

#nexus

```
BEGIN Taxa;
DIMENSIONS ntax=27;
TAXLABELS
[1] 'P_s_stewartii'
[2] 'P_sp_GM01'
[3] 'P_allii'
[4] 'P_wallisii'
[5] 'P_conspicua'
[6] 'T_ptyseos'
[7] 'P_sp_A4'
[8] 'P_agglomerans'
[9] 'E_billingiae'
[10] 'P_septica'
[11] 'P_brenneri'
[12] 'P_ananatis'
[13] 'P_cypripedii'
[14] 'P_sp_aB'
[15] 'T_morbirosei'
[16] 'E_tasmaniensis'
[17] 'P_vagans'
[18] 'P_deleyi'
[19] 'E_pyrifoliae'
[20] 'P_sp_At-9b'
[21] 'P_anthophila'
[22] 'T_sp_NML_06'
[23] 'P_s_indologenes'
[24] 'P_eucrina'
[25] 'P_rodasii'
[26] 'P_rwandensis'
[27] 'P_dispersa'
;
END; [Taxa]
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BEGIN Trees;
PROPERTIES rooted=yes;
[TREES]
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[1] tree 't1'=[&R]
(P_rodasii:0.03366,(P_dispersa:0.02828,((P_eucrina:0.13615,((T_ptyseos:0.03833,(T_sp_NML_06:0.11494,T_morbirosei:0.16039):0.04761):0.26269,(P_septica:0.1541,((P_sp_A4:0.16381,((P_brenneri:5.4E-4,P_conspicua:0.06854):0.04204,(P_anthophila:0.03204,(P_deleyi:0.05263,(P_vagans:5.5E-4,(P_agglomerans:5.3E-4,P_sp_aB:0.05606):0.02232):0.04338):0.01658):0.05478):0.03238,(E_billingiae:0.19929,(E_pyrifoliae:0.09952,E_tasmaniensis:0.00276):0.14329):0.13098):0.09218):0.04022,(P_allii:0.02163,((P_s_indologenes:0.0,P_s_stewartii:0.0):0.03277,P_ananatis:0.03315):0.01249):0.07626):0.06261):0.12713):0.03819):0.0948,P_wallisii:0.05769):0.0127):0.05966,((P_sp_At-9b:0.0112,P_cyprapedii:0.04507):0.02293,(P_rwandensis:0.02276,P_sp_GM01:0.03397):0.02095):0.01192);
[2] tree 't2'=[&R]
(P_anthophila:0.04206,((P_allii:0.06057,((P_s_indologenes:0.0,P_s_stewartii:0.0):0.0924,P_ananatis:5.4E-4):0.02277):0.11804,((E_billingiae:0.18211,(E_pyrifoliae:0.07816,E_tasmaniensis:0.06519):0.08346):0.11238,((((P_rwandensis:0.07199,((P_eucrina:0.10975,(P_rodasii:0.07056,P_wallisii:0.0507):0.01966):0.01045,P_dispersa:0.03419):0.04007):0.02306,P_sp_GM01:0.01871):0.07114,P_cyprapedii:0.04859):0.0153,P_sp_At-9b:0.05281):0.05408,(T_sp_NML_06:0.16715,(T_morbirosei:0.2118,T_ptyseos:0.09548):0.05652):0.36682):0.08996,(P_sp_A4:0.23913,P_septica:0.21954):0.02124):0.04207):0.06888):0.02336,(P_deleyi:0.04467,(P_conspicua:0.10003,((P_agglomerans:0.00803,P_vagans:0.01717):0.03223,(P_brenneri:0.03637,P_sp_aB:0.0211):0.02179):0.00876):0.01095):0.0116);
[3] tree 't3'=[&R] ((P_sp_At-9b:5.5E-4,P_cyprapedii:0.00858):0.03307,(P_dispersa:0.02432,(P_eucrina:0.10255,((P_septica:0.05092,((P_s_indologenes:0.00425,P_s_stewartii:5.5E-4):0.02075,(P_ananatis:0.01838,P_allii:0.00727):0.01668):0.0977,((P_agglomerans:5.4E-4,P_sp_aB:0.00422):0.00342,(P_anthophila:0.00849,(P_deleyi:0.01714,P_vagans:5.4E-4):5.3E-4):0.00545):0.02908,(P_brenneri:0.00404,P_conspicua:0.01302):0.01551):0.01367):0.0234):0.03616,((E_billingiae:0.06973,(E_pyrifoliae:0.03509,E_tasmaniensis:0.04607):0.09681):0.09573,(P_sp_A4:0.0889,(T_morbirosei:0.05985,(T_sp_NML_06:0.2087,T_ptyseos:0.0666):0.01629):0.16467):0.02335):0.02923):0.01092):0.0096):0.02019):0.01611,(P_wallisii:0.02659,P_sp_GM01:0.01745):0.00667,(P_rwandensis:0.03999,P_rodasii:0.00969):0.00798);
[4] tree 't4'=[&R] ((P_allii:0.012,((P_s_indologenes:0.0,P_s_stewartii:0.0):0.01856,P_ananatis:5.5E-4):5.4E-4):0.05149,(P_deleyi:5.4E-4,((P_anthophila:0.01649,(P_brenneri:0.0,P_conspicua:0.0):0.01006):0.01089,(P_agglomerans:5.4E-4,(P_vagans:0.0,P_sp_aB:0.0):0.00619):0.00626):0.00621):0.02743):0.03113,(P_septica:0.02545,P_sp_GM01:0.03233):0.01785,((((P_wallisii:0.01074,(P_rodasii:0.01222,P_rwandensis:5.5E-4):0.03651):0.00246,(P_eucrina:0.04463,P_dispersa:0.0058):0.01243):0.02471,P_cyprapedii:5.4E-4):0.01181,P_sp_At-9b:5.4E-4):0.01465,(P_sp_A4:0.10637,((T_morbirosei:0.04897,(T_ptyseos:0.04044,T_sp_NML_06:0.02741):0.0356):0.05447,(E_billingiae:0.06352,(E_pyrifoliae:0.01455,E_tasmaniensis:0.02275):0.04891):0.0145):0.01464):0.0164):0.00351);
[5] tree 't5'=[&R]
(P_rodasii:0.02043,P_rwandensis:0.0255,(P_sp_GM01:0.02784,(P_wallisii:0.01793,((P_cyprapedii:0.02511,P_sp_At-9b:0.02018):0.02667,(P_dispersa:0.01028,(P_eucrina:0.02753,((T_morbirosei:0.08848,(T_ptyseos:0.05227,T_sp_NML_06:0.04878):0.03593):0.20467,(E_billingiae:0.09583,(E_pyrifoliae:0.0304,E_tasmaniensis:0.02913):0.06946):0.06762):0.03962,(P_sp_A4:0.08601,(P_septica:0.08705,((P_s_indologenes:0.00355,P_s_stewartii:0.00177):0.01768,(P_allii:0.0163,P_ananatis:0.00568):0.01358):0.04028,((P_brenneri:0.00498,P_conspicua:0.00225):0.01844,(P_deleyi:0.01879,(P_agglomerans:0
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.00846,(P\_vagans:0.01392,(P\_sp\_aB:0.01285,P\_anthophila:0.02989):0.0043):0.00503):0.0018):0.01586):0.01946):0.01389):0.02878):0.025):0.05114):0.02557):0.01539):0.00803):0.01163):0.0068);

[6] tree 't6'=[&R] (P\_septica:0.02689,((E\_billingiae:0.06881,(P\_sp\_A4:5.5E-4,(T\_morbirosei:0.08763,(T\_ptyseos:0.00608,T\_sp\_NML\_06:0.03977):0.00793):0.09682):0.02624):0.01045,(P\_anthophila:0.00895,(((P\_brenneri:0.0,P\_conspicua:0.0):0.00932,P\_agglomerans:0.00863):0.00902,(P\_vagans:0.00841,(P\_deleyi:0.02792,P\_sp\_aB:5.4E-4):5.4E-4):0.01777):5.3E-4):5.4E-4):0.01782,((P\_sp\_At-9b:0.01759,P\_cyprapedii:0.01843):0.01844,((P\_wallisii:5.5E-4,(P\_dispersa:5.3E-4,(P\_rwandensis:0.01747,(P\_sp\_GM01:0.00909,P\_rodasii:0.00907):0.00889):0.00866):0.00889):0.01826,(P\_eucrina:0.04514,((E\_pyrifoliae:0.05873,E\_tasmaniensis:0.03518):0.0204,(P\_s\_stewartii:0.00954,(P\_allii:0.01824,(P\_ananatis:0.00893,P\_s\_indologenes:5.5E-4):5.5E-4):0.00848):0.01562):0.01264):0.00967):0.00882):0.00978);

[7] tree 't7'=[&R] (((P\_sp\_At-9b:0.04404,P\_cyprapedii:0.03829):0.07273,((P\_sp\_GM01:0.06658,P\_dispersa:0.06846):0.00182,(((P\_septica:0.07554,P\_eucrina:0.12634):6.0E-4,((E\_billingiae:0.12687,(E\_pyrifoliae:0.05526,E\_tasmaniensis:0.06147):0.16494):0.07309,(T\_ptyseos:0.085,(T\_morbirosei:0.04653,T\_sp\_NML\_06:0.11808):0.05603):0.10163):0.0983):0.02099,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01597,(P\_allii:0.01075,P\_ananatis:5.4E-4):0.04164):0.05611,((P\_brenneri:5.4E-4,P\_conspicua:0.04606):0.06303,(P\_agglomerans:0.02847,(P\_deleyi:0.0622,(P\_vagans:0.01211,(P\_anthophila:0.03606,P\_sp\_aB:0.02185):0.01126):0.01863):0.02621):5.9E-4):0.07765):0.04835,P\_sp\_A4:0.1078):0.06003):0.05811):0.03517):0.00663,P\_rwandensis:0.02658,(P\_wallisii:0.08592,P\_rodasii:0.06246):0.0357);

[8] tree 't8'=[&R] ((P\_anthophila:5.5E-4,((P\_brenneri:0.0,P\_conspicua:0.0):0.00688,P\_agglomerans:0.00688):5.5E-4):0.0069,(P\_sp\_aB:5.5E-4,P\_deleyi:0.00686):5.5E-4,(P\_vagans:0.01382,(((P\_septica:0.01224,(T\_morbirosei:0.04911,(T\_ptyseos:0.0209,T\_sp\_NML\_06:0.04425):0.03541):0.02455):0.0226,(((P\_sp\_At-9b:0.01751,(P\_cyprapedii:0.02969,(P\_rodasii:0.00682,(P\_rwandensis:5.5E-4,P\_sp\_GM01:0.00684):0.00689):0.0264):0.01399):0.00902,(P\_eucrina:0.01681,(P\_dispersa:5.4E-4,P\_wallisii:0.01355):0.01188):0.01033):0.03256,(P\_sp\_A4:0.03026,(E\_billingiae:0.05016,(E\_pyrifoliae:0.02766,E\_tasmaniensis:0.01576):0.07744):0.07014):0.01676):0.01015):0.01469,(P\_ananatis:5.4E-4,(P\_allii:0.00689,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.5E-4):0.00686):0.00797):0.00566):5.5E-4);

[9] tree 't9'=[&R] ((P\_wallisii:0.02285,(P\_rodasii:0.03802,(P\_rwandensis:0.0,P\_sp\_GM01:0.0):5.5E-4):0.01732):0.05033,(P\_dispersa:0.06459,P\_cyprapedii:5.4E-4):0.01283,(P\_sp\_At-9b:5.5E-4,(P\_septica:0.0268,((P\_sp\_A4:0.0312,(T\_sp\_NML\_06:0.01357,(T\_morbirosei:0.0,T\_ptyseos:0.0):0.01273):0.04263):0.0572,(((P\_allii:0.0,P\_ananatis:0.0):5.4E-4,(P\_s\_stewartii:0.01276,P\_s\_indologenes:5.5E-4):0.01279):0.04847,(((P\_sp\_aB:5.4E-4,((P\_brenneri:0.0,P\_agglomerans:0.0,P\_vagans:0.0):5.5E-4,P\_conspicua:0.01304):0.01314):0.00409,(P\_anthophila:0.02654,P\_deleyi:5.4E-4):0.01296):0.01673,((E\_pyrifoliae:5.4E-4,E\_tasmaniensis:0.03941):0.01221,(P\_eucrina:0.12816,E\_billingiae:0.04321):0.07119):0.12179):0.01129):0.02797):5.5E-4):0.03182):0.01257);

[10] tree 't10'=[&R] (P\_deleyi:0.0264,P\_anthophila:5.5E-4,(P\_vagans:5.3E-4,P\_sp\_aB:0.00728):0.01097,((P\_brenneri:5.3E-4,P\_conspicua:0.00362):0.01839,(P\_agglomerans:0.01087,(((P\_eucrina:0.0701,(P\_dispersa:0.00487,(P\_wallisii:0.0077,(P

\_sp\_GM01:0.01597,((P\_sp\_At-9b:0.00414,P\_cyprapedii:0.01428):0.01709,((P\_rodasii:5.4E-4,P\_sp\_A4:0.06556):0.00353,P\_rwandensis:5.4E-4):0.00533):0.0359):0.00855):0.00554):0.00877):0.02949,P\_septica:0.02715):0.00831,(E\_billingiae:0.03706,((E\_pyriifoliae:0.06736,E\_tasmaniensis:0.0536):0.0802,(T\_morbirosei:0.05037,(T\_ptyseos:0.05867,T\_sp\_NML\_06:0.05981):0.02993):0.12731):0.08391):0.07064):0.00803,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01946,(P\_allii:0.01168,P\_ananatis:0.0105):0.0125):0.06463):0.01323):5.5E-4):0.01475):0.01102);

[11] tree 't11'=[&R] (((((P\_sp\_At-9b:5.3E-4,P\_cyprapedii:0.01569):0.04825,((P\_dispersa:5.5E-4,P\_wallisii:0.0316):5.3E-4,((P\_rodasii:0.01562,P\_rwandensis:5.5E-4):0.02851,(P\_eucrinea:0.01603,P\_sp\_GM01:0.0346):0.00417):0.01404):0.01761):0.01277,(T\_sp\_NML\_06:0.22411,(T\_morbirosei:0.06845,T\_ptyseos:0.06096):0.04927):0.06919):0.03471,(P\_septica:0.03188,(P\_sp\_A4:0.08541,(E\_billingiae:0.27612,(E\_pyriifoliae:5.5E-4,E\_tasmaniensis:0.07653):0.183):0.1143):5.7E-4):0.01556):5.3E-4,(P\_brenneri:0.0,P\_conspicua:0.0):5.5E-4,(((P\_anthophila:0.0,P\_agglomerans:0.0,P\_vagans:0.0,P\_sp\_aB:0.0,P\_deleyi:0.0):0.01558,(P\_allii:0.03066,P\_ananatis:5.5E-4):0.0151):0.01571,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01563):5.5E-4);

[12] tree 't12'=[&R] (P\_septica:0.04625,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.05796,(P\_ananatis:0.07298,P\_allii:0.0343):0.05479):0.08465,((P\_brenneri:0.02589,P\_conspicua:0.01869):0.02265,(P\_deleyi:0.06482,((P\_agglomerans:0.02472,P\_vagans:0.02552):0.0071,(P\_sp\_aB:0.01508,P\_anthophila:0.05493):0.00729):0.02239):0.04046):0.05647):0.03096,(P\_sp\_A4:0.13364,(((T\_morbirosei:0.10964,(T\_sp\_NML\_06:0.12986,T\_ptyseos:0.07174):0.05356):0.29145,(E\_billingiae:0.10572,(E\_pyriifoliae:0.06411,E\_tasmaniensis:0.0474):0.07993):0.09361):0.03012,(((P\_rodasii:0.04767,P\_rwandensis:0.0085):0.03163,(P\_sp\_GM01:0.12146,(P\_dispersa:0.09017,P\_wallisii:0.04585):0.02431):0.01077):0.02,(P\_eucrinea:0.07708,(P\_sp\_At-9b:0.05524,P\_cyprapedii:0.03279):0.0559):0.0123):0.02636):0.01366):0.02569);

[13] tree 't13'=[&R] (((P\_sp\_At-9b:0.0225,(P\_sp\_GM01:0.02292,(P\_rodasii:0.1659,P\_rwandensis:0.00478):0.01657):0.0099):0.00931,P\_cyprapedii:0.01953):0.01415,(((P\_brenneri:0.00896,P\_conspicua:0.00651):0.02769,(P\_anthophila:0.03795,(P\_agglomerans:0.01706,(P\_deleyi:0.02904,(P\_sp\_aB:0.02088,P\_vagans:0.01006):0.00236):0.00197):0.01108):0.02169):0.04459,(P\_septica:0.05389,((P\_s\_indologenes:0.00381,P\_s\_stewartii:0.00132):0.04214,(P\_allii:0.00823,P\_ananatis:0.02136):0.01551):0.09379):0.02191):0.01597,(P\_sp\_A4:0.10966,((T\_morbirosei:0.09638,(T\_sp\_NML\_06:0.17723,T\_ptyseos:0.12324):0.05474):0.22594,(E\_billingiae:0.10414,(E\_pyriifoliae:0.08715,E\_tasmaniensis:0.0909):0.07307):0.07291):0.06738):0.02921):0.0233):0.01784,P\_eucrinea:0.09923,(P\_wallisii:0.0396,P\_dispersa:0.05333):0.0133);

[14] tree 't14'=[&R] (((((P\_brenneri:0.01563,P\_conspicua:0.02011):0.03269,(P\_sp\_aB:0.01272,(P\_vagans:0.00534,(P\_anthophila:0.02562,(P\_deleyi:0.01008,P\_agglomerans:0.01009):5.3E-4):0.00474):0.00251):0.02431):0.02917,(P\_septica:0.03439,((P\_sp\_A4:0.10332,((T\_sp\_NML\_06:0.0463,(T\_ptyseos:0.06339,T\_morbirosei:0.0722):0.02014):0.07726,(E\_billingiae:0.05751,(E\_pyriifoliae:0.01753,E\_tasmaniensis:0.01378):0.05677):0.04209):0.07252):0.03743,((P\_s\_indologenes:5.3E-4,P\_s\_stewartii:0.00496):0.03583,(P\_allii:0.0402,P\_ananatis:0.01431):0.02598):0.02501):0.01535):0.01753):0.05496,(P\_sp\_GM01:0.03039,(P\_rwandensis:0.01009,P\_rodasii:0.01524):0.01065):0.00507,((P\_sp\_At-9b:5.3E-

4,P\_cyprapedii:0.04104):0.01018,((P\_eucrinea:0.05494,P\_dispersa:0.02161):0.01865,P\_wallisii:0.01178):0.00863):0.00539);

[15] tree 't15'=[&R] (((P\_sp\_GM01:0.02582,(P\_rodasii:0.01524,P\_rwandensis:0.0129):0.00676):0.01837,(P\_sp\_At-9b:0.0206,P\_cyprapedii:0.01328):0.01203):0.00857,P\_wallisii:0.02279,((P\_eucrinea:0.05021,(P\_sp\_A4:0.1425,(P\_septica:0.0516,((P\_allii:0.02211,(P\_ananatis:0.01339,(P\_s\_indologenes:0.00242,P\_s\_stewartii:0.00195):0.02372):0.00981):0.04365,((P\_brenneri:0.00993,P\_conspicua:0.00559):0.02074,(P\_anthophila:0.02383,(P\_deleyi:0.01795,(P\_vagans:0.01639,(P\_agglomerans:0.0023,P\_sp\_aB:0.0175):0.01574):0.01205):0.01244):0.02073):0.02078):0.02847,((T\_morbirosei:0.06684,(T\_sp\_NML\_06:0.0899,T\_ptyseos:0.03152):0.03523):0.14822,(E\_billingiae:0.08764,(E\_pyrifoliae:0.0265,E\_tasmaniensis:0.01976):0.09651):0.05282):0.0298):0.00798):0.01908):0.03662):0.01224,P\_dispersa:0.02623):0.00858);

[16] tree 't16'=[&R] (P\_wallisii:0.01576,(P\_sp\_At-9b:0.00764,P\_cyprapedii:0.00341):0.01286,((P\_sp\_GM01:0.01972,(P\_rodasii:0.00482,P\_rwandensis:0.0036):0.01327):0.01476,(P\_dispersa:0.01112,(P\_eucrinea:0.03006,(P\_sp\_A4:0.0412,(P\_septica:0.01782,((T\_morbirosei:0.03481,(T\_ptyseos:0.01377,T\_sp\_NML\_06:0.0484):0.01856):0.05268,((E\_billingiae:0.05283,(E\_pyrifoliae:0.02182,E\_tasmaniensis:0.01283):0.02626):0.029,((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00119):0.00537,(P\_allii:0.00748,P\_ananatis:0.00865):0.00422):0.02531,((P\_vagans:0.00598,(P\_agglomerans:0.00359,P\_sp\_aB:0.00361):5.4E-4):0.00379,(P\_deleyi:0.01123,P\_anthophila:0.0084):0.00551):0.02883,(P\_brenneri:0.00163,P\_conspicua:0.00679):0.00624):0.02179):0.02511):0.00457):0.0107):0.00942):0.012):0.00731):0.00326):0.00261);

[17] tree 't17'=[&R] (((P\_sp\_aB:0.0,P\_vagans:0.0):5.4E-4,((E\_billingiae:5.4E-4,((P\_sp\_GM01:0.04495,(T\_ptyseos:5.5E-4,E\_pyrifoliae:0.03725):0.03405):5.4E-4,(T\_sp\_NML\_06:0.03911,T\_morbirosei:5.5E-4):0.03772):0.04594):0.0316,(P\_brenneri:1.10441,P\_septica:5.4E-4):0.00936):0.02966,P\_anthophila:5.3E-4):0.03527):0.03599,((E\_tasmaniensis:0.07993,P\_eucrinea:5.4E-4):0.03594,P\_deleyi:0.02854):0.00769,P\_agglomerans:0.03597):5.4E-4,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0,P\_allii:0.0,P\_ananatis:0.0):0.03064,(P\_conspicua:5.4E-4,(P\_sp\_A4:5.3E-4,((P\_sp\_At-9b:0.0,P\_wallisii:0.0):5.4E-4,(P\_rodasii:5.5E-4,P\_rwandensis:0.03567):0.03751):0.03446,(P\_cyprapedii:0.0,P\_dispersa:0.0):5.4E-4):0.04105):0.04109):0.01892):0.02132);

[18] tree 't18'=[&R] ((P\_sp\_GM01:0.02268,(P\_rodasii:5.3E-4,P\_rwandensis:0.01479):0.00802):0.01951,P\_wallisii:0.00436,(P\_eucrinea:0.01977,(P\_dispersa:0.01855,((P\_septica:0.02261,(P\_sp\_A4:0.05606,((T\_sp\_NML\_06:0.0312,(T\_morbirosei:0.04913,T\_ptyseos:0.02189):0.02542):0.06821,(E\_billingiae:0.06045,(E\_pyrifoliae:0.00405,E\_tasmaniensis:0.01884):0.02829):0.01712):0.00824,((P\_allii:5.5E-4,(P\_ananatis:0.00142,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01752):0.01075):0.02924,((P\_brenneri:5.3E-4,P\_conspicua:0.0035):0.01203,(P\_anthophila:0.00504,(P\_deleyi:0.01782,(P\_sp\_aB:0.00367,(P\_agglomerans:0.0037,P\_vagans:5.5E-4):5.5E-4):0.00545):0.01745):0.01072):0.02241):0.03494):0.02604):0.00659):0.01678,(P\_cyprapedii:0.01073,P\_sp\_At-9b:0.02351):0.01456):0.00684):0.01341):0.00715);

[19] tree 't19'=[&R] (P\_sp\_aB:0.00911,((P\_allii:0.00821,(P\_ananatis:0.00413,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00412):0.00419):0.03174,P\_deleyi:0.01153):0.00757,((P\_agglomerans:0.0,P\_vagans:0.0,P\_anthophila:0.0):5.5E-4,(P\_conspicua:5.3E-

4,(P\_brenneri:0.00829,(P\_septica:0.04164,(((E\_billingiae:0.02678,(E\_pyrifoliae:0.02314,E\_tasmaniensis:0.01576):0.03584):0.04652,(((P\_sp\_GM01:0.00873,(P\_wallisii:0.00998,(P\_eucrinea:0.00992,P\_dispersa:0.01097):0.01261):0.01535):0.00357,(P\_rodasii:0.00649,P\_rwandensis:0.0106):0.01755):0.01363,P\_cypripedii:0.00424):0.00414,P\_sp\_At-9b:5.5E-4):0.01596):0.00954,(P\_sp\_A4:0.04392,(T\_morbirosei:0.03354,(T\_ptyseos:0.03704,T\_sp\_NML\_06:0.04883):0.02821):0.13455):0.02559):0.00839):0.01007):5.5E-4):0.00408):0.00309);

[20] tree 't20'=[&R] ((P\_cypripedii:0.0,P\_dispersa:0.0):5.4E-4,(P\_rodasii:5.5E-4,P\_rwandensis:0.00875):0.01754,((P\_sp\_GM01:0.03639,(P\_wallisii:0.01782,P\_eucrinea:0.02685):0.0088):0.00882,(P\_sp\_A4:0.07585,(P\_sp\_At-9b:5.4E-4,(((T\_morbirosei:0.07088,(T\_ptyseos:0.03124,T\_sp\_NML\_06:0.04957):0.02306):0.0766,(E\_billingiae:0.06889,(E\_pyrifoliae:0.0,E\_tasmaniensis:0.0):0.03798):0.07147):0.01926,(((P\_deleyi:0.0,P\_anthophila:0.0,P\_vagans:0.0):5.4E-4,(P\_agglomerans:0.0,P\_sp\_aB:0.0):0.00858):0.01726,P\_conspicua:5.3E-4):5.4E-4):0.00828,P\_brenneri:5.4E-4):0.06057,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00884,(P\_allii:0.00874,P\_ananatis:5.5E-4):0.00905):0.04871,P\_septica:0.03727):0.02321):0.01515):5.4E-4):0.00825):5.4E-4);

[21] tree 't21'=[&R] (P\_anthophila:0.01799,((P\_sp\_aB:0.01244,P\_agglomerans:5.4E-4):0.00254,(P\_vagans:0.0051,P\_deleyi:0.01281):0.00223):0.0053,(((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00252):0.02381,(P\_allii:0.00275,P\_ananatis:0.00989):0.01012):0.05521,(P\_septica:0.06206,(((P\_eucrinea:0.08275,P\_wallisii:0.02702):0.00725,(P\_sp\_GM01:0.03297,(P\_rodasii:0.0151,P\_rwandensis:0.00526):0.01065):0.00808,P\_dispersa:0.01842):0.00837):0.03164,P\_cypripedii:0.00758):0.00601,P\_sp\_At-9b:0.00183):0.03883,(P\_sp\_A4:0.06921,((T\_morbirosei:0.09014,(T\_ptyseos:0.09099,T\_sp\_NML\_06:0.06434):0.03528):0.27677,(E\_billingiae:0.06846,(E\_pyrifoliae:0.02368,E\_tasmaniensis:0.02802):0.04706):0.06236):0.04737):0.0167):0.01209):0.02844):0.02628,(P\_brenneri:5.5E-4,P\_conspicua:0.00761):0.00239):0.0054);

[22] tree 't22'=[&R] (P\_agglomerans:0.00273,P\_sp\_aB:0.00272,(P\_anthophila:0.01658,(P\_vagans:5.4E-4,(P\_deleyi:0.01978,((P\_brenneri:0.00572,P\_conspicua:0.01061):0.01246,(((P\_septica:0.03678,(P\_ananatis:0.01858,(P\_allii:0.01765,(P\_s\_indologenes:0.00249,P\_s\_stewartii:5.5E-4):0.04679):0.00691):0.04889):0.00701,(((P\_sp\_At-9b:0.00985,P\_cypripedii:0.00784):0.01631,(P\_sp\_GM01:0.0096,(P\_rodasii:0.03096,P\_rwandensis:0.00598):0.01405):0.01433,(P\_eucrinea:0.06812,(P\_dispersa:0.01732,P\_wallisii:0.01407):0.00355):0.00992):0.01772):0.04366,((T\_morbirosei:0.03712,(T\_sp\_NML\_06:0.05931,T\_ptyseos:0.04328):0.03054):0.09218,(E\_billingiae:0.04605,(E\_tasmaniensis:0.04917,E\_pyrifoliae:0.03224):0.04264):0.02648):0.00977):0.00632):0.00307,P\_sp\_A4:0.06927):0.01272):0.00716):0.00236):0.00269):5.4E-4);

[23] tree 't23'=[&R] ((P\_eucrinea:0.0182,P\_rodasii:5.5E-4):0.00434,P\_sp\_GM01:0.00434):5.5E-4,P\_rwandensis:5.5E-4,(((P\_sp\_A4:0.0261,((T\_morbirosei:0.03117,(T\_sp\_NML\_06:0.06719,T\_ptyseos:0.05131):0.02746):0.07978,(E\_billingiae:0.03182,(E\_pyrifoliae:0.01476,E\_tasmaniensis:0.01622):0.03439):0.01086):0.0118):0.01439,P\_wallisii:0.00445):0.00426,(P\_sp\_At-9b:0.0,P\_cypripedii:0.0):0.00426,(P\_septica:0.00875,((P\_deleyi:0.00867,(P\_vagans:0.0,P\_agglomerans:0.0,P\_sp\_aB:0.0):5.5E-4):0.00437,(((P\_allii:0.01439,P\_ananatis:0.00726):0.02208,(P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00441):0.02314):0.05435,(P\_anthophila:0.02223,(P\_brenneri:0.0,P\_conspicua:0.0):0.00881):0.00816):5.3E-4):0.00438):0.00878):0.00444):5.3E-4,P\_dispersa:0.00435):5.5E-4);

[24] tree 't24'=[&R] (E\_tasmaniensis:0.01377,P\_wallisii:0.0137,((P\_eucrinea:0.0,E\_pyrifoliae:0.0,P\_dispersa:0.0,P\_brenneri:0.0,P\_conspicua

:0.0):5.5E-  
4,((P\_rodasii:0.0,P\_rwandensis:0.0,P\_septica:0.0):0.00998,((P\_sp\_A4:0.0,P\_sp\_GM01:0.0,P\_s\_indologenes:0.0,P\_s\_stewartii:0.0,P\_ananatis:0.0,P\_agglomerans:0.0,P\_vagans:0.0,P\_deleyi:0.0,P\_allii:0.0,P\_anthophila:0.0,P\_sp\_aB:0.0):5.3E-4,((E\_billingiae:0.0,P\_sp\_At-9b:0.0,P\_cyprapedii:0.0):5.5E-4,(T\_morbirosei:0.02753,(T\_ptyseos:0.0,T\_sp\_NML\_06:0.0):5.5E-4):0.01377):0.01379):0.01001):0.00741):5.5E-4);  
[25] tree 't25'=[&R]  
((P\_sp\_GM01:0.03458,P\_rodasii:0.03402):0.01398,(P\_wallisii:0.07994,(P\_rwandensis:0.04545,(P\_sp\_At-9b:0.01878,P\_cyprapedii:0.02005):0.07765):0.00763):6.4E-4,(P\_dispersa:0.05989,(P\_eucrina:0.1331,(((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.0041):0.07008,(P\_allii:0.03945,P\_ananatis:0.0625):0.0541):0.13103,(P\_septica:0.1141,((P\_brenneri:0.03829,P\_conspicua:0.01583):0.02939,((P\_sp\_aB:0.01797,((P\_anthophila:0.01045,P\_deleyi:0.07721):0.02991,P\_agglomerans:0.00879):0.0079):0.00866,P\_vagans:0.00454):0.03292):0.0664):0.0098):0.03449,(P\_sp\_A4:0.17211,((T\_sp\_NML\_06:0.08276,(T\_ptyseos:0.0975,T\_morbirosei:0.25293):0.08908):0.5208,(E\_billingiae:0.18552,(E\_pyrifoliae:0.0341,E\_tasmaniensis:0.06363):0.11542):0.11713):0.05199):0.04355):0.0637):0.03412):0.01822);  
[26] tree 't26'=[&R]  
((P\_dispersa:0.01598,(((T\_sp\_NML\_06:0.00792,(T\_morbirosei:0.01068,T\_ptyseos:0.00875):0.00657):0.05994,(E\_billingiae:0.02218,(E\_pyrifoliae:0.0052,E\_tasmaniensis:0.00546):0.02353):0.01027):0.01303,((P\_septica:0.04194,(P\_deleyi:5.4E-4,((P\_allii:5.5E-4,(P\_ananatis:0.01065,(P\_s\_stewartii:0.00532,P\_s\_indologenes:5.5E-4):5.5E-4):0.00519):0.03299,((P\_agglomerans:5.4E-4,(P\_vagans:0.00285,(P\_anthophila:0.00527,(P\_brenneri:0.01052,P\_conspicua:5.0E-4):0.00527):0.00299):0.0153):0.00526,P\_sp\_aB:5.4E-4):0.00552):0.02101):0.02128):0.01222,(P\_sp\_A4:0.04163,(P\_cyprapedii:0.01615,P\_sp\_At-9b:5.5E-4):0.00284):0.00996):0.01452):0.0017):5.5E-4,P\_rwandensis:0.00531,(P\_rodasii:5.5E-4,((P\_wallisii:0.00528,P\_eucrina:5.4E-4):0.0053,P\_sp\_GM01:0.00538):5.4E-4):5.5E-4);  
[27] tree 't27'=[&R] (((P\_agglomerans:0.01427,(P\_vagans:0.0,P\_sp\_aB:0.0):5.4E-4):0.01433,(P\_deleyi:5.5E-4,(P\_anthophila:0.01427,(P\_conspicua:0.0,P\_brenneri:0.0):0.01427):5.4E-4):5.5E-4):0.04085,(P\_septica:0.02191,(T\_morbirosei:5.4E-4,(T\_sp\_NML\_06:0.02043,T\_ptyseos:0.03938):0.04038):0.08621):0.03365):0.02947,(((P\_eucrina:0.0,P\_dispersa:0.0):0.01464,((P\_rodasii:5.4E-4,P\_rwandensis:0.01446):0.0145,((P\_sp\_At-9b:0.0,P\_cyprapedii:0.0):5.4E-4,P\_sp\_GM01:0.03172):5.5E-4):0.02985):5.4E-4,P\_wallisii:5.4E-4):0.02445,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.5E-4,(P\_ananatis:0.01451,P\_allii:5.5E-4):0.01471):0.01595,(P\_sp\_A4:0.03221,(E\_billingiae:0.13887,(E\_pyrifoliae:0.0,E\_tasmaniensis:0.0):0.01814):0.07471):0.01252):0.01976);  
[28] tree 't28'=[&R] (((E\_billingiae:0.01303,(T\_morbirosei:0.02565,(T\_ptyseos:0.01288,T\_sp\_NML\_06:0.01269):5.4E-4):0.02549):0.01299,P\_deleyi:0.01277):0.01267,(((P\_allii:0.0,P\_ananatis:0.0,P\_dispersa:0.0,P\_eucrina:0.0,P\_rodasii:0.0,P\_rwandensis:0.0,P\_sp\_A4:0.0,P\_sp\_GM01:0.0,P\_wallisii:0.0):5.5E-4,((P\_sp\_At-9b:0.0,P\_cyprapedii:0.0):0.01303,((P\_agglomerans:0.0,P\_vagans:0.0,P\_brenneri:0.0,P\_conspicua:0.0,P\_sp\_aB:0.0):5.4E-4,P\_anthophila:0.01292):0.01293):5.5E-4):0.01114,P\_septica:0.00594):0.00853,(P\_s\_indologenes:5.5E-4,(P\_s\_stewartii:0.01276,(E\_pyrifoliae:0.0129,E\_tasmaniensis:5.4E-4):0.01271):5.4E-4):5.5E-4);

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[29] tree 't29'=[&R] (P_septica:0.00228,(P_sp_At-9b:5.5E-4,P_cypripedii:0.00865):0.02432,(((P_s_indologenes:0.0,P_s_stewartii:0.0):5.5E-4,(P_allii:0.00213,P_ananatis:5.5E-4):0.00214):0.00788,((P_brenneri:0.00234,(P_conspicua:0.00845,P_agglomerans:0.00235):0.00215):0.00329,(P_anthophila:0.00494,(P_deleyi:0.01022,(P_vagans:5.5E-4,P_sp_aB:0.00215):0.00278):0.00216):5.5E-4):0.0065):0.00721,((E_billingiae:0.01458,(E_pyriifoliae:0.00524,E_tasmaniensis:0.00601):0.01648):0.02645,((P_eucrina:0.0109,(P_sp_GM01:0.00666,(P_rodasii:0.00867,P_rwandensis:0.00861):0.00654):0.00222,(P_wallisii:0.0043,P_dispersa:0.00883):0.00424):0.00437):0.00439,(P_sp_A4:0.02399,(T_sp_NML_06:0.01431,(T_ptyseos:0.01324,T_morbirosei:0.02969):0.00588):0.0189):0.00247):0.00451):0.00216):0.00222);
[30] tree 't30'=[&R] ((P_allii:0.01188,(P_cypripedii:5.5E-4,P_sp_At-9b:0.0235):0.02325):5.4E-4,(P_ananatis:0.01202,((T_ptyseos:0.08407,(T_sp_NML_06:0.08456,T_morbirosei:0.0299):0.02653):0.02291,((P_sp_A4:0.01263,(P_septica:0.01226,(P_rodasii:5.5E-4,((P_rwandensis:0.0,P_sp_GM01:0.0):5.5E-4,(P_eucrina:0.03761,(P_dispersa:0.01232,P_wallisii:0.01212):5.4E-4):0.02427):0.01238):0.02502):5.4E-4):0.01734,(E_billingiae:0.01224,(E_pyriifoliae:0.01231,E_tasmaniensis:5.4E-4):0.07893):0.05412):0.00886):0.01263):0.01199,(((P_conspicua:0.0,P_brenneri:0.0):0.01209,(P_anthophila:0.0,P_deleyi:0.0,P_sp_aB:0.0,P_agglomerans:0.0,P_vagans:0.0):5.4E-4):0.02369,(P_s_indologenes:0.0,P_s_stewartii:0.0):5.4E-4):5.4E-4);
[31] tree 't31'=[&R] (((P_brenneri:0.0,P_conspicua:0.0):0.00834,((P_sp_aB:0.0,P_agglomerans:0.0,P_vagans:0.0):0.00835,P_deleyi:0.00834):5.5E-4):0.00854,P_anthophila:0.00847,((P_s_indologenes:0.0,P_s_stewartii:0.0):5.5E-4,(P_ananatis:0.00801,(P_allii:5.4E-4,(((P_sp_GM01:0.01672,(P_eucrina:0.0081,((P_rwandensis:0.01646,P_rodasii:5.5E-4):0.017,(P_dispersa:0.01707,P_wallisii:0.00825):0.00849):5.4E-4):0.01715):0.01807,(P_sp_At-9b:0.01697,P_cypripedii:0.01732):0.02025):5.5E-4,(P_sp_A4:0.0588,((E_billingiae:0.00815,(E_pyriifoliae:0.0,E_tasmaniensis:0.0):0.00816):0.07247,(T_ptyseos:5.3E-4,(T_morbirosei:0.05159,T_sp_NML_06:0.02599):0.00779):0.06629):0.02278):0.00845):0.02948,P_septica:0.01403):0.02179):5.5E-4):0.00835):0.00825);
[32] tree 't32'=[&R] (P_dispersa:0.0118,(P_sp_A4:0.01819,((P_eucrina:0.02396,(P_anthophila:5.5E-4,((P_agglomerans:0.00586,P_vagans:5.4E-4):0.0059,(P_deleyi:0.01181,P_sp_aB:5.5E-4):5.4E-4):0.00586):0.00599):0.01174,(P_brenneri:5.5E-4,(P_conspicua:5.4E-4,((P_s_indologenes:0.0,P_s_stewartii:0.0):0.00591,(P_allii:0.00581,P_ananatis:5.4E-4):0.00584):0.01777):0.01765):0.00584):5.4E-4,(((E_pyriifoliae:0.01652,E_tasmaniensis:0.00796):0.04587,(E_billingiae:0.03181,(T_ptyseos:0.01891,(T_morbirosei:0.02993,T_sp_NML_06:0.06343):0.02172):0.07573):0.02794):0.1425,(P_septica:0.01211,(P_cypripedii:0.01284,P_sp_At-9b:0.02405):0.02416):0.00478):0.01308):0.00585):0.00586,((P_sp_GM01:0.01761,(P_rodasii:5.5E-4,P_rwandensis:0.01179):0.00771):0.01043,P_wallisii:0.01185):5.4E-4);
[33] tree 't33'=[&R] ((P_anthophila:0.01434,((P_allii:0.01725,((P_s_indologenes:0.00383,P_s_stewartii:0.00189):0.03561,P_ananatis:0.01114):0.00527):0.07152,((P_septica:0.05766,(P_sp_At-9b:0.01885,P_cypripedii:0.01435):0.0272,((P_dispersa:0.02645,P_wallisii:0.03173):0.00595,((P_sp_GM01:0.03604,(P_rodasii:0.01259,P_rwandensis:0.01086):0.0174):0.00497,P_eucrina:0.0807):0.00603):0.04184):0.01843):0.01547,(P_sp_A4:0.12
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318,((T\_ptyseos:0.11955,(T\_morbirosei:0.11103,T\_sp\_NML\_06:0.16666):0.03148):0.27036,(E\_billingiae:0.10726,(E\_pyrifoliae:0.08146,E\_tasmaniensis:0.08578):0.08878):0.10054):0.04309):0.01705):0.02216):0.024,(P\_brenneri:0.01471,P\_conspicua:0.01367):0.01342):0.01263):0.00689,(P\_vagans:0.01328,P\_sp\_aB:0.00763):0.00391,(P\_deleyi:0.0192,P\_agglomerans:0.00782):0.00165);

[34] tree 't34'=[&R] (P\_dispersa:5.4E-4,(P\_eucrina:5.5E-4,P\_wallisii:0.01963):0.01932,((P\_cypripedii:0.0,P\_sp\_At-9b:0.0):0.03085,((P\_allii:0.0,E\_billingiae:0.0,E\_pyrifoliae:0.0,E\_tasmaniensis:0.0,P\_rwandensis:0.0,P\_sp\_A4:0.0,P\_sp\_GM01:0.0,P\_ananatis:0.0,P\_s\_indologenes:0.0,P\_s\_stewartii:0.0,P\_agglomerans:0.0,P\_vagans:0.0,P\_anthophila:0.0,P\_sp\_aB:0.0,P\_rodasii:0.0,P\_septica:0.0,P\_deleyi:0.0,P\_brenneri:0.0,P\_conspicua:0.0):5.4E-4,((T\_morbirosei:0.0,T\_ptyseos:0.0):0.01997,T\_sp\_NML\_06:5.5E-4):0.01963):0.01701):0.01238);

[35] tree 't35'=[&R] (P\_vagans:0.00837,P\_sp\_aB:0.00443,(P\_deleyi:0.01501,(P\_agglomerans:0.00816,(P\_anthophila:0.01256,(((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00231):0.02202,(P\_allii:0.00772,P\_ananatis:0.0154):0.01309):0.02772,(((P\_sp\_At-9b:0.00858,P\_cypripedii:0.01643):0.01983,(P\_sp\_GM01:0.0266,(P\_eucrina:0.05471,(P\_dispersa:0.04784,(P\_wallisii:0.02641,(P\_rodasii:0.01364,P\_rwandensis:0.01616):0.02148):0.0129):0.0094):0.04319):0.03031):0.02223,((T\_morbirosei:0.03389,(T\_ptyseos:0.06058,T\_sp\_NML\_06:0.05408):0.04089):0.11067,(E\_billingiae:0.0659,(E\_pyrifoliae:0.03345,E\_tasmaniensis:0.03833):0.0457):0.05113):0.02956):0.02561,(P\_sp\_A4:0.12657,P\_septica:0.0442):0.01052):0.01637):0.01912,(P\_brenneri:0.0141,P\_conspicua:0.01045):0.01033):0.00924):0.00776):0.00155):0.00119);

[36] tree 't36'=[&R] ((P\_wallisii:0.00714,(P\_eucrina:0.01981,(P\_septica:0.01737,((P\_brenneri:0.0,P\_conspicua:0.0):5.4E-4,((P\_deleyi:0.00695,(P\_agglomerans:0.0,P\_vagans:0.0,P\_sp\_aB:0.0):5.5E-4):5.5E-4,(P\_anthophila:5.5E-4,((T\_morbirosei:5.5E-4,(T\_sp\_NML\_06:0.06676,T\_ptyseos:0.01698):0.01124):0.0941,(E\_billingiae:0.02998,(E\_pyrifoliae:0.00696,E\_tasmaniensis:5.5E-4):0.02779):0.01315):0.0367):0.00695):0.01423):0.01433,((P\_allii:5.3E-4,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01409,P\_ananatis:5.5E-4):0.00699):0.02653,P\_sp\_A4:0.05163):0.00949):0.00687):0.01672):0.00336):0.01452,(P\_sp\_GM01:0.01395,(P\_sp\_At-9b:0.00636,P\_cypripedii:0.00178):0.01356):5.5E-4,(P\_dispersa:0.01442,(P\_rodasii:0.1639,P\_rwandensis:5.5E-4):0.00706):5.5E-4);

[37] tree 't37'=[&R] (P\_agglomerans:0.00609,(P\_sp\_aB:0.02253,P\_deleyi:0.07312):0.008,((P\_anthophila:0.03048,(((P\_s\_stewartii:0.01425,P\_s\_indologenes:5.4E-4):0.01842,(P\_allii:0.01277,P\_ananatis:0.03042):0.02686):0.09737,(P\_septica:0.19899,((P\_sp\_At-9b:0.04842,P\_cypripedii:0.01843):0.09879,((P\_eucrina:0.09202,P\_sp\_GM01:0.05041):0.03252,(P\_rwandensis:0.01848,(P\_rodasii:0.06775,(P\_wallisii:0.04351,P\_dispersa:0.07513):0.02011):0.01609):0.01393):0.0736):0.17671,(P\_sp\_A4:0.47646,((T\_morbirosei:0.29859,(T\_ptyseos:0.23963,T\_sp\_NML\_06:0.22079):0.11862):0.29611,(E\_billingiae:0.16012,(E\_pyrifoliae:0.06442,E\_tasmaniensis:0.11777):0.13296):0.31082):0.02598):0.07545):0.05877):0.05491):0.08965,(P\_brenneri:0.00691,P\_conspicua:0.01397):0.0119):0.02133):0.00891,P\_vagans:0.05837):0.01082);

[38] tree 't38'=[&R] (((E\_billingiae:0.01225,(E\_pyrifoliae:0.00306,E\_tasmaniensis:0.00315):0.00604):0.01278,(P\_sp\_A4:0.00321,((T\_morbirosei:0.0,T\_ptyseos:0.0):5.5E-4,T\_sp\_NML\_06:0.00605):0.03427,(P\_anthophila:5.4E-4,(P\_brenneri:0.00304,(P\_conspicua:0.0,P\_agglomerans:0.0):5.5E-4,(P\_deleyi:0.00606,(P\_vagans:0.0,P\_sp\_aB:0.0):5.5E-

4):0.00302):0.00302):0.003):0.00301,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.4E-4,(P\_allii:0.01561,P\_ananatis:0.0015):0.0108):0.00603):5.3E-4):0.00585):0.0062):0.00614,((P\_wallisii:0.00302,P\_sp\_At-9b:5.5E-4):5.3E-4,(P\_dispersa:5.3E-4,P\_septica:0.01216):0.00303):0.00297,(P\_eucrina:0.00302,(P\_cyprapedii:5.5E-4,(P\_rodasii:0.00599,(P\_sp\_GM01:0.00297,P\_rwandensis:5.4E-4):0.00301):5.3E-4):5.5E-4);

[39] tree 't39'=[&R]  
( (P\_rwandensis:0.11357,P\_rodasii:0.05022):0.02955,(P\_dispersa:0.05251,P\_eucrina:0.18754):0.02356,(P\_wallisii:0.16039,(((P\_septica:0.1592,((P\_s\_indologenes:0.0061,P\_s\_stewartii:5.5E-4):0.06605,(P\_allii:0.01283,P\_ananatis:0.03283):0.03927):0.07278,(((P\_vagans:0.01972,P\_agglomerans:0.04165):0.02043,P\_sp\_aB:0.03816):0.02445,((P\_brenneri:0.0139,P\_conspicua:0.02657):0.03453,P\_deleyi:0.20719):0.01939,P\_anthophila:0.01434):0.01001):0.05654):0.0354):0.05344,(P\_sp\_A4:0.24895,(E\_billingiae:0.21274,(E\_pyriifoliae:0.06791,E\_tasmaniensis:0.08072):0.17269,(T\_sp\_NML\_06:0.17687,(T\_morbirosei:0.20176,T\_ptyseos:0.09214):0.13567):0.2256):0.06553):0.07891):0.05894):0.10961,(P\_sp\_At-9b:0.03331,P\_cyprapedii:0.05634):0.05028):0.04598,P\_sp\_GM01:0.09317):0.0126):5.4E-4);

[40] tree 't40'=[&R]  
( (P\_sp\_GM01:0.01636,(P\_dispersa:0.02747,((P\_septica:0.05612,(P\_sp\_A4:0.08395,(E\_billingiae:0.16929,(E\_pyriifoliae:0.03974,E\_tasmaniensis:0.03584):0.05306):0.10819,(T\_morbirosei:0.04184,(T\_ptyseos:0.07514,T\_sp\_NML\_06:0.13008):0.10823):0.11897):0.03307):0.05043):0.01212,(((P\_vagans:0.00964,(P\_agglomerans:0.00319,P\_anthophila:0.02958):5.4E-4,P\_sp\_aB:0.00643):0.00318):5.4E-4,P\_deleyi:0.00319):0.02311,(P\_brenneri:0.00234,P\_conspicua:0.01605):0.01401):0.02586,((P\_s\_indologenes:0.00322,P\_s\_stewartii:0.00643):0.00788,(P\_allii:0.00848,P\_ananatis:0.01414):0.01643):0.04352):0.01434):0.0434):0.00846):0.00355,((P\_rwandensis:0.02282,P\_rodasii:0.00651):0.0036,(P\_cyprapedii:0.01251,P\_sp\_At-9b:0.02097):0.01252):0.00643,(P\_eucrina:0.05353,P\_wallisii:0.0123):0.00999);

[41] tree 't41'=[&R] ((P\_sp\_At-9b:0.02968,P\_cyprapedii:0.01965):0.02012,(P\_sp\_GM01:0.02257,(P\_rwandensis:0.01529,P\_rodasii:0.01597):0.01203):0.006):0.00955,P\_wallisii:0.02514,((P\_eucrina:0.05476,(P\_septica:0.05793,(((T\_morbirosei:0.05304,(T\_ptyseos:0.04911,T\_sp\_NML\_06:0.07581):0.03608):0.11334,(P\_sp\_A4:0.11243,(E\_billingiae:0.08273,(E\_pyriifoliae:0.01876,E\_tasmaniensis:0.04145):0.06127):0.05307):0.01618):0.01776,(((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00458):0.03948,(P\_allii:0.02166,P\_ananatis:0.01459):0.00709):0.04684,((P\_conspicua:0.01923,P\_brenneri:5.5E-4):0.01149,((P\_vagans:0.00529,(P\_anthophila:0.01553,P\_deleyi:0.04473):0.00935):0.00384,(P\_agglomerans:5.5E-4,P\_sp\_aB:0.00235):0.00264):0.01366):0.03274):0.00775):0.00645):0.03878):0.0118,P\_dispersa:0.03081):0.00337);

[42] tree 't42'=[&R] (P\_agglomerans:0.01088,(P\_sp\_aB:5.5E-4,P\_anthophila:0.00725):0.00361,(P\_vagans:0.0036,(P\_deleyi:0.00618,(P\_brenneri:0.00358,(P\_conspicua:0.00719,(((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00358):0.02136,(P\_ananatis:5.4E-4,P\_allii:0.01422):0.00778):0.01489,(P\_septica:0.01939,(P\_sp\_A4:0.07682,((E\_billingiae:0.08202,(E\_pyriifoliae:0.01463,E\_tasmaniensis:0.02557):0.03275):0.06793,((T\_morbirosei:0.02139,(T\_sp\_NML\_06:0.05021,T\_ptyseos:0.03321):5.5E-4):0.14183,(P\_sp\_At-9b:0.01492,((P\_sp\_GM01:0.01364,(((P\_rodasii:0.01468,P\_rwandensis:0.01092):0.01738,(P\_wallisii:0.01226,P\_eucrina:0.02632):0.00942):0.00747,P\_dispersa:0.00505):0.01382):0.01216,P\_cyprapedii:0.0103):0.00362):0.04208):0.0023):0.00477):0.01926):0.00573):0.02676):0.00351):0.00658):0.00166):5.5E-4);

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[43] tree 't43'=[&R] ((P_septica:0.04454,((P_sp_A4:0.11032,(P_eucrina:0.07971,((P_sp_At-9b:0.00179,P_cypripedii:0.00909):0.03966,((P_rodasii:0.00998,(P_rwandensis:0.02932,P_sp_GM01:0.01992):5.4E-4):0.0118,(P_dispersa:0.01928,P_wallisii:0.01441):0.0084):0.0122):0.00677):0.02423):0.02384,(((T_sp_NML_06:0.07064,(T_morbirosei:0.03641,T_ptyseos:0.02144):0.01538):0.15395,(E_billingiae:0.05192,(E_pyrifoliae:0.04275,E_tasmaniensis:0.05031):0.06215):0.05362):0.03547,((P_s_indologenes:0.0,P_s_stewartii:0.0):0.02126,(P_allii:0.01986,P_ananatis:0.01515):0.01743):0.01505):0.02417):5.4E-4):0.02243,(P_brenneri:0.00465,P_conspicua:5.4E-4):5.4E-4,(P_deleyi:0.00934,(((P_anthophila:0.00954,P_agglomerans:0.00467):0.00469,P_vagans:5.4E-4):0.00466,P_sp_aB:0.00945):0.00955):0.00937);
[44] tree 't44'=[&R] (P_cypripedii:0.00646,(P_sp_At-9b:0.01319,(T_sp_NML_06:0.0208,(T_morbirosei:0.03886,T_ptyseos:0.01537):0.02035):0.03345):0.00648,(((P_dispersa:5.5E-4,((P_sp_GM01:0.00646,(P_rodasii:0.0,P_rwandensis:0.0):5.4E-4):0.00203,(P_eucrina:0.0065,((P_brenneri:5.5E-4,((P_deleyi:5.4E-4,(P_agglomerans:5.4E-4,(P_vagans:0.0,P_sp_aB:0.0):0.00645):0.00653,(P_anthophila:0.0,P_conspicua:0.0):5.4E-4):0.00654):5.5E-4,((P_s_indologenes:0.0,P_s_stewartii:0.0):0.0133,(P_allii:0.0,P_ananatis:0.0):0.00686):0.01344):0.02627):0.01278):0.01154):5.4E-4,P_wallisii:0.00645):0.01346,(P_sp_A4:0.02658,(P_septica:0.01779,(E_billingiae:0.02731,(E_pyrifoliae:5.4E-4,E_tasmaniensis:0.00651):0.02906):0.09061):0.00825):0.00752):0.00654);
[45] tree 't45'=[&R] (P_anthophila:5.4E-4,(P_deleyi:0.02259,(P_brenneri:0.02811,(P_conspicua:0.02512,(((P_s_indologenes:0.0,P_s_stewartii:0.0):0.05252,(P_allii:0.02782,P_ananatis:0.01734):0.02267):0.05802,(P_septica:0.06537,((P_sp_A4:0.15882,((T_morbirosei:0.16684,(T_ptyseos:0.14792,T_sp_NML_06:0.15285):0.08068):0.08908,(E_billingiae:0.17148,(E_pyrifoliae:0.10543,E_tasmaniensis:0.0344):0.11577):0.1066):0.05934):0.09042,(P_eucrina:0.13428,(((P_sp_At-9b:0.01023,P_cypripedii:0.0257):0.02898,(P_wallisii:0.0429,P_dispersa:0.03193):0.01647):0.01316,(P_sp_GM01:0.05691,P_rwandensis:0.01298):0.00665):0.00223,P_rodasii:0.0189):0.0089):0.07118):0.04028):0.02495):0.01866):0.01287):0.0219):0.00848,(P_agglomerans:0.00435,(P_vagans:0.0087,P_sp_aB:0.00436):0.00429):0.00437);
[46] tree 't46'=[&R] (P_septica:5.5E-4,((P_sp_A4:0.02283,(T_morbirosei:0.00373,(T_ptyseos:0.05671,T_sp_NML_06:0.02997):0.06661):0.04635):0.02416,(P_brenneri:0.01126,(P_deleyi:0.0,P_sp_aB:0.0,P_anthophila:0.0,P_agglomerans:0.0,P_conspicua:0.0,P_vagans:0.0):5.5E-4):0.01137):5.4E-4,(((P_sp_At-9b:0.0,P_cypripedii:0.0):5.4E-4,((E_pyrifoliae:0.0503,E_tasmaniensis:0.01076):0.03586,((P_rodasii:0.0,P_rwandensis:0.0,P_sp_GM01:0.0):5.5E-4,(P_wallisii:5.5E-4,(P_eucrina:0.03465,P_dispersa:0.01132):0.01122):0.0113):5.3E-4):0.01113):0.01175,(E_billingiae:0.03655,(P_ananatis:5.5E-4,(P_allii:0.02286,(P_s_indologenes:0.0,P_s_stewartii:0.0):0.02303):5.4E-4):0.03593):0.01116):5.4E-4);
[47] tree 't47'=[&R] (((P_sp_GM01:0.01019,((P_wallisii:5.4E-4,(P_dispersa:0.00319,P_eucrina:0.00651):0.0032):0.01283,(P_rodasii:0.00316,P_rwandensis:5.5E-4):5.4E-4):0.01092):0.03388,(P_cypripedii:0.01752,P_sp_At-9b:0.00841):0.00554):0.0114,(P_septica:0.00323,((P_conspicua:0.00325,P_brenneri:5.4E-4):0.00323,((P_agglomerans:0.0,P_sp_aB:0.0):5.5E-4,(P_vagans:0.00312,P_anthophila:0.00317):5.5E-4):0.0032):0.00322):5.4E-4,((P_deleyi:5.5E-
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4,(((T_morbirosei:0.00952,(T_ptyseos:0.04155,T_sp_NML_06:0.01685):0.01855):0.07493,P_sp_A4:0.04629):0.00451,(E_bill-
ngiae:0.01005,(E_pyrifoliae:0.00761,E_tasmaniensis:0.00866):0.07903):0.04373):0.01395):0.00635,((P_allii:0.0,P_anana-
tis:0.0):5.5E-4,(P_s_indologenes:0.0,P_s_stewartii:0.0):0.00321):0.02338):0.00315);
[48] tree 't48'=[&R] (P_sp_GM01:0.05644,((P_cypripedii:0.02256,P_sp_At-
9b:0.00885):0.02946,((P_wallisii:0.14466,P_dispersa:0.00449):0.04307,(P_eucrina:0.18763,(((P_ananatis:0.03131,(P_all-
ii:0.01184,(P_s_indologenes:0.0,P_s_stewartii:0.0):0.08656):5.4E-
4):0.22962,((P_anthophila:0.04545,((P_agglomerans:5.4E-
4,(P_sp_aB:0.04907,P_deleyi:0.04006):0.00202):0.00928,P_vagans:0.01072):0.02865):0.10882,(P_brenneri:0.0445,P_conspi-
cua:0.01217):0.05499):0.0271):0.09137,(((T_sp_NML_06:0.09647,(T_morbirosei:0.19641,T_ptyseos:0.05643):0.04831):0.574
08,(E_billingiae:0.14484,(P_septica:0.57132,(E_pyrifoliae:0.14695,E_tasmaniensis:0.1254):0.2741):0.08921):0.1543):0.
06929,P_sp_A4:0.06041):0.01997):0.04452):0.03946):0.01113):0.02265,(P_rodasii:0.01011,P_rwandensis:0.01006):5.4E-4);
[49] tree 't49'=[&R]
(P_wallisii:0.00452,(P_dispersa:0.02667,((((P_septica:0.12806,((E_pyrifoliae:0.05659,E_tasmaniensis:0.03194):0.0658
2,(E_billingiae:0.11006,(T_sp_NML_06:0.02738,(T_ptyseos:0.01747,T_morbirosei:0.06703):0.01963):0.20307):0.02433):0.0
1565):0.02076,((P_s_indologenes:5.5E-
4,P_s_stewartii:0.00504):0.02778,(P_allii:0.00142,P_ananatis:0.01932):0.03364):0.02237):0.01997,P_sp_A4:0.03745):0.0
0709,P_eucrina:0.05804):0.00398,(P_deleyi:0.01014,((P_anthophila:5.4E-
4,(P_conspicua:0.01252,P_brenneri:0.01502):0.00273):0.00488,(P_sp_aB:0.00495,(P_agglomerans:0.0,P_vagans:0.0):5.5E-
4):0.00507):0.00567):0.03646):0.00552):0.00503,((P_sp_At-
9b:0.00784,P_cypripedii:0.01923):0.01288,(P_sp_GM01:0.01982,(P_rodasii:0.01509,P_rwandensis:0.00501):0.00606):0.0059
):0.0113);
[50] tree 't50'=[&R]
(P_sp_A4:0.0564,((P_brenneri:0.00299,(((P_agglomerans:0.00681,((P_anthophila:0.03034,P_deleyi:0.01414):0.00795,P_sp_
aB:0.0131):0.00565):0.0049,P_vagans:0.00627):0.02296,P_conspicua:0.02385):0.00813):0.03111,((P_s_indologenes:5.5E-
4,P_s_stewartii:0.00204):0.02757,(P_allii:0.01484,P_ananatis:0.00597):0.00537):0.0437):0.00979,((P_septica:0.02896,(
(T_morbirosei:0.10761,(T_ptyseos:0.07285,T_sp_NML_06:0.05138):0.03714):0.14973,(E_billingiae:0.05077,(E_pyrifoliae:0
.02045,E_tasmaniensis:0.01178):0.07218):0.05585):0.025):0.0096,(P_eucrina:0.04638,((P_dispersa:0.02521,P_wallisii:0.
01768):0.01798,((P_sp_At-
9b:0.03556,P_cypripedii:0.02247):0.03998,(P_sp_GM01:0.02425,(P_rodasii:0.01531,P_rwandensis:0.00989):0.01755):0.0026
6):0.00809):0.01339):0.01088):0.01701);
[51] tree 't51'=[&R] (((((P_allii:0.0,P_ananatis:0.0,P_s_indologenes:0.0,P_s_stewartii:0.0):5.5E-
4,((E_billingiae:0.00433,(E_pyrifoliae:0.00904,E_tasmaniensis:0.00904):0.02747):0.01869,P_septica:0.01337):5.3E-
4):0.00446,(P_brenneri:5.5E-4,(P_conspicua:0.00885,((P_vagans:0.00447,(P_anthophila:0.00892,P_sp_aB:0.00444):5.5E-
4):5.3E-
4,(P_agglomerans:0.00449,P_deleyi:0.00898):0.00445):0.00896,(P_sp_A4:0.03204,(T_morbirosei:0.01351,(T_ptyseos:0.0137
6,T_sp_NML_06:5.4E-4):0.01357):5.4E-4):0.00898):0.00449):5.4E-4):5.4E-4):0.00893,(P_sp_GM01:5.3E-4,(P_rodasii:5.4E-
4,(P_rwandensis:5.5E-4,(P_eucrina:0.00912,P_wallisii:0.63883):0.00878):0.00444):0.00918):0.00444):5.5E-
4,P_dispersa:5.5E-4,(P_cypripedii:0.00446,P_sp_At-9b:0.00443):5.5E-4);
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[52] tree 't52'=[&R]
(P_agglomerans:0.00481,(((P_brenneri:0.00963,(((P_s_indologenes:0.0,P_s_stewartii:0.0):0.00944,(P_allii:0.00472,P_ananatis:0.00953):0.00489):0.02462,(P_septica:0.03527,(P_sp_A4:0.0414,((T_sp_NML_06:0.04918,(T_morbirosei:0.04776,T_ptyseos:0.03825):0.04614):0.06672,(E_billingiae:0.14165,(E_pyrifoliae:0.04635,E_tasmaniensis:0.00432):0.04549):0.05342):0.03335,(P_sp_At-9b:0.03359,P_cypripedii:0.03701):0.0348,((P_wallisii:0.01932,(P_eucrina:0.03585,P_dispersa:0.00605):0.01353):0.00577,(P_rodasii:0.00221,P_rwandensis:0.00746):0.01878,P_sp_GM01:0.02762):0.01152):0.01359):0.02388):0.01157):0.03789):0.01436):0.01487,P_conspicua:5.3E-4):0.00923):0.01966,(P_anthophila:0.01463,P_deleyi:0.00498):0.00479):0.00486,(P_vagans:0.00486,P_sp_aB:5.5E-4):5.4E-4);
[53] tree 't53'=[&R] (P_sp_aB:5.4E-4,(P_agglomerans:0.00242,P_vagans:5.5E-4):0.00483,(P_anthophila:0.0146,(P_deleyi:0.01945,(((P_sp_A4:0.06095,((T_morbirosei:0.02927,(T_sp_NML_06:0.04542,T_ptyseos:0.04066):0.01161):0.04674,(E_billingiae:0.04336,(E_pyrifoliae:0.02836,E_tasmaniensis:0.01412):0.06625):0.03654):0.02261):0.01969,(P_septica:0.04584,(((P_s_indologenes:5.5E-4,P_s_stewartii:0.00241):0.01452,(P_allii:0.00727,P_ananatis:0.00728):0.00747):0.01647,(P_eucrina:0.02746,(P_dispersa:0.00268,((P_sp_GM01:0.00928,(P_rodasii:0.00414,P_rwandensis:0.00312):0.01354):0.0138,(P_wallisii:0.01127,(P_sp_At-9b:0.00634,P_cypripedii:0.00343):0.02215):0.00985):0.00945):0.01118):0.01521):0.00893):0.00986):0.01615,(P_brenneri:0.01468,P_conspicua:5.5E-4):0.00935):0.00761):0.0029):0.0024);
[54] tree 't54'=[&R]
(P_sp_aB:0.01118,P_vagans:0.00934,(((P_deleyi:0.03213,(P_brenneri:0.00542,P_conspicua:0.01224):0.03606):0.01542,(((P_septica:0.0631,((T_sp_NML_06:0.08462,(T_morbirosei:0.07558,T_ptyseos:0.06913):0.03254):0.16298,(E_billingiae:0.10417,(E_pyrifoliae:0.0309,E_tasmaniensis:0.02945):0.07101):0.02808):0.02495):0.03467,(P_sp_At-9b:0.03391,P_cypripedii:0.03093):0.01502):0.01761,(P_sp_A4:0.07983,((P_wallisii:0.02055,(P_dispersa:0.02043,P_eucrina:0.04776):0.01536):0.00177,(P_sp_GM01:0.03169,(P_rodasii:0.01561,P_rwandensis:0.01113):0.0185):0.00876):0.00949):0.02302):0.06023,((P_s_indologenes:5.5E-4,P_s_stewartii:0.00577):0.01915,(P_allii:0.00937,P_ananatis:0.02021):0.00967):0.00765):0.01438):0.00494,(P_anthophila:0.02064,P_agglomerans:0.003):0.00423):0.0051);
[55] tree 't55'=[&R]
((P_brenneri:0.01155,(P_deleyi:0.02291,(P_septica:0.02271,(((P_sp_GM01:0.01156,(P_dispersa:5.4E-4,(P_eucrina:0.02381,(P_sp_At-9b:5.5E-4,P_cypripedii:0.01189):5.4E-4):0.02335):0.01116):0.01161,((P_rwandensis:0.0109,(P_wallisii:0.01157,P_rodasii:0.02362):0.02346):5.5E-4,P_sp_A4:0.0347):0.01163):0.01192,((T_sp_NML_06:5.5E-4,(T_morbirosei:0.03951,T_ptyseos:5.4E-4):0.01154):0.08992,(E_pyrifoliae:0.02578,E_tasmaniensis:0.03475):0.08539):0.02808):0.01172):0.01152):5.4E-4):5.5E-4,(P_anthophila:0.0,P_vagans:0.0,P_sp_aB:0.0):5.5E-4,((E_billingiae:0.08235,P_agglomerans:5.4E-4):0.01116,((P_s_indologenes:0.0,P_s_stewartii:0.0):5.5E-4,(P_conspicua:0.44648,(P_ananatis:0.01161,P_allii:5.5E-4):0.01104):5.4E-4):0.01186):5.5E-4);
[56] tree 't56'=[&R]
((P_conspicua:0.02161,P_brenneri:0.0206):0.03528,((P_agglomerans:0.00737,P_sp_aB:0.01627):0.01783,(((P_s_indologenes:0.0,P_s_stewartii:0.0):0.02904,(P_allii:0.02659,P_ananatis:0.00889):0.01166):5.4E-4,((P_septica:0.04006,((P_sp_At-
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9b:0.02136,P\_cyripedii:0.0158):0.01132,((P\_rodasii:0.01849,P\_rwandensis:0.00414):0.0204,(P\_sp\_GM01:0.04334,(P\_wallisii:0.02323,(P\_dispersa:0.01816,P\_eucrina:0.04991):0.00382):0.01558):0.00549):0.02023):0.0543):0.03333,(P\_sp\_A4:0.11696,(E\_billingiae:0.0838,(E\_pyrifoliae:0.01161,E\_tasmaniensis:0.03304):0.04994):0.05825):0.05498):0.01581,(T\_morbirosei:0.07333,(T\_sp\_NML\_06:0.09924,T\_ptyseos:0.06519):0.04909):0.15928):0.03436):0.06032):6.9E-4,(P\_vagans:0.02473,(P\_deleyi:0.04514,P\_anthophila:0.03568):0.01451):0.01187);

[57] tree 't57'=[&R] (P\_vagans:5.5E-4,(P\_allii:0.00338,(((P\_eucrina:0.01023,P\_wallisii:5.4E-4):0.00351,P\_rwandensis:5.3E-4):0.00339,P\_rodasii:5.4E-4):0.00658,((E\_pyrifoliae:0.00683,E\_tasmaniensis:5.5E-4):0.0155,((P\_dispersa:0.0029,(P\_sp\_A4:0.00882,(T\_sp\_NML\_06:0.00995,(T\_morbirosei:0.01017,T\_ptyseos:5.4E-4):0.01422):0.06849):0.01065):0.00468,(P\_septica:0.01075,(P\_sp\_GM01:0.01442,(P\_sp\_At-9b:5.4E-4,(E\_billingiae:0.01765,P\_cyripedii:0.00343):0.00336):0.00332):0.00357):0.00188):0.01362):0.00366):0.00545,(P\_anthophila:0.00679,(P\_agglomerans:0.0103,P\_sp\_aB:5.4E-4):0.00343):0.00297):5.3E-4):5.4E-4,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00329,P\_conspicua:5.5E-4):0.00337,((P\_ananatis:0.0,P\_brenneri:0.0):5.5E-4,P\_deleyi:0.00334):0.00329):5.5E-4);

[58] tree 't58'=[&R] (P\_rwandensis:0.00641,P\_dispersa:0.0064,(P\_wallisii:0.00641,((P\_sp\_At-9b:0.01956,P\_cyripedii:0.00756):0.02599,(P\_sp\_GM01:0.0262,((P\_sp\_A4:0.14664,((T\_morbirosei:0.03899,(T\_ptyseos:0.13562,T\_sp\_NML\_06:0.07773):0.05573):0.19921,P\_eucrina:0.07475):0.03677,((P\_septica:0.04561,((P\_brenneri:0.00625,P\_conspicua:0.00623):5.3E-4,(P\_sp\_aB:0.02976,(P\_agglomerans:5.4E-4,(P\_vagans:5.5E-4,(P\_deleyi:0.02521,P\_anthophila:0.01954):5.4E-4):0.00623):0.01801):0.02356):0.01921):0.01288,(P\_allii:0.035,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.04858,P\_ananatis:0.03622):0.01982):0.05536):0.01965):0.00592):5.5E-4,((E\_billingiae:0.04271,(E\_pyrifoliae:0.07853,E\_tasmaniensis:0.03172):0.17655):0.10905,P\_rodasii:0.02551):5.4E-4):0.00649):0.00627):0.00653):5.5E-4);

[59] tree 't59'=[&R] ((P\_anthophila:0.00309,P\_conspicua:5.5E-4):0.00309,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0,P\_deleyi:0.0):5.5E-4,(P\_allii:0.0,P\_ananatis:0.0):0.00307):0.00308):5.5E-4,((P\_rwandensis:5.3E-4,(P\_sp\_A4:0.0,P\_dispersa:0.0):0.00305):0.00308,((P\_wallisii:0.0,P\_eucrina:0.0):5.4E-4,(P\_septica:0.00932,(P\_cyripedii:0.0,P\_sp\_At-9b:0.0):5.3E-4):0.00307):0.00305):5.5E-4,((P\_sp\_aB:0.0,P\_agglomerans:0.0,P\_vagans:0.0,P\_brenneri:0.0,P\_sp\_GM01:0.0):5.5E-4,((P\_rodasii:5.4E-4,(E\_pyrifoliae:5.5E-4,E\_tasmaniensis:0.00617):0.00931):0.00308,((T\_morbirosei:0.0058,(T\_sp\_NML\_06:0.00616,T\_ptyseos:0.00309):5.4E-4):0.02179,E\_billingiae:0.00623):0.00615):5.3E-4):5.5E-4);

[60] tree 't60'=[&R] ((P\_brenneri:0.02032,P\_conspicua:0.01555):0.01266,(P\_anthophila:0.03177,(P\_agglomerans:0.0082,(P\_vagans:0.01907,P\_sp\_aB:0.01077):0.00805):0.01224):0.01569,(P\_deleyi:0.03161,((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00372):0.01237,(P\_allii:0.01547,P\_ananatis:0.01631):0.00744):0.02326,(P\_sp\_A4:0.02954,(P\_septica:0.09314,((E\_billingiae:0.10654,(E\_pyrifoliae:0.04512,E\_tasmaniensis:0.03791):0.12134):0.04266,((T\_sp\_NML\_06:0.07633,(T\_morbirosei:0.14313,T\_ptyseos:0.10402):0.02632):0.16482,((P\_rodasii:0.01025,(P\_sp\_GM01:0.05518,P\_rwandensis:0.00571):0.01837):0.02897,(P\_cyripedii:0.05324,P\_sp\_At-

9b:0.02952):0.0268):0.02518,(P\_eucrina:0.10873,(P\_dispersa:0.05644,P\_wallisii:0.07054):0.0149):0.02214):0.03746):0.03511):0.01483):0.02458):0.03111):0.03929):0.0106);

[61] tree 't61'=[&R] (((P\_conspicua:0.01314,P\_brenneri:5.5E-4):0.03145,((P\_s\_indologenes:0.00652,P\_s\_stewartii:5.3E-4):0.05585,(P\_allii:0.03117,P\_ananatis:0.03157):0.03594):0.06078,(P\_septica:0.11197,((T\_morbirosei:0.14869,(T\_ptyseos:0.09729,T\_sp\_NML\_06:0.20233):0.1649):0.30744,(E\_billingiae:0.13084,(E\_pyrifoliae:0.02693,E\_tasmaniensis:0.13112):0.16565):0.07984,P\_sp\_A4:0.18833):0.05594):0.03869,(P\_sp\_At-9b:0.01451,P\_cypripedii:0.01305):0.03268,(P\_dispersa:0.01785,(P\_eucrina:0.12889,P\_wallisii:0.03191):0.02152):0.03285,(P\_sp\_GM01:0.07353,(P\_rodasii:0.02587,P\_rwandensis:0.0305):0.00851):0.0091):0.09263):0.05276):0.03045):0.05108):0.05326):0.01718,P\_vagans:0.00678,(P\_agglomerans:0.01353,(P\_deleyi:0.0729,P\_anthophila:0.01398):0.0196,P\_sp\_aB:0.036):0.01556):0.00647);

[62] tree 't62'=[&R] ((P\_allii:0.04144,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.06017,P\_ananatis:0.01409):0.02307):0.09351,(((P\_brenneri:0.01818,P\_conspicua:0.02813):0.01683,(P\_agglomerans:0.00542,(P\_sp\_aB:0.00774,P\_vagans:0.00385):0.00623):0.03018,P\_deleyi:0.06981):5.3E-4):0.01615,P\_anthophila:0.03336):0.04214,(P\_sp\_A4:0.16503,(T\_sp\_NML\_06:0.12307,(T\_morbirosei:0.18045,T\_ptyseos:0.10972):0.06841):0.16439,(E\_billingiae:0.12883,(E\_pyrifoliae:0.04422,E\_tasmaniensis:0.05701):0.14527):0.07909):0.03698):0.05461,(((P\_sp\_At-9b:0.03316,P\_cypripedii:0.02775):0.04907,(P\_sp\_GM01:0.03429,(P\_rodasii:0.01752,P\_rwandensis:0.01359):0.05197):0.06614,(P\_wallisii:0.0389,(P\_eucrina:0.04803,P\_dispersa:0.06397):0.00167):0.01229):0.01913):0.06555,P\_septica:0.13324):0.04866):0.00547);

[63] tree 't63'=[&R] (P\_sp\_A4:0.41171,((P\_allii:0.07522,(P\_ananatis:0.10089,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.17762):0.03642):0.16492,(E\_billingiae:0.24823,(E\_pyrifoliae:0.09049,E\_tasmaniensis:0.05857):0.32365):0.40891,(T\_morbirosei:0.22076,(T\_sp\_NML\_06:0.16239,T\_ptyseos:0.10227):0.0755):0.19342):0.1966):0.03565,(P\_eucrina:0.22345,(P\_septica:0.28177,(P\_brenneri:5.4E-4,P\_conspicua:0.02051):0.00542,(P\_anthophila:0.06388,(P\_deleyi:0.03222,P\_vagans:0.01062):0.01058,(P\_agglomerans:5.5E-4,P\_sp\_aB:0.04324):0.01097):0.0036):0.09342):0.15076):0.11712,((P\_sp\_At-9b:0.03439,P\_cypripedii:0.05566):0.09459,(P\_dispersa:0.08661,(P\_rodasii:0.03068,(P\_rwandensis:0.04639,P\_sp\_GM01:0.14941):0.04403):0.06297,P\_wallisii:0.09758):0.05639):0.05509):0.04393):0.01451):0.06369);

[64] tree 't64'=[&R] ((P\_sp\_GM01:0.12951,(P\_rodasii:0.06914,P\_rwandensis:0.05841):0.02295):0.01872,((P\_sp\_At-9b:0.05131,P\_cypripedii:0.055):0.06298,(P\_sp\_A4:0.26171,(P\_septica:0.19591,(T\_morbirosei:0.1694,(T\_ptyseos:0.1387,T\_sp\_NML\_06:0.24408):0.07305):0.25859,(E\_billingiae:0.36111,(E\_pyrifoliae:0.11814,E\_tasmaniensis:0.04505):0.11864):0.10182):0.09811):0.0216):0.04765,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.13146,(P\_allii:0.05725,P\_ananatis:0.0577):0.04247):0.1289,(P\_brenneri:0.06961,P\_conspicua:0.05819):0.04878,(P\_agglomerans:0.07068,(P\_vagans:0.03929,(P\_sp\_aB:0.0221,(P\_anthophila:0.12826,P\_deleyi:0.07541):0.03927):0.01131):0.01418):0.03237):0.10314):0.05483,P\_eucrina:0.23857):0.04243):0.04656):0.06087,(P\_wallisii:0.09937,P\_dispersa:0.11496):0.03297);

[65] tree 't65'=[&R] (P\_deleyi:0.03618,(P\_sp\_aB:0.02937,(P\_agglomerans:0.01006,P\_vagans:0.00417):0.00369):0.0042,(P\_anthophila:0.02992,(P

\_conspicua:0.02928,(((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00353):0.04392,(P\_allii:0.02849,P\_ananatis:0.01962):0.00423):0.07238,(P\_septica:0.09798,((T\_sp\_NML\_06:0.09102,(T\_morbirosei:0.16085,T\_ptyseos:0.09346):0.00575):0.28071,(E\_billingiae:0.11508,(E\_pyriifoliae:0.05519,E\_tasmaniensis:0.06903):0.07669):0.08024):0.02757,(P\_sp\_A4:0.09419,(((P\_sp\_At-9b:0.03374,P\_cyprapedii:0.01815):0.07758,(P\_rodasii:0.04054,P\_rwandensis:0.00808):0.0137):0.00988,P\_sp\_GM01:0.03303):0.02926,(P\_eucrina:0.12449,P\_wallisii:0.03043):0.01144):0.01472,P\_dispersa:0.0263):0.03895):0.02574):0.02422):0.02081):0.05704,P\_brenneri:5.5E-4):0.00736):0.02861):0.00433);

[66] tree 't66'=[&R] (P\_eucrina:0.03305,P\_wallisii:0.01235,(((P\_sp\_A4:0.06075,(P\_septica:0.03787,(P\_sp\_At-9b:0.00262,P\_cyprapedii:0.0045):0.01871):0.00919,(((T\_sp\_NML\_06:0.02372,(T\_morbirosei:0.06828,T\_ptyseos:0.02223):0.02437):0.11933,(E\_billingiae:0.03328,(E\_pyriifoliae:0.02845,E\_tasmaniensis:0.00499):0.04519):0.05791):0.01495,((P\_allii:0.0,P\_ananatis:0.0):0.01132,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00498):0.02351,(P\_brenneri:0.0023,P\_conspicua:5.5E-4):0.00802,(P\_anthophila:0.012,(P\_agglomerans:0.0027,(P\_deleyi:0.01569,P\_vagans:0.00895):0.00838,P\_sp\_aB:0.00325):0.00327):0.00234):0.00905):0.01443):0.01264):0.01119):0.00912):0.01899,P\_dispersa:0.00608):0.00584,P\_sp\_GM01:0.02893):0.00387,(P\_rodasii:0.0511,P\_rwandensis:0.00716):0.01364):0.00538);

[67] tree 't67'=[&R] (P\_wallisii:0.05027,(P\_dispersa:0.06401,(P\_sp\_A4:0.0575,(P\_rodasii:0.04516,P\_rwandensis:0.02761):0.0237):0.01441):0.01715,(P\_sp\_GM01:0.05437,(((P\_anthophila:0.05895,(P\_deleyi:0.06641,(P\_vagans:0.01252,(P\_sp\_aB:0.0212,P\_agglomerans:0.01671):0.00371):0.00729):5.4E-4):0.04193,(P\_conspicua:0.06139,P\_brenneri:0.0161):0.01807):0.04133,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.04026,(P\_allii:0.03387,P\_ananatis:0.01552):0.02828):0.03999,P\_septica:0.13233):0.01454):0.08214,((T\_sp\_NML\_06:0.11805,(T\_morbirosei:0.16227,T\_ptyseos:0.13231):0.03714):0.21602,(E\_billingiae:0.09279,(E\_pyriifoliae:0.05578,E\_tasmaniensis:0.0745):0.16205):0.16458):0.07756):0.03902,(P\_eucrina:0.08387,(P\_sp\_At-9b:0.04448,P\_cyprapedii:0.03293):0.02393):0.00596):0.03603):0.01205);

[68] tree 't68'=[&R] ((P\_rwandensis:0.03675,(P\_rodasii:0.04441,P\_sp\_A4:0.04297):0.01351):0.01266,(P\_dispersa:0.02581,(P\_eucrina:0.02029,P\_wallisii:0.00222):0.00776):0.0138,(((P\_cyprapedii:0.01885,P\_sp\_At-9b:0.00687):0.03018,(((E\_billingiae:0.07559,(E\_pyriifoliae:0.02786,E\_tasmaniensis:0.02237):0.05394):0.0581,(T\_morbirosei:0.03506,(T\_ptyseos:0.03302,T\_sp\_NML\_06:0.03627):0.03814):0.06307):0.0559,(P\_septica:0.11334,((P\_allii:0.0155,(P\_s\_indologenes:0.00642,P\_s\_stewartii:0.00446):0.01865,P\_ananatis:0.0102):0.00356):0.04939,(((P\_deleyi:0.02991,(P\_agglomerans:0.00709,(P\_sp\_aB:0.0036,P\_vagans:0.00361):5.5E-4):0.00988):0.01084,P\_conspicua:0.01244):0.00401,(P\_brenneri:0.01605,P\_anthophila:0.01807):0.00696):0.02068):0.0154):0.00996):5.4E-4):0.01275,P\_sp\_GM01:0.02144):0.00528);

[69] tree 't69'=[&R] (P\_sp\_At-9b:0.02062,P\_cyprapedii:0.00824,((P\_dispersa:0.00729,(P\_eucrina:0.04071,P\_wallisii:0.01095):0.00707):0.02013,(((P\_ananatis:5.4E-4,(P\_allii:0.01391,(P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00343):0.00691):0.00677):0.05837,(P\_brenneri:5.4E-4,P\_conspicua:0.02888):0.01643,(((P\_deleyi:0.01429,P\_anthophila:0.00717):0.01794,(P\_agglomerans:0.0139,P\_vagans:0.01046):5.5E-



4):0.01503,P\_sp\_aB:0.00271):0.02401):0.01833):0.02539,(P\_septica:0.06256,((E\_billingiae:0.11922,(E\_pyrifoliae:0.05144,E\_tasmaniensis:0.00901):0.03294):0.12872,((T\_morbirosei:0.03634,(T\_ptyseos:0.06896,T\_sp\_NML\_06:0.06821):0.03295):0.13515,P\_sp\_A4:0.08016):0.03294):0.01886):0.01766):0.02071,(P\_sp\_GM01:0.02753,(P\_rodasii:0.00839,P\_rwandensis:0.02542):0.02812):0.02725):0.01567):0.00563);

[70] tree 't70'=[&R] ((E\_tasmaniensis:0.37465,(E\_pyrifoliae:6.0E-4,P\_conspicua:0.66276):0.09507):0.11992,((P\_eucrina:0.0,P\_dispersa:0.0,P\_wallisii:0.0,P\_sp\_At-9b:0.0,P\_cypripedii:0.0,P\_sp\_GM01:0.0):5.4E-4,((T\_morbirosei:0.0,T\_ptyseos:0.0):0.02182,(T\_sp\_NML\_06:5.4E-4,P\_sp\_A4:0.08362):0.06851):0.07374):5.5E-4,((P\_rwandensis:0.08621,P\_rodasii:5.4E-4):0.09024,(E\_billingiae:0.09312,(P\_allii:0.0,P\_s\_indologenes:0.0,P\_s\_stewartii:0.0,P\_ananatis:0.0,P\_septica:0.0,P\_brenneri:0.0,P\_deleyi:0.0,P\_anthophila:0.0,P\_sp\_aB:0.0,P\_agglomerans:0.0,P\_vagans:0.0):0.10475):5.5E-4):0.08952);

[71] tree 't71'=[&R] ((P\_dispersa:0.0,P\_wallisii:0.0):0.01311,P\_sp\_GM01:0.02649,(((P\_conspicua:0.01371,P\_brenneri:0.01329):0.02702,(P\_rwandensis:0.03636,(P\_deleyi:0.02657,(P\_agglomerans:0.0,P\_vagans:0.0,P\_sp\_aB:0.0):5.4E-4):0.04172,((P\_sp\_At-9b:0.0,P\_cypripedii:0.0):0.02495,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01298,(P\_allii:5.5E-4,P\_ananatis:0.01304):5.5E-4):0.02038,(P\_sp\_A4:0.08347,((E\_billingiae:0.05735,(E\_pyrifoliae:0.05725,E\_tasmaniensis:0.0863):0.08709):0.05889,((T\_morbirosei:0.12836,(T\_ptyseos:0.03692,T\_sp\_NML\_06:0.01589):0.01512):0.20056,P\_septica:0.02969):5.4E-4):0.0263):0.02361):0.02775,P\_rodasii:0.01436):5.5E-4):0.0132):0.01773):0.01179):0.01318,(P\_anthophila:0.04044,P\_eucrina:5.4E-4):0.01298):5.4E-4);

[72] tree 't72'=[&R] (P\_eucrina:0.07792,(P\_sp\_At-9b:0.01917,P\_cypripedii:0.02886):0.04725,(((P\_rodasii:0.02538,P\_rwandensis:0.03484):0.0287,(P\_sp\_GM01:0.02823,(P\_dispersa:0.05743,P\_wallisii:0.04461):0.00748):0.00413):0.01441,(((P\_brenneri:0.02133,P\_conspicua:0.01983):0.02442,(P\_deleyi:0.07199,(P\_agglomerans:0.01834,(P\_vagans:0.02458,(P\_anthophila:0.0836,P\_sp\_aB:0.04636):0.00472):0.00944):0.01972):0.04735):0.0379,((T\_morbirosei:0.1478,(T\_ptyseos:0.16116,T\_sp\_NML\_06:0.24504):0.13226):0.33475,P\_sp\_A4:0.1211):0.04295):0.01843,(E\_billingiae:0.18643,(E\_pyrifoliae:0.03471,E\_tasmaniensis:0.08275):0.13129):0.14915):0.00937,(((P\_s\_indologenes:0.00381,P\_s\_stewartii:5.5E-4):0.05827,(P\_allii:0.0428,P\_ananatis:0.0217):0.02152):0.04628,P\_septica:0.13601):6.4E-4):0.03652):0.00914);

[73] tree 't73'=[&R] (P\_sp\_GM01:0.03542,((P\_brenneri:5.5E-4,P\_conspicua:0.01379):0.01387,((P\_septica:0.02808,(((P\_sp\_aB:5.4E-4,P\_deleyi:0.02058):0.00679,P\_vagans:0.00678):5.4E-4,P\_agglomerans:5.5E-4):5.3E-4,P\_anthophila:0.02784):0.00731,(P\_sp\_A4:0.06512,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.3E-4,(P\_allii:0.01319,P\_ananatis:0.00976):0.01176):0.01417):5.4E-4):0.01406):0.01438,(E\_pyrifoliae:0.00701,(E\_billingiae:0.04113,E\_tasmaniensis:0.02073):0.00668):0.08107):5.4E-4):0.00696,(((P\_sp\_At-9b:0.01386,P\_cypripedii:5.4E-4):0.00691,(P\_eucrina:0.02071,(T\_morbirosei:0.05298,(T\_ptyseos:0.03722,T\_sp\_NML\_06:0.00702):0.01907):0.04123):0.00706):5.5E-4,(P\_rwandensis:0.02096,P\_rodasii:0.01549):0.01997):0.00682,(P\_wallisii:0.00684,P\_dispersa:5.5E-4):5.4E-4):5.5E-4);

[74] tree 't74'=[&R] (P\_sp\_GM01:0.00448,(P\_wallisii:0.00491,(P\_eucrina:0.01661,P\_dispersa:5.4E-4):0.00722):0.00497,(((P\_sp\_At-9b:0.00958,P\_cypripedii:0.0146):0.01117,((P\_septica:0.01613,((P\_ananatis:5.3E-

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4,(P_allii:0.00241,(P_s_indologenes:5.4E-
4,P_s_stewartii:0.0024):0.00484):0.00236):0.00994,((P_deleyi:0.00255,(P_anthophila:0.00258,(P_agglomerans:5.4E-
4,(P_vagans:0.00477,P_sp_aB:5.5E-4):0.00238):0.00463):0.00241):0.01732,(P_brenneri:0.00483,P_conspicua:5.5E-
4):0.00251):0.01742):0.00608):0.01729,((E_billingiae:0.01278,(E_pyrifoliae:0.02245,E_tasmaniensis:0.02189):0.0251):0
.03299,((T_morbirosei:0.02532,(T_ptyseos:0.02606,T_sp_NML_06:0.0431):0.05342):0.09297,P_sp_A4:0.05086):0.01202):0.00
979):0.01066):0.00787,(P_rodasii:0.00449,P_rwandensis:0.00264):0.00482):0.00239);
[75] tree 't75'=[&R]
(((E_billingiae:0.08284,(E_pyrifoliae:0.03727,E_tasmaniensis:0.04637):0.07766):0.06144,((P_sp_A4:0.57766,(T_sp_NML_0
6:0.12392,(T_morbirosei:0.06381,T_ptyseos:0.06463):0.03003):0.0524):0.03947,(((P_s_indologenes:0.0,P_s_stewartii:0.0
):0.03325,(P_allii:0.04109,P_ananatis:0.03674):0.05502):0.0717,(P_septica:0.09633,(P_deleyi:0.04009,(P_anthophila:0.
04884,(P_sp_aB:0.00792,(P_agglomerans:0.01567,(P_vagans:0.01306,(P_brenneri:0.01158,P_conspicua:0.14567):0.02068):0.
00332):5.4E-4):0.01147):0.03621):0.02141):0.02445):0.02995):0.04526):0.0417,(P_sp_At-
9b:0.03127,P_cyprapedii:0.04914):0.02977,((P_dispersa:0.03986,(P_eucrina:0.0922,P_wallisii:0.02773):0.01372):0.04725
,(P_sp_GM01:0.02063,(P_rwandensis:0.03685,P_rodasii:0.04403):0.0111):5.5E-4):0.02023);
[76] tree 't76'=[&R] ((P_wallisii:0.0165,(P_eucrina:0.0244,(P_rodasii:0.0079,P_rwandensis:5.5E-
4):0.01193):0.00418):0.00387,((P_septica:0.05032,(((T_morbirosei:0.02366,(T_sp_NML_06:0.0397,T_ptyseos:0.02478):0.03
263):0.08091,((E_pyrifoliae:0.02239,E_tasmaniensis:0.01827):0.03741,(P_sp_A4:0.08192,E_billingiae:0.05346):0.01593):
0.02132):0.02472,((P_allii:0.0375,(P_ananatis:0.0081,(P_s_indologenes:0.0,P_s_stewartii:0.0):0.02024):0.00463):0.033
85,((P_anthophila:0.01293,(P_deleyi:0.00398,(P_sp_aB:0.00795,(P_agglomerans:0.01208,P_vagans:5.5E-
4):0.00396):0.00398):0.01256):0.01598,(P_brenneri:0.02183,P_conspicua:0.01585):0.00686):0.00623):0.01226):0.01654):0
.01404,P_dispersa:0.00768):5.4E-4,((P_sp_At-9b:0.02016,P_cyprapedii:0.00792):0.00803,P_sp_GM01:5.4E-4):0.00392);
[77] tree 't77'=[&R] (P_sp_At-9b:5.5E-4,(P_deleyi:0.03187,(P_cyprapedii:0.01036,(P_wallisii:5.5E-
4,P_sp_GM01:0.01048):0.01037):0.0102):5.4E-4,((P_sp_A4:0.02076,((((P_rodasii:5.4E-
4,P_rwandensis:0.01034):0.01728,E_billingiae:0.04408):0.00328,(P_allii:0.01047,P_ananatis:5.5E-4):0.01045):5.4E-
4,((P_anthophila:5.5E-4,P_vagans:0.0103):5.5E-4,((P_s_indologenes:5.5E-
4,P_s_stewartii:0.01068):0.01076,((E_pyrifoliae:0.02058,E_tasmaniensis:5.5E-4):0.02076,(P_conspicua:5.5E-
4,(P_sp_aB:5.4E-4,(P_agglomerans:0.01026,P_brenneri:5.5E-4):0.01032):0.01036):5.4E-
4):0.01021):0.02112):0.01017):0.01038,(P_septica:0.01021,P_dispersa:5.4E-4):5.4E-4):0.00973):5.5E-4,(P_eucrina:5.5E-
4,(T_morbirosei:0.02177,(T_sp_NML_06:0.01167,T_ptyseos:0.0315):0.05034):0.04579):0.02055):5.5E-4);
[78] tree 't78'=[&R]
((P_agglomerans:0.01461,P_sp_aB:0.01839):0.00622,(P_anthophila:0.02222,(((P_sp_A4:0.08608,((T_morbirosei:0.02919,(T
_ptyseos:0.05225,T_sp_NML_06:0.03212):0.03866):0.16567,(E_billingiae:0.06383,(E_pyrifoliae:0.02275,E_tasmaniensis:0.
0275):0.09104):0.08468):0.02931):0.00969,((P_sp_At-
9b:0.01794,P_cyprapedii:0.00859):0.01546,((P_eucrina:0.03664,(P_dispersa:0.02135,P_wallisii:0.02788):0.00806):0.0057
8,(P_sp_GM01:0.02888,(P_rodasii:0.00983,P_rwandensis:0.01483):0.01524):0.00443):0.01932):0.01704):0.01979,(P_septica
:0.03359,((P_s_indologenes:0.0,P_s_stewartii:0.0):0.02813,(P_allii:0.00541,P_ananatis:0.0056):0.01643):0.05675):0.01
066):0.01983,(P_brenneri:0.00469,P_conspicua:0.00884):0.007):0.0093):0.00363,(P_vagans:0.00558,P_deleyi:0.02061):5.4
E-4);
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[79] tree 't79'=[&R] ((P_agglomerans:0.0,P_vagans:0.0,P_anthophila:0.0):5.5E-4,(P_brenneri:0.0,P_conspicua:0.0):0.00667,(((T_sp_NML_06:0.02343,(T_morbirosei:0.02518,T_ptyseos:0.03309):0.02575):0.12762,(E_billingiae:0.01814,(E_pyriifoliae:0.01916,E_tasmaniensis:0.00855):0.03946):0.05005):0.00707,((P_allii:0.0),P_ananatis:0.0):5.4E-4,(P_s_indologenes:0.0,P_s_stewartii:0.0):0.00667):5.4E-4):0.0134,(P_eucrina:0.02223,((P_sp_At-9b:5.5E-4,(P_septica:0.02015,P_cyprapedii:0.02):0.00658):0.00703,(P_dispersa:5.5E-4,(P_wallisii:0.00663,((P_rodasii:0.0,P_rwandensis:0.0):5.4E-4,(P_sp_GM01:5.4E-4,P_sp_A4:0.04067):0.00663):0.00662):5.4E-4):5.5E-4):0.00751):0.00615):5.4E-4,(P_sp_aB:0.00674,P_deleyi:0.00674):5.5E-4):5.5E-4);
[80] tree 't80'=[&R] ((P_anthophila:5.4E-4,(P_conspicua:0.00255,(P_brenneri:0.00486,(((P_s_indologenes:0.0,P_s_stewartii:0.0):0.00471,(P_allii:0.00476,P_ananatis:0.00235):0.00239):0.02362,(P_sp_A4:0.05745,(P_septica:0.0127,((T_morbirosei:0.04473,(T_sp_NML_06:0.02903,T_ptyseos:0.04174):0.01945):0.12446,(((P_sp_At-9b:0.01042,P_cyprapedii:0.00349):0.00393,(P_sp_GM01:0.01592,(P_rodasii:0.00414,P_rwandensis:0.00595):0.03321):0.0127):0.00283,(P_wallisii:0.01779,(P_dispersa:0.00568,P_eucrina:0.05221):0.01409):0.02162):0.01788,(E_billingiae:0.03051,(E_pyriifoliae:0.0185,E_tasmaniensis:0.02701):0.0272):0.04632):0.00842):0.01186):0.01127):0.01176):0.00926):0.00237):0.01673):0.00236,(P_deleyi:0.00237,P_vagans:5.4E-4):0.00236,(P_sp_aB:0.00476,P_agglomerans:5.4E-4):0.00236);
[81] tree 't81'=[&R] (P_eucrina:0.14102,(((P_wallisii:0.0188,(P_septica:0.03631,((P_deleyi:0.01775,((P_vagans:0.00995,(P_sp_aB:0.00492,P_agglomerans:5.5E-4):5.4E-4):0.00956,(P_anthophila:0.03015,(P_conspicua:0.05521,P_brenneri:0.01222):0.03216):0.0034):0.01266):0.02644,((P_s_indologenes:0.0,P_s_stewartii:0.0):0.07522,(P_allii:0.0283,P_ananatis:0.01287):0.01906):0.04935):0.03593,((E_billingiae:0.06255,(E_pyriifoliae:0.05652,E_tasmaniensis:0.01516):0.13905):0.10201,(P_sp_A4:0.08177,(T_morbirosei:0.06092,(T_sp_NML_06:0.10167,T_ptyseos:0.07631):0.03306):0.15566):0.045):0.02347):0.02159):0.05777):0.00767,(P_sp_GM01:0.02154,(P_rodasii:0.03801,P_rwandensis:0.02644):0.01055):0.01919):0.01173,P_dispersa:0.03321):0.00538,(P_sp_At-9b:0.00412,P_cyprapedii:0.05123):0.00664);
[82] tree 't82'=[&R] (P_conspicua:5.5E-4,(P_brenneri:5.4E-4,(((P_s_indologenes:0.0,P_s_stewartii:0.0):5.5E-4,(P_allii:0.01534,P_ananatis:0.01512):0.01538):0.08198,(((P_cyprapedii:0.03404,P_sp_At-9b:0.01621):0.02908,(P_sp_GM01:0.03328,(P_rwandensis:5.4E-4,(P_wallisii:5.5E-4,(P_rodasii:0.03496,(P_dispersa:5.4E-4,P_eucrina:0.09179):0.03224):5.5E-4):0.03337):0.0527):0.01555):0.08438,(P_septica:0.05286,((E_billingiae:0.13738,(E_pyriifoliae:0.02828,E_tasmaniensis:0.05988):0.02696):0.10138,((T_ptyseos:0.05755,(T_sp_NML_06:0.25386,T_morbirosei:0.11051):0.06122):0.17025,(P_deleyi:0.064633,P_sp_A4:0.07753):0.09679):0.08147):0.01091):0.0147):0.01687):0.01819):0.01557,(P_anthophila:5.3E-4,((P_agglomerans:0.0,P_sp_aB:0.0):0.03262,P_vagans:0.03031):0.02059):0.04852);
[83] tree 't83'=[&R] (((P_s_indologenes:0.0,P_s_stewartii:0.0):0.02472,(P_allii:0.0098,P_ananatis:0.00487):5.3E-4):0.03813,(P_sp_A4:0.04222,(((P_septica:0.01814,((P_sp_GM01:0.02471,((P_dispersa:0.01357,P_wallisii:0.01777):0.01665,(P_eucrina:0.0296,(P_rodasii:0.02341,P_rwandensis:0.01259):0.01326):0.00591):0.01437):0.01273,(P_sp_At-9b:0.01463,P_cyprapedii:0.00988):0.01832):0.02388):0.01196,((P_agglomerans:5.3E-4,P_vagans:0.00477):0.00508,(P_anthophila:0.00957,(P_deleyi:5.5E-4,P_sp_aB:0.00957):5.5E-
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4):0.00925):0.00504,(P\_conspicua:7.0E-4,P\_brenneri:0.17915):0.00432):0.02456):0.01625,(E\_pyrifoliae:0.03862,E\_tasmaniensis:0.0033):0.05581):0.01102):0.01016,((T\_morbirosei:0.06428,(T\_ptyseos:0.03207,T\_sp\_NML\_06:0.04909):0.03837):0.07538,E\_billingiae:0.1206):5.4E-4);  
[84] tree 't84'=[&R]  
((P\_rodasii:0.01687,P\_rwandensis:0.0391):0.04907,(P\_dispersa:0.03473,P\_wallisii:0.01782):0.02473,(P\_sp\_GM01:0.03453,(P\_eucrina:0.09625,((P\_sp\_At-9b:0.02059,P\_cypripedii:0.0292):0.02257,(((P\_brenneri:0.01084,P\_conspicua:0.01076):0.0228,(P\_agglomerans:5.5E-4,(P\_vagans:0.01333,P\_sp\_aB:0.00529):0.01599):0.00573,(P\_anthophila:0.04555,P\_deleyi:0.0294):0.0127):0.03345):0.05879,(((P\_s\_indologenes:0.00578,P\_s\_stewartii:0.00482):0.05393,(P\_allii:0.00906,P\_ananatis:0.02689):0.02465):0.0413,P\_septica:0.14152):0.02791):0.02256,(P\_sp\_A4:0.11065,((T\_morbirosei:0.15991,(T\_sp\_NML\_06:0.19822,T\_ptyseos:0.16183):0.04064):0.31771,(E\_billingiae:0.077,(E\_pyrifoliae:0.0437,E\_tasmaniensis:0.0382):0.06156):0.07039):0.07647):0.03267):0.01865):0.02153):0.02156):0.01143);  
[85] tree 't85'=[&R]  
((P\_deleyi:0.00195,(P\_anthophila:0.00216,(((P\_septica:0.03438,(((T\_morbirosei:0.02023,(T\_sp\_NML\_06:0.04513,T\_ptyseos:0.0266):0.0183):0.09207,(E\_billingiae:0.04843,(E\_pyrifoliae:0.01643,E\_tasmaniensis:0.00863):0.03944):0.05758):0.0565,(((P\_sp\_At-9b:0.0233,P\_cypripedii:0.00141):0.03077,(P\_dispersa:0.01592,(P\_eucrina:0.03117,(P\_rodasii:0.03144,P\_sp\_GM01:0.02767):0.00866):0.00752):0.00476,P\_wallisii:0.0224):0.01685):0.0141,(P\_rwandensis:0.06453,P\_sp\_A4:0.0725):0.04017):0.01789):0.01722):0.02242,(P\_allii:0.00207,(P\_ananatis:0.00379,(P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00187):0.00379):0.00168):0.02286):0.00854,(P\_brenneri:0.00379,P\_conspicua:0.00573):0.00615):0.0124):0.0097):0.00941,P\_agglomerans:5.4E-4,(P\_vagans:0.0056,P\_sp\_aB:0.00383):0.0037);  
[86] tree 't86'=[&R] (P\_sp\_GM01:0.02022,(P\_sp\_At-9b:0.02268,P\_cypripedii:0.02512):0.02702,(((P\_sp\_A4:0.09513,(((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00236):0.02681,(P\_allii:0.03873,P\_ananatis:0.00658):0.01578):0.05473,((P\_anthophila:0.02058,(P\_deleyi:0.02675,(P\_vagans:0.0251,(P\_agglomerans:0.01738,P\_sp\_aB:0.0151):0.00351):0.01181):0.00372):0.04677,(P\_brenneri:0.04834,P\_conspicua:0.01304):0.02148):0.04195):0.02491,(E\_billingiae:0.08438,(E\_pyrifoliae:0.04038,E\_tasmaniensis:0.03347):0.04866):0.08777):0.01583):0.01375,((T\_ptyseos:0.07481,(T\_morbirosei:0.10132,T\_sp\_NML\_06:0.10309):0.03341):0.1788,P\_septica:0.06014):0.03289):0.03016,(P\_rodasii:0.02129,P\_rwandensis:0.00958):0.01636,((P\_eucrina:0.09193,P\_wallisii:0.01771):0.02178,P\_dispersa:0.0391):0.01024):0.00364):0.00744);  
[87] tree 't87'=[&R]  
(P\_dispersa:0.01211,(P\_wallisii:0.0153,(P\_rodasii:0.01502,P\_rwandensis:0.00802):0.02343):0.00526,(((P\_sp\_At-9b:0.01585,P\_cypripedii:0.00438):0.01896,(((T\_morbirosei:0.05843,(T\_sp\_NML\_06:0.09105,T\_ptyseos:0.05622):0.03751):0.26381,(E\_billingiae:0.11049,(E\_pyrifoliae:0.04746,E\_tasmaniensis:0.03464):0.05495):0.1192):0.03031,P\_septica:0.06944):0.01159,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.04814,(P\_allii:0.02014,P\_ananatis:0.02364):0.02056):0.05771,((P\_brenneri:0.01424,P\_conspicua:0.01525):0.02804,(P\_anthophila:0.03456,((P\_agglomerans:0.0098,P\_vagans:0.00973):0.00343,(P\_sp\_aB:0.0073,P\_deleyi:0.03997):0.00284):0.00921):0.02077):0.00471):0.0254):0.0074,P\_sp\_A4:0.12119):0.02453):0.01039,(P\_eucrina:0.11029,P\_sp\_GM01:0.00151):0.01229):0.00437);  
[88] tree 't88'=[&R] ((P\_dispersa:0.01387,((P\_septica:0.03394,P\_sp\_At-9b:0.02793):0.01159,(P\_eucrina:0.0266,(((P\_s\_indologenes:0.00262,P\_s\_stewartii:0.00267):0.03082,(P\_allii:0.01182,P\_a

nanatis:0.01209):0.01617):0.04024,((((P\_agglomerans:5.4E-4,(P\_sp\_aB:0.00787,P\_vagans:0.00819):0.00262):0.00821,(P\_anthophila:0.01871,P\_deleyi:0.03411):0.00258):0.01681,(P\_brenneri:0.00929,P\_conspicua:0.00955):0.01528):0.01836,(P\_sp\_A4:0.11139,(E\_billingiae:0.06188,(E\_pyrifoliae:0.16478,E\_tasmaniensis:0.04905):0.04718):0.01551):0.00865):0.01045,(T\_morbirosei:0.05513,(T\_ptyseos:0.10599,T\_sp\_NML\_06:0.12139):0.09738):0.11781):0.01204):0.00921):0.01004):0.00896):0.01042,P\_wallisii:0.01112,(P\_cypripedii:0.02954,(P\_sp\_GM01:0.02671,(P\_rwandensis:0.02493,P\_rodasii:0.0244):0.00461):0.00592):0.00306);

[89] tree 't89'=[&R] (((P\_allii:0.00605,(P\_ananatis:0.00264,(P\_s\_stewartii:0.00396,P\_s\_indologenes:5.5E-4):0.01178):0.00549):0.01002,(((T\_morbirosei:0.04387,(T\_ptyseos:0.02153,T\_sp\_NML\_06:0.01591):0.01757):0.06218,(E\_billingiae:0.03725,(E\_pyrifoliae:0.0188,E\_tasmaniensis:0.00967):0.03028):0.01779):0.00973,(((P\_vagans:5.5E-4,P\_sp\_aB:0.00199):0.00883,(P\_agglomerans:0.00276,P\_anthophila:0.00918):0.00397):0.00484,(P\_deleyi:0.01011,(P\_brenneri:5.4E-4,P\_conspicua:0.00997):0.0138):0.00428):0.01263):0.00208,(P\_septica:0.03106,(((P\_eucrina:0.01517,(P\_dispersa:0.01746,(P\_rodasii:0.01013,(P\_rwandensis:0.00254,P\_sp\_GM01:0.00737):0.01027):0.00694):0.00385,P\_sp\_A4:0.01579):0.00581):0.0011,P\_wallisii:0.00407):0.02623,(P\_sp\_At-9b:0.01144,P\_cypripedii:0.00694):0.00436):0.0127):0.00384);

[90] tree 't90'=[&R] (((P\_septica:0.0703,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.4E-4,(P\_allii:5.4E-4,P\_ananatis:0.01766):0.0374):0.05569,((P\_brenneri:0.0,P\_conspicua:0.0,P\_vagans:0.0,P\_sp\_aB:0.0,P\_deleyi:0.0,P\_anthophila:0.0):5.4E-4,P\_agglomerans:0.01762):0.01789):0.03768):0.04613,(P\_sp\_A4:0.09859,(T\_morbirosei:0.07851,(T\_sp\_NML\_06:5.4E-4,T\_ptyseos:0.01669):0.03872):0.12166):5.4E-4):5.4E-4,(E\_billingiae:0.01558,(E\_pyrifoliae:0.01773,E\_tasmaniensis:0.01858):0.08083):0.07812):0.01788,(P\_sp\_At-9b:5.5E-4,P\_cypripedii:0.01772):0.05443,(((P\_dispersa:0.0,P\_wallisii:0.0):5.5E-4,((P\_rodasii:0.0,P\_rwandensis:0.0):5.4E-4,P\_sp\_GM01:0.01822):0.01806):0.01819,P\_eucrina:5.3E-4):5.5E-4);

[91] tree 't91'=[&R] (P\_septica:0.03408,((E\_pyrifoliae:0.02215,E\_tasmaniensis:0.09647):0.0468,(E\_billingiae:0.04928,P\_sp\_A4:0.10098):0.01717):0.00236,(((P\_sp\_At-9b:0.00641,P\_cypripedii:0.01366):0.03497,(P\_brenneri:0.00674,(((P\_dispersa:0.01027,(P\_eucrina:0.05474,P\_wallisii:5.4E-4):0.02453):0.03496,(P\_sp\_GM01:5.4E-4,(P\_rodasii:0.02705,P\_rwandensis:0.01362):0.0202):0.00684):0.04333,(P\_conspicua:5.5E-4,((P\_anthophila:0.0,P\_sp\_aB:0.0):5.5E-4,(P\_deleyi:0.00668,(P\_agglomerans:0.0,P\_vagans:0.0):5.5E-4):0.0067):0.00669):5.3E-4):0.00663):0.01344):0.00959,((T\_morbirosei:0.09118,(T\_ptyseos:0.05966,T\_sp\_NML\_06:0.07668):0.0605):0.1819,(P\_ananatis:0.00569,(P\_allii:5.4E-4,(P\_s\_stewartii:5.5E-4,P\_s\_indologenes:0.00675):0.02054):0.00779):0.05082):0.02615):0.02736);

[92] tree 't92'=[&R] (((P\_sp\_At-9b:0.03222,P\_cypripedii:0.00409):0.03804,(P\_sp\_A4:0.18081,P\_septica:0.05001):0.03741,(((T\_sp\_NML\_06:0.05525,(T\_ptyseos:0.07013,T\_morbirosei:0.12721):0.01155):0.2295,(E\_billingiae:0.12128,(E\_pyrifoliae:0.06917,E\_tasmaniensis:0.01274):0.14284):0.06389):0.04895,(((P\_s\_indologenes:0.00432,P\_s\_stewartii:0.0044):0.03867,(P\_allii:5.5E-4,P\_ananatis:0.02214):0.0253):0.04623,((P\_anthophila:0.01325,(P\_agglomerans:5.5E-4,(P\_sp\_aB:0.00442,(P\_deleyi:0.00442,P\_vagans:5.5E-4):5.5E-

4):0.00442):0.00939):0.01601,(P\_brenneri:0.02297,P\_conspicua:5.4E-4):0.02622):0.02712):0.04319):0.02965):0.01294):0.01574,(P\_rodasii:0.00969,P\_rwandensis:0.013):0.03234,((P\_wallisii:0.01023,P\_dispersa:0.03509):0.00464,(P\_eucrina:0.05585,P\_sp\_GM01:0.05412):0.0078):0.01193);

[93] tree 't93'=[&R]  
(P\_deleyi:0.01237,P\_vagans:0.0091,(P\_anthophila:0.01242,((P\_agglomerans:0.00339,P\_sp\_aB:0.00339):5.5E-4,(((T\_morbirosei:0.03814,(T\_ptyseos:0.07394,T\_sp\_NML\_06:0.0337):0.06284):0.07889,(E\_billingiae:0.07948,(E\_pyrifoliae:0.02036,E\_tasmaniensis:0.03883):0.04481):0.06076):0.03186,((P\_septica:0.04584,((P\_s\_indologenes:5.4E-4,P\_s\_stewartii:0.00303):0.02028,(P\_allii:0.00711,P\_ananatis:0.01363):0.01299):0.04265):0.01816,(P\_sp\_A4:0.08284,((P\_sp\_At-9b:0.03738,P\_cypripedii:0.00863):0.01972,(P\_rwandensis:0.01011,(P\_sp\_GM01:0.03438,P\_rodasii:0.00674):0.0034):0.00415):8.9E-4,(P\_wallisii:0.02101,(P\_dispersa:0.01159,P\_eucrina:0.04528):0.01321):0.00825):0.02688):0.01702):0.01266):0.0139,(P\_brenneri:0.00673,P\_conspicua:5.3E-4):0.01297):0.01074):0.01155):0.00614);

[94] tree 't94'=[&R] ((P\_agglomerans:5.5E-4,(P\_brenneri:0.00627,(P\_conspicua:0.01222,((P\_ananatis:0.01277,(P\_allii:0.00686,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01758):0.00684):0.03086,((P\_sp\_At-9b:0.00599,P\_cypripedii:0.00634):0.01903,((E\_billingiae:0.09917,(E\_pyrifoliae:0.033,E\_tasmaniensis:0.02927):0.03146):0.09957,P\_eucrina:0.03651):0.01548,((P\_dispersa:0.03126,((P\_rwandensis:0.01887,P\_sp\_GM01:0.04947):0.00657,P\_rodasii:0.03):5.4E-4):0.01299,P\_wallisii:0.01834):0.02045):0.03406):0.05138,(P\_septica:0.03736,(P\_sp\_A4:0.15282,(T\_morbirosei:0.03109,(T\_sp\_NML\_06:0.08911,T\_ptyseos:0.07736):0.06066):0.21499):0.02634):0.01258):0.0346):0.01229):0.00602):0.02589):0.01224,(P\_vagans:0.01194,P\_sp\_aB:5.4E-4):0.00599,(P\_anthophila:0.02433,P\_deleyi:0.01208):5.4E-4);

[95] tree 't95'=[&R]  
(((P\_sp\_GM01:0.08921,(P\_rodasii:0.03716,P\_rwandensis:0.03779):0.02109):0.01969,(P\_eucrina:0.14773,P\_wallisii:0.0252):0.02353):0.006,P\_dispersa:0.05912,((P\_sp\_At-9b:0.03875,P\_cypripedii:0.0273):0.03512,((P\_septica:0.08673,(P\_sp\_A4:0.13842,(T\_sp\_NML\_06:0.12252,(T\_ptyseos:0.15269,T\_morbirosei:0.14242):0.04756):0.3453):0.03664):0.024,(((P\_s\_indologenes:5.3E-4,P\_s\_stewartii:0.00918):0.0311,(P\_ananatis:0.03334,P\_allii:0.02732):0.02092):0.01165,((P\_brenneri:0.01202,P\_conspicua:0.02206):0.02118,(P\_agglomerans:0.02024,((P\_anthophila:0.04239,P\_deleyi:0.04549):0.01155,P\_vagans:0.00622):0.00604,P\_sp\_aB:0.01545):0.00773):0.06286):0.03389):0.05114):0.03404,(E\_billingiae:0.10745,(E\_pyrifoliae:0.06098,E\_tasmaniensis:0.04265):0.11132):0.1584):0.02742):0.03016);

[96] tree 't96'=[&R] (P\_wallisii:0.0432,(P\_sp\_At-9b:0.01461,P\_cypripedii:0.02025):0.03545,((P\_sp\_GM01:0.13618,(P\_rodasii:0.01927,P\_rwandensis:0.01846):0.00516):0.00999,(P\_dispersa:0.01764,(P\_eucrina:0.08185,(P\_sp\_A4:0.05457,((P\_septica:0.08111,((P\_ananatis:0.03085,(P\_allii:0.00749,(P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00952):0.08105):0.02741):0.16974,(((P\_anthophila:0.061,P\_deleyi:0.03664):0.03534,(P\_agglomerans:0.02952,(P\_vagans:0.03515,P\_sp\_aB:0.0363):0.00899):0.0061):0.11652,(P\_brenneri:0.04815,P\_conspicua:0.03686):0.05229):0.03309):0.03333):0.04938,((T\_morbirosei:0.15557,(T\_ptyseos:0.06227,T\_sp\_NML\_06:0.07128):0.01417):0.08224,(E\_billingi

ae:0.18985,(E\_pyrifoliae:0.066,E\_tasmaniensis:0.0286):0.23008):0.05305):0.03069):0.0199):0.03195):0.01704):0.00509):0.00193);

[97] tree 't97'=[&R]  
( (P\_wallisii:0.02178,P\_dispersa:0.01364):0.00743,(P\_rodasii:0.02435,P\_rwandensis:0.01383):0.00812,(P\_sp\_GM01:0.02457,((P\_sp\_At-9b:0.01591,P\_cyprapedii:0.01147):0.00889,(P\_septica:0.03769,((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00128):0.02385,(P\_allii:0.01312,P\_ananatis:0.0193):0.01448):0.03339,(P\_brenneri:0.00547,P\_conspicua:0.01468):0.01619,(P\_sp\_aB:0.00753,(P\_agglomerans:0.00391,P\_vagans:0.00658):0.00169):0.00363,(P\_deleyi:0.02911,P\_anthophila:0.02069):0.00504):0.00426):0.01901):0.01613):0.01432,((E\_billingiae:0.05321,(E\_pyrifoliae:0.01787,E\_tasmaniensis:0.02957):0.05308):0.03539,(P\_eucrina:0.03849,(P\_sp\_A4:0.05293,(T\_morbirosei:0.04768,(T\_ptyseos:0.08027,T\_sp\_NML\_06:0.0574):0.01642):0.13688):0.03504):0.01255):0.01088):0.00749):0.01175):0.00504);

[98] tree 't98'=[&R] ((P\_vagans:0.00775,(P\_anthophila:0.039,P\_agglomerans:5.4E-4):0.01506):0.00728,P\_sp\_aB:5.4E-4):0.00766,(P\_conspicua:0.03074,P\_brenneri:0.00795):0.01521,((P\_ananatis:0.00523,(P\_allii:0.00794,(P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00748):0.05785):0.00975):0.05613,(P\_wallisii:0.0166,(P\_eucrina:0.06468,((P\_rwandensis:0.03158,(P\_sp\_At-9b:0.09607,P\_cyprapedii:0.07127):0.04089):0.03576,((P\_dispersa:0.02491,(P\_septica:0.07692,P\_rodasii:0.0582):0.00486):0.02485,P\_sp\_GM01:0.03919):0.00187):0.02189,((E\_billingiae:0.0441,(E\_pyrifoliae:0.03665,E\_tasmaniensis:0.04624):0.12392):0.06435,(P\_sp\_A4:0.69927,(T\_sp\_NML\_06:0.08414,(T\_morbirosei:0.16568,T\_ptyseos:0.0788):0.05866):0.05082):0.08615):0.03382):0.00866):0.02191):0.07261):0.01928,P\_deleyi:0.02276):5.5E-4);

[99] tree 't99'=[&R]  
( (P\_dispersa:0.03573,(P\_wallisii:0.02195,(P\_sp\_GM01:0.02247,(P\_rwandensis:0.01687,P\_rodasii:0.02412):0.01571):0.0129):0.01955):0.00839,((P\_sp\_At-9b:0.01303,P\_cyprapedii:0.02729):0.03101,P\_septica:0.07569):0.00595):0.00721,((E\_billingiae:0.04623,(E\_pyrifoliae:0.02848,E\_tasmaniensis:0.02323):0.10642):0.05294,((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00545):0.04629,(P\_allii:0.01634,P\_ananatis:0.02258):0.01958):0.04314):0.01218,(((P\_brenneri:0.02343,P\_conspicua:0.02286):0.01435,(P\_deleyi:0.05629,(P\_anthophila:0.02752,(P\_vagans:0.01738,(P\_agglomerans:0.00547,P\_sp\_aB:0.01284):0.00918):0.0077):0.00947):0.02378):0.0475,(T\_morbirosei:0.10495,(T\_ptyseos:0.10141,T\_sp\_NML\_06:0.10488):0.01413):0.09494,(P\_sp\_A4:0.18556,P\_eucrina:0.04744):0.03223):0.02894):0.01389);

[100] tree 't100'=[&R]  
(P\_sp\_GM01:0.02033,(P\_wallisii:0.48733,P\_eucrina:0.05875):0.01292,((P\_rodasii:0.01863,(P\_dispersa:0.02968,((P\_sp\_A4:0.08101,(((P\_s\_indologenes:0.00324,P\_s\_stewartii:5.4E-4):0.04531,(P\_allii:0.02865,P\_ananatis:0.01486):0.01562):0.06131,((P\_brenneri:0.0575,P\_conspicua:0.0067):0.02316,(P\_anthophila:0.02033,((P\_vagans:0.00443,P\_deleyi:0.04696):0.01194,P\_sp\_aB:0.01646):0.00789,P\_agglomerans:0.01187):0.01477):0.00906):0.03189):0.0261,(P\_septica:0.04815,(T\_morbirosei:0.06615,(T\_ptyseos:0.03461,T\_sp\_NML\_06:0.09032):0.06445):0.10186,(E\_billingiae:0.10837,(E\_pyrifoliae:0.02865,E\_tasmaniensis:0.04103):0.06188):0.05875):0.06853):0.02047):0.02417):0.03019,(P\_cyprapedii:0.01984,P\_sp\_At-9b:5.5E-4):0.00846):0.01591):0.00476):0.00838,P\_rwandensis:0.01465):0.00882);

[101] tree 't101'=[&R]  
( (P\_wallisii:0.05006,(P\_dispersa:0.05734,P\_eucrina:0.10929):0.02005):0.02089,(P\_rwandensis:0.06299,P\_rodasii:0.03032

:0.0234,((((P\_anthophila:0.0472,(P\_deleyi:0.08473,(P\_vagans:0.01739,(P\_sp\_aB:0.01944,P\_agglomerans:0.00953):0.00539):0.02015):0.01465):0.01924,(P\_brenneri:0.04413,P\_conspicua:0.0301):0.02885,(P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00495):0.06053,(P\_allii:0.04578,P\_ananatis:0.03883):0.0211):0.11596):0.03702):0.08351,P\_septica:0.09296):0.01956,((T\_morbirosei:0.12065,(T\_sp\_NML\_06:0.14238,T\_ptyseos:0.0997):0.09508):0.30644,(E\_billingiae:0.13109,(E\_pyrifoliae:0.06666,E\_tasmaniensis:0.08341):0.10892):0.1253):0.04512):0.04394,P\_sp\_A4:0.20786):0.07263,(P\_sp\_GM01:0.07385,(P\_sp\_At-9b:0.02764,P\_cyprapedii:0.02881):0.04023):0.00437):0.01363);

[102] tree 't102'=[&R]  
(P\_vagans:0.0069,(P\_brenneri:0.01029,P\_conspicua:0.01032):0.00686,((P\_agglomerans:0.01023,P\_sp\_aB:0.0068):0.00925,(P\_deleyi:0.03662,(((P\_sp\_At-9b:0.03009,P\_cyprapedii:9.9E-4):0.03606,(((T\_ptyseos:0.06812,(T\_morbirosei:0.10609,T\_sp\_NML\_06:0.11205):0.01926):0.34985,(E\_billingiae:0.15072,(E\_pyrifoliae:0.06123,E\_tasmaniensis:0.02962):0.10595):0.1352):0.0657,(P\_eucrina:0.06216,(P\_dispersa:0.04322,(P\_wallisii:0.02412,(P\_sp\_GM01:0.03538,(P\_rodasii:0.06616,P\_rwandensis:0.00842):0.04775):0.03932):0.02995):0.02154):0.0421):0.02296):0.05187,(P\_sp\_A4:0.15766,P\_septica:0.08496):0.01966):5.4E-4,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.02189,(P\_allii:0.01714,P\_ananatis:0.00693):0.01311):0.06171,P\_anthophila:0.01684):0.00529):0.00698):6.1E-4):0.00222);

[103] tree 't103'=[&R] ((P\_sp\_A4:0.05033,(T\_morbirosei:5.4E-4,(T\_ptyseos:0.04943,T\_sp\_NML\_06:0.02483):0.03934):0.09839):0.02283,(P\_septica:0.02061,P\_sp\_GM01:0.00985):0.01004):5.4E-4,(P\_allii:0.00132,((P\_brenneri:5.5E-4,P\_conspicua:0.01991):0.00989,((P\_deleyi:0.0,P\_anthophila:0.0,P\_agglomerans:0.0,P\_sp\_aB:0.0):5.5E-4,P\_vagans:0.0099):5.3E-4):0.00984,P\_ananatis:5.3E-4):0.00923):0.00948,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.3E-4,(P\_wallisii:5.5E-4,(P\_cyprapedii:0.02978,P\_sp\_At-9b:0.0017):0.02684,((P\_eucrina:0.00996,P\_dispersa:0.02961):0.0099,(P\_rwandensis:0.00977,(E\_billingiae:0.03088,(E\_pyrifoliae:0.0101,E\_tasmaniensis:0.03126):0.04757):0.03923,P\_rodasii:0.03998):5.5E-4):0.00989):0.009):0.01299):0.0101):5.4E-4);

[104] tree 't104'=[&R]  
(((P\_rodasii:0.0,P\_sp\_GM01:0.0):0.01824,(P\_rwandensis:0.00529,(T\_morbirosei:0.00614,T\_ptyseos:0.0297):0.03498):0.01456):5.4E-4,(P\_wallisii:0.0,P\_eucrina:0.0):5.5E-4,((T\_sp\_NML\_06:0.07504,((P\_sp\_At-9b:0.0,P\_cyprapedii:0.0):5.5E-4,((P\_septica:0.03651,((P\_anthophila:5.5E-4,(P\_conspicua:5.3E-4,((P\_brenneri:0.0,P\_agglomerans:0.0,P\_vagans:0.0,P\_sp\_aB:0.0):5.5E-4,P\_deleyi:0.01737):0.03521):0.0345):0.01693,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01815,(P\_allii:0.01782,P\_ananatis:5.4E-4):5.4E-4):0.01834):0.01821):0.01711,(P\_sp\_A4:5.5E-4,(E\_billingiae:0.05672,(E\_pyrifoliae:0.01739,E\_tasmaniensis:0.02007):0.03496):0.05817):5.4E-4):0.01828):0.00326):0.01675,P\_dispersa:0.0183):5.5E-4);

[105] tree 't105'=[&R] (((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00788,(P\_allii:5.5E-4,P\_ananatis:0.01418):0.00636):0.0642,(((P\_sp\_At-9b:5.4E-4,P\_cyprapedii:0.03638):0.01924,((P\_dispersa:0.0126,(P\_wallisii:0.00935,(P\_sp\_GM01:0.03967,(P\_rwandensis:0.05023,P\_rodasii:0.03032):0.01238):0.03195):0.01511):0.00869,P\_eucrina:0.03109):0.0191):0.04267,(P\_septica:0.04587,(E\_billingiae:0.0449,(E\_pyrifoliae:0.02366,E\_tasmaniensis:0.02841):0.03057):0.02279):5.5E-



4):0.01563,(P\_sp\_A4:0.17403,(T\_morbirosei:0.05668,(T\_sp\_NML\_06:0.03759,T\_ptyseos:5.4E-4):0.01647):0.11464):5.4E-4):0.02719):0.01588,(P\_conspicua:0.00716,P\_brenneri:0.00715):0.00866,(P\_deleyi:0.11305,(P\_anthophila:0.01441,(P\_agglomerans:5.4E-4,(P\_vagans:0.00716,P\_sp\_aB:5.0E-4):0.00719):0.0074):0.01146):0.00909);

[106] tree 't106'=[&R] ((P\_vagans:5.5E-4,(P\_agglomerans:5.5E-4,(P\_anthophila:0.03237,(P\_deleyi:0.02915,(((P\_allii:0.00886,(P\_ananatis:0.00442,(P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00444):0.00447):0.00456):0.02267,((((E\_billingiae:0.09954,P\_cyprapedii:0.00784):0.00476,P\_sp\_At-9b:0.00499):0.02111,((P\_sp\_GM01:0.03599,P\_rwandensis:0.02384):0.01614,(P\_rodasii:0.00701,(P\_dispersa:0.03781,P\_wallisii:0.01746):0.02127):0.02629):0.02684):0.01305,(P\_sp\_A4:0.03025,((T\_morbirosei:0.07384,(T\_ptyseos:0.06915,T\_sp\_NML\_06:0.06638):0.0267):0.09774,(E\_pyriifoliae:0.03173,E\_tasmaniensis:0.00814):0.08095):0.03299):0.01797):0.01878,(P\_eucrina:0.06193,P\_septica:0.04486):0.0407):0.02663):0.04439):0.00687):0.00896):0.00439):0.00438,P\_sp\_aB:0.00896,(P\_conspicua:0.01362,P\_brenneri:0.00861):0.00446);

[107] tree 't107'=[&R] (((E\_billingiae:0.08721,(E\_pyriifoliae:0.05074,E\_tasmaniensis:0.01912):0.07629):0.13516,(P\_septica:0.03221,(P\_sp\_A4:0.04654,(P\_cyprapedii:0.02089,P\_sp\_At-9b:0.04551):0.03867):0.0231):0.01884):5.4E-4,((T\_morbirosei:0.1094,(T\_sp\_NML\_06:0.30153,T\_ptyseos:0.12714):0.08959):0.40143,(P\_deleyi:0.03396,((P\_ananatis:0.01634,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.0329,P\_allii:0.00818):0.008):0.04933,((P\_vagans:0.01631,((P\_brenneri:0.0077,P\_conspicua:5.4E-4):0.03257,(P\_agglomerans:0.0,P\_sp\_aB:0.0):0.00775):5.4E-4):0.00807,P\_anthophila:5.4E-4):0.00298):0.00428):0.0645):0.03962):0.01898,(P\_dispersa:5.3E-4,(P\_sp\_GM01:0.03293,(P\_rwandensis:0.00827,P\_rodasii:0.0082):0.00791):0.01573):0.00854,(P\_eucrina:0.04927,P\_wallisii:0.01611):0.00737);

[108] tree 't108'=[&R] ((P\_septica:0.06704,((P\_sp\_A4:0.11451,(E\_billingiae:0.14855,(E\_pyriifoliae:0.10924,E\_tasmaniensis:0.11953):0.09915):0.05569):0.04118,((P\_sp\_At-9b:0.03739,P\_cyprapedii:5.4E-4):0.0668,(P\_eucrina:0.09753,((P\_dispersa:0.03611,P\_wallisii:0.01197):0.03533,(P\_sp\_GM01:0.00927,(P\_rodasii:0.04155,P\_rwandensis:0.0277):0.04746):0.01941):0.01279):0.0201):0.04302):0.01578):0.06594,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.17403,(P\_allii:0.02553,P\_ananatis:0.02213):0.04504):0.07193,(((P\_agglomerans:5.5E-4,(P\_vagans:0.02346,P\_sp\_aB:0.02319):5.5E-4):5.4E-4,(P\_deleyi:0.03337,P\_anthophila:0.08794):0.02177):0.08091,(P\_brenneri:0.02419,(P\_conspicua:0.21222,(T\_morbirosei:0.10761,(T\_sp\_NML\_06:0.32354,T\_ptyseos:0.10098):0.16767):0.47828):0.03094):0.01165):0.03863);

[109] tree 't109'=[&R] ((E\_billingiae:0.09153,((P\_dispersa:0.01019,P\_eucrina:0.01786):0.01463,((P\_sp\_At-9b:0.01474,P\_cyprapedii:0.01996):0.03562,(P\_wallisii:0.01676,(P\_sp\_GM01:0.02043,(P\_rodasii:0.01069,P\_rwandensis:0.00675):0.00427):0.02097):0.02454):0.00408):0.01755):0.01626,(P\_septica:0.04675,(P\_sp\_A4:0.10555,(T\_morbirosei:0.0529,(T\_ptyseos:0.04301,T\_sp\_NML\_06:0.04926):0.12194):0.18079):0.06308):0.01599,((E\_pyriifoliae:0.026,E\_tasmaniensis:0.06543):0.21694,((P\_allii:0.00205,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.026,P\_ananatis:0.01084):0.01101):0.04831,((P\_anthophila:0.0567,P\_sp\_aB:0.03878):0.10381,(P\_deleyi:0.01677,((P\_brenneri:0.01013,P\_conspicua:5.4E-4):0.03207,(P\_agglomerans:0.00487,P\_vagans:0.02374):0.02077):0.01613):0.02393):0.0156):0.00699):0.01003);

[110] tree 't110'=[&R] (P\_anthophila:0.00558,P\_deleyi:0.00278,(P\_vagans:0.0027,(P\_sp\_aB:5.4E-4,(P\_agglomerans:5.4E-4,(P\_conspicua:0.00246,(P\_brenneri:5.4E-4,((P\_allii:0.0,P\_ananatis:0.0):5.4E-4,(((P\_septica:0.04131,((P\_sp\_At-9b:5.5E-4,P\_cyprapedii:0.01373):0.0259,(P\_sp\_A4:0.05925,(P\_rwandensis:5.4E-4,(P\_rodasii:5.5E-

4,P\_sp\_GM01:0.00274):0.00276):0.00578):0.00571):0.01512,(P\_dispersa:5.4E-4,(P\_eucrina:0.01943,P\_wallisii:0.00421):0.00685):0.00764):0.01253):0.0205,((T\_morbirosei:0.02691,(T\_ptyseos:0.01378,T\_sp\_NML\_06:0.01697):0.01336):0.07211,(E\_billingiae:0.02135,(E\_pyrifoliae:0.01894,E\_tasmaniensis:5.4E-4):0.02633):0.02782):0.01742):0.00614,(P\_s\_indologenes:0.00278,P\_s\_stewartii:0.00276):0.00555):0.00275):0.01635):0.00277):0.01154):0.00553):0.00278):5.5E-4);

[111] tree 't111'=[&R] ((P\_dispersa:5.5E-4,((T\_sp\_NML\_06:0.02084,(T\_ptyseos:0.02851,T\_morbirosei:0.03767):0.0073):0.03849,(P\_sp\_A4:0.0139,(E\_billingiae:0.05059,(E\_pyrifoliae:0.00632,E\_tasmaniensis:0.00348):0.0497):0.02927):0.01402):0.01281):0.00962,((((P\_allii:5.5E-4,P\_ananatis:0.00326):0.00324,(P\_s\_stewartii:0.00322,P\_s\_indologenes:5.5E-4):5.5E-4):0.0032,(P\_conspicua:5.5E-4,(P\_agglomerans:0.00325,P\_brenneri:0.00327):5.5E-4):5.4E-4,(P\_vagans:0.0,P\_deleyi:0.0):5.5E-4,(P\_anthophila:0.00329,P\_sp\_aB:0.00322):0.00654):0.00324):0.00657):0.00658,(P\_sp\_At-9b:5.4E-4,(P\_septica:0.01668,(P\_cyprapedii:0.00325,(P\_rodasii:5.5E-4,P\_rwandensis:0.00324):0.00324):0.00325):5.4E-4):5.5E-4):0.00648,P\_wallisii:5.4E-4):0.00327,(P\_eucrina:0.01966,P\_sp\_GM01:5.4E-4):5.4E-4);

[112] tree 't112'=[&R] (P\_anthophila:0.01324,(P\_agglomerans:5.5E-4,(P\_vagans:0.00806,P\_sp\_aB:0.00165):0.00646):0.00536,(P\_deleyi:0.00743,((((P\_s\_stewartii:0.0032,P\_s\_indologenes:5.5E-4):0.00969,(P\_allii:0.00599,P\_ananatis:0.00367):0.00698):0.01639,(((P\_sp\_At-9b:0.01164,(P\_eucrina:0.01102,((P\_rwandensis:0.00808,(P\_sp\_GM01:0.01097,P\_rodasii:0.0034):0.00342):0.00811,P\_wallisii:0.00279):0.00359,P\_dispersa:5.3E-4):0.01003):0.01907,P\_cyprapedii:0.00278):0.00694):0.02194,(E\_billingiae:0.03498,(E\_pyrifoliae:0.00645,E\_tasmaniensis:0.00315):0.01107):0.03794):0.01529,((P\_septica:0.04116,(T\_sp\_NML\_06:0.02401,(T\_morbirosei:0.02012,T\_ptyseos:0.0111):0.00863):0.0409):0.01653,P\_sp\_A4:0.03845):0.01049):0.02096):0.0108,(P\_conspicua:0.00162,P\_brenneri:0.0032):0.00587):0.00786):0.0036);

[113] tree 't113'=[&R] (P\_rwandensis:0.06663,P\_rodasii:0.06469,((((((T\_morbirosei:0.1147,(T\_ptyseos:0.08719,T\_sp\_NML\_06:0.10039):0.037):0.13871,(E\_billingiae:0.13377,(E\_pyrifoliae:0.03345,E\_tasmaniensis:0.07544):0.13627):0.06162):0.07682,(P\_septica:0.12166,(((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00552):0.06529,(P\_allii:0.02545,P\_ananatis:0.03489):0.02575):0.04613,(P\_anthophila:0.06969,(P\_brenneri:0.02072,P\_conspicua:0.01629):0.01491,(P\_vagans:0.02089,(P\_sp\_aB:0.01964,P\_agglomerans:0.01516):0.00955):0.00484,P\_deleyi:0.207):0.01525):0.02402):0.0332):0.02042):0.03217):0.04371,(P\_sp\_A4:0.29785,P\_eucrina:0.16603):0.09552):0.02913,(P\_sp\_GM01:0.02913,(P\_sp\_At-9b:0.02227,P\_cyprapedii:0.04411):0.02955):0.0091):0.0124,(P\_wallisii:0.06543,P\_dispersa:0.02319):0.01116):0.0154);

[114] tree 't114'=[&R] ((P\_sp\_At-9b:0.03201,(P\_cyprapedii:0.01977,((P\_wallisii:0.02226,P\_eucrina:0.02738):0.0182,(P\_dispersa:0.01667,(P\_sp\_GM01:0.01234,(P\_rwandensis:0.02594,P\_rodasii:0.0071):0.03032):0.06754):5.3E-4):0.03535):0.00529):0.09058,(P\_septica:0.10777,P\_sp\_A4:0.09627):0.03357,(((P\_deleyi:0.00488,(P\_agglomerans:5.4E-4,P\_sp\_aB:0.00643):0.03331,P\_vagans:5.5E-4):0.00821):0.01432,(P\_brenneri:0.01988,P\_conspicua:0.0067):0.03328,P\_anthophila:0.05103):0.00498):0.03049,(((P\_s\_stewartii:0.0,P\_s\_indologenes:0.0):5.4E-4,(P\_allii:0.00636,P\_ananatis:5.3E-

4):0.01923):0.02698,(E\_billingiae:0.05148,(E\_pyrifoliae:0.02013,((T\_morbirosei:0.04094,(T\_sp\_NML\_06:0.03451,T\_ptyseos:0.03827):0.02992):0.65599,E\_tasmaniensis:5.4E-4):0.00566):0.06545):0.20081):0.03425):0.03012);

[115] tree 't115'=[&R]  
(T\_morbirosei:0.01142,(T\_ptyseos:0.02078,T\_sp\_NML\_06:0.01423):0.01075):0.03512,(P\_allii:5.5E-4,((P\_brenneri:5.5E-4,(P\_conspicua:0.00553,P\_ananatis:0.00555):5.5E-4):5.4E-4,(P\_deleyi:0.00563,((P\_agglomerans:0.0,P\_vagans:0.0):5.5E-4,(P\_sp\_aB:0.00557,P\_anthophila:0.01123):5.4E-4):0.00552):0.00561):0.00553):5.4E-4,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.5E-4,(((P\_sp\_At-9b:5.4E-4,((P\_sp\_GM01:0.0,P\_dispersa:0.0):5.5E-4,((P\_eucrina:0.01112,P\_wallisii:0.00561):0.0056,(P\_rodasii:0.0,P\_rwandensis:0.0):0.01093):5.4E-4):0.01106):0.00554,P\_cyprapedii:5.4E-4):0.01665,(P\_sp\_A4:5.5E-4,P\_septica:0.01651):5.4E-4):0.00564,((E\_pyrifoliae:0.00546,E\_tasmaniensis:0.00554):0.01531,E\_billingiae:0.00905):0.00891):0.0056):0.0054);

[116] tree 't116'=[&R]  
(P\_deleyi:0.0169,(P\_anthophila:0.00704,(((P\_sp\_A4:0.05191,(T\_morbirosei:0.03637,(T\_ptyseos:0.02312,T\_sp\_NML\_06:0.0557):0.04321):0.04268):0.0134,((P\_conspicua:0.27807,(E\_billingiae:0.04916,(E\_pyrifoliae:0.02271,E\_tasmaniensis:0.02171):0.03429):0.01804):0.00782,(P\_septica:0.01625,(P\_eucrina:0.03296,(P\_wallisii:0.01595,((P\_sp\_At-9b:0.0113,P\_cyprapedii:0.00686):0.01817,(P\_rwandensis:0.00707,(P\_sp\_GM01:0.02685,P\_rodasii:0.02446):0.00964):0.01603):0.01266,P\_dispersa:0.01215):0.00662):0.01147):0.01507):0.02162):0.00907):0.03574,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.02503,(P\_allii:0.00646,P\_ananatis:0.00167):0.00359):0.00493):0.01416):0.00635,(P\_brenneri:0.00676,(P\_agglomerans:5.4E-4,(P\_vagans:0.00223,P\_sp\_aB:0.00461):0.00671):0.00717):0.00706);

[117] tree 't117'=[&R] (((P\_sp\_At-9b:0.01432,P\_cyprapedii:0.01504):0.03878,(P\_septica:0.10739,P\_eucrina:0.12066):0.04838):0.01138,(P\_wallisii:0.02481,(E\_pyrifoliae:0.11286,E\_tasmaniensis:0.02617):0.09083,(E\_billingiae:0.10002,(T\_sp\_NML\_06:0.28145,(T\_morbirosei:0.14241,T\_ptyseos:0.12396):0.04312):0.18217):0.00105):0.05467):0.009,((P\_dispersa:0.06613,(P\_rwandensis:0.0212,(P\_rodasii:0.02167,P\_sp\_GM01:0.06156):0.01466):0.01357):0.01891,(((P\_anthophila:0.03169,((P\_agglomerans:0.01994,P\_vagans:5.3E-4):0.01771,(P\_deleyi:0.04104,P\_sp\_aB:0.00702):0.01311):0.01928):0.05931,(P\_brenneri:0.04084,P\_conspicua:0.01704):0.02183):0.08161,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.08166,(P\_allii:0.02894,P\_ananatis:0.02707):0.03818):0.01069):0.06073,P\_sp\_A4:0.18469):0.02713):0.01226);

[118] tree 't118'=[&R]  
(P\_eucrina:0.03507,((T\_morbirosei:0.06997,(T\_ptyseos:0.05708,T\_sp\_NML\_06:0.05543):0.02912):0.19772,P\_septica:0.01279):0.05137):0.01292,(P\_cyprapedii:0.02834,P\_dispersa:0.00895):0.00906,((P\_wallisii:0.02215,(P\_rwandensis:5.3E-4,((P\_sp\_A4:0.04611,P\_rodasii:0.00946):0.01964,((P\_ananatis:0.01935,(P\_allii:0.08562,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01821):0.00924):0.01881,((P\_conspicua:5.4E-4,(P\_deleyi:0.01779,(P\_sp\_aB:0.01789,(P\_anthophila:0.0,P\_agglomerans:0.0,P\_vagans:0.0):5.5E-4):5.3E-4):0.01786):0.00892,P\_brenneri:5.3E-4):0.01798):0.0306):0.00878):0.01697):0.02605,(P\_sp\_GM01:0.0374,((E\_billingiae:0.12226,(E\_pyrifoliae:0.10204,E\_tasmaniensis:0.04495):0.03559):0.12103,P\_sp\_At-9b:0.02041):0.0084):5.5E-4):5.3E-4);

[119] tree 't119'=[&R]  
(P\_sp\_GM01:0.01669,(P\_rodasii:0.00307,(P\_eucrina:0.01088,(P\_dispersa:0.01284,P\_wallisii:0.0036):0.0136):0.01708):0.0344,(P\_rwandensis:5.4E-4,(P\_cyprapedii:5.5E-4,(P\_sp\_At-9b:5.4E-

4,(((T\_sp\_NML\_06:0.01766,(T\_morbirosei:0.01574,T\_ptyseos:0.021):0.01351):0.08554,(E\_billingiae:0.02471,(E\_pyrifoliae:0.0357,E\_tasmaniensis:0.01193):0.06771):0.06742):0.02162,P\_sp\_A4:0.05184):0.01861,(((P\_ananatis:5.3E-4,(P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00644):0.01955,P\_allii:0.00661):0.00313):0.03645,(P\_anthophila:0.01647,((P\_deleyi:0.01092,(P\_agglomerans:0.00617,(P\_vagans:5.5E-4,P\_sp\_aB:0.0125):0.00314):0.01517):0.00658,(P\_brenneri:0.00991,P\_conspicua:0.00633):0.00778):0.00802):0.01692):0.03464,P\_septica:0.01531):0.00427):0.02605):0.0032):0.01329):5.4E-4);

[120] tree 't120'=[&R] ((P\_anthophila:0.00935,((P\_deleyi:0.0,P\_vagans:0.0):0.00936,P\_agglomerans:5.4E-4):0.00943):5.5E-4,(P\_brenneri:5.4E-4,P\_sp\_aB:0.03834):0.01878,(P\_conspicua:0.00938,((P\_ananatis:0.00916,(P\_allii:0.00934,(P\_s\_stewartii:0.00926,P\_s\_indologenes:5.5E-4):0.00938):0.00921):0.03532,((((E\_pyrifoliae:0.064,(E\_billingiae:0.08885,E\_tasmaniensis:0.03418):0.04263):0.05292,(P\_sp\_GM01:5.4E-4,((P\_rodasii:0.03975,P\_rwandensis:0.02827):0.01896,P\_wallisii:0.01915):0.01861):0.01147,(P\_dispersa:0.03021,(P\_sp\_At-9b:0.00889,P\_cyprapedii:0.00949):0.0287):0.01653):0.00577):0.03473,P\_eucrinea:0.01884):0.02318,(T\_morbirosei:0.15159,(T\_sp\_NML\_06:0.15911,T\_ptyseos:0.11501):0.05551):0.23879):0.02706,(P\_sp\_A4:0.12353,P\_septica:0.00999):0.00587):0.04254):0.02906):5.4E-4);

[121] tree 't121'=[&R] (P\_septica:0.01554,((P\_brenneri:0.01516,P\_conspicua:5.5E-4):0.01455,((P\_deleyi:5.5E-4,(P\_agglomerans:0.0,P\_sp\_aB:0.0):5.4E-4,P\_vagans:0.02219):0.02246):0.00724,(P\_anthophila:0.00718,(((E\_billingiae:0.04981,(E\_pyrifoliae:0.02215,E\_tasmaniensis:0.04486):0.02009):0.10041,(T\_sp\_NML\_06:0.03011,(T\_morbirosei:0.03945,T\_ptyseos:0.06364):0.01877):0.06122):0.04195,(P\_sp\_A4:0.03464,(P\_wallisii:0.02074,((P\_sp\_GM01:0.01607,(P\_sp\_At-9b:0.02235,P\_cyprapedii:0.01765):0.0421):0.00791,(P\_rodasii:0.04527,P\_rwandensis:0.02188):0.01397):0.01769,P\_eucrinea:0.03918):5.4E-4):0.01522,P\_dispersa:0.0461):0.04351):0.02112):0.047):5.5E-4):0.00781):0.01509,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.02323,(P\_allii:0.01482,P\_ananatis:0.00732):0.00739):0.00705);

[122] tree 't122'=[&R] ((P\_dispersa:0.02616,(P\_wallisii:0.03966,(P\_sp\_GM01:0.02323,(P\_rodasii:0.05799,P\_rwandensis:0.02397):0.01641):0.02167):0.02036):0.01088,((P\_sp\_A4:0.10934,(E\_billingiae:0.13579,((T\_morbirosei:0.11462,(T\_ptyseos:0.10061,T\_sp\_NML\_06:0.11706):0.04625):0.18973,(E\_pyrifoliae:0.0829,E\_tasmaniensis:0.03085):0.088):0.02969):0.02736):0.03975,((P\_brenneri:0.00842,P\_conspicua:0.01367):0.02574,((P\_deleyi:0.02216,P\_sp\_aB:0.02375):0.0024,((P\_agglomerans:0.00444,P\_vagans:0.01796):0.00907,P\_anthophila:0.03649):0.00624):0.00835):0.04494,(P\_septica:0.1082,((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00889):0.0452,(P\_allii:0.00687,P\_ananatis:0.05036):0.02922):0.05231):0.03534):0.03578):0.02612,((P\_sp\_At-9b:0.03102,P\_cyprapedii:0.01046):0.03245,P\_eucrinea:0.06798):0.00892);

[123] tree 't123'=[&R] (((P\_deleyi:5.4E-4,(P\_anthophila:5.5E-4,(P\_agglomerans:0.00591,(P\_vagans:5.5E-4,P\_sp\_aB:0.00584):0.00586):0.01156):0.02349):0.02238,((P\_septica:0.01942,(P\_wallisii:0.01925,P\_sp\_GM01:0.0134):0.01552):0.01776,(P\_eucrinea:0.02885,(P\_sp\_A4:0.07864,(T\_morbirosei:0.04819,(T\_sp\_NML\_06:0.13335,T\_ptyseos:0.03839):0.04265):0.09715):0.07314,(E\_pyrifoliae:5.4E-

4,E\_tasmaniensis:0.03454):0.36947,E\_billingiae:0.04447):0.01916):0.01372):0.00778):0.01186):0.01389,P\_dispersa:0.01198):0.00601,((P\_allii:0.01796,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00597):5.4E-4,P\_ananatis:5.5E-4):0.00605,((P\_brenneri:5.5E-4,P\_conspicua:0.01143):0.01811,(P\_cypripedii:5.3E-4,(P\_sp\_At-9b:5.4E-4,(P\_rodasii:0.02374,P\_rwandensis:5.5E-4):0.01771):0.00591):0.01169):0.01235);

[124] tree 't124'=[&R]

((P\_cypripedii:0.02309,P\_dispersa:0.0226):0.01158,((P\_eucrina:0.08565,P\_rodasii:0.01075):0.01236,(P\_sp\_At-9b:0.01136,P\_sp\_A4:0.13154):5.4E-4):5.4E-4,(P\_sp\_GM01:0.04022,(((E\_pyriifoliae:0.09761,E\_tasmaniensis:0.01204):0.13109,((T\_sp\_NML\_06:0.1472,(T\_ptyseos:0.12389,T\_morbirosei:0.12596):0.04903):0.13637,E\_billingiae:0.06226):0.05599):0.03925,((P\_allii:0.03113,(P\_ananatis:0.02083,(P\_s\_indologenes:0.01167,P\_s\_stewartii:5.5E-4):0.02632):0.02181):0.08592,(((P\_vagans:0.02326,(P\_sp\_aB:0.0158,P\_deleyi:0.03776):0.00721):0.01172,(P\_agglomerans:5.5E-4,(P\_conspicua:5.3E-4,P\_brenneri:0.01144):0.02304):0.01152):0.01443,P\_anthophila:0.02366):0.02223):0.03785,P\_septica:0.01159):0.00912):0.03808,(P\_wallisii:0.03139,P\_rwandensis:0.0252):0.04279):0.01239):0.01814);

[125] tree 't125'=[&R]

((E\_billingiae:0.02802,(E\_pyriifoliae:0.01671,E\_tasmaniensis:0.01712):0.03266):0.02482,(P\_cypripedii:0.03478,(P\_sp\_At-9b:0.01589,P\_dispersa:0.03023):0.01018):0.00414):0.00676,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01701,(P\_allii:5.5E-4,P\_ananatis:0.00979):0.00663):0.02228,((P\_brenneri:0.00337,P\_conspicua:5.5E-4):0.0168,(P\_deleyi:0.08288,((P\_agglomerans:0.0,P\_sp\_aB:0.0):5.5E-4,(P\_vagans:5.5E-4,P\_anthophila:0.00674):0.00324):0.01144):0.01415):0.01069):0.01397,(P\_septica:0.02902,(P\_sp\_A4:0.02745,(T\_morbirosei:0.05946,(T\_sp\_NML\_06:0.07572,T\_ptyseos:0.0056):0.01951):0.09409):0.02259):0.01551):0.00681,((P\_sp\_GM01:0.03052,P\_wallisii:0.02118):0.00302,((P\_rodasii:0.01366,P\_rwandensis:0.02064):0.00808,P\_eucrina:0.05322):0.01271):0.00897);

[126] tree 't126'=[&R]

(P\_sp\_GM01:0.05197,(P\_dispersa:0.04194,((P\_rwandensis:0.03238,P\_rodasii:0.02998):0.01025,P\_wallisii:0.03189):0.01332):0.00465,((P\_sp\_At-9b:0.02171,P\_cypripedii:0.01491):0.0075,(((T\_morbirosei:0.07182,(T\_sp\_NML\_06:0.10421,T\_ptyseos:0.04015):0.03052):0.11391,(E\_billingiae:0.0891,(E\_pyriifoliae:0.02819,E\_tasmaniensis:0.02327):0.0672):0.02897):0.03295,P\_sp\_A4:0.07921):0.01051,(((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00288):0.03323,(P\_allii:0.04625,P\_ananatis:0.0204):0.01968):0.03589,((P\_brenneri:0.02317,P\_conspicua:0.02052):0.05338,(P\_septica:0.08939,((P\_vagans:0.00636,(P\_sp\_aB:0.00866,P\_agglomerans:0.00287):0.00505):0.0063,(P\_deleyi:0.03019,P\_anthophila:0.01139):0.00927):0.02289):0.00642):0.03125):0.03329,P\_eucrina:0.06555):0.00672):0.01757):0.01145);

[127] tree 't127'=[&R]

((P\_anthophila:0.01211,((P\_brenneri:0.00895,P\_conspicua:0.01705):0.04264,(P\_septica:0.06166,(P\_sp\_A4:0.16637,(((P\_sp\_At-9b:0.01266,P\_cypripedii:0.0335):0.03991,(P\_sp\_GM01:0.04445,(P\_rodasii:0.01016,P\_rwandensis:0.0247):0.05662):0.02923):0.05089,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.02202,(P\_allii:0.01727,P\_ananatis:0.02492):0.05197):0.26971,((P\_dispersa:0.01553,(P\_eucrina:0.0866,P\_wallisii:0.03872):0.02177):0.07462,((T\_morbirosei:0.1681,(T\_sp\_NML\_06:0.21904,

T\_ptyseos:0.03737):0.06017):0.26484,(E\_billingiae:0.10915,(E\_pyriifoliae:0.01432,E\_tasmaniensis:0.0607):0.14068):0.06367):0.0454):0.03265):0.00404):0.01434):0.01974):0.04659):0.01176):0.00945,P\_vagans:0.0043,((P\_deleyi:0.03961,P\_agglomerans:0.00426):0.00438,P\_sp\_aB:0.01293):0.0042);

[128] tree 't128'=[&R] ((P\_sp\_At-9b:0.02253,P\_cyprapedii:0.01484):0.02375,(P\_sp\_A4:0.10702,(P\_eucrina:0.04026,(P\_dispersa:0.02343,P\_wallisii:0.02558):0.02583):0.01959):0.0144,(P\_septica:0.03506,((P\_sp\_GM01:0.01486,(P\_rodasii:0.01597,P\_rwandensis:0.02896):0.02194):0.01868,(E\_billingiae:0.06031,(E\_pyriifoliae:0.01199,E\_tasmaniensis:0.01358):0.07116):0.03536,((T\_morbirosei:0.03122,(T\_ptyseos:0.02783,T\_sp\_NML\_06:0.02703):0.04788):0.11877,((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00419):0.01311,(P\_allii:0.01875,P\_ananatis:0.0156):0.01453):0.04002,((P\_brenneri:0.00435,P\_conspicua:0.00853):0.02517,(P\_sp\_aB:0.00851,(P\_deleyi:0.01291,(P\_agglomerans:5.5E-4,(P\_anthophila:0.00871,P\_vagans:0.00423):5.5E-4):0.00424):5.5E-4):0.02154):0.00929):0.01687):0.01407):0.01456):0.00559):0.02303);

[129] tree 't129'=[&R] (((P\_sp\_GM01:0.04396,((P\_wallisii:0.02878,P\_dispersa:0.0493):0.02134,(P\_rodasii:0.01741,P\_rwandensis:0.00357):0.02918):0.01311):0.01999,P\_sp\_At-9b:0.00489):0.00779,P\_cyprapedii:0.01787):0.01132,P\_sp\_A4:0.08473,((((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.05266,(P\_allii:0.01428,P\_ananatis:0.02287):0.00682):0.03151,((P\_anthophila:0.01837,((P\_agglomerans:0.00747,P\_deleyi:0.03279):0.00412,P\_sp\_aB:0.01792):0.00287,P\_vagans:0.00616):0.01086):0.02193,((P\_brenneri:0.00646,P\_conspicua:0.02674):0.01405,P\_septica:0.06834):0.006):0.0279):0.0233,(P\_eucrina:0.12576,((T\_morbirosei:0.08237,(T\_sp\_NML\_06:0.11816,T\_ptyseos:0.0747):0.04169):0.14795,(E\_billingiae:0.11556,(E\_pyriifoliae:0.03156,E\_tasmaniensis:0.03677):0.08017):0.09465):0.02796):0.03088):0.00961);

[130] tree 't130'=[&R] ((P\_allii:0.0,P\_ananatis:0.0,P\_agglomerans:0.0,P\_vagans:0.0,P\_sp\_aB:0.0,P\_deleyi:0.0):5.5E-4,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.02153,(P\_anthophila:5.5E-4,((P\_sp\_GM01:0.043,(P\_dispersa:5.4E-4,(P\_rwandensis:0.02128,P\_eucrina:5.4E-4):0.02132):5.4E-4):0.01564,(P\_septica:0.02189,((P\_sp\_At-9b:5.4E-4,(P\_sp\_A4:0.04251,(P\_wallisii:0.02143,P\_cyprapedii:0.02287):0.01837):0.00517):0.02204,((E\_billingiae:0.04418,(E\_pyriifoliae:0.0,E\_tasmaniensis:0.0):5.4E-4):0.19255,(T\_sp\_NML\_06:0.06651,(T\_morbirosei:0.0,T\_ptyseos:0.0):0.04401):0.023):5.4E-4):0.02451):0.01172):0.01568):0.02161):5.4E-4,((P\_conspicua:0.0,P\_brenneri:0.0):0.02163,P\_rodasii:0.02154):5.4E-4);

[131] tree 't131'=[&R] ((P\_sp\_A4:0.10095,P\_cyprapedii:0.00918):0.01152,((T\_morbirosei:0.0231,(T\_sp\_NML\_06:0.05957,T\_ptyseos:0.03761):0.01884):0.07227,(E\_billingiae:0.07334,(E\_pyriifoliae:0.02905,E\_tasmaniensis:0.02136):0.03423):0.02911):0.02663,(((P\_sp\_GM01:0.03479,(P\_eucrina:0.04107,(P\_dispersa:0.01578,(P\_wallisii:5.4E-4,(P\_rodasii:0.00318,P\_rwandensis:0.01529):0.02608):0.01274):0.01253):0.00523):0.01043,(((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.003):0.01562,(P\_allii:0.0187,P\_ananatis:0.00262):0.01323):0.03402,(P\_septica:0.02524,((P\_agglomerans:0.00608,(P\_vagans:5.5E-4,P\_sp\_aB:0.0061):0.00623):0.01438,((P\_brenneri:0.00606,P\_conspicua:5.5E-4):0.00955,(P\_anthophila:0.02521,P\_deleyi:0.01547):0.00917):0.00403):0.03462):0.01097):0.02563):0.00929,P\_sp\_At-9b:0.02708):0.01727);

[132] tree 't132'=[&R] (P\_deleyi:0.06028,P\_anthophila:0.01567,(P\_vagans:0.00826,(P\_agglomerans:0.01139,(P\_sp\_aB:0.01835,((P\_conspicua:0.018

99,P\_brenneri:0.00614):0.00483,(((P\_wallisii:0.05507,(P\_eucrina:0.07417,P\_dispersa:0.01417):0.01592):0.00421,((P\_s  
p\_At-  
9b:0.01087,P\_cyprapedii:0.02334):0.01596,(P\_rodasii:0.01448,P\_rwandensis:0.00522):0.00886):0.00659,P\_sp\_GM01:0.0256)  
:0.01688):0.03436,(P\_septica:0.03214,((T\_morbirosei:0.05984,(T\_ptyseos:0.07672,T\_sp\_NML\_06:0.07629):0.03047):0.1213,  
(P\_sp\_A4:0.05444,(E\_billingiae:0.04917,(E\_pyriifoliae:0.02773,E\_tasmaniensis:0.01961):0.05151):0.08527):0.03718):0.01  
928):0.01433):0.01696,((P\_s\_indologenes:0.00263,P\_s\_stewartii:0.00275):0.02415,(P\_allii:0.00808,P\_ananatis:5.5E-  
4):0.00892):0.0082):0.01045):0.00644):5.4E-4):0.00268):0.00345);  
[133] tree 't133'=[&R] (P\_sp\_GM01:0.06688,P\_wallisii:0.04183,(((P\_dispersa:0.03791,(P\_eucrina:0.16315,((P\_sp\_At-  
9b:5.2E-  
4,P\_cyprapedii:0.01147):0.03746,(P\_sp\_A4:0.08201,((E\_billingiae:0.14085,(E\_pyriifoliae:0.02615,E\_tasmaniensis:0.1247  
4):0.20115):0.19626,(T\_sp\_NML\_06:0.22654,(T\_ptyseos:0.05948,T\_morbirosei:0.03904):0.04825):0.13799):0.02254,((((P\_  
anthophila:0.0,P\_deleyi:0.0):0.02348,((P\_sp\_aB:0.0,P\_agglomerans:0.0):5.3E-4,P\_vagans:0.02364):5.3E-  
4):0.01153,P\_conspicua:5.4E-4):5.3E-  
4,P\_brenneri:0.0229):0.09216,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.07906,(P\_allii:0.02296,P\_ananatis:5.3E-  
4):0.01699):0.03258):0.06244,P\_septica:0.10561):0.06118):0.05755):0.03094):0.05021):6.1E-  
4):0.05237,P\_rwandensis:0.01787):0.01032,P\_rodasii:5.3E-4):0.01943);  
[134] tree 't134'=[&R] ((P\_sp\_At-  
9b:0.02965,P\_cyprapedii:0.05678):0.07198,(P\_rodasii:0.04567,P\_sp\_GM01:0.06049):0.01969,(P\_dispersa:0.08391,P\_wallis  
ii:0.03051):0.03026):0.0176):0.01727,(((P\_deleyi:0.04052,(P\_anthophila:0.04103,(P\_sp\_aB:0.02568,(P\_agglomerans:0.020  
97,P\_vagans:0.02581):0.00472):0.01038):0.0044):0.03833,(P\_brenneri:0.03229,P\_conspicua:0.03763):0.02338):0.0471,((P\_  
s\_indologenes:0.0,P\_s\_stewartii:0.0):0.02443,(P\_allii:0.03678,P\_ananatis:0.02708):0.03079):0.11143):0.02498,((E\_bill  
ingiae:0.20336,((T\_sp\_NML\_06:0.41148,(T\_morbirosei:0.15255,T\_ptyseos:0.17703):0.09612):0.79808,(E\_pyriifoliae:0.04006  
,E\_tasmaniensis:0.04562):0.14792):0.08014):0.15697,((P\_rwandensis:0.11851,P\_sp\_A4:0.08765):0.09909,(P\_septica:0.1576  
9,P\_eucrina:0.16127):0.04159):0.00907):0.00758);  
[135] tree 't135'=[&R] (P\_deleyi:0.01395,(P\_anthophila:0.00684,P\_sp\_aB:5.3E-4):0.00676,(P\_vagans:5.5E-  
4,((P\_agglomerans:0.0067,(P\_brenneri:5.3E-  
4,P\_conspicua:0.00691):0.02824,((((E\_billingiae:0.0113,(E\_pyriifoliae:0.04918,E\_tasmaniensis:5.5E-  
4):0.08071):0.04041,(T\_morbirosei:0.06532,(T\_ptyseos:0.08848,T\_sp\_NML\_06:0.13581):0.07564):0.14383):0.01955,P\_septic  
a:0.04652):0.02347,((P\_sp\_At-9b:0.00674,P\_cyprapedii:5.4E-4):0.02143,(P\_rwandensis:0.01746,(P\_wallisii:5.5E-  
4,(P\_dispersa:5.5E-4,P\_eucrina:0.08663):0.00669):0.00909,(P\_sp\_GM01:0.02543,P\_rodasii:0.00905):0.00682):5.3E-  
4):0.03296):0.05165):0.03355):0.00112):0.0069,(((P\_s\_indologenes:5.5E-  
4,P\_s\_stewartii:0.00668):0.01723,(P\_allii:0.02535,P\_ananatis:0.02296):0.02621):0.0417,P\_sp\_A4:0.14639):0.0197):5.5E-  
4):5.5E-4);  
[136] tree 't136'=[&R] ((P\_conspicua:5.5E-4,(P\_brenneri:5.4E-4,(P\_septica:0.04653,((P\_ananatis:0.01944,P\_allii:5.3E-  
4):0.00638,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00606,(((P\_deleyi:0.07556,P\_wallisii:0.08349):0.15333,(T\_morbi  
rosei:0.03941,(T\_sp\_NML\_06:0.05636,T\_ptyseos:0.05291):0.01656):0.06166):0.02549,((E\_pyriifoliae:0.01801,(E\_billingiae  
:0.03094,E\_tasmaniensis:0.02799):0.00666):0.05722,(P\_sp\_A4:0.06164,((((P\_rodasii:0.0,P\_rwandensis:0.0):5.4E-  
4,P\_cyprapedii:0.00617):0.00622,(P\_sp\_GM01:0.00568,P\_sp\_At-9b:0.02526):0.00737):0.01077,(P\_eucrina:5.4E-

4,P\_dispersa:0.01248):0.00833):0.01489):0.0129):0.00412):0.01343):0.01322):0.00647):0.00658):0.01932):0.00628,(P\_agglomerans:0.00619,P\_sp\_aB:5.5E-4):0.00625,(P\_anthophila:5.5E-4,P\_vagans:0.00628):5.5E-4);

[137] tree 't137'=[&R]  
(P\_vagans:0.00873,(P\_anthophila:0.00877,P\_sp\_aB:0.00429):0.00436,(P\_agglomerans:0.01305,(P\_deleyi:0.016,(P\_conspicua:0.01143,(P\_brenneri:0.01366,(((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00435):0.02428,(P\_allii:0.0172,P\_ananatis:0.00475):0.02366):0.03574,((P\_septica:0.05942,(P\_sp\_At-9b:0.01228,P\_cyprapedii:0.03206):0.02955):0.02459,((P\_eucrina:0.08166,(P\_dispersa:0.02232,(P\_wallisii:0.02279,(P\_rwandensis:0.0044,(P\_sp\_GM01:0.00871,P\_rodasii:0.01325):0.00433):0.00859):0.02297):0.01367):0.03857,(P\_sp\_A4:0.04418,((T\_sp\_NML\_06:0.13529,(T\_morbirosei:0.10202,T\_ptyseos:0.07139):0.0717):0.13083,(E\_billingiae:0.09965,(E\_pyriifoliae:0.0693,E\_tasmaniensis:0.07378):0.07873):0.09383):0.03082):0.03928):0.01169):0.00963):0.02522):0.00544):0.00928):0.00566):0.00423);

[138] tree 't138'=[&R] (P\_septica:0.09067,(P\_sp\_At-9b:0.02177,P\_cyprapedii:0.01447):0.0226,(((P\_brenneri:0.0089,P\_conspicua:0.01101):0.02005,(P\_deleyi:0.03663,(P\_anthophila:0.02646,(P\_agglomerans:0.00965,(P\_sp\_aB:0.0174,P\_vagans:0.00273):0.00504):0.00623):0.008):0.00928):0.02585,(((P\_s\_indologenes:0.00517,P\_s\_stewartii:0.00217):0.03561,(P\_allii:0.01481,P\_ananatis:0.01506):0.0166):0.0448,(P\_sp\_A4:0.0515,((T\_sp\_NML\_06:0.11024,(T\_morbirosei:0.08534,T\_ptyseos:0.0579):0.02506):0.1455,(E\_billingiae:0.05962,(E\_pyriifoliae:0.08216,E\_tasmaniensis:0.03571):0.04271):0.05462):0.04056):0.01741):0.01073):0.01611,((P\_dispersa:0.04704,((P\_rodasii:0.0127,P\_rwandensis:0.01084):0.02142,(P\_sp\_GM01:0.01699,P\_wallisii:0.01281):0.00459):0.0093):0.0279,P\_eucrina:0.08387):0.0119):0.01191);

[139] tree 't139'=[&R] (P\_vagans:5.5E-4,(P\_sp\_aB:0.00723,P\_agglomerans:0.00358):0.00363,((P\_anthophila:0.00331,((P\_brenneri:5.4E-4,P\_conspicua:0.01074):0.02419,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.04503,(P\_allii:0.00286,P\_ananatis:0.01508):0.02021):0.06859,(((P\_sp\_At-9b:0.06054,P\_cyprapedii:0.03066):0.07568,(((P\_sp\_A4:0.15987,(T\_sp\_NML\_06:0.10941,(T\_morbirosei:0.18355,T\_ptyseos:0.14108):0.0587):0.20101):0.06764,(E\_billingiae:0.06498,(E\_tasmaniensis:0.07866,E\_pyriifoliae:0.03771):0.09474):0.04192):0.02321,((P\_sp\_GM01:0.03195,(P\_dispersa:0.04448,P\_wallisii:0.05124):0.03371):0.02011,(P\_rodasii:0.02192,P\_rwandensis:0.01962):0.01298):0.06015):0.00797):0.01373,(P\_eucrina:0.10068,P\_septica:0.03816):0.02348):0.02081):0.00898):0.00528):0.01468,P\_deleyi:0.00132):0.00241);

[140] tree 't140'=[&R] (((P\_sp\_At-9b:5.5E-4,P\_cyprapedii:0.01899):0.00996,((P\_sp\_A4:0.0758,((T\_morbirosei:0.04435,(T\_sp\_NML\_06:0.12082,T\_ptyseos:0.06853):0.03679):0.14944,(E\_billingiae:0.106,(E\_pyriifoliae:0.03139,E\_tasmaniensis:0.05815):0.04289):0.06051):0.03283):0.0202,(P\_septica:0.07035,((P\_s\_indologenes:5.3E-4,P\_s\_stewartii:0.00475):0.00927,((P\_anthophila:5.4E-4,(P\_deleyi:0.00957,(P\_agglomerans:0.00952,(P\_vagans:0.00949,P\_sp\_aB:0.00946):0.00479):0.00949):0.00473):0.00482,(P\_conspicua:0.01004,P\_brenneri:0.05997):0.00409):0.03549,(P\_allii:0.00964,P\_ananatis:0.00461):0.0093):0.00498):0.00492):0.01008):0.00515):0.02092,P\_sp\_GM01:0.05072):0.01017,(P\_rodasii:0.03699,P\_rwandensis:0.0254):0.01106,((P\_eucrina:0.05363,P\_dispersa:0.00616):0.00743,P\_wallisii:0.18428):0.00111);

[141] tree 't141'=[&R]  
((((T\_morbirosei:0.09921,(T\_ptyseos:0.05132,T\_sp\_NML\_06:0.05589):0.0998):0.13599,(P\_septica:0.09235,(E\_billingiae:0.05964,(E\_pyriifoliae:0.01588,E\_tasmaniensis:0.04595):0.07431):0.03483):0.03733):0.01286,((P\_agglomerans:0.02615,(P\_v



agans:0.00982,P\_sp\_aB:0.01128):0.01591):0.01947,(P\_deleyi:0.02175,P\_anthophila:0.03401):0.00763):0.03062,((P\_brenneri:0.00378,P\_conspicua:0.02142):0.02705,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00433,(P\_allii:0.02841,P\_ananatis:0.00355):0.01009):0.02023):0.00995):0.02554):0.02552,P\_sp\_A4:0.06811,((P\_sp\_At-9b:0.03599,P\_cypripedii:0.02424):0.03903,(((P\_wallisii:0.01085,(P\_eucrina:0.05711,(P\_rodasii:0.02902,P\_sp\_GM01:0.03757):0.02871):0.01373):0.02698,P\_dispersa:0.00931):0.00918,P\_rwandensis:0.03281):0.02076):0.01633);

[142] tree 't142'=[&R] ((T\_morbirosei:0.02172,(T\_ptyseos:0.03145,T\_sp\_NML\_06:0.02713):0.01893):0.03778,((P\_sp\_At-9b:0.00334,P\_cypripedii:0.01091):0.01448,((P\_sp\_A4:0.02796,((E\_billingiae:0.01379,(E\_pyrifoliae:0.01125,E\_tasmaniensis:0.01993):0.01589):0.03287,(P\_sp\_GM01:0.01565,(P\_rodasii:0.02019,P\_rwandensis:0.00291):0.00536):0.02726):0.00734):0.00362,(((P\_brenneri:0.00504,P\_conspicua:0.00381):0.0105,(P\_deleyi:0.01151,((P\_agglomerans:0.00563,(P\_sp\_aB:0.01717,P\_vagans:5.4E-4):0.01728):0.00574,P\_anthophila:0.00569):0.00277):0.01055):0.01286,(P\_septica:0.02416,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.4E-4,(P\_ananatis:0.00282,P\_allii:0.00568):0.00559):0.02549):0.00632):0.00693):0.01178):0.00531,(P\_dispersa:0.00608,(P\_eucrina:0.02972,P\_wallisii:0.02892):0.01126):0.00595);

[143] tree 't143'=[&R] (P\_vagans:5.3E-4,(P\_agglomerans:0.00265,P\_sp\_aB:0.00266):0.00496,(((E\_pyrifoliae:0.00809,E\_tasmaniensis:0.00809):0.02296,(E\_billingiae:0.03125,(T\_morbirosei:0.01015,(T\_sp\_NML\_06:0.04626,T\_ptyseos:0.02693):0.0204):0.06412):0.01946):0.01177,((P\_brenneri:5.5E-4,P\_conspicua:0.00538):0.00908,((P\_septica:0.01895,((P\_sp\_At-9b:5.4E-4,P\_cypripedii:0.01304):0.0108,((P\_rodasii:0.05107,P\_rwandensis:0.01079):0.01968,(P\_sp\_GM01:0.00738,(P\_dispersa:0.00404,(P\_eucrina:0.03579,P\_wallisii:0.00928):0.00947):0.01285):0.00548):0.01927):0.00805):5.5E-4,(P\_sp\_A4:0.03913,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.5E-4,(P\_allii:0.00794,P\_ananatis:0.00283):0.00763):0.00845):0.01057):0.00919):0.00892):0.00799,(P\_deleyi:0.01667,P\_anthophila:0.00267):0.00544):0.00265);

[144] tree 't144'=[&R] (P\_anthophila:0.02605,(P\_brenneri:0.01647,P\_conspicua:5.4E-4):0.02838,(P\_vagans:5.5E-4,((P\_sp\_aB:0.02229,(((P\_allii:0.01624,P\_ananatis:0.0054):0.02715,(P\_s\_indologenes:0.00535,P\_s\_stewartii:0.00535):5.4E-4):0.04478,(((E\_billingiae:0.13829,(E\_pyrifoliae:0.01271,E\_tasmaniensis:0.05005):0.06194):0.06613,(P\_sp\_A4:0.11561,(T\_morbirosei:0.1148,(T\_ptyseos:0.1255,T\_sp\_NML\_06:0.13234):0.05323):0.16846):0.02438):0.01827,(P\_septica:0.091,((P\_eucrina:0.09663,(P\_dispersa:0.03443,(P\_wallisii:0.01272,(P\_rodasii:0.02724,(P\_sp\_GM01:0.0381,P\_rwandensis:0.02241):5.4E-4):0.01549):0.01002):0.02668):0.03886,(P\_sp\_At-9b:0.0309,P\_cypripedii:0.04725):0.04392):0.03131):0.03366):0.0407):0.04007):0.01186,(P\_agglomerans:0.00557,P\_deleyi:0.01658):0.00259):0.00826):0.01282);

[145] tree 't145'=[&R] ((P\_vagans:0.00409,(P\_deleyi:0.04323,P\_anthophila:0.03614):0.01346):0.00896,P\_sp\_aB:0.0132,(P\_agglomerans:0.02001,(((P\_s\_indologenes:0.00414,P\_s\_stewartii:5.5E-4):0.02051,(P\_allii:0.02199,P\_ananatis:0.02206):0.03084):0.0427,(P\_septica:0.07832,((P\_eucrina:0.12832,((P\_dispersa:0.02593,P\_wallisii:0.0294):0.02054,((P\_rodasii:0.02605,P\_rwandensis:0.02521):0.02833,(P\_sp\_GM01:0.05039,(P\_sp\_At-9b:0.01453,P\_cypripedii:0.0216):0.0508):0.0066):0.0297):0.017):0.07262,(P\_sp\_A4:0.14509,((T\_morbirosei:0.12567,(T\_ptyseos:0.14664,T\_sp\_NML\_06:0.12348):0.05561):0.16717,(E\_billingiae:0.11554,(E\_pyrifoliae:0.05297,E\_tasmaniensis:0.054

65):0.10554):0.09719):0.04755):0.03531):0.01125):0.03332):0.05049,(P\_brenneri:0.01108,P\_conspicua:0.02392):0.02876):0.0149):0.01495);

[146] tree 't146'=[&R] (P\_dispersa:0.01239,(P\_sp\_At-9b:5.5E-4,P\_cyprapedii:0.00718):0.02153,((P\_sp\_GM01:0.00897,(P\_rodasii:0.00413,P\_rwandensis:0.00449):0.01106):0.01435,(P\_wallisii:0.02186,(P\_sp\_A4:0.03733,(P\_eucrina:0.02197,(((T\_morbirosei:0.03178,(T\_ptyseos:0.06801,T\_sp\_NML\_06:0.03924):0.05056):0.14454,((P\_allii:0.0072,(P\_ananatis:0.01523,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.0289):0.00705):0.02834,(E\_billingiae:0.04152,(E\_tasmaniensis:0.03228,E\_pyrifoliae:0.01851):0.0254):0.08969):0.00589):0.01146,(P\_septica:0.05145,((P\_anthophila:0.0,P\_conspicua:0.0):5.4E-4,(P\_brenneri:0.01423,(P\_deleyi:0.00712,(P\_agglomerans:0.0,P\_vagans:0.0,P\_sp\_aB:0.0):0.00713):5.5E-4):0.00701):0.01416):5.5E-4):5.5E-4):0.00692):5.5E-4):0.0088):5.5E-4);

[147] tree 't147'=[&R] (((P\_septica:0.0478,((P\_allii:0.00902,(P\_ananatis:0.0137,(P\_s\_indologenes:0.00277,P\_s\_stewartii:5.5E-4):0.02027):0.00253):0.05931,(((P\_deleyi:0.02611,(P\_anthophila:0.02796,(P\_vagans:0.00279,(P\_sp\_aB:0.0056,P\_agglomerans:5.5E-4):0.00279):0.00185):0.01079):0.01394,P\_conspicua:0.01049):0.00311,P\_brenneri:0.02169):0.01163):0.03156):0.00822,(P\_sp\_A4:0.11247,((T\_morbirosei:0.16296,(T\_ptyseos:0.10807,T\_sp\_NML\_06:0.07545):0.04958):0.17429,(E\_billingiae:0.06679,(E\_pyrifoliae:0.01434,E\_tasmaniensis:0.04627):0.06189):0.13354):0.06709):0.02907):0.01909,P\_eucrina:0.08754):0.02286,(P\_wallisii:0.02347,P\_dispersa:0.02387):0.00287,((P\_sp\_At-9b:0.02134,P\_cyprapedii:0.02998):0.01743,(P\_rwandensis:0.02455,(P\_rodasii:0.03431,P\_sp\_GM01:0.02698):0.01162):0.00853):0.00192);

[148] tree 't148'=[&R] (P\_deleyi:0.00346,((P\_sp\_At-9b:0.01183,P\_cyprapedii:5.5E-4):0.02135,(((P\_septica:0.05452,((E\_pyrifoliae:0.01953,E\_tasmaniensis:0.03038):0.16252,E\_billingiae:0.08708):0.04392,(((P\_s\_indologenes:5.4E-4,P\_s\_stewartii:0.00611):0.01431,(P\_allii:0.01492,P\_ananatis:0.01816):0.04293):0.03642,((T\_morbirosei:0.14481,(T\_ptyseos:0.14402,T\_sp\_NML\_06:0.08361):0.13441):0.06045,P\_sp\_A4:0.07202):0.04721):0.01028):0.02574):0.03919,(P\_eucrina:0.05845,(P\_wallisii:5.5E-4,(P\_rwandensis:0.0,P\_sp\_GM01:0.0):0.00615,P\_rodasii:5.5E-4):0.01236):5.4E-4):0.0117):5.4E-4,P\_dispersa:5.5E-4):0.03851):0.04334,((P\_agglomerans:0.00608,(P\_brenneri:5.5E-4,P\_conspicua:0.00597):0.03159):0.00621,(P\_anthophila:0.00608,(P\_vagans:0.01836,P\_sp\_aB:5.5E-4):0.01794):5.5E-4):0.01659);

[149] tree 't149'=[&R] (((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01973,(P\_allii:0.00785,P\_ananatis:0.00178):0.01484):0.09707,((P\_brenneri:0.0133,P\_conspicua:0.03228):0.01722,(P\_deleyi:0.03604,(P\_anthophila:0.00905,(P\_sp\_aB:5.3E-4,(P\_agglomerans:0.00965,P\_vagans:0.00314):0.00938):0.01124):0.01203):0.01837):0.02681,(P\_septica:0.0537,(((P\_rodasii:0.03131,P\_rwandensis:0.01924):0.00873,(P\_sp\_GM01:0.03284,(P\_eucrina:0.05656,(P\_dispersa:0.00617,P\_wallisii:0.01986):0.01447):0.021):0.01517):0.03493,((P\_sp\_At-9b:0.0112,P\_cyprapedii:0.0086):0.04798,(P\_sp\_A4:0.05603,((T\_morbirosei:0.11634,(T\_ptyseos:0.03993,T\_sp\_NML\_06:0.04618):0.04713):0.09627,(E\_billingiae:0.08398,(E\_pyrifoliae:0.03311,E\_tasmaniensis:0.04863):0.08221):0.03412):0.03421):0.02682):0.02478):0.02011):0.01275);

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[150] tree 't150'=[&R]
(P_sp_aB:0.01327,P_agglomerans:0.00996,(P_vagans:0.0097,((P_anthophila:0.0445,P_deleyi:0.0066):0.00696,((((P_cypripedii:0.03007,(P_sp_At-
9b:0.01326,(((P_rodasii:0.02502,P_rwandensis:0.02434):0.01391,(P_wallisii:0.08682,(P_eucrina:0.06552,P_dispersa:0.02
588):0.01459):0.02621):0.01073,P_sp_GM01:0.03464):0.0188):0.01803):0.02954,(P_sp_A4:0.04419,(T_morbirosei:0.07653,(T
_ptyseos:0.1205,T_sp_NML_06:0.09986):0.05559):0.13726):0.02389):0.0196,(P_septica:0.04217,(E_billingiae:0.07833,(E_p
yrifoliae:0.04719,E_tasmaniensis:0.01999):0.06187):0.04405):0.01528):0.03008,(P_brenneri:0.01564,P_conspicua:0.01111
):0.01354):0.01246,((P_s_indologenes:0.0,P_s_stewartii:0.0):0.02388,(P_allii:5.5E-
4,P_ananatis:0.00987):0.01974):0.03365):0.00671):0.00676):5.4E-4);
[151] tree 't151'=[&R] (P_eucrina:0.22158,P_dispersa:0.03987,(P_wallisii:0.10748,(((P_sp_At-
9b:0.03183,P_cypripedii:0.02704):0.04503,(P_sp_A4:0.20154,((P_septica:0.10108,(((P_s_indologenes:0.00728,P_s_stewart
ii:0.00456):0.04616,(P_allii:0.02683,P_ananatis:0.0134):0.04318):0.12085,((P_brenneri:0.04303,P_conspicua:0.03782):0
.06797,(((P_agglomerans:0.01899,(P_vagans:0.01953,P_sp_aB:0.02793):0.00982):0.00767,P_deleyi:0.05825):0.01334,P_anth
ophila:0.05673):0.0167):0.04931):0.04607):0.05033,((T_ptyseos:0.10497,(T_morbirosei:0.1305,T_sp_NML_06:0.08997):0.03
757):0.11858,(E_billingiae:0.09332,(E_pyriifoliae:0.05095,E_tasmaniensis:0.05285):0.09303):0.03783):0.04777):0.04696
):0.04426):0.05479,(P_sp_GM01:0.08806,(P_rodasii:0.03741,P_rwandensis:0.05414):0.03378):0.01361):0.04152):0.03231);
[152] tree 't152'=[&R] ((P_sp_A4:0.13596,(((P_sp_GM01:0.01752,P_rodasii:0.00579):0.01816,(P_sp_At-
9b:0.02271,P_cypripedii:0.00853):0.02745):5.3E-
4,P_wallisii:0.02695):0.00939,((P_eucrina:0.04624,P_dispersa:0.03587):0.01795,P_rwandensis:0.01791):0.00269):0.01704
):0.01867,((E_pyriifoliae:0.0365,E_tasmaniensis:0.01943):0.07561,((P_s_indologenes:0.0,P_s_stewartii:0.0):0.00741,(P
_allii:0.00907,P_ananatis:0.00442):0.01041):0.03868):0.00487):0.0068,(E_billingiae:0.04678,(T_ptyseos:0.03382,(T_sp_N
ML_06:0.0499,T_morbirosei:0.03494):0.00841):0.08628):0.00505,(((P_anthophila:0.01561,(P_deleyi:0.01332,(P_vagans:0.
0076,(P_agglomerans:0.01357,P_sp_aB:0.01431):0.00564):0.0057):0.0093):0.02291,P_conspicua:5.4E-
4):0.00831,P_brenneri:5.5E-4):0.02528,P_septica:0.031):0.00661);
[153] tree 't153'=[&R]
((P_conspicua:0.0,P_deleyi:0.0,P_sp_aB:0.0,P_agglomerans:0.0,P_vagans:0.0,P_brenneri:0.0):5.5E-
4,P_anthophila:0.01623,((E_billingiae:5.5E-4,(E_pyriifoliae:5.4E-
4,E_tasmaniensis:0.03308):0.04965):0.06667,((P_s_indologenes:0.0,P_s_stewartii:0.0):5.5E-4,(P_ananatis:5.4E-
4,P_allii:0.01632):0.0163):0.01659):0.01676,(((P_eucrina:0.0,P_sp_GM01:0.0,P_dispersa:0.0,P_rodasii:0.0,P_rwandensis
:0.0,P_wallisii:0.0):5.4E-4,(T_morbirosei:0.03772,(T_ptyseos:5.4E-
4,T_sp_NML_06:0.10232):0.04912):0.09244):0.03251,(P_sp_A4:0.0,P_septica:0.0,P_sp_At-9b:0.0,P_cypripedii:0.0):5.4E-
4):0.01608):5.4E-4);
[154] tree 't154'=[&R]
(P_eucrina:0.05901,P_wallisii:0.02093,((P_rwandensis:0.01356,(P_rodasii:0.02539,P_sp_GM01:0.039):0.00665):0.00471,(P
_dispersa:0.04079,((P_sp_At-
9b:0.00429,P_cypripedii:0.01778):0.01827,(P_septica:0.0575,((P_allii:0.00364,((P_s_indologenes:5.5E-
4,P_s_stewartii:0.00709):0.01854,P_ananatis:0.00348):0.00727):0.09409,(P_deleyi:0.01004,((P_brenneri:5.4E-
4,P_conspicua:0.00716):0.01145,(P_anthophila:0.02137,(P_vagans:0.00704,(P_sp_aB:0.01065,P_agglomerans:5.4E-
4):0.00356):0.00414):0.0035):0.00725):0.01239):0.0176,(P_sp_A4:0.04334,((E_billingiae:0.04893,(E_pyriifoliae:0.01095,
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E\_tasmaniensis:0.02933):0.08436):0.08193,(T\_sp\_NML\_06:0.05227,(T\_ptyseos:0.0996,T\_morbirosei:0.07083):0.05077):0.10938):0.0356):0.01276):0.00718):0.02185):0.01837):0.00509):0.00867);

[155] tree 't155'=[&R]  
(((T\_morbirosei:0.12219,(T\_sp\_NML\_06:0.16481,T\_ptyseos:0.16005):0.04925):0.20366,(E\_billingiae:0.07455,(E\_pyrifoliae:0.05489,E\_tasmaniensis:0.0642):0.1101):0.07903):0.03329,(((P\_sp\_At-9b:0.00709,P\_cyprapedii:0.02486):0.03102,(P\_eucrinea:0.14531,((P\_sp\_GM01:0.02392,((P\_rodasii:0.02645,P\_rwandensis:0.03241):0.01824,P\_wallisii:0.06341):0.01094):0.01205,P\_dispersa:0.05114):0.01745):0.04106):0.02309,P\_sp\_A4:0.15202):0.02048):0.02525,((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00371):0.03068,(P\_allii:0.01303,P\_ananatis:0.03489):0.01905):0.05991,(((P\_brenneri:0.00223,P\_conspicua:0.013):0.01359,(P\_deleyi:0.03803,((P\_sp\_aB:0.0126,P\_agglomerans:0.0128):0.00869,(P\_vagans:0.00897,P\_anthophila:0.05152):0.00903):0.00889):0.0291):0.04551,P\_septica:0.0836):0.01498);

[156] tree 't156'=[&R]  
(((P\_s\_indologenes:0.00213,P\_s\_stewartii:0.00248):0.07111,(P\_allii:0.01783,P\_ananatis:0.03909):0.03007):0.13017,(((P\_brenneri:0.03872,P\_conspicua:0.01432):0.04579,(P\_anthophila:0.04556,(P\_agglomerans:0.02955,(P\_deleyi:0.05558,(P\_vagans:0.01011,P\_sp\_aB:0.01825):0.01078):0.01051):0.01668):0.06052):0.05911):0.07331,((T\_sp\_NML\_06:0.11525,(T\_morbirosei:0.15121,T\_ptyseos:0.17655):0.06768):0.47003,(E\_billingiae:0.1853,(E\_pyrifoliae:0.072,E\_tasmaniensis:0.07205):0.11881):0.14702):0.09193):0.02321,P\_septica:0.14478,((P\_eucrinea:0.18208,((P\_wallisii:0.06857,((P\_sp\_GM01:0.07501,(P\_rodasii:0.03919,P\_rwandensis:0.0364):0.04411):0.02361,(P\_sp\_At-9b:0.04999,P\_cyprapedii:0.04546):0.10886):0.02111):0.03128,P\_dispersa:0.06184):0.0294):0.09158,P\_sp\_A4:0.24167):0.03035);

[157] tree 't157'=[&R] ((P\_sp\_At-9b:0.03576,P\_cyprapedii:0.01255):0.02491,((P\_sp\_GM01:5.4E-4,(P\_rwandensis:0.01976,P\_rodasii:0.00713):0.01288):0.02094,(P\_wallisii:0.01258,(P\_dispersa:0.01398,P\_eucrinea:0.03963):0.00672):0.00737):0.03614,(P\_sp\_A4:0.09009,(((T\_morbirosei:0.09234,(T\_sp\_NML\_06:0.05574,T\_ptyseos:0.06014):0.02033):0.09349,(E\_billingiae:0.06438,(E\_pyrifoliae:0.02431,E\_tasmaniensis:0.03208):0.10946):0.04354):0.06081,((P\_anthophila:5.4E-4,((P\_agglomerans:0.0,P\_vagans:0.0,P\_sp\_aB:0.0):5.3E-4,((P\_brenneri:0.0,P\_conspicua:0.0):0.00659,P\_deleyi:5.4E-4):0.0066):0.00661):0.02783,(P\_septica:0.05286,((P\_allii:0.0,P\_ananatis:0.0):5.5E-4,((P\_s\_indologenes:0.00655,P\_s\_stewartii:5.5E-4):0.00649):0.04892):0.01679):0.0077):0.01341):0.02002);

[158] tree 't158'=[&R] (P\_brenneri:5.4E-4,(P\_conspicua:0.00389,((P\_deleyi:0.0,P\_agglomerans:0.0,P\_vagans:0.0,P\_sp\_aB:0.0):5.5E-4,P\_anthophila:0.00386):0.00785):0.00383,((P\_allii:0.00403,(P\_sp\_A4:0.02299,(((P\_cyprapedii:0.00396,(P\_sp\_At-9b:0.00158,((E\_billingiae:0.02968,(E\_pyrifoliae:0.0405,E\_tasmaniensis:0.00501):0.02208):0.0673,(T\_morbirosei:0.00901,(T\_ptyseos:0.0046,T\_sp\_NML\_06:0.01534):0.01594):0.03393):0.01606):0.01038):0.00389,(P\_sp\_GM01:0.00397,(P\_rwandensis:0.00393,P\_rodasii:0.00391):0.00392):0.00396):0.00916,(P\_septica:0.02429,(P\_eucrinea:0.01595,(P\_dispersa:0.00807,P\_wallisii:0.00775):0.00797):0.00344):0.00683):0.00847):0.00487):0.0039,(P\_ananatis:5.5E-4,((P\_s\_stewartii:0.00387,P\_s\_indologenes:5.5E-4):0.00386):5.5E-4):0.00373);

[159] tree 't159'=[&R] (P\_dispersa:0.02497,(P\_rodasii:0.00826,P\_rwandensis:0.00798):0.02534,(((P\_sp\_At-9b:0.0,P\_cyprapedii:0.0):0.02529,(P\_eucrinea:0.03716,P\_wallisii:0.01565):0.01475):0.00807,((P\_sp\_A4:0.03253,((E\_billingiae:0.03374,(E\_pyrifoliae:0.02293,E\_tasmaniensis:0.03712):0.10552):0.11681,(T\_sp\_NML\_06:0.06595,(T\_morbirosei:0.0

6098,T\_ptyseos:0.02851):0.05013):0.07231):0.03118,((P\_ananatis:0.01581,(P\_allii:0.0158,(P\_s\_indologenes:0.0,P\_s\_stew  
artii:0.0):0.01648):5.4E-4):0.02437,((P\_deleyi:0.03994,((P\_sp\_aB:0.00798,P\_vagans:5.4E-  
4):0.01608,(P\_agglomerans:5.5E-4,P\_anthophila:0.00786):5.4E-  
4):0.01573):0.00902,((P\_brenneri:0.00801,P\_conspicua:0.00797):0.02418,P\_septica:0.07863):5.4E-  
4):0.02521):0.00722):0.017):0.04388,P\_sp\_GM01:0.04229):5.3E-4):0.00801);  
[160] tree 't160'=[&R]  
((P\_anthophila:0.01914,(P\_brenneri:0.00298,P\_conspicua:0.01235):0.00313):0.00305,((P\_sp\_A4:0.05779,(P\_septica:0.0187  
2,((P\_sp\_At-9b:0.01217,P\_cyprapedii:0.00609):5.4E-  
4,((P\_dispersa:0.00577,(P\_eucrina:0.02195,P\_wallisii:0.00588):0.00988):0.01898,(P\_rwandensis:0.00666,(P\_rodasii:0.03  
089,P\_sp\_GM01:0.01304):0.00623):0.01062):0.00731):0.02597,((T\_morbirosei:0.03254,(T\_ptyseos:0.01759,T\_sp\_NML\_06:0.02  
639):0.01929):0.07226,(E\_billingiae:0.03016,(E\_pyriifoliae:0.00805,E\_tasmaniensis:0.01007):0.05171):0.03719):0.01973)  
:0.01517):0.01592):0.01148,(P\_agglomerans:0.00921,(P\_vagans:5.5E-  
4,(P\_deleyi:0.0132,P\_sp\_aB:0.01546):0.00521):0.00941):0.00921):0.00603,((P\_allii:0.02227,P\_ananatis:0.01181):0.00322  
,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01506):0.00654);  
[161] tree 't161'=[&R] (P\_wallisii:0.00331,((P\_sp\_A4:0.01593,P\_septica:0.00688):0.0094,(P\_sp\_At-  
9b:0.00327,P\_cyprapedii:0.0036):0.0024):0.00847,(((P\_ananatis:5.5E-  
4,(P\_allii:0.00308,(P\_s\_stewartii:0.00476,P\_s\_indologenes:5.5E-  
4):0.00162):0.00155):0.00796,((P\_brenneri:0.0,P\_conspicua:0.0):0.0031,(P\_vagans:0.00204,((P\_deleyi:0.00314,P\_anthoph  
ila:0.00314):0.00315,(P\_agglomerans:0.00631,P\_sp\_aB:0.00156):0.00156):0.00138):0.00778):0.00318):0.01392,((P\_sp\_GM01  
:0.00939,(P\_rodasii:0.01102,P\_rwandensis:0.01037):0.007):0.00328,((T\_morbirosei:0.01898,(T\_ptyseos:0.01536,T\_sp\_NML\_  
06:0.01098):0.00792):0.02263,(E\_billingiae:0.04458,(E\_pyriifoliae:0.00339,E\_tasmaniensis:0.00768):0.00374):0.01711):0  
.01261):0.00309):0.00503):0.00259,(P\_eucrina:0.01279,P\_dispersa:5.5E-4):0.00586);  
[162] tree 't162'=[&R] (P\_agglomerans:0.01997,(P\_deleyi:0.0162,P\_anthophila:0.00631):0.00623,(((P\_ananatis:5.4E-  
4,(P\_allii:0.01164,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.02722):0.00476):0.04775,(P\_septica:0.08312,((P\_cypraped  
ii:0.04203,P\_sp\_At-  
9b:0.04278):0.02364,((P\_sp\_A4:0.07801,((T\_morbirosei:0.04723,(T\_sp\_NML\_06:0.18066,T\_ptyseos:0.09893):0.08716):0.2963  
,(E\_billingiae:0.10537,(E\_pyriifoliae:0.05521,E\_tasmaniensis:0.03722):0.15492):0.11901):0.04038):0.03816,(P\_sp\_GM01:0  
.01617,((P\_rodasii:0.01278,P\_rwandensis:0.01206):0.03999,(P\_dispersa:0.0299,(P\_eucrina:0.07315,P\_wallisii:0.01914):0  
.0147):0.00957):0.017):0.02438):0.01969):0.00869):0.01666):0.0151,(P\_brenneri:0.02718,P\_conspicua:0.01214):6.1E-  
4):0.01773,(P\_sp\_aB:0.01221,P\_vagans:0.00666):0.00824):5.0E-4);  
[163] tree 't163'=[&R] ((P\_sp\_GM01:0.0151,(P\_rodasii:0.0203,P\_rwandensis:5.4E-  
4):0.01886):0.02757,(((T\_morbirosei:0.06574,(T\_sp\_NML\_06:0.11684,T\_ptyseos:0.08039):0.02895):0.18938,(E\_billingiae:0  
.10034,(E\_pyriifoliae:0.03177,E\_tasmaniensis:0.08787):0.10696):0.17953):0.12652,(P\_sp\_A4:0.16858,P\_dispersa:5.4E-  
4):0.01391):0.00651,(((P\_brenneri:0.0,P\_conspicua:0.0):0.01158,((P\_allii:0.01331,(P\_ananatis:0.0,P\_s\_indologenes:0  
.0,P\_s\_stewartii:0.0):5.3E-4):0.06211,(P\_deleyi:0.02014,((P\_sp\_aB:0.00663,(P\_agglomerans:0.00659,P\_vagans:5.5E-  
4):0.01325):5.4E-4,P\_anthophila:0.0415):0.0066):0.0068):0.0084):0.03064,(P\_cyprapedii:0.03952,P\_sp\_At-  
9b:0.02211):0.02988):0.03802,P\_wallisii:0.01392):0.00668,(P\_septica:0.05281,P\_eucrina:0.03796):0.01768):0.01421);  
[164] tree 't164'=[&R]  
(P\_deleyi:0.00678,P\_sp\_aB:0.01054,(P\_vagans:0.00486,(P\_agglomerans:0.00887,(P\_anthophila:0.01889,(((P\_allii:0.00773,

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((P_s_indologenes:5.3E-4,P_s_stewartii:0.00344):0.03131,P_ananatis:0.01516):0.007):0.04085,(((P_sp_At-9b:0.02679,P_cyprapedii:0.01536):0.02052,(P_sp_A4:0.08717,(P_eucrina:0.02467,(P_dispersa:0.00764,(P_sp_GM01:0.02425,(P_rodasii:0.02071,P_rwandensis:0.02896):0.03594):0.03118):0.0048,P_wallisii:0.0306):0.02205):0.01593):0.02647):0.01501,(((T_morbirosei:0.08437,(T_ptyseos:0.09139,T_sp_NML_06:0.04386):0.01294):0.13321,(E_billingiae:0.06951,(E_pyrifoliae:0.0239,E_tasmaniensis:0.03485):0.04474):0.09361):0.03996,P_septica:0.07006):0.01877):0.0137):0.00855,(P_brenneri:0.01867,P_conspicua:0.0171):0.00766):0.00782):0.00781):0.00722):0.00604);
[165] tree 't165'=[&R]
((P_sp_A4:0.02057,(((E_billingiae:0.02425,(E_pyrifoliae:0.01054,E_tasmaniensis:0.0033):0.00552):0.01553,(T_sp_NML_06:5.4E-4,(T_morbirosei:0.00342,T_ptyseos:5.5E-4):0.00688):0.03494,(P_allii:0.01383,(P_ananatis:5.5E-4,(P_s_stewartii:0.00344,P_s_indologenes:5.5E-4):0.00688):5.5E-4):0.007):0.00384):0.00688,(P_brenneri:0.0,P_conspicua:0.0):0.00337,(P_sp_aB:0.0,P_agglomerans:0.0,P_vagans:0.0,P_deleyi:0.0,P_anthophila:0.0):5.4E-4):0.0071):5.3E-4,P_septica:0.00674):0.00365):0.01372,(P_eucrina:0.00686,((P_dispersa:0.0,P_wallisii:0.0):0.00343,(P_sp_At-9b:0.00685,P_cyprapedii:5.5E-4):0.01376):0.00339):0.00372,((P_rodasii:0.00342,P_rwandensis:5.4E-4):0.00996,P_sp_GM01:0.00309):5.4E-4);
[166] tree 't166'=[&R]
(P_anthophila:0.00678,(P_vagans:0.0,P_sp_aB:0.0):0.00661,(P_agglomerans:0.00661,(P_deleyi:0.01354,(((E_billingiae:0.05304,(E_pyrifoliae:0.00811,E_tasmaniensis:0.02211):0.04693):0.0738,(P_sp_A4:0.09218,(T_morbirosei:0.04908,(T_ptyseos:0.05726,T_sp_NML_06:0.01435):0.04791):0.13884):0.05766):0.0171,((P_brenneri:0.0,P_conspicua:0.0):0.00691,((P_sp_At-9b:0.01288,P_cyprapedii:5.3E-4):0.02089,(P_dispersa:0.01453,P_eucrina:0.07107):0.0136,(P_wallisii:0.02803,P_sp_GM01:0.02703):0.01388,(P_rodasii:0.0,P_rwandensis:0.0):5.5E-4):0.01325):0.02664):0.02862,P_septica:0.01468):0.02608):0.00391):0.01658,(P_ananatis:5.5E-4,(P_allii:0.00654,(P_s_stewartii:0.00668,P_s_indologenes:5.5E-4):0.02054):0.00679):0.0133):0.01379):0.01354):5.4E-4);
[167] tree 't167'=[&R]
(P_deleyi:0.01337,(P_vagans:0.0026,(P_sp_aB:0.00642,P_agglomerans:0.00126):0.00255):0.00481,((P_anthophila:0.01176,(P_s_indologenes:5.5E-4,P_s_stewartii:0.00254):0.00612,(P_ananatis:0.00998,P_allii:0.01327):0.0019):0.01536):0.00618,(((T_morbirosei:0.02569,(T_sp_NML_06:0.04068,T_ptyseos:0.0356):0.0179):0.04956,(E_billingiae:0.05111,(E_pyrifoliae:0.02098,E_tasmaniensis:0.00511):0.05655):0.04316):0.05045,(P_septica:0.0242,((P_sp_At-9b:0.00712,P_cyprapedii:0.00846):0.03273,(P_dispersa:0.00755,(((P_sp_GM01:0.02014,(P_rodasii:0.01362,P_rwandensis:0.01081):0.01939):0.00704,P_sp_A4:0.06539):0.00293,P_wallisii:0.02066):0.00515):0.00104,P_eucrina:0.0316):0.00787):0.01299):0.00961):0.01339,(P_brenneri:0.01228,P_conspicua:0.00335):0.00648):0.00291):0.00378);
[168] tree 't168'=[&R] (((P_brenneri:0.12465,P_conspicua:5.5E-4):5.5E-4,(P_agglomerans:0.0,P_vagans:0.0):5.5E-4,(P_deleyi:0.00835,P_sp_aB:0.00835):0.00834):0.01667):0.01703,P_anthophila:0.02559):0.00866,(P_septica:0.00842,(P_eucrina:0.01662,(P_allii:0.01687,(P_s_indologenes:0.0,P_s_stewartii:0.0,P_ananatis:0.0):5.4E-4):0.04408):0.01735):5.4E-4,(P_dispersa:5.5E-4,((P_sp_At-9b:0.0,P_cyprapedii:0.0):0.01453,((P_wallisii:0.03532,(P_rodasii:0.00842,P_rwandensis:5.3E-
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4):0.0182):0.03521,(P\_sp\_A4:0.05682,P\_sp\_GM01:0.00877):0.00874):0.02066,((T\_ptyseos:0.0096,(T\_sp\_NML\_06:0.0257,T\_morbirosei:0.02471):0.03301):0.13993,(E\_billingiae:0.01898,(E\_pyrifoliae:0.02207,E\_tasmaniensis:0.02977):0.03318):0.09171):0.034):0.00175):0.01475):0.00847);

[169] tree 't169'=[&R]  
(P\_deleyi:0.03249,P\_agglomerans:0.01058,(P\_anthophila:0.04355,(P\_sp\_aB:0.03729,(P\_vagans:5.4E-4,((P\_brenneri:0.01446,P\_conspicua:0.02955):0.03259,(((P\_s\_indologenes:0.00528,P\_s\_stewartii:0.00483):0.01516,(P\_ananatis:0.01509,P\_allii:0.03001):0.01274):0.0654,(P\_septica:0.05956,((P\_sp\_A4:0.1861,(E\_billingiae:0.13822,(E\_pyrifoliae:0.07134,E\_tasmaniensis:0.09869):0.14689):0.23091):0.02326,((T\_morbirosei:0.09264,(T\_sp\_NML\_06:0.13966,T\_ptyseos:0.11747):0.08728):0.2783,(((P\_rwandensis:0.02546,(P\_sp\_GM01:0.03746,P\_rodasii:0.02156):0.00679):0.01604,(P\_eucrina:0.08758,(P\_dispersa:0.04767,P\_wallisii:0.05562):0.01124):0.00814):0.04636,P\_cyprapedii:0.00527):0.02287,P\_sp\_At-9b:0.02096):0.05587):0.04073):0.02747):0.0228):0.03894):0.03563):0.00929):0.00111):0.00529);

[170] tree 't170'=[&R]  
(P\_agglomerans:0.00455,(P\_deleyi:0.01915,P\_sp\_aB:0.00473):0.00923,(((P\_anthophila:0.00932,((P\_ananatis:0.01362,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00455,P\_allii:5.5E-4):5.4E-4):0.03301,(((P\_septica:0.0413,(E\_billingiae:0.01997,(E\_pyrifoliae:0.02687,E\_tasmaniensis:0.01228):0.01536):0.0267):0.01534,(P\_sp\_A4:0.01818,(T\_morbirosei:0.01663,(T\_sp\_NML\_06:0.03482,T\_ptyseos:0.01999):0.01048):0.05362):0.0179):0.0106,((P\_sp\_At-9b:0.00923,P\_cyprapedii:0.01581):0.01239,(P\_sp\_GM01:0.00961,(P\_dispersa:0.00433,((P\_eucrina:0.03061,(P\_rodasii:0.00866,P\_rwandensis:0.01948):0.01373):0.01236,P\_wallisii:5.4E-4):0.00941):0.00947):0.00461):0.00948):0.01875):5.3E-4):0.00459,P\_vagans:5.4E-4):0.00458,(P\_brenneri:0.01375,P\_conspicua:5.4E-4):0.00453):5.5E-4);

[171] tree 't171'=[&R] ((P\_dispersa:0.00906,(P\_septica:0.0869,(P\_sp\_At-9b:0.0,P\_cyprapedii:0.0):5.4E-4):0.03994):0.01071,(P\_rodasii:0.00996,(P\_rwandensis:0.01928,P\_sp\_GM01:0.03971):0.00998):0.00993,(((P\_wallisii:0.02891,((P\_conspicua:0.0,P\_brenneri:0.0):0.00948,((P\_agglomerans:0.0,P\_vagans:0.0):5.5E-4,(P\_sp\_aB:0.0095,P\_deleyi:0.00947):5.5E-4):5.4E-4):0.02873):5.5E-4,(P\_anthophila:0.00962,(P\_allii:0.00995,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01926,P\_ananatis:5.3E-4):0.0095):0.05945):5.4E-4):5.5E-4,((T\_morbirosei:0.02486,(T\_ptyseos:0.08845,T\_sp\_NML\_06:0.0509):0.06277):0.15908,(E\_billingiae:0.08555,(E\_pyrifoliae:0.06217,E\_tasmaniensis:0.03359):0.1033):0.03632):0.02415):0.01939,(P\_sp\_A4:0.06792,P\_eucrina:0.10369):5.4E-4):0.00169);

[172] tree 't172'=[&R] ((E\_pyrifoliae:0.08393,E\_tasmaniensis:0.00778):0.03243,(P\_vagans:5.5E-4,(P\_anthophila:0.00909,(P\_sp\_aB:0.01837,(P\_deleyi:0.00929,P\_agglomerans:0.0191):0.00906):5.5E-4):0.00914):0.01987,((E\_billingiae:0.00994,(P\_brenneri:0.01726,P\_conspicua:0.02167):0.02754):0.01963,((P\_eucrina:5.4E-4,(P\_septica:0.04927,P\_dispersa:0.00948):0.01782):0.00899,(P\_wallisii:5.3E-4,(((P\_cyprapedii:0.01788,P\_sp\_At-9b:0.00894):0.0093,(P\_rodasii:5.5E-4,(P\_sp\_GM01:5.3E-4,((P\_allii:0.0,P\_ananatis:0.0):0.02913,P\_sp\_A4:0.01834):0.02744):0.01769):5.4E-4):5.4E-4,P\_rwandensis:0.00856):0.0183,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.05265,(T\_morbirosei:5.4E-4,(T\_ptyseos:0.02835,T\_sp\_NML\_06:0.02903):0.07028):0.04316):0.01754):5.4E-4):5.4E-4):0.00757):0.01796);

[173] tree 't173'=[&R]  
(T\_sp\_NML\_06:0.29308,(T\_morbirosei:0.29268,T\_ptyseos:0.24495):0.0875):0.6277,(P\_sp\_A4:0.18126,((P\_septica:0.07786,((

E\_billingiae:0.11238,(E\_pyriifoliae:0.10063,E\_tasmaniensis:0.145):0.09717):0.08954):0.03037,(P\_sp\_At-9b:0.01806,P\_cyprapedii:0.02448):0.04727):0.00867):0.01867,(((P\_allii:5.5E-4,(P\_ananatis:0.04375,(P\_s\_indologenes:5.4E-4,P\_s\_stewartii:0.01411):0.06495):0.00661):0.03626,(P\_brenneri:0.0194,(P\_conspicua:0.02775,(P\_anthophila:0.09904,(P\_vagans:0.0334,(P\_sp\_aB:0.04878,(P\_deleyi:0.06394,P\_agglomerans:5.5E-4):0.00677):0.00696):0.01787):0.04725):0.01146):0.04617):0.06068,((P\_dispersa:0.01215,((P\_sp\_GM01:0.02037,(P\_rwandensis:0.01578,P\_rodasii:0.33543):5.4E-4):0.02687,P\_wallisii:0.04139):0.01361):9.2E-4,P\_eucrina:0.06681):0.05496):0.00368);

[174] tree 't174'=[&R]  
(P\_eucrina:0.01342,((P\_dispersa:0.014,P\_wallisii:0.00947):0.00893,(P\_septica:0.00974,(T\_morbirosei:0.01804,(T\_ptyseos:0.01169,T\_sp\_NML\_06:0.00633):0.01237):0.04422):0.02821):0.00237,((P\_sp\_At-9b:0.00886,P\_cyprapedii:0.00198):0.01797,((P\_sp\_GM01:0.01084,(P\_sp\_A4:0.0063,(P\_rodasii:0.00897,P\_rwandensis:0.00177):0.00465):0.00347):0.01375,(((P\_deleyi:0.00119,P\_anthophila:0.00112):0.00174,(P\_vagans:0.0054,((P\_agglomerans:5.4E-4,(P\_conspicua:5.5E-4,P\_brenneri:0.00359):0.00358):0.0018,P\_sp\_aB:5.4E-4):0.01094):0.00701):0.01219,((P\_s\_indologenes:0.00179,P\_s\_stewartii:5.5E-4):0.00196,((P\_allii:0.00361,P\_ananatis:0.00358):0.00434,(E\_billingiae:0.03175,(E\_pyriifoliae:0.00433,E\_tasmaniensis:0.00281):0.00391):0.02284):0.00662):0.01012):0.00773):0.00832):0.00179);

[175] tree 't175'=[&R] (P\_wallisii:0.00517,(P\_rodasii:0.0051,(P\_rwandensis:5.4E-4,P\_sp\_GM01:0.00511):0.0104):0.01041,(P\_dispersa:5.4E-4,(P\_eucrina:0.03926,(((P\_sp\_A4:0.03133,(P\_brenneri:0.00941,P\_conspicua:0.00614):0.01419):0.00815,(P\_deleyi:0.01035,(P\_sp\_aB:0.01563,((P\_agglomerans:0.0,P\_vagans:0.0):0.00515,P\_anthophila:0.00516):0.00519):0.0053):0.00521):0.00566,(P\_sp\_At-9b:0.01548,P\_cyprapedii:0.01554):5.3E-4):0.00639,((P\_ananatis:0.00505,(P\_allii:5.5E-4,(P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00516):0.01571):5.5E-4):0.01732,((E\_billingiae:0.04261,P\_septica:0.01557):0.02505,((E\_pyriifoliae:0.02539,E\_tasmaniensis:0.01213):0.0629,(T\_morbirosei:0.00958,(T\_sp\_NML\_06:0.02092,T\_ptyseos:0.01591):0.01754):0.03001):0.00625):0.00576):0.01067):0.00946):0.0103):0.01042);

[176] tree 't176'=[&R] ((P\_sp\_At-9b:0.01098,(P\_septica:0.00889,((P\_sp\_GM01:0.02892,(P\_sp\_A4:0.00516,(P\_rodasii:0.01103,P\_rwandensis:0.00196):0.01186):0.00547):0.03106,(((T\_morbirosei:0.01286,(T\_sp\_NML\_06:0.02719,T\_ptyseos:0.01711):0.0107):0.04327,(E\_billingiae:0.03898,(E\_pyriifoliae:0.00335,E\_tasmaniensis:0.00984):0.0298):0.02869):0.04555,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00973,(P\_allii:5.4E-4,P\_ananatis:0.00524):0.00743):0.01048,((P\_agglomerans:0.00392,(P\_vagans:0.00374,P\_sp\_aB:0.00186):0.00167):0.00734,((P\_anthophila:0.00556,P\_deleyi:5.5E-4):0.00372,(P\_brenneri:0.01515,P\_conspicua:0.00376):0.00179):5.4E-4):0.00968):0.00683):0.01451):0.00453):0.0063):5.5E-4,P\_dispersa:0.00371,(P\_cyprapedii:0.0056,(P\_eucrina:0.02055,P\_wallisii:0.00369):5.4E-4):0.00186);

[177] tree 't177'=[&R]  
(((P\_rodasii:0.3888,T\_sp\_NML\_06:0.04269):0.00149,((P\_cyprapedii:0.0,T\_morbirosei:0.0):0.01426,((P\_sp\_At-9b:0.01397,(E\_billingiae:5.4E-4,(E\_tasmaniensis:0.05935,E\_pyriifoliae:5.5E-4):0.06042):0.07792):5.3E-4,((P\_dispersa:0.0,P\_eucrina:0.0,P\_wallisii:0.0):5.5E-4,(P\_rwandensis:0.01422,(P\_septica:5.4E-



4,((P\_agglomerans:0.0,P\_vagans:0.0,P\_deleyi:0.0,P\_anthophila:0.0,P\_brenneri:0.0,P\_conspicua:0.0,P\_sp\_aB:0.0):0.01422  
,(P\_allii:0.0,P\_ananatis:0.0,P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.4E-4):0.01422):5.4E-4):5.5E-  
4):0.01426):5.4E-4):5.4E-4,T\_ptyseos:5.5E-4,(P\_sp\_A4:0.02866,P\_sp\_GM01:0.01441):5.5E-4);  
[178] tree 't178'=[&R]  
((P\_wallisii:0.08506,P\_septica:0.07635):0.0245,((P\_sp\_A4:0.11322,((E\_billingiae:0.11474,(E\_pyriifoliae:0.03122,E\_tasm  
aniensis:0.05208):0.09929):0.13532,(((T\_morbirosei:0.1124,(T\_ptyseos:0.05232,T\_sp\_NML\_06:0.08031):0.03671):0.17472,  
(P\_sp\_At-  
9b:0.02832,P\_cyprapedii:0.0345):0.07749):0.04505,((P\_anthophila:0.02305,((P\_deleyi:0.03729,P\_agglomerans:5.4E-  
4):0.00759,(P\_sp\_aB:0.04163,P\_vagans:0.0135):0.01261):0.00749):0.06455,(P\_brenneri:0.03636,P\_conspicua:0.00661):0.01  
275):0.06534):0.02718,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.04685,(P\_allii:0.03196,P\_ananatis:0.05488):0.04309)  
:0.08199):0.04346):0.05465):0.04331,(P\_sp\_GM01:0.06422,(P\_rodasii:0.0477,P\_rwandensis:0.03252):0.02542):0.02113):0.0  
2706,(P\_dispersa:0.06971,P\_eucrina:0.07156):0.03237);  
[179] tree 't179'=[&R] (((P\_septica:5.5E-4,(P\_dispersa:0.00777,P\_eucrina:5.4E-4):0.02362):5.4E-  
4,(P\_sp\_GM01:0.01587,(P\_rwandensis:0.00771,P\_rodasii:5.4E-  
4):0.00753):0.01581):0.0079,P\_wallisii:0.0157):0.0081,((P\_brenneri:0.0,P\_conspicua:0.0):5.4E-  
4,(P\_agglomerans:0.00779,((P\_deleyi:0.00794,P\_anthophila:5.4E-4):0.02365,(P\_vagans:0.0,P\_sp\_aB:0.0):5.4E-  
4):0.00798):0.032):0.01573,(P\_sp\_A4:0.04216,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.0079,(P\_allii:0.01572,P\_anan  
atis:5.5E-4):0.0079):0.00795,(((T\_ptyseos:0.00669,(T\_morbirosei:0.02364,T\_sp\_NML\_06:5.5E-  
4):0.0174):0.09953,(E\_billingiae:0.02981,(E\_pyriifoliae:0.0079,E\_tasmaniensis:5.4E-  
4):0.01376):0.04797):0.03492,(P\_sp\_At-9b:0.0078,P\_cyprapedii:5.5E-4):0.00111):0.01467):0.00797):0.00766);  
[180] tree 't180'=[&R] (P\_eucrina:0.02712,P\_wallisii:0.01589,(P\_dispersa:5.3E-4,((P\_cyprapedii:0.01643,P\_sp\_At-  
9b:0.00464):0.0082,(P\_sp\_GM01:0.02436,((P\_rodasii:0.01061,P\_rwandensis:0.01014):0.01403,(((P\_brenneri:5.3E-  
4,(P\_anthophila:0.00525,(P\_deleyi:0.01586,(P\_sp\_aB:0.00785,(P\_vagans:0.0026,P\_agglomerans:5.5E-  
4):0.00258):0.0026):0.00264):0.00532):0.00256,P\_conspicua:0.00529):0.01558,((E\_billingiae:0.05153,(E\_pyriifoliae:0.01  
546,E\_tasmaniensis:0.03967):0.02745):0.05878,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01001,(P\_allii:0.00517,P\_ana  
natis:0.01294):0.00279):0.02172):0.0165):0.01675,((P\_sp\_A4:0.06272,(T\_morbirosei:0.02038,(T\_sp\_NML\_06:0.05592,T\_ptys  
eos:0.03535):0.02695):0.08863):0.03917,P\_septica:0.02513):0.00907):0.01278):0.00691):0.00291):0.00784):0.00505);  
[181] tree 't181'=[&R] ((P\_agglomerans:5.2E-4,(P\_conspicua:5.3E-  
4,(P\_brenneri:0.0047,(((P\_allii:0.00327,P\_ananatis:0.00107):0.0042,(P\_s\_indologenes:5.5E-  
4,P\_s\_stewartii:0.00107):0.00452):0.01023,(P\_eucrina:0.01387,(((P\_septica:0.00873,(P\_sp\_A4:0.03785,((E\_billingiae:0.  
02214,(E\_pyriifoliae:0.00862,E\_tasmaniensis:0.00552):0.01851):0.04431,(T\_ptyseos:0.01388,(T\_morbirosei:0.02838,T\_sp\_N  
ML\_06:0.01868):0.0104):0.04812):0.01335):0.01722):0.01253,(P\_sp\_GM01:0.00932,(P\_rodasii:0.00467,P\_rwandensis:0.00836  
):0.0104):0.01441):0.0015,(P\_wallisii:0.00781,(P\_dispersa:0.00317,(P\_sp\_At-  
9b:0.00703,P\_cyprapedii:0.00724):0.00933):0.0054):0.00411):0.00594):0.0171):0.00241):0.00616):0.0032):0.00214,P\_sp\_a  
B:0.00212,(P\_vagans:0.00216,(P\_deleyi:0.00434,P\_anthophila:0.00325):0.00433):5.5E-4);  
[182] tree 't182'=[&R]  
(((P\_rodasii:0.0,P\_rwandensis:0.0):0.00798,P\_sp\_GM01:0.00586):0.00794,(P\_cyprapedii:0.01367,(((P\_allii:0.00195,P\_an  
anatis:5.5E-4):0.00601,(P\_s\_indologenes:0.0079,P\_s\_stewartii:5.5E-  
4):0.00183):0.01595,((P\_conspicua:0.00193,P\_brenneri:5.5E-4):0.00202,((P\_agglomerans:0.0,P\_vagans:0.0):5.5E-

4,((P\_deleyi:0.00789,P\_anthophila:0.00193):0.00394,P\_sp\_aB:5.5E-4):0.00188):0.00588):0.00388):0.00336,(((T\_sp\_NML\_06:0.0085,(T\_morbirosei:0.02228,T\_ptyseos:0.00987):0.00963):0.05754,(E\_billingiae:0.01464,(E\_pyriifoliae:0.00953,E\_tasmaniensis:0.00433):0.03692):0.02047):0.0139,(P\_sp\_A4:0.02562,P\_septica:0.02282):0.00401):0.00693):0.00734):5.5E-4,(P\_wallisii:0.00251,(P\_dispersa:0.00404,(P\_sp\_At-9b:0.01548,P\_eucrina:0.00841):0.00921):0.00241):0.00335);

[183] tree 't183'=[&R] (P\_sp\_At-9b:0.01367,P\_dispersa:5.5E-4,(P\_eucrina:0.00671,((P\_wallisii:0.00826,(((P\_rwandensis:0.02751,(T\_sp\_NML\_06:0.02042,(T\_morbirosei:0.04183,T\_ptyseos:0.00709):0.00731):0.03618):5.3E-4,(E\_billingiae:0.03636,P\_rodasii:0.01474):0.00669):0.0152,((P\_septica:0.04827,(E\_pyriifoliae:0.00683,E\_tasmaniensis:5.4E-4):0.00685):0.01369,(P\_sp\_A4:0.04093,((P\_allii:0.0,P\_ananatis:0.0,P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00717,((P\_deleyi:5.5E-4,(P\_anthophila:0.01373,(P\_agglomerans:0.0,P\_vagans:0.0,P\_sp\_aB:0.0):0.0137):0.00658):0.02728,(P\_brenneri:5.5E-4,P\_conspicua:0.01362):0.00269):0.0181):0.0206):5.4E-4):0.00546):0.0069):0.0147,(P\_sp\_GM01:0.00672,P\_cyprapedii:5.3E-4):5.5E-4):0.00672):5.4E-4);

[184] tree 't184'=[&R] (P\_sp\_GM01:0.01612,(P\_cyprapedii:0.00292,(P\_sp\_At-9b:0.01688,P\_septica:0.00965):0.00548):0.01165,((P\_sp\_A4:0.01788,(P\_rwandensis:0.00726,(P\_rodasii:0.00486,(P\_eucrina:0.01671,(P\_dispersa:0.00672,P\_wallisii:0.0112):0.00383):0.01016):0.00546):0.02406):0.01151,(((T\_morbirosei:0.01106,(T\_sp\_NML\_06:0.0205,T\_ptyseos:0.02372):0.01007):0.06453,(E\_billingiae:0.02469,(E\_pyriifoliae:0.03061,E\_tasmaniensis:5.5E-4):0.03461):0.01238):0.00792,(((P\_conspicua:5.5E-4,P\_brenneri:0.01349):0.00335,((P\_anthophila:0.0,P\_agglomerans:0.0):5.5E-4):0.00331):0.00329):0.0046,P\_deleyi:0.00538):0.01458,(P\_allii:5.3E-4,(P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00332):0.01729,P\_ananatis:0.01008):0.00664):0.01462):0.01464):0.01125):0.00869);

[185] tree 't185'=[&R] ((P\_allii:0.0012,((E\_billingiae:0.0,P\_vagans:0.0,P\_agglomerans:0.0,P\_sp\_aB:0.0):0.00775,(P\_brenneri:0.0,P\_conspicua:0.0):5.4E-4):0.00171):0.00223,P\_anthophila:0.00259,((P\_septica:0.0,P\_ananatis:0.0):5.4E-4,(((P\_sp\_A4:5.4E-4,(P\_rodasii:0.00516,P\_rwandensis:5.4E-4):0.00252):0.00518,(((E\_pyriifoliae:0.0,E\_tasmaniensis:0.0):0.01041,(P\_sp\_At-9b:0.0,P\_cyprapedii:0.0,P\_s\_indologenes:0.0,P\_s\_stewartii:0.0,P\_dispersa:0.0,P\_eucrina:0.0):5.5E-4):0.00253,P\_wallisii:0.00228):5.5E-4):5.5E-4,((T\_morbirosei:5.5E-4,(T\_sp\_NML\_06:0.00516,T\_ptyseos:5.5E-4):0.00257):0.00789,(P\_deleyi:0.1077,P\_sp\_GM01:0.01002):5.4E-4):0.00516):5.5E-4):5.4E-4);

[186] tree 't186'=[&R] ((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.4E-4,(P\_allii:0.01439,((P\_septica:0.00468,(((P\_eucrina:0.00476,P\_wallisii:5.5E-4):0.01405,(P\_sp\_GM01:0.01455,(P\_rodasii:0.01974,P\_rwandensis:0.00463):0.0194):0.00504):0.00484,(((P\_sp\_A4:0.05073,(T\_morbirosei:0.01338,(T\_ptyseos:0.0047,T\_sp\_NML\_06:0.01443):0.01088):0.00802):0.0147,(P\_sp\_At-9b:5.4E-4,P\_cyprapedii:0.00467):0.01889):5.4E-4,P\_dispersa:0.00955):0.00517):0.02374):0.00485,((E\_billingiae:0.03658,(E\_pyriifoliae:0.00971,E\_tasmaniensis:0.00967):0.00875):0.03894,P\_ananatis:0.00945):5.5E-4):5.5E-4):0.00472):0.00471,(P\_agglomerans:0.00474,P\_sp\_aB:5.5E-

4):0.00948,((P\_conspicua:0.0,P\_brenneri:0.0):5.5E-4,(P\_deleyi:0.00473,(P\_anthophila:0.00949,P\_vagans:5.5E-4):0.00471):5.5E-4):5.5E-4);

[187] tree 't187'=[&R] (((P\_rodasii:0.0,P\_sp\_GM01:0.0):0.01041,((P\_wallisii:0.07688,P\_eucrina:5.5E-4):0.02372,P\_dispersa:0.0129):0.03324):0.01399,P\_rwandensis:5.4E-4):0.04078,(P\_sp\_A4:0.10379,(E\_billingiae:0.05115,(E\_pyriifoliae:5.5E-4,E\_tasmaniensis:0.03579):0.04445):0.05803):0.04656,(((P\_allii:0.03608,P\_ananatis:5.4E-4):0.05464,(P\_septica:0.01917,((P\_conspicua:0.0,P\_deleyi:0.0,P\_brenneri:0.0,P\_sp\_aB:0.0,P\_agglomerans:0.0,P\_vagans:0.0):5.4E-4,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.10419,P\_anthophila:5.3E-4):0.01748):0.01972):0.01776):0.03681,((P\_sp\_At-9b:0.01893,P\_cyprapedii:5.5E-4):0.0206,(T\_ptyseos:0.04319,(T\_morbirosei:0.05825,T\_sp\_NML\_06:0.01739):5.4E-4):0.17939):5.5E-4):0.01997);

[188] tree 't188'=[&R] (P\_deleyi:0.01902,(((P\_sp\_At-9b:0.0055,P\_cyprapedii:0.01437):0.01499,(P\_septica:0.0288,((T\_sp\_NML\_06:5.4E-4,(T\_ptyseos:5.5E-4,T\_morbirosei:0.03106):0.01188):0.0814,(E\_billingiae:0.05886,(E\_pyriifoliae:0.00915,E\_tasmaniensis:0.00944):0.03883):0.02111):0.01747):0.02062):5.5E-4,((P\_allii:0.0186,(P\_ananatis:0.0,P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.3E-4):0.0186,(P\_sp\_A4:0.06089,((P\_rwandensis:0.02538,(P\_rodasii:0.03758,(P\_sp\_GM01:0.03301,(P\_dispersa:5.3E-4,P\_wallisii:0.00605):0.01278):0.00269):0.00352):0.00631,P\_eucrina:5.4E-4):0.01081):0.02289):0.00899):0.01856,P\_anthophila:0.00288):0.00964,(((P\_brenneri:0.01226,P\_conspicua:5.5E-4):0.0123,P\_sp\_aB:5.3E-4):0.00617,(P\_agglomerans:0.0,P\_vagans:0.0):5.4E-4):0.00612);

[189] tree 't189'=[&R] (P\_rwandensis:0.01184,(P\_rodasii:0.01288,((P\_cyprapedii:0.02707,P\_sp\_At-9b:5.4E-4):0.00828,(P\_septica:0.03572,(((P\_allii:0.00671,(P\_ananatis:0.00454,(P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00221):0.01106):0.00231):0.04239,((P\_anthophila:0.01229,(P\_deleyi:0.00328,(P\_sp\_aB:0.00219,(P\_agglomerans:0.00219,P\_vagans:5.5E-4):5.5E-4):0.00774):0.0043):0.01672,(P\_brenneri:0.00562,P\_conspicua:0.0099):0.00333):0.01508):0.02314,((E\_billingiae:0.03015,(E\_pyriifoliae:0.01251,E\_tasmaniensis:0.01026):0.06503):0.15689,(P\_sp\_A4:0.0595,(T\_morbirosei:0.036,(T\_sp\_NML\_06:0.05567,T\_ptyseos:0.03325):0.01405):0.14725):0.04209):0.01082):0.00827):0.02017):0.0185):0.00227,((P\_dispersa:0.00683,(P\_eucrina:0.05775,P\_wallisii:0.00438):0.00894):0.01055,P\_sp\_GM01:0.01394):0.00658);

[190] tree 't190'=[&R] ((P\_sp\_GM01:0.0022,(P\_rodasii:0.0202,(P\_wallisii:0.0411,P\_rwandensis:5.3E-4):0.00664):0.03151):0.01788,((P\_sp\_A4:0.07421,((P\_brenneri:0.01548,(P\_conspicua:5.5E-4,((P\_anthophila:0.0053,P\_deleyi:0.00532):0.01332,(P\_vagans:0.00779,(P\_agglomerans:0.0,P\_sp\_aB:0.0):5.4E-4):0.0052):0.00268):0.00831):0.02735,(P\_septica:0.02948,((P\_s\_stewartii:0.00256,P\_s\_indologenes:5.5E-4):0.01336,(P\_allii:0.0103,P\_ananatis:5.5E-4):0.0078):0.03231):0.01315):0.01536):0.0117,((E\_billingiae:0.07442,(E\_pyriifoliae:0.00617,E\_tasmaniensis:0.01233):0.02684):0.05894,(T\_sp\_NML\_06:0.00341,(T\_morbirosei:0.03515,T\_ptyseos:0.01784):0.01245):0.04235):0.01381):0.01446,(P\_eucrina:0.03351,(P\_cyprapedii:0.0112,(P\_sp\_At-9b:0.01695,P\_dispersa:0.00935):0.00737):0.00518):0.00801);

[191] tree 't191'=[&R] (((P\_sp\_GM01:0.0,P\_conspicua:0.0):5.4E-4,P\_brenneri:0.01405):0.01413,P\_rwandensis:0.01399):5.4E-4,P\_wallisii:0.01404,(P\_rodasii:0.01396,(P\_cyprapedii:5.4E-4,(P\_sp\_At-9b:5.5E-4,((T\_morbirosei:0.20644,(P\_sp\_A4:0.31173,(T\_ptyseos:0.05416,T\_sp\_NML\_06:0.08412):0.11116):0.0533):0.05544,((P\_sp\_aB:0.04241,(P\_deleyi:0.01333,(P\_allii:0.01435,(P\_s\_stewartii:0.01416,(P\_ananatis:0.0,P\_s\_indologenes:0.0):5.5E-

4):5.5E-4):0.03199):0.01437):5.4E-4,(P\_agglomerans:0.014,(P\_vagans:0.0,P\_anthophila:0.0):5.4E-4):5.5E-4):5.3E-4):0.03149,((P\_eucrina:0.03036,P\_dispersa:0.01267):0.01418,(E\_billingiae:0.14399,(E\_pyrifoliae:5.4E-4,E\_tasmaniensis:0.02789):0.15038):0.05835,P\_septica:0.02143):0.03637):0.01404):0.01268):0.01397):0.01402):5.5E-4);

[192] tree 't192'=[&R] (P\_sp\_A4:5.4E-4,((P\_agglomerans:0.0,P\_vagans:0.0,P\_conspicua:0.0,P\_rodasii:0.0,P\_rwandensis:0.0,P\_sp\_aB:0.0):5.5E-4,((E\_tasmaniensis:5.5E-4,(T\_morbirosei:0.01099,(T\_ptyseos:5.5E-4,T\_sp\_NML\_06:0.01143):0.01301):0.05889):0.02313,(E\_pyrifoliae:0.01141,E\_billingiae:5.5E-4):5.3E-4):0.01133):0.01144,((P\_eucrina:5.5E-4,(P\_deleyi:0.0,P\_allii:0.0):0.0116):0.01139,((P\_brenneri:0.0114,(P\_sp\_At-9b:0.0,P\_cypripedii:0.0,P\_dispersa:0.0,P\_septica:0.0,P\_s\_indologenes:0.0,P\_s\_stewartii:0.0,P\_wallisii:0.0):5.5E-4):0.01117,(P\_sp\_GM01:0.01133,(P\_ananatis:0.0,P\_anthophila:0.0):5.5E-4):5.4E-4):0.01122):5.4E-4);

[193] tree 't193'=[&R] ((P\_agglomerans:0.0,P\_vagans:0.0,P\_deleyi:0.0,P\_anthophila:0.0,P\_conspicua:0.0,P\_sp\_aB:0.0):5.5E-4,(P\_brenneri:5.5E-4,((E\_pyrifoliae:0.0,E\_tasmaniensis:0.0):5.5E-4,(P\_sp\_A4:0.02446,E\_billingiae:0.02546):0.01221):0.02394,((T\_morbirosei:5.5E-4,(T\_ptyseos:5.5E-4,T\_sp\_NML\_06:0.01174):0.01177):0.0241,(P\_sp\_At-9b:0.0,P\_cypripedii:0.0):5.3E-4):5.4E-4):0.02449):0.01214,(P\_eucrina:0.02533,((P\_septica:0.02411,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.4E-4):0.01194,(P\_allii:0.0,P\_ananatis:0.0):5.4E-4):5.5E-4,((P\_dispersa:0.0,P\_wallisii:0.0):5.4E-4,(P\_sp\_GM01:5.4E-4,(P\_rodasii:0.01205,P\_rwandensis:5.5E-4):0.01197):0.01188):0.02428):0.01212):5.4E-4);

[194] tree 't194'=[&R] (P\_sp\_GM01:0.01522,P\_rwandensis:0.00509,(P\_rodasii:5.5E-4,(((E\_billingiae:0.04621,(E\_pyrifoliae:0.01552,E\_tasmaniensis:0.00492):0.02226):0.05142,(T\_morbirosei:0.02829,(T\_sp\_NML\_06:0.03132,T\_ptyseos:0.01048):0.00794):0.05819):0.01325,(P\_sp\_At-9b:5.3E-4,P\_cypripedii:0.01445):0.01017):0.01452,(P\_dispersa:5.5E-4,(P\_eucrina:0.01484,(P\_wallisii:0.00472,(P\_sp\_A4:0.05588,(P\_deleyi:0.09265,(P\_anthophila:0.00502,(P\_conspicua:0.01011,(P\_agglomerans:0.0,P\_vagans:0.0,P\_sp\_aB:0.0,P\_brenneri:0.0):5.5E-4):5.4E-4):0.00445):0.0057,((P\_ananatis:0.0,P\_allii:0.0,P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.5E-4,P\_septica:0.03544):0.00502):0.0145):0.00849):0.01018):5.3E-4):5.4E-4):0.005):0.00495);

[195] tree 't195'=[&R] ((P\_anthophila:0.01393,P\_agglomerans:5.4E-4):0.00231,P\_sp\_aB:0.00697,(P\_vagans:0.0023,((P\_brenneri:0.00235,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00235,(P\_allii:0.00473,P\_ananatis:0.00234):0.00469):0.0141,((P\_sp\_At-9b:0.00248,((P\_sp\_GM01:0.0084,((P\_rodasii:0.00458,P\_rwandensis:5.5E-4):0.01143,(P\_eucrina:0.01624,(P\_dispersa:0.00674,P\_wallisii:0.00685):0.00991):5.3E-4):0.01015):0.01141,P\_cypripedii:0.00179):0.00549):0.00713,(P\_sp\_A4:0.03588,(P\_septica:0.01767,((T\_ptyseos:0.01714,(T\_morbirosei:0.03112,T\_sp\_NML\_06:0.07002):0.00926):0.04516,(E\_billingiae:0.01226,(E\_pyrifoliae:0.01129,E\_tasmaniensis:0.02249):0.04163):0.01644):0.02054):0.00613):5.3E-4):0.01338):0.00836,P\_conspicua:0.00181):5.4E-4):0.01415,P\_deleyi:0.0023):0.00234):5.5E-4);

[196] tree 't196'=[&R] (P\_rodasii:0.16582,(P\_wallisii:0.01191,(P\_cypripedii:0.0,P\_dispersa:0.0,P\_sp\_GM01:0.0):5.5E-4):5.3E-4,(((E\_tasmaniensis:5.3E-4,(E\_billingiae:0.07594,E\_pyrifoliae:0.01197):0.01219):0.08294,(T\_ptyseos:5.4E-4,(T\_morbirosei:0.04975,T\_sp\_NML\_06:0.0235):0.0248):0.07927):0.01223,(P\_septica:0.03634,(P\_anthophila:5.4E-4,(((P\_allii:0.0,P\_s\_stewartii:0.0):5.3E-

4,P\_s\_indologenes:0.01202):0.01197,(P\_vagans:0.0,P\_deleyi:0.0,P\_sp\_aB:0.0):0.01204):5.4E-4,(P\_agglomerans:0.0,P\_ananatis:0.0,P\_brenneri:0.0,P\_conspicua:0.0):5.5E-4):0.01197):0.01213):5.3E-4):0.01211,P\_sp\_At-9b:5.3E-4):0.01213,(P\_eucrina:0.00324,(P\_sp\_A4:5.5E-4,P\_rwandensis:0.01175):0.00986):0.01059):0.01168);

[197] tree 't197'=[&R] (P\_sp\_GM01:0.05597,(P\_rodasii:0.05692,P\_rwandensis:5.4E-4):0.03635,((P\_sp\_At-9b:0.05756,(P\_dispersa:0.05141,P\_wallisii:0.02364):0.02206):0.01927,(((P\_eucrina:0.12525,(((E\_billingiae:0.16111,(E\_pyrifoliae:0.13951,E\_tasmaniensis:0.11864):0.17862):0.13285,(T\_morbirosei:0.20685,(T\_sp\_NML\_06:0.21223,T\_ptyseos:0.22753):0.0415):0.25182):0.0859,(P\_allii:0.01226,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.12543,P\_ananatis:0.04265):0.00626):0.20827):0.02594,P\_sp\_A4:0.43599):0.04141,(P\_septica:0.16501,((P\_brenneri:0.02492,P\_conspicua:0.00443):0.02314,((P\_sp\_aB:0.02937,(P\_agglomerans:0.0,P\_vagans:0.0):0.00167):0.00807,(P\_deleyi:5.5E-4,P\_anthophila:0.05229):0.0297):0.04376):0.03459):0.05669):0.08698):0.08402,P\_cyprapedii:0.01687):0.01681):0.02755);

[198] tree 't198'=[&R] ((P\_deleyi:0.02373,(P\_sp\_aB:0.00945,(P\_anthophila:0.02387,(P\_agglomerans:5.5E-4,P\_vagans:0.00471):5.5E-4):0.00469):0.00487):0.01392,(P\_brenneri:0.01431,P\_conspicua:0.0047):5.2E-4):0.03601,(E\_billingiae:0.07133,(E\_pyrifoliae:0.04004,E\_tasmaniensis:0.06036):0.07064):0.08691,(((P\_sp\_A4:0.08929,(T\_morbirosei:0.05628,(T\_sp\_NML\_06:0.11485,T\_ptyseos:0.05675):0.07296):0.12041,((P\_s\_indologenes:0.00469,P\_s\_stewartii:5.4E-4):0.03456,(P\_allii:0.00952,P\_ananatis:5.5E-4):0.01407):0.05296):0.01734):0.01087,((P\_sp\_At-9b:0.02457,P\_cyprapedii:0.02352):0.02546,(P\_sp\_GM01:0.03016,((P\_rodasii:0.01641,P\_rwandensis:0.02251):0.03413,(P\_wallisii:0.02427,(P\_eucrina:0.04372,P\_dispersa:0.00612):0.01497):0.01515):0.0136):0.0058):0.01475):0.01173,P\_septica:0.05428):0.01517);

[199] tree 't199'=[&R] (P\_rodasii:0.00708,P\_rwandensis:0.01415,((P\_sp\_GM01:0.05962,P\_dispersa:0.00686):0.01394,(((E\_billingiae:0.04326,(E\_pyrifoliae:0.0427,E\_tasmaniensis:0.03988):0.13107):0.171,(P\_septica:0.05215,((P\_s\_indologenes:0.00697,P\_s\_stewartii:5.5E-4):0.00923,(P\_allii:0.01453,P\_ananatis:0.0068):0.01892):0.05671,(P\_deleyi:0.00261,((P\_agglomerans:5.5E-4,P\_vagans:0.00698):0.00696,(P\_conspicua:5.5E-4,P\_brenneri:0.00697):5.3E-4):0.01458,(P\_anthophila:5.4E-4,P\_sp\_aB:0.021):0.00666):0.01862):0.02562):0.0219):0.02305):0.00881,(T\_ptyseos:0.05252,(T\_morbirosei:0.0346,T\_sp\_NML\_06:0.01573):0.02489):0.11262):0.02583,((P\_sp\_At-9b:0.01448,(P\_sp\_A4:0.07542,(P\_eucrina:0.02125,P\_wallisii:5.3E-4):0.02775):0.00163):0.01524,P\_cyprapedii:0.01373):5.4E-4):0.01404):5.4E-4);

[200] tree 't200'=[&R] ((P\_dispersa:0.01216,(P\_sp\_At-9b:5.5E-4,P\_cyprapedii:0.00773):0.01985):0.00355,(P\_sp\_GM01:0.01511,(P\_septica:0.01236,(P\_rodasii:5.5E-4,P\_rwandensis:0.0078):0.00329):0.01179):5.5E-4,((P\_eucrina:0.04936,P\_wallisii:0.0034):0.01239,((P\_sp\_A4:0.05146,(T\_sp\_NML\_06:0.06428,(T\_morbirosei:0.04032,T\_ptyseos:0.03003):0.02251):0.08759):0.02619,((E\_billingiae:0.04283,(E\_pyrifoliae:0.02933,E\_tasmaniensis:0.00665):0.02226):0.05732,(((P\_allii:0.0,P\_ananatis:0.0):0.00365,(P\_s\_indologenes:0.00393,P\_s\_stewartii:5.5E-4):0.00424):0.02834,(P\_deleyi:5.5E-4,((P\_anthophila:5.4E-4,P\_conspicua:0.00391):5.4E-4,((P\_brenneri:5.4E-4,P\_agglomerans:0.00786):0.00397,(P\_sp\_aB:0.00389,P\_vagans:0.00384):0.0078):0.00395):0.01564):0.00556):0.01167):0.0031):5.5E-4):0.0039);

[201] tree 't201'=[&R] ((P\_sp\_At-9b:0.01066,P\_cyprapedii:0.00583):0.01095,(P\_dispersa:0.02229,(P\_rwandensis:5.4E-4,P\_rodasii:0.01661):0.00547):5.4E-4,(((P\_eucrina:0.05383,P\_sp\_GM01:0.00518):0.01125,(P\_sp\_A4:0.08939,(((T\_sp\_NML\_06:0.08055,(T\_morbirosei:0.11159,T\_p

tyseos:0.08248):0.07876):0.25699,(E\_billingiae:0.06013,(E\_tasmaniensis:0.04389,E\_pyrifoliae:0.04756):0.02171):0.0728  
2):0.05184,((P\_allii:0.00529,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01068,P\_ananatis:0.00537):5.4E-  
4):0.04127,(P\_anthophila:0.00593,((P\_deleyi:0.00532,P\_sp\_aB:0.01072):0.00529,((P\_agglomerans:0.0,P\_vagans:0.0):5.5E-  
4),(P\_conspicua:0.01072,P\_brenneri:0.00529):5.5E-4):5.5E-  
4):0.00473):0.05019):0.01771):0.01062,P\_septica:0.07218):0.01386):0.03385):5.3E-4,P\_wallisii:0.06025):0.0051);  
[202] tree 't202'=[&R]  
(((P\_dispersa:0.004,P\_eucrina:0.02145):0.01129,(P\_wallisii:0.00525,(P\_sp\_GM01:0.00425,(P\_rodasii:5.4E-  
4,P\_rwandensis:0.00834):0.00415):0.02028):0.00491):0.00956,(P\_sp\_A4:0.06667,((P\_sp\_At-  
9b:0.00818,P\_cypripedii:0.01754):0.03133,(((P\_anthophila:0.00423,((P\_sp\_aB:0.00844,P\_deleyi:0.00419):0.00424,(P\_aggl  
omerans:5.5E-4,P\_vagans:0.00848):0.00845):0.00421):0.01602,(P\_brenneri:5.4E-  
4,P\_conspicua:0.02941):0.01524):0.03865,((T\_sp\_NML\_06:5.4E-  
4,(T\_morbirosei:0.04409,T\_ptyseos:0.01422):0.02069):0.07458,(E\_billingiae:0.05512,(E\_pyrifoliae:0.01335,E\_tasmaniens  
is:0.00379):0.02712):0.06465):0.00571):0.01432):0.00779):0.01285,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00546,(  
P\_allii:0.0042,P\_ananatis:5.5E-4):0.01166):0.01698,P\_septica:0.02585):0.00441);  
[203] tree 't203'=[&R]  
((P\_septica:0.02668,(((E\_billingiae:0.05878,(E\_pyrifoliae:0.01799,E\_tasmaniensis:0.03544):0.08236):0.06641,(P\_sp\_A4:  
0.06958,(T\_morbirosei:0.01241,(T\_sp\_NML\_06:0.08054,T\_ptyseos:0.04948):0.04314):0.12585):0.03165):0.03744,((P\_conspic  
ua:5.5E-4,(P\_brenneri:0.00466,(P\_anthophila:0.00843,(P\_agglomerans:5.4E-4,(P\_vagans:5.4E-  
4,(P\_deleyi:0.00423,P\_sp\_aB:0.0172):0.00425):0.00848):0.00845):0.01258):0.01247):0.03779,(P\_ananatis:5.4E-  
4,(P\_allii:0.00442,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.0393):0.00837):0.03431):0.03281):0.00197):0.01932,(P\_ro  
dasii:0.00451,P\_rwandensis:0.01298):0.00433,((P\_eucrina:0.03307,P\_dispersa:0.00681):0.00778,(P\_wallisii:0.0171,(P\_cy  
pripedii:0.0144,(P\_sp\_At-9b:0.00986,P\_sp\_GM01:0.03329):0.00859):0.01135):0.00964):0.00725);  
[204] tree 't204'=[&R] (P\_sp\_GM01:0.018,((P\_sp\_At-  
9b:0.00874,P\_cypripedii:0.00923):0.01857,(P\_eucrina:0.00943,(P\_wallisii:0.01145,P\_dispersa:0.00977):0.0346):0.00698)  
:0.01183,(P\_rodasii:5.5E-  
4,(P\_rwandensis:0.00951,(P\_sp\_A4:0.08091,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.0384,(P\_allii:0.12738,P\_ananat  
is:0.00588):0.04613):0.05152,(P\_septica:0.01782,((P\_conspicua:0.0,P\_brenneri:0.0):0.00888,(P\_deleyi:5.5E-  
4,(P\_anthophila:5.4E-4,(P\_agglomerans:5.4E-4,(P\_vagans:0.01755,P\_sp\_aB:5.5E-  
4):0.00941):0.00876):0.00888):0.00878):5.4E-  
4):0.02389):0.02318,((E\_billingiae:0.07008,(E\_pyrifoliae:0.06361,E\_tasmaniensis:0.03686):0.0769):0.04364,(T\_sp\_NML\_0  
6:0.06281,(T\_morbirosei:0.07341,T\_ptyseos:0.06543):0.02732):0.08523):0.03482):0.00921):0.0179):0.02664):0.01849);  
[205] tree 't205'=[&R]  
(P\_eucrina:0.03333,P\_wallisii:0.02692,(P\_dispersa:0.02146,(((((((P\_anthophila:0.01095,P\_sp\_aB:0.00552):0.00537,(P\_d  
eleyi:0.02844,(P\_vagans:0.00545,P\_agglomerans:5.5E-4):5.4E-  
4):0.00546):0.02011,(P\_brenneri:0.0199,P\_conspicua:0.02403):0.01398):0.03811,(P\_ananatis:5.3E-  
4,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.05198,P\_allii:0.01102):0.01629):0.08905):0.03172,((P\_sp\_At-  
9b:0.02614,P\_cypripedii:0.02354):0.05291,(T\_sp\_NML\_06:0.10351,(T\_morbirosei:0.07417,T\_ptyseos:0.07633):0.04564):0.18  
143):0.012):5.4E-  
4,(E\_billingiae:0.1054,(E\_pyrifoliae:0.04982,E\_tasmaniensis:0.05748):0.13426):0.06539):0.01146,(P\_septica:0.04376,P\_

sp\_A4:0.16733):0.00515):0.01716,(P\_sp\_GM01:0.04353,(P\_rodasii:0.0236,P\_rwandensis:0.05288):0.05485):0.01183):0.00531):0.00532);

[206] tree 't206'=[&R] ((P\_vagans:0.0,P\_brenneri:0.0):5.5E-4,((P\_sp\_A4:0.05747,(((P\_sp\_GM01:5.4E-4,(P\_rodasii:0.00989,P\_rwandensis:0.02082):0.02093):0.04098,(P\_dispersa:5.5E-4,(P\_eucrina:0.01021,P\_wallisii:0.01026):0.0102):5.5E-4):0.0121,(((E\_billingiae:0.08972,(E\_pyriifoliae:0.03673,E\_tasmaniensis:0.01877):0.0255):0.12136,((P\_allii:0.02023,(P\_ananatis:0.0,P\_s\_indologenes:0.0):5.5E-4,P\_s\_stewartii:0.01016):5.4E-4):0.03076,(P\_sp\_At-9b:5.4E-4,P\_cyprapedii:0.02042):0.02152):5.4E-4):0.00963,(T\_morbirosei:0.11754,(T\_sp\_NML\_06:0.11682,T\_ptyseos:0.08727):0.0483):0.10182):0.01173,P\_septica:0.04021):0.01041):0.01686):0.01827,(P\_anthophila:0.01016,(P\_conspicua:0.0,P\_agglomerans:0.0):5.4E-4):0.01012):5.3E-4,(P\_sp\_aB:0.01017,P\_deleyi:0.01026):5.5E-4);

[207] tree 't207'=[&R] ((((((E\_billingiae:0.00204,(E\_pyriifoliae:0.02146,E\_tasmaniensis:0.02314):0.0249):0.01668,P\_eucrina:0.01144):0.00568,(P\_brenneri:0.0,P\_conspicua:0.0):5.5E-4):5.5E-4,(P\_dispersa:0.01151,((T\_sp\_NML\_06:0.02517,(T\_ptyseos:0.02065,T\_morbirosei:0.02584):0.01489):0.03222,P\_cyprapedii:0.00567):0.00584):0.0056):0.00566,P\_wallisii:0.00568):5.5E-4,((P\_sp\_A4:0.00729,((P\_agglomerans:0.0,P\_sp\_aB:0.0):0.00567,(P\_vagans:0.0,P\_deleyi:0.0,P\_anthophila:0.0):5.5E-4):0.00454):0.00531,(P\_rodasii:0.05551,P\_rwandensis:5.5E-4):0.00566):5.5E-4,(P\_sp\_At-9b:5.5E-4,(P\_sp\_GM01:5.5E-4,(P\_septica:0.01674,((P\_allii:0.0,P\_ananatis:0.0):0.00577,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00551):0.01156):5.4E-4):0.0057):5.4E-4);

[208] tree 't208'=[&R] (P\_wallisii:0.01391,(P\_sp\_At-9b:0.01478,P\_cyprapedii:0.01204):0.01133,(((P\_sp\_GM01:0.03058,(P\_rodasii:0.03003,P\_rwandensis:0.01276):0.00607):0.01243,((E\_billingiae:0.04581,(E\_pyriifoliae:0.02391,E\_tasmaniensis:0.01082):0.03568):0.05336,((P\_sp\_A4:0.04217,(T\_morbirosei:0.041,(T\_ptyseos:0.01899,T\_sp\_NML\_06:0.02139):0.02548):0.05097):0.02144,(((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00212):0.0096,(P\_allii:5.5E-4,P\_ananatis:0.01944):0.01017):0.02572,(P\_septica:0.0539,(((P\_vagans:0.00879,(P\_brenneri:0.00671,P\_conspicua:0.00427):0.00979):0.00253,P\_agglomerans:0.00571):0.0028,(P\_anthophila:0.01647,P\_sp\_aB:0.02129):0.00569):0.00375,P\_deleyi:0.00483):0.02023):0.0106):0.01392):0.00508):0.02079):0.00494,(P\_eucrina:0.05614,P\_dispersa:0.0041):0.00866):0.00424);

[209] tree 't209'=[&R] ((P\_wallisii:0.0,P\_sp\_A4:0.0):0.01706,P\_s\_stewartii:0.0171,((P\_sp\_At-9b:0.0,P\_cyprapedii:0.0,P\_dispersa:0.0,P\_rwandensis:0.0,P\_sp\_GM01:0.0,P\_rodasii:0.0,P\_septica:0.0,P\_allii:0.0,P\_ananatis:0.0,P\_s\_indologenes:0.0,P\_anthophila:0.0,P\_brenneri:0.0,P\_deleyi:0.0,P\_sp\_aB:0.0,P\_agglomerans:0.0,P\_vagans:0.0):5.5E-4,((E\_billingiae:0.06545,(E\_pyriifoliae:5.5E-4,E\_tasmaniensis:0.01729):0.02746):0.03284,(P\_conspicua:0.03446,((T\_morbirosei:5.4E-4,(T\_sp\_NML\_06:0.02738,T\_ptyseos:0.04385):0.05526):0.0522,P\_eucrina:5.4E-4):0.01704):5.4E-4):5.3E-4):5.5E-4);

[210] tree 't210'=[&R] (P\_wallisii:0.00777,((P\_eucrina:0.0068,((P\_sp\_GM01:0.00685,P\_rodasii:5.5E-4):0.00309,P\_rwandensis:5.3E-4):0.00315):5.4E-4,(P\_septica:0.00712,P\_dispersa:0.00688):0.00346):0.00614,((E\_billingiae:0.01596,(E\_tasmaniensis:0.01,E\_pyriifoliae:0.00714):0.00677):0.01553,(((P\_cyprapedii:0.01007,P\_sp\_At-9b:5.4E-4):0.00652,((P\_deleyi:0.0,P\_anthophila:0.0,P\_brenneri:0.0,P\_sp\_aB:0.0):5.5E-

4,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00332,(P\_ananatis:0.0068,P\_allii:5.5E-4):5.3E-4):0.0177,((P\_conspicua:0.0034,(P\_agglomerans:0.0,P\_vagans:0.0):5.5E-4):5.5E-4),(T\_morbirosei:0.00953,(T\_ptyseos:0.04331,T\_sp\_NML\_06:0.0339):0.00909):0.0413):5.4E-4):0.00262):5.5E-4):0.00385,P\_sp\_A4:0.03523):0.00397):0.00353);

[211] tree 't211'=[&R] (P\_dispersa:0.01292,(((P\_agglomerans:0.0,P\_vagans:0.0):5.4E-4,(P\_brenneri:0.0,P\_conspicua:0.0):0.01322):0.01318,(P\_sp\_aB:5.5E-4,(P\_deleyi:0.01318,P\_anthophila:0.0132):5.5E-4):5.5E-4):0.02663,((P\_rwandensis:0.0,P\_wallisii:0.0):5.4E-4,(P\_sp\_GM01:0.01297,P\_rodasii:0.01298):5.4E-4):0.01351,((P\_septica:0.02126,(E\_billingiae:0.01599,(E\_pyriifoliae:0.0106,E\_tasmaniensis:0.02919):0.02677):0.0445):0.02223,(P\_sp\_At-9b:0.0,P\_cyprapedii:0.0):5.4E-4):0.01294):5.3E-4,(((P\_sp\_A4:5.4E-4,(T\_morbirosei:0.03821,(T\_ptyseos:0.07348,T\_sp\_NML\_06:0.07472):0.01319):0.08826):0.05479,(P\_allii:0.00692,P\_ananatis:0.00946):0.00963):5.4E-4,(P\_eucrina:0.04038,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.3E-4):0.02553):0.01292);

[212] tree 't212'=[&R] ((P\_deleyi:0.0271,(P\_agglomerans:5.3E-4,(P\_sp\_aB:0.03802,P\_vagans:5.4E-4):0.01304):5.5E-4):0.01194,P\_anthophila:0.01262,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.0614,(P\_allii:5.5E-4,P\_ananatis:0.03833):0.00981):0.0756,((E\_tasmaniensis:0.08152,(P\_sp\_A4:0.10828,(T\_morbirosei:0.01317,(T\_sp\_NML\_06:0.05874,T\_ptyseos:0.08095):0.04487):0.07931):0.04561):0.02592,E\_pyriifoliae:0.08054):0.02284,((E\_billingiae:0.05062,P\_cyprapedii:0.01238):0.01307,(P\_sp\_At-9b:0.01251,(P\_sp\_GM01:0.01223,(((P\_rodasii:0.01241,P\_rwandensis:0.01232):0.0132,(P\_eucrina:0.02587,P\_septica:0.06578):0.0125):0.01103,(P\_wallisii:0.27748,P\_dispersa:5.4E-4):0.02647):0.01322):0.01285):0.01309):0.00901):0.00293):0.02471,(P\_brenneri:0.0,P\_conspicua:0.0):5.4E-4):5.4E-4);

[213] tree 't213'=[&R] ((P\_rwandensis:0.02568,(P\_rodasii:0.02356,P\_sp\_GM01:0.05094):0.01823):0.01527,((P\_sp\_At-9b:0.04016,P\_cyprapedii:0.02465):0.04511,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01395,(P\_allii:0.03653,P\_ananatis:0.03223):0.04519):0.06879,(P\_septica:0.07246,((P\_brenneri:0.02377,P\_conspicua:0.00852):0.03092,(P\_deleyi:0.01311,(P\_anthophila:0.02598,(P\_agglomerans:0.01181,(P\_sp\_aB:0.02619,P\_vagans:0.00938):0.01001):0.00959):0.00441):0.00642):0.05797):0.01738):0.03619,(P\_sp\_A4:0.07818,((T\_sp\_NML\_06:0.11635,(T\_morbirosei:0.06453,T\_ptyseos:0.1024):0.02287):0.07413,(E\_billingiae:0.10822,(E\_pyriifoliae:0.05049,E\_tasmaniensis:0.02494):0.14839):0.06443):0.01994):0.03782):0.02712):0.01079,(P\_wallisii:0.02764,(P\_dispersa:0.06864,P\_eucrina:0.07106):0.0181):0.00837);

[214] tree 't214'=[&R] ((P\_septica:0.03064,(P\_sp\_A4:0.08152,(((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00192):0.01462,(P\_allii:0.0033,P\_ananatis:0.01028):0.01153):0.02323,((P\_brenneri:0.00283,P\_conspicua:0.00508):0.00632,(P\_anthophila:0.00218,(P\_vagans:0.00588,(P\_deleyi:0.01822,(P\_sp\_aB:0.00192,P\_agglomerans:5.5E-4):0.00194):5.3E-4):0.00367):0.00549):0.0214):0.02507):0.00409):0.00953,((T\_sp\_NML\_06:0.06385,(T\_ptyseos:0.0798,T\_morbirosei:0.06638):0.0311):0.1273,(E\_billingiae:0.06566,(E\_pyriifoliae:0.03146,E\_tasmaniensis:0.03615):0.07467):0.0477):0.03859):0.01494,(P\_sp\_At-9b:0.00998,P\_cyprapedii:0.00958):0.01849,(P\_sp\_GM01:0.01425,(((P\_eucrina:0.05784,P\_wallisii:0.00914):0.01345,P\_dispersa:0.01159):0.01252,(P\_rwandensis:0.01869,P\_rodasii:0.00871):0.00637):0.00876):0.00505);

[215] tree 't215'=[&R] ((P\_anthophila:0.01853,P\_vagans:5.0E-4):0.00901,(P\_conspicua:0.0029,(P\_brenneri:5.4E-4,((P\_sp\_At-9b:5.5E-4,P\_cyprapedii:0.02764):0.06562,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.02088,(P\_allii:0.05673,P\_ananatis:5.5E-4):0.02632):0.01813,(((P\_dispersa:0.03057,((P\_eucrina:0.07513,((P\_rodasii:0.02812,P\_rwandensis:0.01822):0.00893,P\_sp



\_GM01:5.4E-4):0.01059):0.00925,P\_wallisii:5.4E-4):0.01894):0.02527,(P\_sp\_A4:0.09374,((T\_sp\_NML\_06:0.16469,(T\_morbirosei:0.08959,T\_ptyseos:0.1146):0.02314):0.11915,(E\_billingiae:0.04743,(E\_pyriifoliae:0.03541,E\_tasmaniensis:0.05908):0.08166):0.06991):0.03625):0.01737):0.03272,P\_septica:0.07674):0.02636):0.04762):0.02194):0.00659):0.01789,(P\_sp\_aB:5.5E-4,(P\_agglomerans:0.0184,P\_deleyi:0.00916):5.4E-4):5.4E-4);

[216] tree 't216'=[&R]  
((P\_septica:0.0247,(((T\_sp\_NML\_06:0.02425,(T\_morbirosei:0.00717,T\_ptyseos:0.01183):0.02329):0.04801,(P\_sp\_A4:0.04605,((P\_rodasii:0.0088,P\_rwandensis:0.00559):0.02224,((P\_sp\_At-9b:0.00463,P\_cypripedii:5.4E-4):0.0138,(P\_dispersa:0.0019,(P\_wallisii:0.01128,(P\_eucrina:0.00942,P\_sp\_GM01:0.00457):0.00745):0.00927):0.01679):0.00347):0.02119):0.00594):0.02054,(E\_pyriifoliae:0.0,E\_tasmaniensis:0.0):0.01453):0.00415,E\_billingiae:0.01077):0.03108):0.01753,((P\_allii:0.0,P\_ananatis:0.0):5.5E-4,(P\_s\_stewartii:0.01435,P\_s\_indologenes:5.5E-4):0.00473):0.00938,((P\_brenneri:0.0,P\_conspicua:0.0):0.00472,((P\_agglomerans:0.0,P\_deleyi:0.0,P\_anthophila:0.0):5.5E-4,(P\_vagans:0.0,P\_sp\_aB:0.0):0.00469):0.00939):5.3E-4);

[217] tree 't217'=[&R] (((P\_rodasii:0.0,P\_rwandensis:0.0):0.01194,P\_sp\_GM01:5.5E-4):0.01166,((T\_morbirosei:0.01186,(T\_ptyseos:0.0,T\_sp\_NML\_06:0.0):5.4E-4):0.01199,(((P\_brenneri:0.0,P\_conspicua:0.0,P\_septica:0.0):0.01232,((P\_deleyi:0.0,P\_agglomerans:0.0,P\_vagans:0.0,P\_anthophila:0.0,P\_sp\_aB:0.0):5.5E-4,P\_allii:0.01233):5.4E-4):0.02467,(E\_billingiae:0.0122,(E\_pyriifoliae:0.0,E\_tasmaniensis:0.0):5.5E-4):5.5E-4):0.01228):0.01196):0.01184,((P\_dispersa:0.0,P\_wallisii:0.0):5.4E-4,(P\_sp\_A4:0.01192,(P\_sp\_At-9b:0.0,P\_cypripedii:0.0):5.4E-4):0.01175):5.4E-4,(P\_eucrina:0.00792,(P\_ananatis:0.0,P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01031):0.00547);

[218] tree 't218'=[&R]  
((T\_ptyseos:0.0,T\_sp\_NML\_06:0.0):0.01932,((P\_deleyi:0.0,T\_morbirosei:0.0,E\_pyriifoliae:0.0,E\_tasmaniensis:0.0,P\_sp\_At-9b:0.0,P\_ananatis:0.0,P\_s\_indologenes:0.0,P\_s\_stewartii:0.0,P\_cypripedii:0.0,E\_billingiae:0.0,P\_eucrina:0.0):5.5E-4,((P\_conspicua:0.0,P\_anthophila:0.0,P\_allii:0.0,P\_agglomerans:0.0,P\_vagans:0.0,P\_brenneri:0.0,P\_sp\_aB:0.0):5.5E-4,P\_septica:0.01952):0.01988):0.0199,((P\_rwandensis:0.0,P\_rodasii:0.0):0.02011,(P\_dispersa:0.0,P\_wallisii:0.0,P\_sp\_A4:0.0,P\_sp\_GM01:0.0):5.4E-4):5.4E-4);

[219] tree 't219'=[&R]  
((P\_rodasii:0.16123,P\_rwandensis:0.02479):0.02261,(((P\_anthophila:0.00894,(P\_brenneri:0.01616,P\_conspicua:0.0199):0.03104):0.01333,(P\_agglomerans:0.01257,(P\_vagans:0.01418,(P\_deleyi:0.03172,P\_sp\_aB:0.01151):0.00862):0.01443):0.01034):0.05902,(P\_dispersa:0.03448,(P\_wallisii:0.01422,P\_sp\_GM01:0.02111):0.01057):0.01168):0.00602,((((P\_s\_indologenes:5.4E-4,P\_s\_stewartii:0.00677):0.01649,(P\_allii:0.05167,P\_ananatis:0.00718):0.01813):0.09872,((T\_ptyseos:0.17809,(T\_morbirosei:0.10642,T\_sp\_NML\_06:0.18162):0.07762):0.13649,(E\_billingiae:0.03367,(E\_pyriifoliae:0.04687,E\_tasmaniensis:0.08525):0.10874):0.0965):0.03317):0.02698,P\_septica:0.02132):0.01832,P\_eucrina:0.06042):0.01592,(P\_sp\_At-9b:0.01234,(P\_sp\_A4:0.05098,P\_cypripedii:0.02278):0.01396):0.0229):0.00678);

[220] tree 't220'=[&R]  
((P\_wallisii:0.01701,(((P\_allii:0.0,P\_ananatis:0.0,P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.05149,(P\_deleyi:5.4E-4,(P\_anthophila:0.01704,(P\_agglomerans:0.0,P\_vagans:0.0,P\_sp\_aB:0.0):5.1E-4):5.5E-

4,((E\_pyrifoliae:0.01677,(E\_billingiae:5.5E-4,E\_tasmaniensis:0.01696):5.5E-4):0.06937,(P\_brenneri:0.01704,P\_conspicua:5.5E-4):5.5E-4):0.01698):0.01696):0.01694):5.5E-4,(P\_sp\_GM01:5.5E-4,(P\_rodasii:5.4E-4,(T\_ptyseos:0.05119,(T\_morbirosei:5.4E-4,T\_sp\_NML\_06:0.08343):0.01884):0.12274,P\_rwandensis:5.5E-4):0.01695):0.01688):0.01708):0.01715):5.5E-4,(P\_eucrina:0.0,P\_septica:0.0):5.5E-4,((P\_sp\_A4:0.03329,P\_dispersa:5.4E-4):0.01658,(P\_sp\_At-9b:0.0,P\_cypripedii:0.0):0.0169):5.5E-4);  
[221] tree 't221'=[&R]  
(P\_deleyi:0.01109,P\_sp\_aB:0.00438,((P\_agglomerans:0.0,P\_vagans:0.0):0.00219,(P\_anthophila:0.00876,(P\_brenneri:0.00636,((((P\_sp\_At-9b:0.01103,P\_cypripedii:0.02983):0.02481,((T\_morbirosei:0.09871,(T\_ptyseos:0.14353,T\_sp\_NML\_06:0.13751):0.04633):0.26032,(E\_billingiae:0.11553,(E\_pyrifoliae:0.06234,E\_tasmaniensis:0.10738):0.11444):0.05095):0.05288):0.00777,(P\_wallisii:0.01691,(P\_eucrina:0.02812,P\_dispersa:0.01244):0.00619):0.01034,(P\_sp\_GM01:0.01973,(P\_rodasii:0.02309,P\_rwandensis:0.01929):0.02227):0.00772):0.02397):0.0189,P\_sp\_A4:0.07577):0.01609,(P\_septica:0.03469,(P\_s\_indologenes:0.00222,P\_s\_stewartii:0.00219):0.01,(P\_allii:5.4E-4,P\_ananatis:0.00654):0.00812):0.02421):0.01174):0.01323,P\_conspicua:0.01131):5.3E-4):0.0218):0.00238):5.4E-4);  
[222] tree 't222'=[&R]  
(P\_sp\_GM01:0.03794,P\_eucrina:0.03583,((P\_rodasii:0.01288,P\_rwandensis:0.01264):0.01399,(((T\_morbirosei:0.05811,(T\_sp\_NML\_06:0.03989,T\_ptyseos:0.03108):0.02514):0.0859,(((P\_s\_indologenes:5.4E-4,P\_s\_stewartii:0.00431):0.0129,(P\_ananatis:0.01691,P\_allii:0.00854):0.01698):0.0235,((P\_conspicua:0.01718,P\_brenneri:0.00436):0.00346,(P\_septica:0.05443,(P\_vagans:5.5E-4,(P\_sp\_aB:0.0042,(P\_anthophila:5.5E-4,(P\_deleyi:0.01283,P\_agglomerans:0.00418):5.5E-4):0.00423):0.00424):0.00938):0.00882):0.01282):0.00982,(P\_sp\_A4:0.04538,(E\_billingiae:0.08204,(E\_pyrifoliae:0.05707,E\_tasmaniensis:0.09513):0.17083):0.11227):0.03839):0.0132):0.00884,(P\_cypripedii:0.02834,P\_sp\_At-9b:0.03741):0.01473):0.0114,(P\_dispersa:5.5E-4,P\_wallisii:0.03897):0.00556):0.00211):0.0063);  
[223] tree 't223'=[&R]  
(P\_anthophila:0.06725,P\_sp\_aB:0.01055,(P\_agglomerans:0.02186,((P\_brenneri:0.01246,P\_conspicua:0.01072):0.06636,(P\_deleyi:5.4E-4,((P\_sp\_At-9b:6.3E-4,P\_cypripedii:0.01022):0.06171,((P\_sp\_GM01:0.02764,(P\_rwandensis:0.06578,P\_rodasii:0.02627):0.0246):0.05534,(P\_eucrina:0.09387,(P\_dispersa:0.02247,P\_wallisii:0.05563):0.02882):0.01527):0.0552):0.07095,(((P\_s\_indologenes:0.01095,P\_s\_stewartii:0.01061):0.05366,(P\_allii:5.4E-4,P\_ananatis:0.03247):0.01269):0.12206,(((E\_pyrifoliae:0.10525,E\_tasmaniensis:0.0933):0.19237,(P\_sp\_A4:0.1055,(T\_morbirosei:0.15723,(T\_ptyseos:0.17261,T\_sp\_NML\_06:0.18996):0.07369):0.31958):0.13034):0.04469,(P\_septica:0.15491,E\_billingiae:0.07163):0.02291):0.01243):0.04757):0.05141):0.01825):0.03734,P\_vagans:0.02158):0.01116):0.01092);  
[224] tree 't224'=[&R] (((P\_allii:0.0,P\_ananatis:0.0):0.00457,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.4E-4):0.01095,(E\_pyrifoliae:0.01449,E\_tasmaniensis:0.00916):0.01272):0.00642,((T\_morbirosei:0.00458,(T\_sp\_NML\_06:0.02292,T\_ptyseos:0.01296):0.0206):0.04496,P\_wallisii:5.4E-4):0.00232):0.00222,((E\_billingiae:0.01152,P\_sp\_GM01:5.4E-4):0.00228,(P\_rwandensis:0.00921,(P\_rodasii:0.08009,(P\_dispersa:0.00207,(P\_sp\_At-9b:5.5E-4,P\_cypripedii:0.00227):0.00691,(P\_brenneri:0.0,P\_conspicua:0.0):0.00186,((P\_agglomerans:0.0,P\_vagans:0.0):5.4E-4,(P\_anthophila:5.4E-4,P\_deleyi:0.00231):0.00231):0.00205,P\_sp\_aB:5.4E-

4):0.00651):0.00531):0.00254):0.00461,P\_septica:5.3E-4):0.00666):5.4E-4):0.0023):0.00231,(P\_eucrina:0.00671,P\_sp\_A4:0.02557):5.4E-4);

[225] tree 't225'=[&R] (P\_anthophila:0.01459,P\_agglomerans:0.0072,((P\_deleyi:0.0,P\_sp\_aB:0.0):5.5E-4,(P\_vagans:0.0072,(P\_brenneri:5.5E-4,P\_conspicua:0.00737):0.00977,(((P\_sp\_GM01:0.04421,(P\_rodasii:0.01595,P\_rwandensis:0.02086):0.00775):0.01877,(((T\_morbirosei:0.16152,(T\_sp\_NML\_06:0.26577,T\_ptyseos:0.12114):0.03236):0.22348,(P\_sp\_A4:0.12541,(E\_billingiae:0.15694,(E\_pyrifoliae:0.0462,E\_tasmaniensis:0.08008):0.17312):0.1044):0.02862):0.02076,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01449,(P\_ananatis:0.0147,P\_allii:5.4E-4):5.4E-4):0.04091):0.0471):0.00606,(P\_sp\_At-9b:0.01573,(P\_dispersa:5.3E-4,(P\_cyprapedii:0.01539,(P\_wallisii:0.01459,P\_eucrina:0.04924):6.0E-4):0.0077):0.02286):0.00862):0.01581,P\_septica:0.03844):0.0272):0.00692):5.5E-4):5.5E-4);

[226] tree 't226'=[&R] (P\_dispersa:0.01747,P\_wallisii:0.00816,((P\_rodasii:5.4E-4,(P\_sp\_GM01:0.01704,(((P\_sp\_A4:0.08972,(T\_sp\_NML\_06:0.01795,(T\_morbirosei:0.13308,T\_ptyseos:0.029):0.06633):0.20113):0.06001,(P\_septica:0.07343,(E\_billingiae:0.05668,(E\_pyrifoliae:0.02525,E\_tasmaniensis:0.01013):0.1094):0.09457):5.5E-4):0.01132,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00873,(((P\_conspicua:5.4E-4,P\_brenneri:0.00872):0.02467,((P\_anthophila:0.0087,(P\_agglomerans:0.0,P\_vagans:0.0):5.5E-4):5.5E-4,(P\_sp\_aB:0.01779,P\_deleyi:0.03623):5.4E-4):0.00176):0.02778,(P\_allii:0.03551,P\_ananatis:0.01793):0.01775):5.5E-4):0.0191):0.02617):5.4E-4):5.3E-4,(P\_eucrina:0.03642,((P\_sp\_At-9b:0.02649,P\_cyprapedii:0.0171):0.03536,P\_rwandensis:5.3E-4):0.00826):0.0178):0.00875);

[227] tree 't227'=[&R] ((P\_eucrina:0.02023,P\_dispersa:0.015):0.00529,((P\_sp\_A4:0.05111,(((E\_billingiae:0.02661,(E\_pyrifoliae:0.0175,E\_tasmaniensis:0.01216):0.04112):0.05354,(T\_sp\_NML\_06:0.05277,(T\_ptyseos:0.0537,T\_morbirosei:0.07244):0.02291):0.03296):0.02853,P\_septica:0.0219):0.00862):0.02375,(P\_sp\_GM01:0.01661,((P\_sp\_At-9b:0.00716,P\_cyprapedii:0.00252):0.0079,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00736,(P\_ananatis:0.00716,P\_allii:5.4E-4):0.00241):0.01787,(((P\_vagans:0.00465,P\_sp\_aB:0.00252):0.00251,(P\_agglomerans:0.00964,(P\_deleyi:0.0073,P\_anthophila:0.00973):0.00738):0.00255):0.02566,(P\_brenneri:5.5E-4,P\_conspicua:0.00241):0.00627):0.01382):0.01227):0.00458):0.00632):0.0044,(P\_wallisii:0.00871,(P\_rwandensis:0.01167,P\_rodasii:0.0214):0.00804):0.00259);

[228] tree 't228'=[&R] ((P\_eucrina:0.19207,(P\_dispersa:0.06591,P\_wallisii:0.0658):0.01468):0.02864,(P\_sp\_GM01:0.04692,(P\_rodasii:0.05172,P\_rwandensis:0.03448):0.0242):0.02028,((P\_sp\_At-9b:0.04275,P\_cyprapedii:0.04586):0.04723,(((T\_morbirosei:0.21809,(T\_sp\_NML\_06:0.31298,T\_ptyseos:0.18269):0.05592):0.33752,(E\_billingiae:0.23851,(E\_pyrifoliae:0.1049,E\_tasmaniensis:0.08102):0.19533):0.14715):0.11956,(P\_sp\_A4:0.25265,(P\_septica:0.16411,((P\_s\_indologenes:8.8E-4,P\_s\_stewartii:0.00344):0.05114,(P\_allii:0.03089,P\_ananatis:0.03233):0.03339):0.12873,((P\_brenneri:0.02609,P\_conspicua:0.03042):0.02216,((P\_agglomerans:0.01779,(P\_sp\_aB:0.03594,P\_vagans:0.01597):0.00292):0.01703,(P\_anthophila:0.05835,P\_deleyi:0.09474):0.01538):0.0542):0.05851):0.05384):0.06483):0.01966):0.0645):0.03002);

[229] tree 't229'=[&R] ((P\_agglomerans:0.0,P\_vagans:0.0):5.5E-4,P\_sp\_aB:0.00199,(P\_deleyi:0.006,(P\_anthophila:0.0119,((P\_septica:0.01707,((P\_sp\_At-

9b:0.00231,P\_cyprapedii:0.00363):0.00409,(P\_sp\_A4:0.03672,((T\_morbirosei:0.04056,(T\_sp\_NML\_06:0.05607,T\_ptyseos:0.02761):0.01739):0.07424,(E\_billingiae:0.01986,(E\_pyrifoliae:0.00639,E\_tasmaniensis:0.00769):0.02902):0.03849):0.01215):0.00825):0.00403,((P\_dispersa:0.01049,P\_eucrina:0.01143):0.01007,((P\_rodasii:0.00233,P\_rwandensis:0.00784):0.01322,(P\_sp\_GM01:0.01147,P\_wallisii:0.00464):0.00199):0.00413):0.00618):0.01514):0.01297,(((P\_allii:5.4E-4,P\_ananatis:0.00197):0.00578,(P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00199):5.4E-4):0.01816,(P\_conspicua:0.00199,P\_brenneri:5.5E-4):0.00726):0.00702):0.00417):0.00215):5.3E-4);

[230] tree 't230'=[&R] ((P\_wallisii:0.04063,P\_dispersa:0.04582):0.02079,(P\_sp\_At-9b:0.05829,(((T\_sp\_NML\_06:0.18414,(T\_morbirosei:0.26238,T\_ptyseos:0.18997):0.14673):0.21096,((P\_sp\_A4:0.11851,((P\_brenneri:0.02436,P\_conspicua:0.03864):0.00664,(P\_anthophila:0.05112,(P\_deleyi:0.04507,(P\_agglomerans:0.02066,(P\_vagans:0.02199,P\_sp\_aB:0.00924):0.00825):0.0129):0.02435):0.03441):0.05203):0.06607,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.04625,(P\_allii:0.01259,P\_ananatis:0.01883):0.06522):0.09139,((E\_pyrifoliae:0.02953,E\_tasmaniensis:0.07951):0.15497,(P\_septica:0.08465,E\_billingiae:0.20371):0.03612):0.04845):0.03429):0.01939):0.01787,(P\_cyprapedii:0.07962,P\_eucrina:0.16223):0.01538):0.00762):0.0253,(P\_sp\_GM01:0.03883,(P\_rodasii:0.04915,P\_rwandensis:0.0302):0.01605):5.4E-4);

[231] tree 't231'=[&R] ((P\_eucrina:5.5E-4,(P\_wallisii:0.01743,(T\_ptyseos:0.05084,(T\_sp\_NML\_06:0.00863,T\_morbirosei:0.04786):0.03262):0.20801):5.3E-4):0.01748,P\_sp\_A4:0.05637,((P\_sp\_At-9b:0.0,P\_cyprapedii:0.0,P\_rodasii:0.0,P\_sp\_GM01:0.0,P\_dispersa:0.0,P\_rwandensis:0.0):5.4E-4,(((E\_billingiae:0.0,P\_sp\_aB:0.0,P\_anthophila:0.0,P\_deleyi:0.0,P\_agglomerans:0.0,P\_vagans:0.0,P\_conspicua:0.0,P\_s\_stewartii:0.0,P\_s\_indologenes:0.0,P\_ananatis:0.0,P\_allii:0.0,P\_brenneri:0.0):5.4E-4,(E\_tasmaniensis:0.09148,E\_pyrifoliae:0.01899):0.05282):0.01766,P\_septica:0.01744):5.5E-4):5.5E-4);

[232] tree 't232'=[&R] ((P\_dispersa:0.00652,(P\_eucrina:0.00739,P\_wallisii:0.00739):0.00112):0.00706,(P\_rodasii:0.00363,P\_rwandensis:5.5E-4):0.00367,((P\_sp\_GM01:0.00817,((T\_morbirosei:0.03421,(T\_ptyseos:0.08253,T\_sp\_NML\_06:0.08763):0.03494):0.2781,P\_sp\_A4:0.03953):0.02086):0.0028,(((E\_billingiae:0.0286,(E\_tasmaniensis:0.03451,E\_pyrifoliae:0.03895):0.01538):0.06079,(P\_septica:0.02547,(((P\_brenneri:0.00363,P\_conspicua:5.5E-4):0.0073,((P\_anthophila:0.0,P\_deleyi:0.0,P\_vagans:0.0,P\_agglomerans:0.0):5.5E-4,P\_sp\_aB:0.00367):5.4E-4):0.03209,(P\_ananatis:0.01104,(P\_allii:0.00365,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.5E-4):0.00362):0.01472):0.00587):0.0079):0.00343,(P\_sp\_At-9b:0.0147,P\_cyprapedii:0.0036):0.01096):5.5E-4):0.00363);

[233] tree 't233'=[&R] ((E\_billingiae:0.0,P\_sp\_At-9b:0.0,P\_vagans:0.0,P\_deleyi:0.0,P\_allii:0.0,P\_ananatis:0.0,P\_anthophila:0.0,P\_brenneri:0.0,P\_conspicua:0.0,P\_cyprapedii:0.0,P\_dispersa:0.0,P\_eucrina:0.0,P\_septica:0.0,P\_sp\_aB:0.0,P\_s\_indologenes:0.0,P\_s\_stewartii:0.0,P\_wallisii:0.0):5.4E-4,((P\_rodasii:0.0,P\_rwandensis:0.0,P\_sp\_A4:0.0,P\_sp\_GM01:0.0):0.00282,(E\_pyrifoliae:0.0,E\_tasmaniensis:0.0):5.3E-4):0.00279,((T\_sp\_NML\_06:5.4E-4,(T\_morbirosei:0.00282,T\_ptyseos:5.5E-4):0.00282):0.01131,P\_agglomerans:5.5E-4):0.00279);

[234] tree 't234'=[&R] (P\_eucrina:0.0824,(P\_wallisii:0.01605,(P\_sp\_GM01:0.03292,P\_dispersa:0.00803):0.0059):0.00903,(P\_rwandensis:0.01834,(P\_rodasii:0.01858,((P\_sp\_At-9b:0.00639,P\_cyprapedii:0.0092):0.03503,((P\_sp\_A4:0.09174,((T\_morbirosei:0.06319,(T\_sp\_NML\_06:0.1415,T\_ptyseos:0.064

44):0.07393):0.25033,(E\_billingiae:0.06797,(E\_pyriifoliae:0.05934,E\_tasmaniensis:0.01369):0.06524):0.04142):0.03871):0.03238,(P\_septica:0.03463,(((P\_s\_indologenes:0.00304,P\_s\_stewartii:5.5E-4):5.4E-4,(P\_ananatis:0.01079,P\_allii:0.00772):0.01202):0.04147,(((P\_anthophila:0.01209,(P\_brenneri:0.00778,P\_conspicua:0.01473):0.03377):0.00348,P\_agglomerans:0.00306):0.00615,(P\_sp\_aB:0.02194,P\_vagans:0.00607):0.00623):0.00673,P\_deleyi:0.01166):0.02874):0.05863):0.0113):0.04656):0.00752):0.00771):0.00999);

[235] tree 't235'=[&R] (P\_vagans:0.00705,((P\_anthophila:0.02151,P\_sp\_aB:5.3E-4):5.4E-4,(P\_deleyi:0.02259,(P\_conspicua:0.04874,(((P\_sp\_A4:0.12913,((P\_eucrina:0.12747,(P\_sp\_GM01:0.08762,((P\_dispersa:0.02567,((P\_rodasii:0.05072,P\_rwandensis:0.0363):0.02277,(P\_sp\_At-9b:0.02351,P\_cyprapedii:0.03218):0.07315):0.01746):0.01166,P\_wallisii:0.03544):0.01281):0.01822):0.03265,(T\_morbiros ei:0.08513,(T\_sp\_NML\_06:0.35177,T\_ptyseos:0.10095):0.12076):0.41985):0.06301):0.074,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.06077,(P\_allii:0.02836,P\_ananatis:0.03224):0.01465):0.0666):0.01488,P\_septica:0.1178):0.04123,(E\_billingiae:0.06546,(E\_pyriifoliae:0.03472,E\_tasmaniensis:0.03334):0.0597):0.13956):0.02604):0.01851):0.01548):0.01456,(P\_brenneri:0.03756,P\_agglomerans:5.4E-4):0.02158);

[236] tree 't236'=[&R] (P\_eucrina:0.00863,(P\_dispersa:0.00878,P\_wallisii:0.00395):0.00879,(((P\_sp\_At-9b:0.00843,P\_cyprapedii:0.0042):0.00484,(P\_sp\_A4:0.05313,((P\_brenneri:5.5E-4,P\_conspicua:0.00399):0.01252,((T\_morbirosei:0.05796,(T\_sp\_NML\_06:0.03875,T\_ptyseos:0.01659):0.02106):0.09543,(E\_billingiae:0.024,(E\_pyriifoliae:0.01564,E\_tasmaniensis:0.01579):0.03853):0.06794):0.0162):5.4E-4,(P\_septica:0.02121,((P\_deleyi:0.01249,((P\_s\_indologenes:0.00417,P\_s\_stewartii:5.5E-4):0.01707,(P\_allii:0.00838,P\_ananatis:5.5E-4):5.5E-4):0.03085,(P\_agglomerans:5.5E-4,(P\_anthophila:0.00838,P\_vagans:0.0042):5.3E-4):5.5E-4):0.00418):5.5E-4,P\_sp\_aB:0.00415):0.01287):0.00408):0.01139):0.00594):0.00474,(P\_sp\_GM01:0.00376,(P\_rwandensis:0.01281,P\_rodasii:0.00857):5.4E-4):0.00831):0.00813);

[237] tree 't237'=[&R] (P\_dispersa:5.3E-4,(P\_eucrina:0.05348,(P\_septica:0.03358,(((T\_ptyseos:0.02535,(T\_morbirosei:0.0756,T\_sp\_NML\_06:0.03675):0.03923):0.07654,((P\_ananatis:0.02467,(P\_allii:0.0154,(P\_s\_indologenes:5.4E-4,P\_s\_stewartii:0.01962):0.04142):0.00741):0.06391,(P\_conspicua:0.00644,(P\_brenneri:0.01979,((P\_agglomerans:5.5E-4,(P\_sp\_aB:0.01309,P\_vagans:0.00648):0.00665):0.00652,P\_anthophila:5.3E-4):0.00664,P\_deleyi:0.00647):0.01367):0.00662):0.0262):0.01975):5.4E-4,(P\_sp\_A4:0.05167,(E\_billingiae:0.03268,(E\_pyriifoliae:0.01687,E\_tasmaniensis:0.02504):0.08552):0.04762):0.03314):0.0074):0.0272):5.3E-4,(P\_wallisii:0.0064,((P\_cyprapedii:0.01947,P\_sp\_At-9b:5.4E-4):0.01955,(P\_rwandensis:0.01306,(P\_rodasii:0.0,P\_sp\_GM01:0.0):5.5E-4):5.4E-4):0.00645):0.0064);

[238] tree 't238'=[&R] ((E\_pyriifoliae:0.01363,P\_septica:5.5E-4):0.01364,P\_s\_stewartii:0.01363):5.5E-4,(E\_billingiae:0.0,P\_dispersa:0.0,P\_eucrina:0.0,P\_rwandensis:0.0,P\_wallisii:0.0,P\_allii:0.0,P\_ananatis:0.0,P\_s\_indologenes:0.0):5.5E-4,(((P\_sp\_GM01:0.01359,(P\_sp\_aB:0.0,P\_anthophila:0.0,P\_agglomerans:0.0,P\_deleyi:0.0,P\_vagans:0.0):5.4E-4):0.01364,((P\_brenneri:0.0,P\_conspicua:0.0,P\_cyprapedii:0.0,P\_rodasii:0.0):5.3E-4,(P\_sp\_A4:0.04146,P\_sp\_At-9b:5.3E-4):0.01364):0.01359):5.4E-4,((T\_morbirosei:5.4E-4,(T\_ptyseos:0.01378,T\_sp\_NML\_06:5.4E-4):0.02774):0.02757,E\_tasmaniensis:0.01375):5.4E-4):5.5E-4);

[239] tree 't239'=[&R]  
 ((P\_dispersa:0.04498,(P\_wallisii:0.03211,P\_eucrina:0.16061):0.01242):0.07276,((P\_rodasii:0.12461,(P\_rwandensis:0.04278,P\_sp\_GM01:0.00324):0.03356):0.04698,(P\_septica:0.10209,(P\_cyprapedii:0.07861,P\_sp\_At-9b:0.01091):0.08296):0.02102):0.0168,((E\_pyriifoliae:5.4E-4,(E\_billingiae:0.2648,E\_tasmaniensis:0.01459):0.05991):0.45785,((P\_sp\_A4:0.0949,((P\_s\_indologenes:0.01374,P\_s\_stewartii:5.5E-4):0.10038,(P\_allii:5.5E-4,P\_ananatis:0.07416):0.08828):0.02698):0.04734,(((P\_brenneri:5.4E-4,P\_conspicua:0.02778):5.5E-4,(P\_anthophila:0.05851,(P\_deleyi:0.04344,(P\_sp\_aB:0.02873,(P\_agglomerans:0.01456,P\_vagans:5.4E-4):5.3E-4):0.02872):0.01645):0.02904):0.05538,(T\_sp\_NML\_06:0.05201,(T\_morbirosei:0.07355,T\_ptyseos:0.10164):0.12183):0.25038):5.4E-4):0.01912):0.05194);

[240] tree 't240'=[&R] (((((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00217):0.00687,(P\_allii:0.01991,P\_ananatis:0.01241):0.02065):0.05821,((P\_brenneri:5.4E-4,P\_conspicua:0.00837):0.00807,(P\_deleyi:0.02353,(P\_vagans:0.01062,(P\_anthophila:0.02157,(P\_agglomerans:0.0023,P\_sp\_aB:0.0086):0.00554):0.00342):0.0052):0.02164):0.02944):0.05164,(P\_sp\_A4:0.04815,((T\_sp\_NML\_06:0.04874,(T\_morbirosei:0.1232,T\_ptyseos:0.04923):0.03863):0.24219,(E\_billingiae:0.07979,(E\_pyriifoliae:0.02938,E\_tasmaniensis:0.0144):0.05859):0.0474):0.05965):0.03815):0.02384,(P\_sp\_At-9b:0.01662,P\_cyprapedii:0.0164):0.00451):0.00846,(P\_wallisii:0.02644,(P\_eucrina:0.05365,P\_septica:0.03108):0.01148):0.00686,((P\_rodasii:0.00437,(P\_sp\_GM01:0.02269,P\_rwandensis:0.02647):0.00577):0.0117,P\_dispersa:0.01963):0.00497);

[241] tree 't241'=[&R] ((P\_dispersa:0.01069,P\_wallisii:0.02094):0.00418,((P\_sp\_At-9b:0.01487,P\_cyprapedii:0.00942):0.0183,(P\_septica:0.02299,(P\_eucrina:0.05329,((T\_morbirosei:0.08828,(T\_ptyseos:0.01813,T\_sp\_NML\_06:0.05231):0.02893):0.08968,(E\_billingiae:0.06875,(E\_pyriifoliae:0.05262,E\_tasmaniensis:0.02102):0.04332):0.03748):0.04896):0.00901):5.5E-4):0.00639,((P\_sp\_A4:0.06457,((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00676):0.01943,(P\_ananatis:0.02506,P\_allii:0.01516):0.00478):0.04305,((P\_conspicua:0.01124,P\_brenneri:0.01131):0.01953,(P\_anthophila:0.0072,(P\_deleyi:0.01849,(P\_vagans:0.01419,(P\_agglomerans:0.01269,P\_sp\_aB:0.01421):0.00525):0.00497):0.01583):0.0198):0.01431):0.01348):0.03386,(P\_sp\_GM01:0.02998,(P\_rodasii:0.01093,P\_rwandensis:0.0171):0.00833):0.01551):0.02102);

[242] tree 't242'=[&R]  
 (P\_sp\_GM01:0.00997,(E\_billingiae:0.0,E\_pyriifoliae:0.0,E\_tasmaniensis:0.0,P\_septica:0.0,T\_morbirosei:0.0,T\_ptyseos:0.0,T\_sp\_NML\_06:0.0):0.00996,(P\_agglomerans:0.0,P\_sp\_At-9b:0.0,P\_vagans:0.0,P\_deleyi:0.0,P\_allii:0.0,P\_ananatis:0.0,P\_anthophila:0.0,P\_brenneri:0.0,P\_conspicua:0.0,P\_cyprapedii:0.0,P\_dispersa:0.0,P\_eucrina:0.0,P\_rodasii:0.0,P\_rwandensis:0.0,P\_sp\_A4:0.0,P\_sp\_aB:0.0,P\_s\_indologenes:0.0,P\_s\_stewartii:0.0,P\_wallisii:0.0):5.5E-4);

[243] tree 't243'=[&R]  
 (P\_sp\_aB:0.02955,(P\_anthophila:0.03788,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.02262,(P\_allii:0.0279,P\_ananatis:0.01199):0.01163):0.09617,(P\_sp\_A4:0.11915,(((E\_billingiae:0.13049,P\_eucrina:0.08587):0.01902,((P\_sp\_GM01:0.04921,(P\_rodasii:0.04497,P\_rwandensis:0.02228):0.02298):0.00349,(P\_dispersa:0.07288,P\_wallisii:0.12605):0.04209):0.04636):0.04916,(P\_septica:0.15049,((E\_pyriifoliae:0.07167,E\_tasmaniensis:0.05956):0.1157,(T\_ptyseos:0.23765,(T\_morbirosei:0.13838,T\_sp\_NML\_06:0.25348):0.05637):0.11222):0.04749):0.03071):0.03948,(P\_sp\_At-

9b:0.01849,P\_cyprapedii:0.00339):0.01973):0.04435):0.03308):0.03035,(P\_brenneri:0.02008,P\_conspicua:0.02601):0.03567  
) :0.02396):0.01283,(P\_vagans:0.00681,(P\_deleyi:0.02241,P\_agglomerans:0.0057):0.01566):0.00565);  
[244] tree 't244'=[&R] (((P\_cyprapedii:0.04036,P\_sp\_At-9b:0.02683):0.04096,(((P\_vagans:0.01076,(P\_agglomerans:5.4E-  
4,(P\_deleyi:0.02941,P\_sp\_aB:5.4E-  
4):0.01128):0.01274):0.00847,(P\_anthophila:0.01,(P\_brenneri:0.00571,P\_conspicua:0.00569):0.02139):0.00732):0.04193,(  
P\_septica:0.09632,((P\_s\_indologenes:5.4E-  
4,P\_s\_stewartii:0.00539):0.03601,(P\_allii:0.01946,P\_ananatis:0.02554):0.03945):0.07162):0.02688):0.05339,(P\_sp\_A4:0.  
13546,(P\_eucrina:0.10504,(E\_billingiae:0.15607,((E\_pyriifoliae:0.08022,E\_tasmaniensis:0.05378):0.12312,(T\_morbirosei:  
0.06759,(T\_ptyseos:0.12883,T\_sp\_NML\_06:0.10665):0.02918):0.14803):0.06367):0.03069):0.0626):0.00721):0.02038):0.0262  
3,(P\_dispersa:0.03978,P\_rodasii:0.03529):0.01853,((P\_sp\_GM01:0.01808,P\_rwandensis:0.02347):0.0135,P\_wallisii:0.02958  
) :0.00189);  
[245] tree 't245'=[&R]  
(P\_cyprapedii:0.00656,((P\_septica:0.04032,((P\_sp\_A4:0.02588,(((P\_allii:0.0,P\_ananatis:0.0):5.5E-  
4,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00656):5.4E-4,(P\_brenneri:0.01303,P\_conspicua:5.5E-  
4):0.00816,(P\_anthophila:5.5E-4,(P\_deleyi:0.01963,(P\_agglomerans:5.5E-4,(P\_sp\_aB:0.0195,P\_vagans:5.5E-  
4):0.013):0.01314):0.00637):0.01858):0.02621):0.02704):0.02754,(E\_billingiae:0.02752,(E\_pyriifoliae:0.0203,E\_tasmanie  
nsis:0.02666):0.02652):0.02213):0.00665):0.01391,((P\_rodasii:0.00656,((T\_morbirosei:0.03339,(T\_ptyseos:0.02881,T\_sp\_  
NML\_06:0.07214):0.05365):0.20628,P\_rwandensis:5.5E-4):0.00635):0.05577,P\_sp\_GM01:0.01325):0.00643):5.5E-  
4,(P\_eucrina:0.01303,(P\_wallisii:0.01305,(P\_sp\_At-9b:0.01301,P\_dispersa:5.5E-4):5.3E-4):0.0065):5.5E-4);  
[246] tree 't246'=[&R] (P\_conspicua:0.01766,(P\_anthophila:0.006,(P\_brenneri:5.4E-4,((P\_allii:5.4E-  
4,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01203,P\_ananatis:5.4E-  
4):0.00593):0.01766,((P\_sp\_A4:0.07537,((E\_billingiae:0.02067,(E\_tasmaniensis:0.01815,E\_pyriifoliae:0.00807):0.01315):  
0.03897,(T\_sp\_NML\_06:5.5E-  
4,(T\_ptyseos:0.01404,T\_morbirosei:0.05005):0.00993):0.03416):0.04857):0.01219,(P\_septica:0.02398,(((P\_wallisii:0.018  
15,(P\_rodasii:0.01832,P\_rwandensis:0.00595):0.00613):0.00593,(P\_sp\_GM01:0.00596,(P\_sp\_At-9b:5.5E-  
4,P\_cyprapedii:0.01213):0.03708):5.4E-4):0.01773,(P\_dispersa:0.01182,P\_eucrina:0.01799):5.4E-  
4):0.01231):0.00597):0.01431):0.02832):0.01767):0.00589,(P\_sp\_aB:5.3E-4,(P\_vagans:5.5E-  
4,(P\_deleyi:0.00593,P\_agglomerans:0.01195):5.5E-4):0.00592):5.5E-4);  
[247] tree 't247'=[&R] ((P\_deleyi:0.017,(P\_vagans:0.0,P\_sp\_aB:0.0):0.00823):5.4E-  
4,P\_anthophila:0.00418,((P\_conspicua:0.00855,(P\_brenneri:5.3E-4,(((P\_s\_indologenes:5.5E-  
4,P\_s\_stewartii:0.00424):0.04237,(P\_allii:0.00854,P\_ananatis:0.00409):0.01014):0.0535,((P\_sp\_A4:0.12139,(T\_morbirose  
i:0.07048,(T\_ptyseos:0.03135,T\_sp\_NML\_06:0.06453):0.0472):0.13451):0.03515,(((P\_sp\_At-  
9b:0.00423,P\_cyprapedii:0.02096):0.04416,(P\_eucrina:0.07612,(P\_dispersa:0.02216,(P\_wallisii:0.03377,(P\_rwandensis:0.  
01602,(P\_sp\_GM01:0.02971,P\_rodasii:0.00841):0.00609):0.00468):0.01747):0.01539):0.00481):0.01203,((E\_billingiae:0.08  
32,(E\_pyriifoliae:0.0251,E\_tasmaniensis:0.00519):0.05061):0.03576,P\_septica:0.05191):0.01694):0.00465):0.0331):0.0060  
7):0.00416):0.01721,P\_agglomerans:0.00417):5.5E-4);  
[248] tree 't248'=[&R]  
(P\_sp\_A4:0.11808,((P\_eucrina:0.05915,(T\_sp\_NML\_06:0.11664,(T\_morbirosei:0.10876,T\_ptyseos:0.13554):0.04626):0.11024)  
:0.05438,(P\_septica:0.09859,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.05888,(P\_allii:0.04468,P\_ananatis:0.01942):0

.03544):0.05494,((P\_brenneri:0.01588,P\_conspicua:0.00904):0.01854,(P\_agglomerans:0.01293,((P\_vagans:0.01377,(P\_anthophila:0.04296,P\_deleyi:0.03831):0.02393):0.00818,P\_sp\_aB:0.01521):6.1E-4):0.02664):0.05133):0.04444):0.02132):0.02754,(((P\_sp\_GM01:0.07648,(P\_rodasii:0.04692,P\_rwandensis:0.03129):0.03074):0.01478,(P\_dispersa:0.07721,P\_wallisii:0.03512):0.00555):0.01364,((P\_cypripedii:0.03159,P\_sp\_At-9b:0.01505):0.03228,(E\_billingiae:0.11378,(E\_pyrifoliae:0.00953,E\_tasmaniensis:0.03608):0.0866):0.06714):0.01598):0.01287);

[249] tree 't249'=[&R]  
(((P\_deleyi:0.03985,P\_sp\_aB:0.02039):0.00811,P\_vagans:0.02361):0.00395,P\_agglomerans:0.02296,(P\_anthophila:0.03559,(((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00765):0.06876,(P\_allii:0.03579,P\_ananatis:0.03432):0.01385):0.06158,((P\_septica:0.11485,(P\_eucrinsa:0.08778,(((P\_sp\_GM01:0.04198,(P\_rodasii:0.02372,P\_rwandensis:0.03913):0.04872):0.01959,P\_wallisii:0.2028):0.00524,P\_dispersa:0.07593):0.00744,(P\_sp\_At-9b:0.06855,P\_cypripedii:0.02471):0.04951):0.00985):0.0578):0.02885,(((T\_morbirosei:0.04682,(T\_ptyseos:0.08261,T\_sp\_NML\_06:0.09149):0.05007):0.212,(E\_billingiae:0.13952,(E\_pyrifoliae:0.05633,E\_tasmaniensis:0.01977):0.07135):0.23934):0.07427,P\_sp\_A4:0.14102):0.01988):0.05103):0.04506,(P\_brenneri:0.03356,P\_conspicua:0.02049):0.0201):0.01532):0.00542);

[250] tree 't250'=[&R] (P\_vagans:5.4E-4,(P\_deleyi:0.00747,P\_sp\_aB:5.2E-4):0.00371,(((E\_billingiae:0.02294,(E\_pyrifoliae:0.01686,E\_tasmaniensis:0.01891):0.02248):0.03933,(P\_agglomerans:5.5E-4,(P\_brenneri:0.00365,P\_conspicua:5.4E-4):0.00373):0.00676):5.4E-4,(P\_anthophila:0.01025,((P\_ananatis:5.5E-4,(P\_allii:0.0035,(P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00375):0.01112):5.4E-4):0.01196,(((P\_sp\_At-9b:0.0,P\_cypripedii:0.0):5.4E-4,((P\_sp\_GM01:0.00749,(P\_rodasii:0.01924,P\_rwandensis:5.3E-4):0.01523):0.01157,(P\_wallisii:5.3E-4,(P\_dispersa:0.00389,P\_eucrinsa:0.01942):0.00365):0.00376):0.0039):0.01615,((P\_sp\_A4:0.04129,(T\_morbirosei:0.00436,(T\_sp\_NML\_06:0.02999,T\_ptyseos:0.02978):0.0149):0.06077):0.0145,P\_septica:0.02279):0.00368):0.00791):0.00933):0.01017):5.3E-4);

[251] tree 't251'=[&R]  
((E\_billingiae:0.03526,((P\_sp\_A4:0.01925,(((T\_ptyseos:0.07349,(T\_sp\_NML\_06:0.04862,T\_morbirosei:5.4E-4):0.01779):0.03664,(P\_septica:0.04564,(P\_sp\_At-9b:0.02759,P\_cypripedii:0.02357):0.03988):0.02269):0.01312,((P\_wallisii:0.02908,P\_dispersa:5.3E-4):0.01951,(P\_eucrinsa:0.04902,((P\_rodasii:0.0,P\_rwandensis:0.0):0.02943,P\_sp\_GM01:0.01955):0.00937):5.4E-4):0.04365):0.01177):0.01003,(E\_pyrifoliae:0.03805,E\_tasmaniensis:0.02163):0.03972):0.0405):0.02456,(P\_ananatis:0.01899,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.4E-4):0.01948,(P\_allii:0.02956,(P\_conspicua:0.01056,(P\_brenneri:0.01131,((P\_agglomerans:5.5E-4,(P\_vagans:0.00965,(P\_sp\_aB:5.4E-4,P\_deleyi:0.02941):0.00969):5.3E-4):0.00937,P\_anthophila:0.00965):0.03911):0.00897):0.03845):5.3E-4);

[252] tree 't252'=[&R] (P\_sp\_GM01:0.01153,T\_ptyseos:0.01152,(T\_sp\_NML\_06:5.5E-4,(T\_morbirosei:0.03485,((E\_billingiae:0.0,E\_pyrifoliae:0.0,E\_tasmaniensis:0.0,P\_sp\_A4:0.0):0.01142,((P\_s\_stewartii:0.0,P\_anthophila:0.0,P\_brenneri:0.0,P\_conspicua:0.0,P\_s\_indologenes:0.0):0.01155,(P\_agglomerans:0.0,P\_sp\_At-



9b:0.0,P\_vagans:0.0,P\_deleyi:0.0,P\_allii:0.0,P\_ananatis:0.0,P\_cypripedii:0.0,P\_dispersa:0.0,P\_eucrina:0.0,P\_rodasii:  
0.0,P\_rwandensis:0.0,P\_septica:0.0,P\_sp\_aB:0.0,P\_wallisii:0.0):5.4E-4):5.4E-4):0.01134):5.5E-4):5.5E-4);  
[253] tree 't253'=[&R]  
(((P\_agglomerans:0.0,P\_vagans:0.0,P\_deleyi:0.0,P\_anthophila:0.0,P\_brenneri:0.0,P\_conspicua:0.0,P\_septica:0.0,P\_sp\_aB  
:0.0):5.5E-4,(E\_billingiae:0.00713,(E\_tasmaniensis:0.00356,E\_pyrifoliae:5.5E-4):5.5E-  
4):0.00356):0.00357,((P\_allii:0.0,P\_s\_indologenes:0.0):5.5E-4,P\_s\_stewartii:0.00356):0.00357,((P\_sp\_At-  
9b:0.0,P\_ananatis:0.0,P\_cypripedii:0.0,P\_dispersa:0.0,P\_eucrina:0.0,P\_rodasii:0.0,P\_rwandensis:0.0,P\_sp\_GM01:0.0,P\_w  
allisii:0.0):5.5E-4,(P\_sp\_A4:0.01055,(T\_morbirosei:0.00351,(T\_ptyseos:0.00701,T\_sp\_NML\_06:5.4E-  
4):0.00372):0.00705):5.5E-4):5.5E-4);  
[254] tree 't254'=[&R] (((P\_wallisii:0.0,P\_eucrina:0.0):5.3E-  
4,(P\_sp\_A4:0.01393,(T\_morbirosei:0.00688,(T\_ptyseos:0.0,T\_sp\_NML\_06:0.0):5.5E-  
4):0.03514):0.00706):0.00675,((P\_septica:0.00684,P\_dispersa:5.3E-  
4):0.00687,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00692,P\_ananatis:5.4E-  
4):0.0069,(P\_allii:0.0,P\_agglomerans:0.0,P\_vagans:0.0,P\_deleyi:0.0,P\_anthophila:0.0,P\_brenneri:0.0,P\_conspicua:0.0,P  
\_sp\_aB:0.0):5.5E-4):5.5E-4):0.00689):5.4E-4,P\_sp\_At-9b:5.5E-  
4,((P\_cypripedii:0.00684,(E\_billingiae:0.0,E\_tasmaniensis:0.0):0.00678,E\_pyrifoliae:5.4E-4):0.0207):5.5E-  
4,(P\_rodasii:0.0,P\_rwandensis:0.0,P\_sp\_GM01:0.0):0.00689):5.3E-4);  
[255] tree 't255'=[&R] (((P\_eucrina:0.0,P\_wallisii:0.0):0.00456,P\_dispersa:5.5E-4):5.5E-  
4,(P\_septica:0.0023,(P\_sp\_At-  
9b:0.0,P\_cypripedii:0.0):0.00458):0.00229):0.00228,(P\_rodasii:0.00228,(P\_rwandensis:0.0,P\_sp\_GM01:0.0):5.5E-  
4):0.00227,((P\_agglomerans:0.0,P\_vagans:0.0,P\_deleyi:0.0,P\_brenneri:0.0,P\_conspicua:0.0,P\_sp\_aB:0.0):5.5E-  
4,P\_anthophila:0.00226):0.00227,((T\_morbirosei:0.00877,(T\_sp\_NML\_06:0.01387,T\_ptyseos:0.00255):0.00634):0.0189,((E\_  
pyrifoliae:0.00464,E\_tasmaniensis:0.00449):0.00229,(E\_billingiae:0.00687,P\_sp\_A4:0.01156):0.00234):0.00702):0.00207,  
(P\_ananatis:5.5E-4,(P\_allii:0.00226,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00228):5.5E-4):5.4E-4):0.00227):5.5E-  
4);  
[256] tree 't256'=[&R] ((E\_tasmaniensis:0.01056,T\_morbirosei:0.01051):5.5E-  
4,(E\_billingiae:0.01102,(T\_ptyseos:0.0,T\_sp\_NML\_06:0.0):0.01062):0.01042):0.01052,(P\_sp\_At-9b:5.5E-  
4,P\_cypripedii:0.01054):0.02113,((E\_pyrifoliae:0.02144,P\_rodasii:5.4E-  
4):0.01059,((P\_sp\_A4:0.04347,P\_eucrina:0.01039):0.02176,(P\_septica:0.02119,(P\_wallisii:0.0,P\_dispersa:0.0):5.5E-  
4):5.3E-4):0.02162,(P\_sp\_GM01:5.5E-  
4,(P\_brenneri:0.01063,(P\_agglomerans:0.0,P\_vagans:0.0,P\_deleyi:0.0,P\_sp\_aB:0.0):0.01055,((P\_ananatis:0.0,P\_anthophi  
la:0.0,P\_conspicua:0.0,P\_s\_indologenes:0.0):5.5E-4,(P\_allii:0.01051,P\_s\_stewartii:0.01063):5.5E-4):5.5E-  
4):0.02131):0.02141):0.0211,P\_rwandensis:5.4E-4):0.01052):5.5E-4):5.5E-4);  
[257] tree 't257'=[&R]  
(P\_agglomerans:0.0,P\_vagans:0.0,P\_anthophila:0.0,P\_sp\_aB:0.0,P\_s\_indologenes:0.0,P\_s\_stewartii:0.0,P\_conspicua:0.0,  
P\_brenneri:0.0,P\_ananatis:0.0,P\_allii:0.0,P\_deleyi:0.0):0.02352,((E\_billingiae:0.0,E\_tasmaniensis:0.0):5.5E-  
4,E\_pyrifoliae:0.02272):0.02467,((P\_eucrina:0.0,P\_rodasii:0.0,P\_rwandensis:0.0):5.3E-4,(P\_septica:5.5E-  
4,(P\_sp\_GM01:0.02339,(P\_sp\_At-9b:0.0,P\_cypripedii:0.0,P\_dispersa:0.0,P\_wallisii:0.0):5.5E-

4):0.02299):0.02256):0.04866):0.0229,((T\_ptyseos:0.0,T\_sp\_NML\_06:0.0):5.3E-4,(P\_sp\_A4:0.02412,T\_morbirosei:5.4E-4):0.02399):5.4E-4);

[258] tree 't258'=[&R] ((P\_ananatis:0.00893,(P\_allii:0.02304,(P\_s\_indologenes:0.00424,P\_s\_stewartii:0.00238):0.00949):0.00785):0.06632,(P\_septica:0.06401,(((P\_eucrina:0.05292,((T\_morbirosei:0.14196,(T\_ptyseos:0.13633,T\_sp\_NML\_06:0.09189):0.09819):0.20394,(E\_billingiae:0.10896,(E\_pyriifoliae:0.03576,E\_tasmaniensis:0.01855):0.12054):0.04749):0.0565):0.01464,(P\_dispersa:0.01774,(P\_wallisii:0.04028,(P\_sp\_GM01:0.02352,(P\_rodasii:0.00812,P\_rwandensis:0.01282):0.00667):0.0094):0.01458,(P\_sp\_At-9b:0.01863,P\_cypripedii:0.0093):0.03451):0.01353):0.03623):0.0233,P\_sp\_A4:0.10022):0.01297):0.02314):0.02087,(P\_deleyi:0.01358,(P\_vagans:0.00672,P\_sp\_aB:0.00223):0.00682,P\_agglomerans:0.0113):0.00223):0.00476,(P\_anthophila:0.0136,(P\_conspicua:0.01373,P\_brenneri:0.01602):0.00882):0.00236);

[259] tree 't259'=[&R] (P\_sp\_A4:0.01767,(((P\_sp\_At-9b:0.0,P\_cypripedii:0.0,P\_eucrina:0.0):5.3E-4,(((P\_allii:0.0,P\_ananatis:0.0,P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00578,(P\_agglomerans:0.0,P\_vagans:0.0,P\_deleyi:0.0,P\_anthophila:0.0,P\_brenneri:0.0,P\_conspicua:0.0,P\_sp\_aB:0.0):5.1E-4):0.00583,(P\_dispersa:0.00576,P\_wallisii:5.5E-4):0.00579):0.00577):0.01157,(P\_rodasii:0.0,P\_rwandensis:0.0,P\_sp\_GM01:0.0):0.00575):5.4E-4,(P\_septica:0.00575,((T\_sp\_NML\_06:5.4E-4,(T\_morbirosei:0.0,T\_ptyseos:0.0):0.00555):0.02896,(E\_billingiae:0.00593,(E\_pyriifoliae:0.0058,E\_tasmaniensis:5.5E-4):0.00564):0.0294):0.00595):0.0058);

[260] tree 't260'=[&R] (P\_wallisii:0.01232,(P\_sp\_GM01:5.4E-4,(P\_sp\_A4:0.02425,(P\_rodasii:0.0,P\_rwandensis:0.0):5.5E-4):0.01212):0.02419,((((T\_sp\_NML\_06:5.4E-4,(T\_ptyseos:5.3E-4,T\_morbirosei:0.02382):0.01165):0.03617,((E\_pyriifoliae:0.0,E\_tasmaniensis:0.0):0.02449,((P\_brenneri:0.0,P\_conspicua:0.0):0.01203,((P\_agglomerans:0.0,P\_vagans:0.0,P\_deleyi:0.0,P\_anthophila:0.0,P\_sp\_aB:0.0,P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.5E-4,(P\_allii:0.0,P\_ananatis:0.0):0.01201):5.5E-4):0.0242):5.5E-4):0.02445,P\_septica:5.4E-4):5.5E-4,E\_billingiae:0.04869):0.02429,(P\_sp\_At-9b:0.0,P\_cypripedii:0.0,P\_dispersa:0.0,P\_eucrina:0.0):5.4E-4):5.5E-4);

[261] tree 't261'=[&R] (P\_ananatis:0.0054,(P\_allii:0.00546,(P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00543):0.00545):0.00551,((P\_septica:0.02874,((T\_morbirosei:0.01703,(T\_ptyseos:0.01101,T\_sp\_NML\_06:0.02087):0.00668):0.04987,((E\_billingiae:0.02292,(E\_pyriifoliae:0.00513,E\_tasmaniensis:5.5E-4):0.01677):0.02806,(P\_sp\_A4:0.08426,((P\_wallisii:5.4E-4,(P\_dispersa:0.0,P\_sp\_GM01:0.0):5.5E-4,(P\_rwandensis:0.01096,P\_rodasii:5.5E-4):0.00549):0.00549):5.4E-4,(P\_sp\_At-9b:5.4E-4,(P\_eucrina:0.04562,P\_cypripedii:5.4E-4):0.01668):0.00554):0.01389):0.00242):0.023):0.00223):0.02192,(P\_deleyi:0.00545,((P\_agglomerans:0.0,P\_brenneri:0.0,P\_conspicua:0.0,P\_sp\_aB:0.0):5.4E-4,(P\_anthophila:0.00552,P\_vagans:5.5E-4):0.00548):0.00547):5.4E-4):0.00552);

[262] tree 't262'=[&R] ((P\_rwandensis:0.0153,(P\_eucrina:5.4E-4,((T\_morbirosei:0.01522,(T\_sp\_NML\_06:0.00757,T\_ptyseos:5.5E-4):0.00761):0.0075,((E\_billingiae:0.02314,(E\_pyriifoliae:0.00762,E\_tasmaniensis:5.5E-4):5.5E-4):0.02305,(((P\_agglomerans:0.0,P\_vagans:0.0,P\_deleyi:0.0,P\_anthophila:0.0,P\_sp\_aB:0.0):0.0076,((P\_allii:0.0,P\_ananatis:0.0):0.00758,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.5E-4):0.01523):5.4E-4,(P\_brenneri:0.0,P\_conspicua:0.0):5.4E-4):0.01533):0.00781):0.02302):0.01516):5.3E-

4,(P\_wallisii:0.00748,(P\_sp\_A4:0.03819,(P\_rodasii:0.00746,P\_sp\_GM01:5.5E-4):0.00763):0.00737):5.5E-4,(((P\_sp\_At-9b:0.0,P\_cyprapedii:0.0):0.00758,P\_dispersa:5.5E-4):0.0076,P\_septica:0.01528):5.5E-4);

[263] tree 't263'=[&R] ((P\_eucrinea:0.0,P\_sp\_At-9b:0.0,P\_cyprapedii:0.0,P\_dispersa:0.0,P\_rodasii:0.0,P\_rwandensis:0.0,P\_s\_indologenes:0.0,P\_wallisii:0.0,P\_allii:0.0,P\_ananatis:0.0,P\_s\_stewartii:0.0):5.5E-4,(E\_billingiae:5.5E-4,(E\_pyriifoliae:0.0,E\_tasmaniensis:0.0):0.00699):0.0212,P\_sp\_GM01:0.00697):5.4E-4,((T\_morbirosei:0.007,(T\_ptyseos:0.00706,T\_sp\_NML\_06:5.5E-4):5.4E-4):0.01419,((P\_agglomerans:0.0,P\_vagans:0.0,P\_deleyi:0.0,P\_anthophila:0.0,P\_sp\_aB:0.0):0.00704,((P\_septica:0.0071,P\_sp\_A4:0.00706):0.00707,(P\_brenneri:0.0,P\_conspicua:0.0):5.5E-4):5.4E-4):0.007):5.5E-4);

[264] tree 't264'=[&R] ((P\_sp\_GM01:0.01877,((P\_agglomerans:0.0,P\_vagans:0.0,P\_deleyi:0.0,P\_allii:0.0,P\_ananatis:0.0,P\_anthophila:0.0,P\_brenneri:0.0,P\_conspicua:0.0,P\_septica:0.0,P\_sp\_aB:0.0,P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.5E-4,(E\_pyriifoliae:5.5E-4,(E\_billingiae:0.03858,E\_tasmaniensis:0.01867):0.00959):0.01868):5.4E-4):0.00895,(T\_morbirosei:0.01894,(T\_sp\_NML\_06:0.00943,T\_ptyseos:5.5E-4):0.01836):0.00942,(P\_sp\_A4:0.00919,((P\_dispersa:0.0,P\_eucrinea:0.0):5.4E-4,((P\_sp\_At-9b:5.3E-4,P\_cyprapedii:0.00913):0.00932,(P\_rodasii:0.00925,(P\_rwandensis:0.0,P\_wallisii:0.0):5.5E-4):0.01846):5.4E-4):0.00924):5.4E-4);

[265] tree 't265'=[&R] ((P\_eucrinea:0.00831,(P\_rwandensis:0.0,P\_rodasii:0.0):0.00831):5.5E-4,(P\_agglomerans:0.0,P\_vagans:0.0,P\_ananatis:0.0,P\_anthophila:0.0,P\_dispersa:0.0,P\_sp\_A4:0.0,P\_sp\_GM01:0.0,P\_sp\_aB:0.0,P\_s\_indologenes:0.0,P\_s\_stewartii:0.0,P\_deleyi:0.0,P\_allii:0.0,P\_brenneri:0.0,P\_conspicua:0.0,P\_septica:0.0,P\_wallisii:0.0):5.5E-4,(((T\_morbirosei:0.0,T\_ptyseos:0.0,T\_sp\_NML\_06:0.0):0.00824,((E\_billingiae:0.0,E\_tasmaniensis:0.0):5.5E-4,E\_pyriifoliae:0.00824):0.00826):5.5E-4,(P\_sp\_At-9b:0.0,P\_cyprapedii:0.0):0.01659):5.5E-4);

[266] tree 't266'=[&R] ((P\_sp\_GM01:5.5E-4,(P\_rodasii:5.5E-4,(P\_sp\_A4:0.01125,P\_rwandensis:5.5E-4):0.01116):0.01118):0.02276,(P\_wallisii:5.5E-4,P\_septica:0.01125):5.5E-4,((P\_dispersa:0.0,P\_eucrinea:0.0):5.4E-4,((P\_agglomerans:0.0,P\_vagans:0.0,P\_deleyi:0.0,P\_anthophila:0.0,P\_brenneri:0.0,P\_conspicua:0.0,P\_sp\_aB:0.0):0.01142,(P\_sp\_At-9b:0.0,P\_cyprapedii:0.0):5.5E-4):0.01137,((P\_allii:0.0,P\_ananatis:0.0,P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.4E-4,(T\_morbirosei:0.02287,(T\_ptyseos:0.01133,(E\_billingiae:0.02296,(E\_pyriifoliae:0.01134,E\_tasmaniensis:5.4E-4):5.5E-4):0.05029):5.4E-4,T\_sp\_NML\_06:0.01127):5.5E-4):0.01167):5.4E-4):0.01165):0.01122);

[267] tree 't267'=[&R] ((T\_morbirosei:0.0161,(E\_billingiae:0.0,P\_allii:0.0,P\_ananatis:0.0,P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01617):5.5E-4,(E\_pyriifoliae:5.5E-4,E\_tasmaniensis:0.01615):0.01617,(((P\_sp\_At-9b:0.0,P\_cyprapedii:0.0):0.0165,P\_sp\_A4:5.5E-4):0.01619,(P\_wallisii:5.5E-4,((P\_rodasii:0.0,P\_rwandensis:0.0):5.5E-4,P\_sp\_GM01:0.01614):0.01608):0.01628):5.4E-4,(P\_dispersa:0.0,P\_eucrinea:0.0,P\_septica:0.0,T\_ptyseos:0.0,T\_sp\_NML\_06:0.0,P\_agglomerans:0.0,P\_vagans:0.0,P\_deleyi:0.0,P\_anthophila:0.0,P\_brenneri:0.0,P\_conspicua:0.0,P\_sp\_aB:0.0):5.5E-4):5.5E-4);

[268] tree 't268'=[&R] ((E\_billingiae:0.0,E\_pyriifoliae:0.0,E\_tasmaniensis:0.0,P\_sp\_At-9b:0.0,P\_allii:0.0,P\_ananatis:0.0,P\_anthophila:0.0,P\_cyprapedii:0.0,P\_dispersa:0.0,P\_eucrinea:0.0,P\_rodasii:0.0,P\_rwandensis:0.0,P\_septica:0.0,P\_sp\_GM01:0.0,P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.3E-

4,(P\_sp\_A4:0.0,P\_wallisii:0.0):0.00746,((T\_morbirosei:0.0,T\_ptyseos:0.0,T\_sp\_NML\_06:0.0):0.01494,(P\_agglomerans:0.0,P\_vagans:0.0,P\_deleyi:0.0,P\_brenneri:0.0,P\_conspicua:0.0,P\_sp\_aB:0.0):5.3E-4):0.00755);  
[269] tree 't269'=[&R]  
(P\_eucrina:0.12166,(P\_dispersa:0.03825,(P\_sp\_GM01:0.02565,(P\_rwandensis:0.02418,P\_rodasii:0.01802):0.00852):0.00846):0.00642):0.01844,(P\_sp\_At-9b:0.00466,P\_cyprapedii:0.04124):0.03271,((((T\_morbirosei:0.19543,(T\_ptyseos:0.07932,T\_sp\_NML\_06:0.12345):0.04141):0.23488,(P\_sp\_A4:0.24143,P\_septica:0.16441):0.02723):0.03705,(((P\_s\_indologenes:0.00633,P\_s\_stewartii:0.00636):0.0309,(P\_allii:0.04683,P\_ananatis:0.01532):0.02669):0.05504,(P\_deleyi:0.0299,((P\_conspicua:0.03352,P\_brenneri:0.01866):0.0196,(P\_anthophila:0.04328,(P\_agglomerans:0.01239,(P\_vagans:5.5E-4,P\_sp\_aB:0.01248):0.01883):0.02145):0.00663):0.0184):0.02921):0.01397):0.03669,(E\_billingiae:0.1607,(E\_pyrifoliae:0.02263,E\_tasmaniensis:0.0337):0.11977):0.14111):0.03269,P\_wallisii:0.0431):0.01384);  
[270] tree 't270'=[&R]  
(P\_conspicua:0.0,P\_sp\_A4:0.0,T\_morbirosei:0.0,T\_sp\_NML\_06:0.0,P\_dispersa:0.0,P\_agglomerans:0.0,P\_sp\_At-9b:0.0,P\_anthophila:0.0,P\_brenneri:0.0,P\_cyprapedii:0.0,P\_eucrina:0.0,P\_septica:0.0,P\_vagans:0.0,P\_deleyi:0.0,P\_sp\_aB:0.0,P\_sp\_GM01:0.0,P\_allii:0.0,P\_ananatis:0.0,P\_s\_indologenes:0.0,P\_s\_stewartii:0.0,P\_rodasii:0.0,P\_rwandensis:0.0,P\_wallisii:0.0,E\_pyrifoliae:0.0,E\_tasmaniensis:0.0):5.5E-4,T\_ptyseos:0.00966,E\_billingiae:0.00967);  
[271] tree 't271'=[&R] (P\_sp\_A4:0.01684,T\_sp\_NML\_06:5.5E-4,(((P\_sp\_At-9b:0.0,P\_cyprapedii:0.0,P\_dispersa:0.0,P\_eucrina:0.0,P\_septica:0.0,P\_sp\_GM01:0.0,P\_wallisii:0.0):5.4E-4,(P\_allii:0.0,P\_ananatis:0.0,P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00846):5.3E-4,((P\_rodasii:0.0,P\_rwandensis:0.0):0.00463,((P\_agglomerans:0.0,P\_vagans:0.0,P\_anthophila:0.0,P\_conspicua:0.0,P\_sp\_aB:0.0):0.00842,(P\_deleyi:0.0,P\_brenneri:0.0):5.4E-4):0.0244):0.00461):0.01679,((E\_billingiae:0.00835,(E\_pyrifoliae:0.0,E\_tasmaniensis:0.0):5.5E-4):5.4E-4,(T\_ptyseos:5.4E-4,T\_morbirosei:0.00843):0.00845):0.00835):5.4E-4);  
[272] tree 't272'=[&R] (P\_sp\_At-9b:5.5E-4,(P\_sp\_A4:0.00352,(P\_allii:0.00354,(P\_ananatis:0.0,P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.5E-4):0.00737):5.4E-4,(P\_septica:0.00686,(((T\_morbirosei:5.5E-4,(T\_sp\_NML\_06:0.00724,T\_ptyseos:5.5E-4):0.00732):0.01083,((P\_rodasii:5.3E-4,P\_rwandensis:0.00362):0.0113,P\_cyprapedii:0.00369):0.00361):5.3E-4,P\_sp\_GM01:0.01086):0.00362,(P\_dispersa:5.4E-4,(P\_wallisii:0.00359,(P\_eucrina:0.00359,(P\_brenneri:0.00731,((P\_agglomerans:0.0,P\_sp\_aB:0.0):5.5E-4,((P\_deleyi:0.0,P\_anthophila:0.0):0.00357,P\_conspicua:0.00359):5.5E-4):5.4E-4,(P\_vagans:5.5E-4,(E\_billingiae:0.00619,(E\_tasmaniensis:0.00351,E\_pyrifoliae:5.5E-4):0.01431):0.00487):0.0036):0.00359):0.00361):0.00361):0.00359):0.00362):5.4E-4):0.00351);  
[273] tree 't273'=[&R] ((P\_rwandensis:0.00951,((P\_sp\_At-9b:0.0,P\_cyprapedii:0.0,P\_dispersa:0.0,P\_sp\_A4:0.0,P\_wallisii:0.0):5.4E-4,((P\_septica:0.0098,((E\_pyrifoliae:0.0,E\_tasmaniensis:0.0):0.06193,E\_billingiae:0.02881):0.02305,T\_morbirosei:0.0294):5.5E-4):0.00725,(P\_eucrina:0.00963,((P\_brenneri:5.4E-4,((P\_agglomerans:0.0,P\_vagans:0.0,P\_deleyi:0.0,P\_anthophila:0.0,P\_sp\_aB:0.0):0.00957,P\_conspicua:5.4E-4):0.00956):0.0096,(P\_allii:0.0,P\_ananatis:0.0,P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.5E-4):5.5E-

4):0.00703):0.00511):0.00965):5.4E-4,(P\_rodasii:0.0,P\_sp\_GM01:0.0):5.5E-4,(T\_ptyseos:0.00952,T\_sp\_NML\_06:0.00951):5.5E-4);

[274] tree 't274'=[&R] (((P\_sp\_A4:0.0,P\_sp\_At-9b:0.0,P\_cypripedii:0.0):5.5E-4,((P\_rodasii:0.0,P\_rwandensis:0.0):0.00857,((E\_tasmaniensis:5.4E-4,(E\_billingiae:5.4E-4,E\_pyrifoliae:0.01951):0.00968):0.0292,((P\_ananatis:0.0,P\_s\_indologenes:0.0,P\_s\_stewartii:0.0,P\_allii:0.0):5.5E-4,((T\_sp\_NML\_06:0.0,T\_morbirosei:0.0):5.5E-4,T\_ptyseos:0.00957):0.01916):5.4E-4):0.01956):0.00107):0.00954,(P\_septica:0.0095,P\_sp\_GM01:0.00969):0.0096,((P\_dispersa:0.0,P\_wallisii:0.0):5.5E-4,(P\_eucrina:0.00948,(P\_agglomerans:0.0,P\_vagans:0.0,P\_brenneri:0.0,P\_conspicua:0.0,P\_sp\_aB:0.0,P\_deleyi:0.0,P\_anthophila:0.0):0.02882):5.5E-4):5.5E-4);

[275] tree 't275'=[&R] (((((T\_ptyseos:0.0,T\_sp\_NML\_06:0.0):0.00784,((E\_pyrifoliae:0.0,E\_tasmaniensis:0.0):0.01483,P\_sp\_A4:0.01861):0.00706):0.01868,((P\_dispersa:5.4E-4,(T\_morbirosei:0.0135,P\_wallisii:5.5E-4):0.01353):0.00668,((P\_sp\_GM01:0.02723,(P\_rodasii:0.00685,P\_rwandensis:0.00674):0.00657):0.00686,P\_eucrina:5.4E-4):5.4E-4):0.01311):5.5E-4,((P\_agglomerans:0.0,P\_vagans:0.0,P\_deleyi:0.0,P\_brenneri:0.0,P\_conspicua:0.0,P\_sp\_aB:0.0):5.4E-4,(P\_sp\_At-9b:0.00669,P\_cypripedii:5.5E-4):0.00665):0.00666,(((P\_anthophila:0.0,P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.5E-4,(E\_billingiae:0.04063,(P\_allii:0.0,P\_ananatis:0.0):5.5E-4):0.00667):0.00665,P\_septica:5.5E-4):5.4E-4);

[276] tree 't276'=[&R] ((P\_rodasii:0.0,P\_sp\_At-9b:0.0,P\_allii:0.0,P\_ananatis:0.0,P\_dispersa:0.0,P\_eucrina:0.0,P\_rwandensis:0.0,P\_sp\_GM01:0.0,P\_s\_indologenes:0.0,P\_s\_stewartii:0.0,P\_wallisii:0.0):0.01182,(P\_deleyi:0.0,P\_conspicua:0.0,E\_billingiae:0.0,E\_pyrifoliae:0.0,E\_tasmaniensis:0.0,P\_agglomerans:0.0,P\_vagans:0.0,P\_anthophila:0.0,P\_brenneri:0.0,P\_cypripedii:0.0,P\_septica:0.0,P\_sp\_aB:0.0,T\_morbirosei:0.0,T\_ptyseos:0.0,T\_sp\_NML\_06:0.0):5.4E-4,P\_sp\_A4:0.03608);

[277] tree 't277'=[&R] ((E\_billingiae:0.0,P\_ananatis:0.0,P\_rodasii:0.0,P\_rwandensis:0.0,P\_sp\_GM01:0.0,P\_s\_indologenes:0.0,P\_s\_stewartii:0.0,P\_allii:0.0):0.01124,(E\_pyrifoliae:0.0,E\_tasmaniensis:0.0,P\_agglomerans:0.0,P\_sp\_At-9b:0.0,P\_vagans:0.0,P\_deleyi:0.0,P\_anthophila:0.0,P\_brenneri:0.0,P\_cypripedii:0.0,P\_septica:0.0,P\_sp\_A4:0.0,P\_sp\_aB:0.0,T\_morbirosei:0.0,T\_ptyseos:0.0,T\_sp\_NML\_06:0.0,P\_conspicua:0.0,P\_wallisii:0.0,P\_eucrina:0.0,P\_dispersa:0.0):0.01124);

[278] tree 't278'=[&R] ((P\_sp\_GM01:0.03638,(P\_rodasii:0.0705,P\_rwandensis:5.5E-4):0.05903):0.02851,(P\_eucrina:0.11431,(P\_sp\_At-9b:0.10961,P\_cypripedii:0.11257):0.13122):0.07457,((P\_sp\_A4:0.18925,((E\_billingiae:0.22471,(E\_pyrifoliae:0.06279,E\_tasmaniensis:0.07511):0.21671):0.31899,(T\_morbirosei:0.24374,(T\_sp\_NML\_06:0.32815,T\_ptyseos:0.1831):0.12046):0.22104):0.11808,(P\_septica:0.16066,((P\_allii:0.00741,((P\_s\_indologenes:5.4E-4,P\_s\_stewartii:0.01127):0.19214,P\_ananatis:0.0754):0.03688):0.33385,((P\_brenneri:0.04626,P\_conspicua:0.0355):0.05421,((P\_deleyi:0.11823,P\_anthophila:0.06082):0.05726,((P\_agglomerans:0.03829,P\_sp\_aB:0.11565):0.07671,P\_vagans:0.08663):0.01379):0.13669):0.08903):0.09875):0.12212):0.05889):0.13389,(P\_wallisii:0.14423,P\_dispersa:0.13788):0.02377):0.05046);

[279] tree 't279'=[&R] (((((P\_agglomerans:0.02459,(P\_sp\_aB:0.05145,P\_vagans:5.4E-4):0.00839):0.01106,(P\_deleyi:0.05471,P\_anthophila:0.03958):0.00868):0.02238,((P\_sp\_A4:0.03351,(P\_sp\_At-

9b:0.04181,P\_cyprapedii:0.01036):0.03476,(P\_rodasii:0.15299,(P\_wallisii:0.03982,(P\_sp\_GM01:0.04222,(P\_dispersa:0.04099,P\_rwandensis:0.04975):0.022):0.02811):0.01209):0.05002):0.01172):0.02463,(P\_eucrina:0.15085,P\_septica:0.03748):0.03215):0.03):0.01625,(P\_brenneri:0.01673,P\_conspicua:0.06042):0.00872,(((T\_sp\_NML\_06:0.14385,(T\_morbirosei:0.12161,T\_ptyseos:0.12378):0.05264):0.10425,(E\_billingiae:0.10577,(E\_pyrifoliae:0.05917,E\_tasmaniensis:0.03701):0.17401):0.1078):0.02433,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.0247,(P\_allii:0.00801,P\_ananatis:0.0252):0.00929):0.06565):0.01738);

[280] tree 't280'=[&R] (P\_anthophila:0.03663,P\_deleyi:0.09411,(((P\_s\_indologenes:0.0055,P\_s\_stewartii:5.5E-4):0.0452,(P\_allii:0.02649,P\_ananatis:0.03852):0.04504):0.06437,((P\_sp\_A4:0.20449,(P\_sp\_At-9b:0.01594,P\_cyprapedii:0.09352):0.06748,(P\_wallisii:0.06206,P\_dispersa:0.04847):5.4E-4,((P\_sp\_GM01:0.03598,(P\_rodasii:0.06726,P\_rwandensis:0.03511):0.05095):0.0294,P\_eucrina:0.14741):0.02572):0.04408):0.10035):0.06691,((T\_morbirosei:0.16621,(T\_ptyseos:0.10896,T\_sp\_NML\_06:0.06251):0.09518):0.32572,(P\_septica:0.12518,(E\_billingiae:0.17625,(E\_pyrifoliae:0.0172,E\_tasmaniensis:0.00588):0.12298):0.07055):0.03923):0.03286):0.05096):0.06446,((P\_brenneri:0.0281,P\_conspicua:0.0064):0.04082,(P\_agglomerans:0.01305,(P\_sp\_aB:0.03521,P\_vagans:0.00953):0.02142):0.0309):0.03333):0.03138);

[281] tree 't281'=[&R] ((P\_septica:0.01674,(((P\_sp\_At-9b:0.00408,(P\_rodasii:0.0,P\_sp\_GM01:0.0):0.00412):0.00413,(P\_rwandensis:0.01264,(P\_cyprapedii:0.00829,(P\_dispersa:0.0,P\_wallisii:0.0):0.0124):0.00413):5.5E-4):0.00425,(P\_eucrina:0.00893,((T\_morbirosei:0.02548,(T\_ptyseos:0.04505,T\_sp\_NML\_06:0.03851):0.02487):0.10191,(P\_sp\_A4:0.05269,(E\_billingiae:0.05636,(E\_pyrifoliae:0.01028,E\_tasmaniensis:0.04582):0.05377):0.07228):0.01547):5.5E-4):0.00414):0.00826):0.00404,(P\_agglomerans:5.5E-4,P\_sp\_aB:0.0041):0.0041,(P\_vagans:0.00411,(((P\_s\_stewartii:0.01252,P\_s\_indologenes:0.00414):0.00406,(P\_allii:5.5E-4,P\_ananatis:0.0041):5.4E-4):0.01657,(P\_brenneri:0.00824,(P\_deleyi:0.0,P\_anthophila:0.0,P\_conspicua:0.0):5.5E-4):0.0041):5.4E-4):5.5E-4);

[282] tree 't282'=[&R] ((P\_rwandensis:0.00825,(P\_sp\_GM01:0.02119,P\_rodasii:5.4E-4):0.00365):0.00413,(P\_dispersa:0.01229,((P\_sp\_A4:0.04495,(E\_billingiae:0.04172,(E\_pyrifoliae:0.01609,E\_tasmaniensis:0.03616):0.08372):0.05024):0.01095,(P\_cyprapedii:0.00823,(P\_sp\_At-9b:0.00794,(P\_septica:0.025,((T\_morbirosei:0.0193,(T\_sp\_NML\_06:0.12471,T\_ptyseos:0.02721):0.05009):0.11568,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00443,(P\_allii:0.0,P\_ananatis:0.0):0.00786):0.02713,((P\_vagans:5.3E-4,(P\_agglomerans:0.00403,P\_sp\_aB:5.5E-4):0.00813):0.01153,(P\_anthophila:0.00676,P\_deleyi:0.02238):0.00807):0.00915,(P\_brenneri:0.00412,P\_conspicua:0.00823):0.00413):0.00648):0.00855):0.01427):0.01711):5.5E-4):0.00475):0.00795):0.0041,(P\_eucrina:0.09842,P\_wallisii:0.00405):0.00411);

[283] tree 't283'=[&R] (P\_sp\_GM01:0.0703,((P\_rodasii:5.5E-4,P\_rwandensis:0.02704):0.0634,(((T\_ptyseos:0.02168,(T\_sp\_NML\_06:0.09271,T\_morbirosei:0.14918):0.05415):0.17202,(E\_billingiae:0.14629,(E\_pyrifoliae:0.032,E\_tasmaniensis:0.04331):0.03252):0.04474):0.06253,(P\_septica:0.04178,(P\_sp\_A4:0.07358,(P\_deleyi:0.06935,((P\_agglomerans:0.0131,P\_sp\_aB:5.5E-4):5.4E-4,((P\_vagans:0.0,P\_brenneri:0.0,P\_conspicua:0.0):5.4E-4,P\_anthophila:0.06845):0.01298):0.01284):0.09031,((P\_allii:0.0,P\_ananatis:0.0):5.4E-4,(P\_s\_indologenes:0.01313,P\_s\_stewartii:5.5E-4):0.04017):0.0888):0.03749):0.03261):0.05513):0.0356):5.4E-

4,((P\_eucrina:0.11166,P\_dispersa:0.02616):0.0437,(P\_sp\_At-9b:0.0259,(P\_cyprapedii:5.5E-4,P\_wallisii:0.01317):0.01798):5.3E-4):0.01246);

[284] tree 't284'=[&R] (P\_allii:5.5E-4,P\_ananatis:0.00598,((P\_sp\_A4:0.01825,((P\_eucrina:5.5E-4,((P\_sp\_GM01:0.01205,(P\_wallisii:0.00597,P\_rodasii:5.5E-4):5.5E-4):0.00606,(P\_dispersa:0.0,P\_rwandensis:0.0):5.5E-4):0.00597):5.4E-4,(E\_pyriifoliae:0.00606,E\_tasmaniensis:0.01198):0.05619):0.00617,((P\_septica:5.4E-4,(P\_sp\_At-9b:0.01227,(E\_billingiae:0.03774,(T\_sp\_NML\_06:0.01871,(T\_morbirosei:0.04251,T\_ptyseos:0.01333):0.00686):0.05544):0.00698):0.01116):0.00603,P\_cyprapedii:5.4E-4):0.01862):0.0058):0.01231,(P\_sp\_aB:5.5E-4,(P\_agglomerans:5.4E-4,((P\_brenneri:0.0,P\_s\_stewartii:0.0,P\_s\_indologenes:0.0,P\_vagans:0.0,P\_deleyi:0.0,P\_anthophila:0.0):5.5E-4,P\_conspicua:0.006):0.00592):0.00598):0.00591):5.5E-4);

[285] tree 't285'=[&R] (((P\_eucrina:0.03584,P\_anthophila:5.3E-4):0.01776,(P\_vagans:0.01782,(P\_agglomerans:0.0,P\_deleyi:0.0,P\_brenneri:0.0,P\_conspicua:0.0):5.3E-4):5.5E-4):0.01782,P\_allii:0.01822,((P\_sp\_aB:0.0,P\_ananatis:0.0,P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.4E-4,((P\_dispersa:5.5E-4,P\_wallisii:0.01762):0.01806,(((P\_sp\_A4:0.08296,(E\_pyriifoliae:5.2E-4,(E\_billingiae:0.13647,E\_tasmaniensis:5.3E-4):0.01808):0.05138):0.02692,(P\_rodasii:0.13323,P\_rwandensis:0.00903):0.06611):0.01798,P\_sp\_GM01:0.01818):0.01801,(P\_septica:5.4E-4,((P\_sp\_At-9b:0.0,P\_cyprapedii:0.0):5.3E-4,(T\_morbirosei:0.1963,(T\_sp\_NML\_06:0.27469,T\_ptyseos:0.1922):0.06285):0.12465):0.01789):0.01895):0.01748):5.3E-4):5.1E-4);

[286] tree 't286'=[&R] (((((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01841,(P\_allii:0.01498,P\_ananatis:5.4E-4):0.00726):0.02072,((P\_anthophila:0.0076,(P\_deleyi:0.01798,(P\_agglomerans:0.00256,(P\_vagans:0.00176,P\_sp\_aB:0.01412):0.00454):0.0026):0.00239):0.01167,(P\_brenneri:0.00566,P\_conspicua:0.0101):0.00608):0.02068):0.01479,((P\_sp\_At-9b:0.01095,P\_cyprapedii:0.00961):0.01403,((P\_septica:0.042,P\_sp\_GM01:0.03105):0.01763,((P\_wallisii:0.013,P\_dispersa:0.01321):0.01386,(P\_rodasii:0.03314,P\_rwandensis:0.00335):0.00949):0.00937):0.00277):0.01441):0.01835,((T\_morbirosei:0.04513,(T\_sp\_NML\_06:0.0608,T\_ptyseos:0.04643):0.01519):0.04631,(E\_billingiae:0.04262,(E\_pyriifoliae:0.01056,E\_tasmaniensis:0.02735):0.04064):0.03836):0.01853,(P\_eucrina:0.04195,P\_sp\_A4:0.06268):0.0089);

[287] tree 't287'=[&R] ((P\_sp\_aB:0.03525,(P\_agglomerans:5.5E-4,(((P\_ananatis:0.01441,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.0437,P\_allii:5.5E-4):0.03293):0.05915,P\_brenneri:0.0256):5.4E-4,P\_conspicua:0.01747):0.01452,(P\_septica:0.06496,((E\_billingiae:0.05616,(E\_pyriifoliae:0.00834,E\_tasmaniensis:0.02659):0.05279):0.01594,((P\_sp\_A4:0.01691,(T\_morbirosei:5.5E-4,(T\_sp\_NML\_06:0.09088,T\_ptyseos:0.04423):0.09478):0.18485):0.07999,(P\_sp\_GM01:5.3E-4,(P\_eucrina:0.02837,((P\_dispersa:0.00866,P\_wallisii:0.04303):0.0184,((P\_rodasii:0.0175,P\_rwandensis:0.00712):0.04037,(P\_sp\_At-9b:0.02291,P\_cyprapedii:0.0206):0.03013):0.01769):0.01706):0.02626):0.04922):0.01411):0.06966):0.10192):0.02052):0.017):5.3E-4,P\_vagans:5.5E-4,(P\_deleyi:0.00881,P\_anthophila:0.01729):5.5E-4);

[288] tree 't288'=[&R] ((P\_allii:0.00598,(P\_ananatis:0.01401,(P\_s\_indologenes:0.00168,P\_s\_stewartii:0.00168):0.01801):0.00694):0.04532,(P\_septica:0.03993,(P\_brenneri:0.01531,(P\_conspicua:0.01136,((P\_agglomerans:0.00547,(P\_sp\_aB:0.00919,P\_vagans:0.00362):0.00393):0.00796,(P\_anthophila:0.01455,P\_deleyi:0.01211):0.01491):0.01072):0.02712):0.02765):0.012,(((P\_sp\_At-

9b:0.00733,P\_cyprapedii:0.00845):0.00738,((P\_eucrina:0.02188,(P\_dispersa:0.01926,P\_wallisii:0.01315):0.00624):0.0027  
,((P\_rodasii:0.09001,P\_rwandensis:0.00525):0.01237,P\_sp\_GM01:0.02902):0.0133):0.02377):0.0069,(P\_sp\_A4:0.05014,((T\_s  
p\_NML\_06:0.04991,(T\_morbirosei:0.07075,T\_ptyseos:0.04456):0.02382):0.10479,(E\_billingiae:0.04128,(E\_pyriifoliae:0.021  
63,E\_tasmaniensis:0.00472):0.03926):0.06984):0.03218):0.02365):0.00643);  
[289] tree 't289'=[&R]  
(((P\_eucrina:0.02503,(P\_sp\_GM01:0.02678,(P\_rodasii:0.00532,P\_rwandensis:0.01052):0.01124):0.01377):0.00506,(P\_sp\_A4:  
0.10577,(E\_billingiae:0.07195,(E\_tasmaniensis:5.4E-  
4,(E\_pyriifoliae:0.02624,(T\_ptyseos:0.89304,(T\_morbirosei:0.12915,T\_sp\_NML\_06:0.1855):0.42051):0.35833):0.03307):0.05  
936):0.09754,(P\_septica:0.07533,(((P\_s\_indologenes:5.4E-  
4,P\_s\_stewartii:0.00514):0.10815,(P\_allii:0.02751,P\_ananatis:0.05143):0.03316):0.05165,((P\_brenneri:0.00515,P\_conspi  
cua:0.02145):0.0134,((P\_vagans:0.00514,P\_anthophila:0.01047):0.01561,(P\_deleyi:0.01534,(P\_sp\_aB:0.016,P\_agglomerans:  
0.01536):0.01029):5.5E-4):0.01345):0.04104):0.02903):0.02698):0.00977):0.02673):0.0063,(P\_sp\_At-  
9b:0.00518,P\_cyprapedii:0.01598):0.00981,(P\_dispersa:0.00534,P\_wallisii:0.03751):0.0035);  
[290] tree 't290'=[&R] ((P\_deleyi:5.4E-  
4,(((E\_billingiae:0.05761,(E\_pyriifoliae:0.03758,E\_tasmaniensis:0.02553):0.05174):0.06806,(P\_sp\_A4:0.07971,(T\_sp\_NML  
\_06:0.16236,(T\_ptyseos:0.03909,T\_morbirosei:0.10813):0.07672):0.14257):0.02157):0.02349,((P\_s\_indologenes:0.0,P\_s\_st  
ewartii:0.0):5.4E-4,(P\_septica:0.06119,(P\_allii:0.02826,P\_ananatis:5.5E-  
4):0.02479):0.01246):0.02697):0.01095,((P\_dispersa:0.03224,(P\_sp\_GM01:0.04432,(P\_rwandensis:5.4E-  
4,(P\_wallisii:0.03669,P\_eucrina:0.05677):0.02061):0.00812):0.01151,P\_rodasii:0.00972):0.02463):0.03841,(P\_sp\_At-  
9b:0.03782,P\_cyprapedii:0.00923):0.0286):0.00952):0.02881):0.01862,P\_agglomerans:5.4E-  
4):0.00887,(P\_anthophila:0.02772,P\_sp\_aB:0.00904):0.00906,(P\_vagans:0.00894,(P\_brenneri:0.00819,P\_conspicua:0.1043):  
0.00983):5.4E-4);  
[291] tree 't291'=[&R] (P\_wallisii:0.1086,P\_dispersa:0.08698,(P\_sp\_GM01:0.14585,(((P\_sp\_At-  
9b:0.03988,P\_cyprapedii:0.04892):0.07557,(P\_eucrina:0.13813,((P\_septica:0.13514,(((P\_s\_indologenes:0.00457,P\_s\_stewa  
rtii:0.01175):0.07334,(P\_allii:0.04789,P\_ananatis:0.02495):0.04923):0.0292,((P\_brenneri:0.04841,P\_conspicua:0.03455)  
:0.07994,(P\_deleyi:0.09247,(P\_anthophila:0.07369,(P\_vagans:0.0178,(P\_sp\_aB:0.02358,P\_agglomerans:0.02289):0.02061):0  
.01115):0.01162):0.01314):0.11055):0.09091):0.05958,((T\_morbirosei:0.14815,(T\_sp\_NML\_06:0.26756,T\_ptyseos:0.14323):0  
.10412):0.18974,(P\_sp\_A4:0.26938,(E\_billingiae:0.18823,(E\_pyriifoliae:0.06407,E\_tasmaniensis:0.07354):0.24544):0.0932  
8):0.05694):0.05664):0.11173):0.01989):0.01478,(P\_rodasii:0.06885,P\_rwandensis:0.05393):0.07984):0.02537):0.01426);  
[292] tree 't292'=[&R] (P\_anthophila:0.05716,(((P\_septica:0.13633,(P\_sp\_A4:0.18505,(((P\_sp\_At-  
9b:0.02473,P\_cyprapedii:0.03367):0.04127,(P\_sp\_GM01:0.03271,(P\_rodasii:0.01295,P\_rwandensis:5.5E-  
4):0.04446):0.02557,((P\_dispersa:0.01434,P\_wallisii:0.02712):0.0144,P\_eucrina:0.07849):0.00798):0.07276):0.07081,((T  
\_morbirosei:0.11157,(T\_ptyseos:0.05826,T\_sp\_NML\_06:0.10357):0.0507):0.27615,(E\_billingiae:0.12811,(E\_pyriifoliae:0.03  
474,E\_tasmaniensis:0.04979):0.08406):0.07591):0.06063):0.04283):0.02632):0.09787,(P\_ananatis:0.0571,(P\_allii:0.04234  
,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.07951):0.0224):0.06977):0.07524,(P\_brenneri:0.0202,P\_conspicua:0.04263):0  
.03216):0.01437,(P\_deleyi:0.05354,(P\_agglomerans:0.02382,(P\_vagans:0.0169,P\_sp\_aB:0.02438):0.0049):0.02457):0.0171);  
[293] tree 't293'=[&R] (P\_deleyi:0.04514,P\_anthophila:0.01441,((P\_vagans:0.01437,P\_sp\_aB:5.5E-4):5.5E-  
4,(P\_agglomerans:0.01382,(P\_brenneri:5.5E-  
4,(P\_conspicua:0.01351,((P\_allii:0.01381,P\_ananatis:0.02767):0.01343,(P\_s\_indologenes:5.4E-



4,P\_s\_stewartii:0.01375):0.01413):0.05623,(((T\_sp\_NML\_06:0.00106,(T\_ptyseos:0.12459,T\_morbirosei:0.18318):0.06041):0.24808,P\_sp\_A4:0.04862):0.06217,((P\_dispersa:5.5E-4,P\_eucrina:0.06009):0.02616,(((P\_rodasii:0.02989,P\_rwandensis:0.01701):0.02558,(P\_wallisii:5.4E-4,P\_sp\_GM01:0.06852):0.01567):0.04756,(E\_tasmaniensis:0.02913,(E\_pyrifoliae:5.3E-4,E\_billingiae:0.14526):0.01273):0.16022):5.4E-4):0.04572):0.01343,(P\_septica:0.05915,(P\_sp\_At-9b:0.01386,P\_cyprapedii:5.4E-4):0.04871):0.03075):0.05918):0.05735):5.3E-4):0.02932):5.4E-4):0.0146);  
[294] tree 't294'=[&R] ((P\_wallisii:0.03607,P\_dispersa:0.00138):0.00421,P\_eucrina:0.03169,(((P\_sp\_At-9b:0.00894,(P\_sp\_GM01:0.01388,(P\_rodasii:0.00527,P\_rwandensis:5.5E-4):0.01115):0.0233):0.00632,((P\_anthophila:0.00518,((P\_brenneri:0.0051,P\_conspicua:0.00535):0.02141,((P\_agglomerans:0.00521,P\_sp\_aB:5.5E-4):5.5E-4),(P\_vagans:0.00555,P\_deleyi:0.01043):0.00498):0.00527):0.00508):0.02937,((P\_sp\_A4:0.07593,(E\_billingiae:0.02869,(E\_pyrifoliae:0.0194,E\_tasmaniensis:0.02734):0.04164):0.04097):0.01484,(((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.01057):0.00541,(P\_allii:0.0054,P\_ananatis:0.01575):0.00525):0.02831,(P\_septica:0.01667,(T\_morbiros ei:0.01537,(T\_sp\_NML\_06:0.0547,T\_ptyseos:0.04249):0.01417):0.10654):0.00599):0.02067):0.00229):0.01945):0.01651,P\_cy pripedii:0.0052):0.01162);  
[295] tree 't295'=[&R] ((P\_rwandensis:0.02903,(P\_sp\_A4:0.05171,P\_cyprapedii:0.08367):5.4E-4):0.01008,(P\_septica:0.04721,(E\_billingiae:0.05968,(T\_ptyseos:0.0667,(T\_morbirosei:0.06353,T\_sp\_NML\_06:0.06459):0.0097):0.10665):0.01217):0.02519):0.00966,((E\_pyrifoliae:0.05544,E\_tasmaniensis:0.00689):0.04966,P\_sp\_GM01:0.0097):5.5E-4,(((P\_rodasii:0.0605,(P\_allii:0.00999,P\_ananatis:5.5E-4):0.02015):5.4E-4,((P\_sp\_At-9b:0.01001,P\_dispersa:5.4E-4):5.4E-4,P\_eucrina:0.02959):0.00978):5.3E-4,((P\_wallisii:5.4E-4,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.03173):0.00979,(P\_agglomerans:5.5E-4,((P\_deleyi:0.0,P\_conspicua:0.0,P\_brenneri:0.0,P\_sp\_aB:0.0):5.5E-4,(P\_anthophila:0.0098,P\_vagans:5.5E-4):0.00973):0.00967):0.03317):5.5E-4):5.5E-4);  
[296] tree 't296'=[&R] (E\_billingiae:0.00637,(P\_dispersa:0.0,P\_eucrina:0.0,P\_wallisii:0.0):5.5E-4,(((P\_allii:0.0,P\_ananatis:0.0,P\_brenneri:0.0,P\_conspicua:0.0,P\_septica:0.0,P\_sp\_A4:0.0,P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.3E-4,((P\_deleyi:0.14829,(P\_agglomerans:0.0,P\_vagans:0.0,P\_anthophila:0.0,P\_rodasii:0.0,P\_rwandensis:0.0,P\_sp\_GM01:0.0,P\_sp\_aB:0.0):5.5E-4):0.00594,(E\_tasmaniensis:0.00985,(E\_pyrifoliae:5.5E-4,(T\_sp\_NML\_06:0.01273,(T\_ptyseos:0.00632,T\_morbirosei:5.5E-4):5.5E-4):0.00629):0.00528):0.00347):6.0E-4):0.0063,(P\_sp\_At-9b:0.0,P\_cyprapedii:0.0):0.0063):5.5E-4);  
[297] tree 't297'=[&R] (P\_sp\_aB:0.0177,P\_vagans:0.00358,(P\_agglomerans:0.00349,((P\_anthophila:0.03237,P\_deleyi:5.4E-4):0.0111,(P\_conspicua:0.00815,(P\_brenneri:0.00409,(((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00708):0.02739,(P\_allii:0.0083,P\_ananatis:0.01765):0.01715):0.0976,(P\_sp\_A4:0.13098,(((T\_morbirose i:0.06735,(T\_ptyseos:0.03718,T\_sp\_NML\_06:0.11699):0.12765):0.321,(E\_billingiae:0.09511,(E\_pyrifoliae:0.03687,E\_tasma niensis:0.02986):0.13359):0.07222):0.04417,(P\_septica:0.07969,((P\_sp\_At-9b:0.01136,P\_cyprapedii:0.01728):0.03713,(P\_eucrina:0.06125,(P\_dispersa:0.01544,((P\_sp\_GM01:0.03002,(P\_rodasii:0.02479,P\_rwandensis:0.01936):0.01585):0.01685,P\_wallisii:0.0284):0.00788):0.01525):0.02078):0.07678):0.0215):0.01411):0.03803):0.04124):0.00563):0.01273):0.03077):0.00709);

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[298] tree 't298'=[&R]
(P_eucrina:0.13406,((P_wallisii:0.04645,((P_dispersa:0.04185,((P_rodasii:0.02249,P_rwandensis:0.03124):0.02512,(P_sp
_GM01:0.02974,P_sp_At-
9b:0.08675):0.0232):0.00707):0.01037,((P_sp_A4:0.09918,(T_ptyseos:0.16521,(T_sp_NML_06:0.26258,T_morbirosei:0.10861)
:0.04443):0.22971):0.08231,((P_allii:0.0327,(P_ananatis:0.05269,(P_s_indologenes:0.0,P_s_stewartii:0.0):5.4E-
4):0.02367):0.0751,(E_billingiae:0.11361,(E_pyrifoliae:0.03329,E_tasmaniensis:0.02026):0.04394):0.06949):0.01607):0.
05892):0.01447):0.01264,((P_sp_aB:0.027,(P_vagans:5.4E-4,(P_deleyi:0.03103,P_agglomerans:0.01008):5.5E-
4):0.01767):0.01721,(P_anthophila:0.02013,(P_brenneri:0.00968,P_conspicua:0.0103):0.0963):5.4E-
4):0.03214):0.01956,(P_septica:0.14261,P_cypripedii:0.05605):0.03118);
[299] tree 't299'=[&R] ((P_dispersa:0.0,P_wallisii:0.0):5.4E-
4,P_eucrina:0.03666):0.02195,((P_sp_GM01:0.01606,(P_rodasii:0.00518,P_rwandensis:5.5E-
4):0.00633):0.00968,((P_conspicua:5.5E-4,((P_agglomerans:0.0,P_vagans:0.0,P_sp_aB:0.0):5.3E-
4,(P_deleyi:0.01589,P_anthophila:5.5E-
4):0.00503):0.01051,P_brenneri:0.0104):0.00532):0.02089,(P_allii:0.02107,(P_ananatis:5.3E-4,(P_s_indologenes:5.5E-
4,P_s_stewartii:0.00521):0.02121):0.00553):0.0161):0.01728):0.01408,((P_cypripedii:0.02137,P_sp_At-
9b:0.00515):0.01053,((T_morbirosei:0.09512,(T_sp_NML_06:0.09625,T_ptyseos:0.08009):0.04451):0.06819,(P_septica:0.026
45,(P_sp_A4:0.06012,(E_billingiae:0.06387,(E_pyrifoliae:0.01714,E_tasmaniensis:0.00409):0.03093):0.04278):0.01366):0
.00911):0.01497):0.0144);
[300] tree 't300'=[&R] ((P_deleyi:0.00764,(P_agglomerans:5.4E-4,((P_septica:0.03695,(P_sp_A4:0.1578,((P_sp_At-
9b:0.00285,P_cypripedii:0.01253):0.02697,((P_dispersa:0.02727,(P_wallisii:0.0121,P_eucrina:0.02584):0.01177):0.00638
,(P_rodasii:0.02131,(P_rwandensis:0.03003,P_sp_GM01:0.03676):0.00664):0.01192):0.03201):0.03988,((E_billingiae:0.049
12,(E_pyrifoliae:0.02702,E_tasmaniensis:0.0268):0.07085):0.10069,(T_sp_NML_06:0.09622,(T_morbirosei:0.12975,T_ptyseo
s:0.05163):0.06):0.10971):0.02272):0.02953):0.03621):0.05637,((P_s_indologenes:0.0,P_s_stewartii:0.0):0.00532,(P_all
ii:0.01269,P_ananatis:0.00508):0.00238):0.02824):0.02676,(P_brenneri:0.0,P_conspicua:0.0):0.00987):0.00523):0.02312)
:0.00253,P_sp_aB:5.4E-4,(P_anthophila:0.01814,P_vagans:0.0077):0.00243);
[301] tree 't301'=[&R] ((P_brenneri:0.01812,P_conspicua:5.5E-
4):0.00909,(((P_sp_GM01:0.01008,(P_rodasii:0.01164,P_rwandensis:5.4E-
4):0.03016):0.01827,(P_dispersa:0.01446,(P_eucrina:0.03127,P_wallisii:0.01543):0.00752):0.01346):0.00717,((T_morbiro
sei:0.02027,(T_sp_NML_06:0.02557,T_ptyseos:0.03105):0.02116):0.10546,(P_sp_At-
9b:0.00908,(P_septica:0.04077,(P_sp_A4:0.04162,P_cypripedii:0.00306):0.00306):0.00285):0.00766):0.0048):0.01265,(((P
_s_indologenes:5.5E-4,P_s_stewartii:0.00298):0.01628,(P_ananatis:5.5E-
4,P_allii:0.0276):0.01095):0.01969,(E_billingiae:0.05921,(E_pyrifoliae:0.025,E_tasmaniensis:0.01483):0.02589):0.0236
2):0.02344):0.00641):0.00903,(P_sp_aB:5.4E-
4,(P_agglomerans:0.00922,P_vagans:0.00271):0.00601):0.01166,(P_anthophila:0.02136,P_deleyi:0.00601):5.5E-4);
[302] tree 't302'=[&R] ((P_brenneri:0.01622,P_conspicua:0.02578):0.02167,(P_deleyi:0.02895,((P_s_indologenes:5.3E-
4,P_s_stewartii:0.00294):0.03839,(P_allii:0.02552,P_ananatis:0.03117):0.02996):0.05726,(P_septica:0.06187,((P_sp_At-
9b:0.02271,P_cypripedii:0.03745):0.04471,((P_sp_GM01:0.06346,(P_rodasii:0.02239,P_rwandensis:0.03456):0.02528):0.022
19,(P_wallisii:0.05116,(P_eucrina:0.12278,P_dispersa:0.03213):0.01347):0.00851):0.02677):0.04311,((T_morbirosei:0.13
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54,(T\_ptyseos:0.06012,T\_sp\_NML\_06:0.12245):0.04391):0.16639,(P\_sp\_A4:0.30566,(E\_billingiae:0.08523,(E\_pyriifoliae:0.05437,E\_tasmaniensis:0.02619):0.121):0.0563):0.04001):0.03072):0.02483):0.03669):0.04965):0.01033):0.01103,(P\_anthophila:0.01952,P\_vagans:0.0291):0.00474,(P\_sp\_aB:0.04586,P\_agglomerans:0.00307):0.00264);

[303] tree 't303'=[&R]  
(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.05335,(P\_allii:0.05296,P\_ananatis:0.01131):0.0275):0.0469,(P\_sp\_A4:0.17163,((E\_billingiae:0.10523,(E\_pyriifoliae:0.05891,E\_tasmaniensis:0.04014):0.12273):0.13741,(T\_sp\_NML\_06:0.25306,(T\_ptyseos:0.19623,T\_morbirosei:0.24111):0.05102):0.16501):0.07347):0.01737,(((P\_brenneri:0.02847,P\_conspicua:0.03751):0.03647,(P\_anthophila:0.01989,((P\_agglomerans:0.02092,P\_vagans:0.01534):0.00889,(P\_sp\_aB:0.01298,P\_deleyi:0.0561):5.5E-4):0.0199):0.03189):0.0449,(P\_septica:0.0751,(P\_dispersa:0.01593,(P\_wallisii:0.01885,((P\_rodasii:0.01444,P\_rwandensis:0.00871):0.03656,(P\_sp\_GM01:0.03081,(P\_sp\_At-9b:0.01073,P\_cyprapedii:0.0071):0.07677):0.02121):0.01926,P\_eucrina:0.12773):0.0279):0.04301):0.02899):0.05054):0.00877);

[304] tree 't304'=[&R]  
(P\_deleyi:0.00908,((P\_brenneri:0.0,P\_conspicua:0.0):0.01384,((P\_dispersa:0.01399,(P\_eucrina:0.01356,((P\_wallisii:5.4E-4,(P\_sp\_At-9b:0.00884,P\_cyprapedii:0.01143):0.01613):0.00917,(P\_rwandensis:0.00437,(P\_rodasii:0.00456,P\_sp\_GM01:0.00467):0.00483):0.01412):0.00453):0.00473):0.01331,(P\_septica:0.01305,(P\_sp\_A4:0.04995,((T\_morbirosei:0.0415,(T\_ptyseos:0.03281,T\_sp\_NML\_06:0.04049):0.01751):0.04799,(E\_billingiae:0.03847,(E\_pyriifoliae:0.00547,E\_tasmaniensis:0.02641):0.03348):0.04203):0.02429):0.01196):0.01413):0.01017):0.00437,(P\_anthophila:5.5E-4,((P\_agglomerans:0.00907,((P\_allii:0.0,P\_ananatis:0.0):5.5E-4,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.0045):0.00454):0.0045,(P\_vagans:0.00448,P\_sp\_aB:5.5E-4):0.00905):5.5E-4):5.4E-4);

[305] tree 't305'=[&R]  
(((P\_sp\_A4:0.09327,(((P\_allii:0.01256,(P\_ananatis:0.00503,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.02827):5.8E-4):0.03792,((P\_brenneri:6.0E-4,P\_conspicua:0.01293):0.00967,(P\_anthophila:0.01474,((P\_agglomerans:0.0177,P\_sp\_aB:5.3E-4):0.00702,(P\_deleyi:0.04593,P\_vagans:0.00569):5.4E-4):0.01744):0.01647):0.02641):0.06868,P\_septica:0.04233):0.0248,((E\_billingiae:0.15616,(E\_pyriifoliae:0.03631,E\_tasmaniensis:0.05219):0.11896):0.12149,(T\_morbirosei:0.10589,(T\_sp\_NML\_06:0.112,T\_ptyseos:0.08206):0.03782):0.08908):0.07661):8.7E-4):0.02742,(P\_sp\_At-9b:0.02775,P\_cyprapedii:0.03573):0.05389):0.02537,((P\_rodasii:0.01311,P\_rwandensis:0.03002):0.02107,P\_sp\_GM01:0.02731):0.01809,(P\_dispersa:0.03908,(P\_eucrina:0.04123,P\_wallisii:0.02621):0.01713):5.2E-4);

[306] tree 't306'=[&R]  
((P\_ananatis:0.00903,(P\_allii:0.00223,(P\_s\_indologenes:0.00254,P\_s\_stewartii:0.00297):0.03107):0.00873):0.05331,((P\_eucrina:0.08321,((P\_dispersa:0.02564,P\_wallisii:0.03232):0.01376,((P\_sp\_At-9b:0.00264,P\_cyprapedii:0.01676):0.00635,(P\_sp\_GM01:0.03594,(P\_rodasii:0.03829,P\_rwandensis:0.01434):0.01767):0.00522):0.00288):0.02305):0.01989,((E\_billingiae:0.07667,(E\_pyriifoliae:0.04675,E\_tasmaniensis:0.05714):0.06702):0.0412,P\_septica:0.0359):0.01011):0.00726,((P\_sp\_A4:0.06266,(T\_sp\_NML\_06:0.08889,(T\_morbirosei:0.08668,T\_ptyseos:0.09236):0.0

4289):0.09998):0.03879,((P\_brenneri:0.01386,P\_conspicua:0.00809):0.01465,((P\_agglomerans:0.00527,(P\_vagans:0.01095,P\_sp\_aB:0.02009):0.00689):0.00902,(P\_anthophila:0.02232,P\_deleyi:0.02983):0.00945):0.00594):0.0319):0.01335);

[307] tree 't307'=[&R] ((P\_ananatis:5.3E-4,(P\_s\_stewartii:0.00568,P\_s\_indologenes:5.5E-4):0.00572):0.0057,((P\_agglomerans:0.0,P\_vagans:0.0,P\_deleyi:0.0,P\_anthophila:0.0,P\_brenneri:0.0,P\_conspicua:0.0,P\_sp\_aB:0.0):5.4E-4,((P\_cyprapedii:0.0,P\_sp\_At-9b:0.0):5.3E-4,((P\_dispersa:0.0,P\_wallisii:0.0):5.5E-4,(P\_rodasii:0.00572,(P\_eucrina:0.0,P\_rwandensis:0.0):0.00574):5.4E-4):0.00578):0.00571):5.4E-4,((P\_allii:5.3E-4,((P\_sp\_A4:5.3E-4,((T\_morbirosei:0.0,T\_sp\_NML\_06:0.0):5.5E-4,T\_ptyseos:0.00567):0.03488):0.01141,((P\_sp\_GM01:7.9E-4,E\_billingiae:0.00525):0.00543,(E\_tasmaniensis:0.0057,E\_pyriifoliae:0.00569):5.4E-4):5.3E-4):0.0057):0.01135,P\_septica:5.4E-4):0.00575);

[308] tree 't308'=[&R] (P\_eucrina:0.13052,(P\_wallisii:0.06985,P\_dispersa:0.03152):0.01324,((P\_sp\_GM01:0.04625,((P\_sp\_At-9b:0.05807,P\_cyprapedii:0.04195):0.06647,((P\_sp\_A4:0.19429,((T\_morbirosei:0.15572,(T\_sp\_NML\_06:0.33246,T\_ptyseos:0.13211):0.11655):0.43942,(E\_billingiae:0.18042,(E\_pyriifoliae:0.03211,E\_tasmaniensis:0.03977):0.13867):0.16498):0.05144):0.04433,(P\_septica:0.17266,((P\_conspicua:0.04798,(P\_brenneri:0.01779,((P\_agglomerans:0.02172,(P\_sp\_aB:0.01361,P\_vagans:0.00336):0.00647):0.00585,(P\_deleyi:0.05819,P\_anthophila:0.04938):0.0134):0.05706):0.01882):0.06773,((P\_s\_indologenes:0.01015,P\_s\_stewartii:5.5E-4):0.08268,(P\_allii:0.03537,P\_ananatis:0.05263):0.02243):0.08873):0.04308):0.03348):0.10076):0.02183):0.02294,(P\_rwandensis:0.04805,P\_rodasii:0.05373):0.03857):0.01804);

[309] tree 't309'=[&R] ((P\_agglomerans:0.0073,(P\_deleyi:0.00993,P\_anthophila:0.01248):0.00649):0.00215,P\_vagans:0.00249,(((P\_brenneri:0.00543,P\_conspicua:0.01365):0.01525,(((P\_s\_indologenes:0.00242,P\_s\_stewartii:0.00241):0.01505,(P\_allii:0.00703,P\_ananatis:0.00895):0.00835):0.04182,(((T\_morbirosei:0.06142,(T\_sp\_NML\_06:0.09607,T\_ptyseos:0.05646):0.03617):0.16226,(E\_billingiae:0.06275,(E\_pyriifoliae:0.03483,E\_tasmaniensis:0.02967):0.06488):0.05086):0.01588,(P\_septica:0.04887,(P\_sp\_A4:0.08201,((P\_sp\_At-9b:0.02419,P\_cyprapedii:0.01165):0.02324,((P\_rodasii:0.02345,P\_rwandensis:0.02403):0.00889,(P\_sp\_GM01:0.0276,(P\_dispersa:0.01911,(P\_wallisii:0.01244,P\_eucrina:0.03837):0.00419):0.01116):0.009):0.00833):0.02048):0.02401):0.01897):0.01455):0.01378):0.01147,P\_sp\_aB:0.00795):0.00331);

[310] tree 't310'=[&R] (P\_dispersa:0.05422,((P\_rwandensis:0.14279,P\_rodasii:0.02607):0.01651,(P\_wallisii:0.04999,P\_sp\_GM01:0.03578):9.3E-4):0.00769,((P\_eucrina:0.12115,((P\_sp\_A4:0.23822,((T\_morbirosei:0.12194,(T\_ptyseos:0.0968,T\_sp\_NML\_06:0.12847):0.04419):0.41268,(E\_billingiae:0.12073,(E\_pyriifoliae:0.10365,E\_tasmaniensis:0.10526):0.17361):0.085):0.03806):0.04745,(P\_septica:0.11626,((P\_allii:5.4E-4,((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00242):0.05225,P\_ananatis:0.02248):0.00977):0.12617,((P\_brenneri:0.01505,P\_conspicua:0.02141):0.01383,(P\_anthophila:0.03096,((P\_deleyi:0.02546,P\_sp\_aB:0.02201):0.01252,P\_vagans:0.02209):0.00286,P\_agglomerans:5.3E-4):0.01888):0.00892):0.04787):0.03905):0.04175):0.01746):0.02083,(P\_sp\_At-9b:0.02977,P\_cyprapedii:0.02935):0.02098):0.01499);

[311] tree 't311'=[&R] ((P\_sp\_At-9b:0.00804,P\_cyprapedii:0.04575):0.05416,((E\_billingiae:0.11872,(E\_pyriifoliae:0.02587,E\_tasmaniensis:0.09536):0.07098):0.04401,(((P\_deleyi:0.0582,(P\_vagans:0.02929,(P\_agglomerans:0.00717,(P\_anthophila:0.02191,P\_sp\_aB:0.00714):0.007

31):5.4E-4):0.01729):0.02586,(P\_brenneri:0.02002,P\_conspicua:0.00212):0.01103):0.02842,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.03566,(P\_allii:0.01458,P\_ananatis:0.01627):0.02664):0.02816):0.02472,(P\_sp\_A4:0.07177,(T\_sp\_NML\_06:0.10059,(T\_morbirosei:0.07508,T\_ptyseos:0.10381):0.04697):0.18251):0.02566):0.01717):0.00216,(P\_septica:0.07526,(P\_eucrinea:0.05723,(P\_dispersa:0.05133,P\_wallisii:0.01619):0.00825,(P\_rwandensis:0.04893,(P\_rodasii:0.04152,P\_sp\_GM01:0.0284):0.04385):0.01159):0.02637):0.02748):0.00748);

[312] tree 't312'=[&R]  
(P\_wallisii:0.03988,(P\_sp\_GM01:0.0226,(P\_rodasii:0.0169,P\_rwandensis:0.01088):0.01118):0.01129,((P\_eucrinea:0.03795,(P\_septica:0.02719,(((P\_allii:0.1261,P\_ananatis:0.00206):0.03132,(P\_s\_indologenes:5.4E-4,P\_s\_stewartii:0.00517):0.01161):0.06435,((P\_brenneri:5.4E-4,P\_conspicua:0.00537):5.5E-4,((P\_anthophila:0.0054,(P\_sp\_aB:5.5E-4,P\_vagans:0.01626):0.01087,P\_agglomerans:0.00542):0.00551):0.00541,P\_deleyi:0.03877):0.01027):0.022):0.05719):0.02943,(P\_sp\_A4:0.12502,((T\_morbirosei:0.04502,(T\_ptyseos:0.09827,T\_sp\_NML\_06:0.04813):0.04448):0.1222,(E\_billingiae:0.06164,(E\_pyriifoliae:0.04032,E\_tasmaniensis:0.03664):0.03821):0.07658):0.0252):0.02411):0.05732):0.01898,(P\_dispersa:0.02653,(P\_sp\_At-9b:5.5E-4,P\_cyprapedii:0.02807):0.0082):0.01522):5.4E-4);

[313] tree 't313'=[&R] ((P\_vagans:0.00347,P\_anthophila:0.00347):5.4E-4,(P\_deleyi:0.01797,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.0233,(P\_allii:0.00718,P\_ananatis:0.00341):0.0175):0.02712,(P\_septica:0.028,(((P\_sp\_GM01:0.02205,(P\_dispersa:0.02127,(P\_rodasii:0.00305,P\_rwandensis:0.01006):0.00461):0.0037):0.00379,(P\_wallisii:0.00696,P\_eucrinea:0.04036):0.00364):0.00469,(P\_sp\_At-9b:0.0216,P\_cyprapedii:0.0071):0.00646):0.03881,((E\_billingiae:0.05928,(E\_pyriifoliae:0.01673,E\_tasmaniensis:0.03288):0.02493):0.02508,(P\_sp\_A4:0.07181,(T\_morbirosei:0.04505,(T\_ptyseos:0.03641,T\_sp\_NML\_06:0.0679):0.03338):0.07576):0.01148):0.00371):0.01888):0.01696):0.01391,P\_sp\_aB:0.00901):0.00994):0.00308,((P\_brenneri:0.00706,P\_conspicua:0.01054):0.01402,P\_agglomerans:0.00349):0.00699);

[314] tree 't314'=[&R]  
(P\_agglomerans:0.01379,P\_anthophila:0.00159):0.00409,(P\_deleyi:0.00946,(P\_sp\_aB:0.0,P\_vagans:0.0):5.5E-4):0.00464,(((P\_septica:0.03058,(P\_sp\_A4:0.04002,(P\_rodasii:5.5E-4,P\_rwandensis:0.03009):0.28989):0.03134):0.01324,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00376):0.00604,(P\_allii:0.0,P\_ananatis:0.0):5.5E-4):0.01961,((P\_eucrinea:0.01222,((E\_billingiae:0.04898,(E\_pyriifoliae:0.01046,E\_tasmaniensis:0.01907):0.05476):0.02941,(T\_sp\_NML\_06:0.02326,(T\_ptyseos:0.06785,T\_morbirosei:0.04672):0.03743):0.10049):0.02873):0.0095,((P\_sp\_At-9b:0.03307,P\_cyprapedii:0.0207):0.02327,(P\_sp\_GM01:0.01721,(P\_dispersa:0.0339,P\_wallisii:5.3E-4):0.0117):0.0106):0.02202):0.02806):0.00476,(P\_brenneri:0.00962,P\_conspicua:0.0298):0.0049):0.00478);

[315] tree 't315'=[&R]  
(P\_deleyi:0.00945,(P\_conspicua:0.0,P\_vagans:0.0,P\_anthophila:0.0,P\_agglomerans:0.0,P\_sp\_aB:0.0):5.5E-4,(((P\_dispersa:0.0,P\_wallisii:0.0,P\_rwandensis:0.0,P\_rodasii:0.0,P\_cyprapedii:0.0,P\_sp\_At-9b:0.0):5.5E-4,((T\_ptyseos:5.4E-4,(T\_sp\_NML\_06:0.0047,T\_morbirosei:5.5E-4):0.00472):0.02846,P\_eucrinea:5.3E-4):0.00472):0.00472,(P\_sp\_GM01:5.5E-4,((P\_allii:0.0,P\_ananatis:0.0,P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00946,(((P\_sp\_A4:0.01141,E\_billingiae:0.0075

):0.00473,(E\_tasmaniensis:5.4E-4,E\_pyrifoliae:0.00945):0.01232):0.00664,P\_septica:5.5E-4):0.00471):5.3E-4):5.5E-4):0.00471,P\_brenneri:0.01458):5.5E-4);

[316] tree 't316'=[&R] (P\_rodasii:0.0042,(E\_billingiae:0.0,E\_pyrifoliae:0.0,E\_tasmaniensis:0.0,P\_sp\_At-9b:0.0,P\_allii:0.0,P\_ananatis:0.0,P\_brenneri:0.0,P\_conspicua:0.0,P\_cyprapedii:0.0,P\_dispersa:0.0,P\_eucrina:0.0,P\_rwandensis:0.0,P\_septica:0.0,P\_sp\_A4:0.0,P\_sp\_GM01:0.0,P\_s\_indologenes:0.0,P\_s\_stewartii:0.0,P\_wallisii:0.0):5.5E-4,((T\_morbirosei:0.0,T\_ptyseos:0.0,T\_sp\_NML\_06:0.0):0.0042,(P\_agglomerans:0.0,P\_vagans:0.0,P\_deleyi:0.0,P\_anthophila:0.0,P\_sp\_aB:0.0):0.00419):5.5E-4);

[317] tree 't317'=[&R] ((P\_vagans:0.00668,(P\_deleyi:0.00679,((P\_brenneri:5.4E-4,(((E\_billingiae:0.1295,(E\_pyrifoliae:0.01334,E\_tasmaniensis:0.01386):0.01703):0.0447,(T\_morbirosei:0.09517,(T\_sp\_NML\_06:0.14195,T\_ptyseos:0.00441):0.04677):0.08287):0.02377,((P\_septica:0.02907,(P\_sp\_A4:0.02617,((P\_cyprapedii:0.0235,((P\_dispersa:9.6E-4,(P\_wallisii:0.01997,P\_eucrina:0.02184):0.01148):0.01003,(P\_rwandensis:0.01564,(P\_rodasii:0.01771,P\_sp\_GM01:0.0278):0.00771):0.02179):0.01334):0.00964,P\_sp\_At-9b:5.5E-4):0.31524):0.04255):5.5E-4,((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00637):0.01096,(P\_allii:0.00636,P\_ananatis:5.5E-4):0.02985):0.04093):0.00569):0.02033):0.00667,P\_conspicua:0.00679):0.02202):0.00655):5.4E-4,P\_sp\_aB:5.5E-4,(P\_anthophila:0.00668,P\_agglomerans:0.00665):5.5E-4);

[318] tree 't318'=[&R] (((P\_deleyi:0.01537,(P\_anthophila:0.00783,(((P\_s\_indologenes:5.4E-4,P\_s\_stewartii:0.00255):0.00527,(P\_allii:0.00774,P\_ananatis:0.00512):0.00239):0.00916,(P\_septica:0.0271,((P\_sp\_A4:0.04636,((P\_sp\_GM01:0.01602,P\_eucrina:0.02303):0.00251,(((P\_sp\_At-9b:5.4E-4,P\_cyprapedii:0.00487):0.01533,(P\_dispersa:0.01514,P\_wallisii:0.00279):0.00583):0.00817,(P\_rodasii:0.03545,P\_rwandensis:0.00598):0.01267):0.00962):0.00363):0.00998,(E\_billingiae:0.05075,(E\_pyrifoliae:0.01695,E\_tasmaniensis:0.00624):0.01396):0.03182,(T\_morbirosei:0.03575,(T\_sp\_NML\_06:0.04297,T\_ptyseos:0.03398):0.02036):0.05179):0.00142):0.00753):0.01205):0.00681):0.00416):0.00329,(P\_brenneri:5.5E-4,P\_conspicua:0.00251):5.4E-4):0.00251,P\_sp\_aB:5.5E-4,(P\_agglomerans:0.00761,P\_vagans:0.00502):5.5E-4);

[319] tree 't319'=[&R] (((P\_eucrina:0.15407,P\_dispersa:0.07621):0.01815,P\_wallisii:0.11014):0.01539,(P\_rodasii:0.08478,P\_sp\_GM01:0.06566):0.01724):0.02602,P\_rwandensis:0.08225,((P\_sp\_At-9b:0.05714,P\_cyprapedii:0.03109):0.04612,((P\_sp\_A4:0.22941,((T\_sp\_NML\_06:0.35491,(T\_morbirosei:0.24414,T\_ptyseos:0.24646):0.03632):0.27049,(E\_billingiae:0.15874,(E\_pyrifoliae:0.04245,E\_tasmaniensis:0.02044):0.17674):0.12388):0.05068):0.05011,(P\_septica:0.16068,(((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00824):0.07975,(P\_allii:0.05087,P\_ananatis:0.04879):0.04595):0.1402,((P\_brenneri:0.05217,P\_conspicua:0.02028):0.05504,(P\_deleyi:0.07424,((P\_sp\_aB:0.05683,P\_agglomerans:0.02777):0.00717,(P\_anthophila:0.0489,P\_vagans:0.03174):0.01556):0.01724):0.0342):0.06667):0.05673):0.04061):0.05736):0.03225);

[320] tree 't320'=[&R] (P\_brenneri:5.5E-4,(((P\_sp\_At-9b:5.4E-4,(P\_rwandensis:5.5E-4,(P\_sp\_GM01:0.02616,P\_rodasii:5.4E-4):0.00522):0.0107):0.00468,(P\_cyprapedii:5.3E-4,((P\_eucrina:0.01036,P\_wallisii:5.5E-4):0.0106,(P\_dispersa:0.01023,((T\_ptyseos:0.03528,(T\_sp\_NML\_06:0.04535,T\_morbirosei:0.02694):0.01448):0.04408,((E\_pyrifoliae:0.0,E\_tasmaniensis:0.0):0.02701,(P\_sp\_A4:0.04846,E\_billingiae:0.03407):0.01039):0.01611):0.02625):5.5E-4):0.01059):7.1E-4):0.01561,((P\_allii:0.00523,P\_ananatis:5.5E-4):5.4E-

4,((P\_s\_stewartii:0.00519,P\_s\_indologenes:5.5E-4):5.4E-4,P\_septica:0.02108):0.00523):0.01045):5.4E-4,(P\_conspicua:0.00517,(P\_deleyi:0.0,P\_anthophila:0.0):5.5E-4),(P\_agglomerans:0.0,P\_vagans:0.0):0.00524,P\_sp\_aB:0.00523):5.5E-4):0.00528):5.5E-4);

[321] tree 't321'=[&R] (P\_rodasii:5.4E-4,(P\_wallisii:5.3E-4),(P\_eucrina:0.03259,(P\_dispersa:0.00829,(((P\_brenneri:0.00778,P\_conspicua:5.5E-4):5.5E-4),(T\_morbirosei:0.03234,(T\_sp\_NML\_06:0.06078,T\_ptyseos:0.02941):0.03314):0.17104):0.01532,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00778,(P\_allii:5.3E-4,P\_ananatis:0.00352):0.0078):0.00784,(P\_vagans:5.5E-4),(P\_deleyi:0.00389,(P\_anthophila:0.00781,P\_sp\_aB:0.00387):0.0039):5.5E-4):5.4E-4):0.00389,P\_agglomerans:0.00386):5.4E-4):0.02386,((P\_cyprapedii:0.0119,P\_sp\_At-9b:5.3E-4):0.00585,P\_septica:0.05601):0.00652):0.01026,(P\_sp\_A4:0.02568,(E\_billingiae:0.04262,(E\_pyrifoliae:0.02759,E\_tasmaniensis:0.00392):0.04567):0.03149):0.01935):0.00874):0.00489):0.00645):0.00387,(P\_sp\_GM01:0.00949,P\_rwandensis:0.00282):0.00319);

[322] tree 't322'=[&R] (P\_dispersa:0.03132,(P\_eucrina:0.08914,P\_wallisii:0.00679):0.01033,((P\_rodasii:0.01678,P\_rwandensis:0.02222):0.02437,(P\_sp\_GM01:0.06215,((P\_sp\_At-9b:0.01461,P\_cyprapedii:0.00851):0.05033,((P\_sp\_A4:0.1333,P\_septica:0.09518):0.02849,(((T\_morbirosei:0.09881,(T\_sp\_NML\_06:0.08795,T\_ptyseos:0.08558):0.04217):0.19335,(E\_billingiae:0.10587,(E\_pyrifoliae:0.04245,E\_tasmaniensis:0.03364):0.13826):0.09225):0.06371,(((P\_s\_indologenes:0.00385,P\_s\_stewartii:0.0038):0.02006,(P\_allii:0.01179,P\_ananatis:0.00752):0.02386):0.02739,(P\_anthophila:0.01089,(P\_deleyi:0.01814,(P\_agglomerans:0.01147,(P\_vagans:0.00369,P\_sp\_aB:0.01139):0.00379):0.02131):0.00836):0.04932,(P\_brenneri:0.0226,P\_conspicua:5.8E-4):0.01407):0.01788):0.05383):0.03474):0.02759):0.02741):0.01018):0.00772);

[323] tree 't323'=[&R] (P\_agglomerans:5.5E-4,(P\_vagans:0.0197,(((T\_morbirosei:0.04791,(T\_ptyseos:0.03653,T\_sp\_NML\_06:0.08229):0.06279):0.26307,(E\_billingiae:0.23679,(E\_pyrifoliae:0.06051,E\_tasmaniensis:0.03653):0.05715):0.12342):0.09519,(P\_septica:0.10119,((P\_rodasii:0.05545,P\_rwandensis:0.02748):0.02518,((P\_dispersa:0.07557,(P\_eucrina:0.06344,P\_wallisii:0.04116):0.00753):0.03388,(P\_sp\_GM01:0.04906,(P\_sp\_At-9b:0.00998,P\_cyprapedii:0.05111):0.02847):0.01017):0.02136):0.05334):0.03987):0.02755,(P\_sp\_A4:0.09932,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.04068,(P\_allii:0.02563,P\_ananatis:0.01687):0.07039):0.14684):0.02092):0.05008,(P\_conspicua:0.04002,P\_brenneri:0.01975):5.5E-4):0.05073):0.01923,(P\_anthophila:0.04841,(P\_deleyi:0.0094,P\_sp\_aB:0.02012):0.00983):5.4E-4);

[324] tree 't324'=[&R] (P\_wallisii:5.5E-4,(P\_eucrina:0.01218,(((P\_septica:0.01633,P\_cyprapedii:0.01223):5.4E-4,P\_sp\_At-9b:5.5E-4):0.00811,P\_dispersa:5.4E-4):5.4E-4):0.00806,((P\_sp\_GM01:0.01046,(((P\_deleyi:0.0,P\_anthophila:0.0):0.00402,P\_sp\_aB:5.0E-4):5.4E-4),(P\_brenneri:0.0,P\_conspicua:0.0):0.00806,(P\_agglomerans:0.0,P\_vagans:0.0):5.5E-4):0.00402):0.01675,((P\_rodasii:0.00804,(P\_rwandensis:5.4E-4,(P\_allii:0.00804,P\_ananatis:5.5E-4):0.00401):5.3E-4):0.00793,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00806,P\_sp\_A4:0.004):5.5E-4):0.00925):0.00655):0.00548,(((E\_billingiae:0.0207,(T\_morbirosei:5.5E-4),(T\_sp\_NML\_06:0.02072,T\_ptyseos:0.01215):0.02101):0.02503):0.0077,E\_tasmaniensis:0.00353):0.0048,E\_pyrifoliae:5.3E-4):0.01187):5.5E-4);

[325] tree 't325'=[&R] (P\_sp\_aB:0.02085,P\_deleyi:0.01421,(((P\_septica:0.05429,(((P\_sp\_At-9b:0.02237,P\_cypripedii:0.01542):0.02276,(P\_dispersa:0.00836,((P\_eucrina:0.06584,P\_wallisii:0.00479):0.00994,(P\_sp\_GM01:0.01656,(P\_rodasii:0.01921,P\_rwandensis:0.00551):0.01857):0.02013):0.00823):0.02084):0.03241,(((P\_s\_indologenes:0.00203,P\_s\_stewartii:0.002):0.01863,(P\_allii:0.00811,P\_ananatis:0.00199):0.01406):0.0394,((T\_morbirosei:0.05055,(T\_ptyseos:0.084,T\_sp\_NML\_06:0.06109):0.01895):0.10574,(P\_sp\_A4:0.05587,(E\_billingiae:0.0412,(E\_pyriifoliae:0.02425,E\_tasmaniensis:0.0237):0.06383):0.03179):0.0181):0.01821):0.01232):0.01434):0.02341,(P\_brenneri:0.00395,P\_conspicua:0.00823):0.00225):0.01306,(P\_anthophila:0.00414,(P\_agglomerans:0.00199,P\_vagans:0.01023):0.00403):0.00346):0.00824);

[326] tree 't326'=[&R] (P\_vagans:5.5E-4,(P\_deleyi:0.02376,P\_sp\_aB:0.00573):0.00277,((((P\_septica:0.03583,((P\_sp\_At-9b:0.00828,P\_cypripedii:0.0164):0.01025,(P\_dispersa:0.01568,((P\_eucrina:0.03007,P\_wallisii:0.00277):0.01199,(P\_sp\_GM01:0.01546,(P\_rwandensis:0.01314,P\_rodasii:0.00378):0.00523):0.01044):0.00411):0.00817):0.00578):0.01124,(P\_sp\_A4:0.0564,((T\_morbirosei:0.03709,(T\_ptyseos:0.03217,T\_sp\_NML\_06:0.02905):0.01471):0.0487,(E\_billingiae:0.06069,(E\_pyriifoliae:0.01283,E\_tasmaniensis:0.01565):0.05773):0.04209):0.01873):0.01113):0.02478,((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00555):0.01045,(P\_ananatis:0.01148,P\_allii:0.01413):0.00352):0.01703):0.02224,(P\_brenneri:0.01339,P\_conspicua:0.00972):0.011):0.00794,(P\_anthophila:0.01694,P\_agglomerans:0.00838):5.4E-4):0.00566);

[327] tree 't327'=[&R] ((P\_dispersa:0.01594,(P\_wallisii:0.01752,P\_eucrina:0.01332):0.00923):0.00881,(P\_rwandensis:0.00861,(P\_sp\_GM01:0.0082,P\_rodasii:5.4E-4):0.01277):0.0056,(P\_sp\_At-9b:5.5E-4,(P\_cypripedii:0.02604,((((P\_anthophila:0.01664,P\_agglomerans:5.4E-4):0.01246,(P\_brenneri:0.00416,P\_conspicua:5.4E-4):5.4E-4):0.00398,(P\_vagans:0.0041,(P\_deleyi:0.00413,P\_sp\_aB:5.5E-4):5.3E-4):0.00435):0.031,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01437,(P\_allii:0.00785,P\_ananatis:0.01332):0.02141):0.01092):0.02392,(P\_septica:0.01617,(P\_sp\_A4:0.06183,((T\_morbirosei:0.046,(T\_ptyseos:0.07277,T\_sp\_NML\_06:0.08147):0.05014):0.12024,(E\_billingiae:0.01468,(E\_pyriifoliae:0.03363,E\_tasmaniensis:0.01644):0.06336):0.04031):0.04556):0.04095):0.01781):0.02133):0.01317):0.01563);

[328] tree 't328'=[&R] (P\_sp\_aB:0.01198,P\_agglomerans:0.00605,(P\_vagans:0.01185,((P\_conspicua:0.00592,P\_brenneri:0.00588):0.00817,(P\_deleyi:0.00832,(P\_anthophila:0.01217,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.02229,(P\_allii:0.01191,P\_ananatis:0.01209):0.02019):0.03037,(P\_sp\_A4:0.15092,(((P\_eucrina:0.06346,((P\_wallisii:0.02929,P\_dispersa:0.03407):0.01555,(P\_rodasii:0.01216,P\_rwandensis:0.01802):0.00711):0.01298,(P\_sp\_GM01:0.02482,(P\_sp\_At-9b:0.02409,P\_cypripedii:0.01813):0.02278):0.00578):0.00909):0.02727,((E\_billingiae:0.04933,(E\_pyriifoliae:0.02754,E\_tasmaniensis:0.02122):0.11026):0.12878,(T\_ptyseos:0.0711,(T\_morbirosei:0.0414,T\_sp\_NML\_06:0.14742):0.02125):0.06924):0.04469):0.01821,P\_septica:0.03482):0.00284):0.00674):0.02072):0.0095):0.00976):0.01217):0.00578);

[329] tree 't329'=[&R] ((P\_eucrina:0.05365,(P\_sp\_GM01:0.01232,(P\_rodasii:0.01231,P\_rwandensis:0.00969):0.0079):0.0072):0.00485,(P\_wallisii:0.00524,((P\_sp\_A4:0.10589,((T\_morbirosei:0.09412,(T\_sp\_NML\_06:0.12925,T\_ptyseos:0.07251):0.02862):0.18209,(E\_billingiae:0.10059,(E\_pyriifoliae:0.02687,E\_tasmaniensis:0.03935):0.07741):0.03962):0.02878):0.03838,(P\_septica:0.0465,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.04261,(P\_allii:0.00286,P\_ananatis:0.00891):0.00389):0.03297,((P\_conspicua:0.01662,(P\_agglomerans:0.0043,(P\_vagans:0.01613,P\_deleyi:0.01316):0.00557,(P\_sp\_aB:0.02069,P\_anthophila:0.03079):0.004



57):0.01027):0.00976):0.00609,P\_brenneri:0.00895):0.02642):0.02014):0.01934):0.0321):0.00287,(P\_dispersa:0.01432,(P\_sp\_At-9b:0.0101,P\_cyprapedii:0.0104):0.02077):0.00706);

[330] tree 't330'=[&R] ((P\_sp\_At-9b:0.05437,P\_cyprapedii:0.04544):0.10663,(P\_rodasii:5.4E-4,P\_rwandensis:0.02632):0.07929):0.05951,(((P\_ananatis:0.06751,P\_allii:0.07933):0.09288,P\_s\_stewartii:0.00224):0.01518,P\_s\_indologenes:5.4E-4):0.1252,P\_dispersa:0.08389):0.02432,((P\_sp\_A4:0.16856,((P\_brenneri:0.01549,((P\_deleyi:0.08474,(P\_sp\_aB:0.06215,P\_agglomerans:5.4E-4):0.01664):0.01635,(P\_vagans:5.4E-4,P\_anthophila:0.12476):0.02785):0.11696):0.04364,P\_conspicua:0.01271):0.24688,((T\_morbirosei:0.64536,((T\_ptyseos:0.10949,T\_sp\_NML\_06:0.10182):0.42171,(P\_sp\_GM01:0.09889,(P\_eucrina:0.1313,P\_septica:0.07463):0.05442):0.32458):0.21963):0.52453,(E\_billingiae:0.2788,(E\_pyriifoliae:0.0345,E\_tasmaniensis:0.09844):0.14375):0.08946):0.06957):0.07895):0.12941,P\_wallisii:0.11514):0.01534);

[331] tree 't331'=[&R] ((P\_ananatis:5.4E-4,(P\_allii:5.5E-4,(P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.01353):0.05666):0.01353):0.13609,(P\_sp\_GM01:0.06568,(E\_billingiae:0.06831,(E\_pyriifoliae:0.04577,E\_tasmaniensis:0.05561):0.22064):0.07284):0.0518):0.02982,(((P\_septica:0.11574,(P\_sp\_A4:0.25516,(P\_sp\_At-9b:0.0707,P\_cyprapedii:5.4E-4):0.0569):0.03051):0.04823,(P\_rwandensis:0.10008,(P\_dispersa:0.05593,P\_wallisii:0.05725):0.0285):0.02096):0.03962,P\_rodasii:0.03191):0.0259,(T\_sp\_NML\_06:0.6643,(T\_ptyseos:0.44199,T\_morbirosei:0.25357):0.18001):0.28565):0.02115,(P\_eucrina:0.26165,(P\_deleyi:0.06394,(P\_anthophila:5.5E-4,((P\_agglomerans:0.0262,P\_vagans:0.01304):5.5E-4,(P\_sp\_aB:0.02668,(P\_brenneri:0.01277,P\_conspicua:0.01356):0.0539):0.01297):0.03927):0.02351):0.09947):0.04882);

[332] tree 't332'=[&R] ((P\_sp\_aB:0.01737,P\_vagans:0.01159):0.00843,P\_agglomerans:0.02691,((P\_deleyi:0.06145,((P\_s\_indologenes:0.00563,P\_s\_stewartii:0.00595):0.03135,(P\_allii:0.01627,P\_ananatis:0.03272):0.02014):0.08573,((P\_brenneri:0.02382,P\_conspicua:0.00687):0.02125,(((E\_billingiae:0.19571,(E\_pyriifoliae:0.03596,E\_tasmaniensis:0.01502):0.10633):0.11247,((P\_dispersa:0.03738,(P\_wallisii:0.13998,((P\_sp\_GM01:0.07839,(P\_rodasii:0.04247,P\_rwandensis:0.01793):0.02319):0.03732,(P\_sp\_At-9b:0.01635,P\_cyprapedii:0.0085):0.05878):0.00726):0.0153):0.0346,(P\_eucrina:0.07628,(T\_ptyseos:0.15416,(T\_morbirosei:0.1453,T\_sp\_NML\_06:0.30633):0.04376):0.17626):0.06769):0.02408):0.01778,(P\_sp\_A4:0.16315,P\_septica:0.09093):0.01849):0.06682):0.01136):0.02589):0.0165,P\_anthophila:0.02714):0.01164);

[333] tree 't333'=[&R] (P\_deleyi:0.02771,(P\_vagans:0.0,P\_sp\_aB:0.0):0.00338,((P\_anthophila:0.01361,((P\_brenneri:0.0,P\_conspicua:0.0):5.5E-4,((P\_septica:0.01237,(((T\_morbirosei:0.01974,(T\_sp\_NML\_06:0.01414,T\_ptyseos:0.01373):0.01182):0.0317,(E\_billingiae:0.01458,(E\_pyriifoliae:0.00353,E\_tasmaniensis:0.01034):0.01362):0.01604):0.03111,((P\_wallisii:0.00799,P\_dispersa:0.00238):0.00345,(P\_eucrina:0.0172,(P\_sp\_GM01:0.00698,(P\_rodasii:0.01034,P\_rwandensis:5.4E-4):0.00689):0.00428):5.5E-4):0.02781):0.00572,(P\_sp\_A4:0.02672,(P\_sp\_At-9b:0.0067,P\_cyprapedii:5.5E-4):0.01199):0.00743):0.00535):0.01035,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.4E-4,(P\_allii:0.0,P\_ananatis:0.0):0.00341):0.00584):0.0044):0.01023):5.5E-4,P\_agglomerans:5.5E-4):5.5E-4);

[334] tree 't334'=[&R] (P\_cyprapedii:0.00343,(((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00315):0.00951,(P\_ananatis:0.01613,P\_allii:0.00962):0.00316):0.01647,(P\_septica:0.02476,((P\_vagans:0.00316,(P\_anthophila:0.00317,(P\_agglomerans:0.0,P\_deleyi:0.0,P\_sp\_aB:0.0):5.5E-4):5.4E-4):0.00931,(P\_brenneri:5.3E-

4,P\_conspicua:0.00916):0.00808):0.01292):0.0028):0.00776,(P\_sp\_A4:0.02078,((T\_ptyseos:0.00924,(T\_morbirosei:0.02011,T\_sp\_NML\_06:0.02943):0.01452):0.15129,(E\_billingiae:0.02978,(E\_pyrifoliae:0.01216,E\_tasmaniensis:0.01096):0.05484):0.0588):0.02983):0.0295):0.01186,P\_sp\_At-9b:0.05366):0.00721,(P\_eucrina:0.06747,((P\_sp\_GM01:0.00325,(P\_rwandensis:0.01617,P\_rodasii:0.0065):0.00651):0.00343,(P\_wallisii:0.00973,P\_dispersa:0.02628):0.01282):0.00314):0.00339);

[335] tree 't335'=[&R] ((P\_septica:0.02627,((P\_wallisii:0.00567,(P\_dispersa:0.01132,(P\_sp\_GM01:0.00563,(P\_rodasii:0.0028,P\_rwandensis:5.5E-4):0.00852):0.01141):0.00284):0.00801,((P\_sp\_At-9b:0.0,P\_cypripedii:0.0):0.00452,(P\_eucrina:0.04338,((E\_billingiae:0.03391,(E\_pyrifoliae:0.00396,E\_tasmaniensis:0.01621):0.01274):0.02484,(P\_sp\_A4:0.03863,(T\_sp\_NML\_06:0.01295,(T\_morbirosei:0.0265,T\_ptyseos:0.02054):0.01147):0.05134):0.00382):0.00543):0.00644):0.0048):0.01148):0.00319,P\_brenneri:0.00304,(((P\_s\_stewartii:0.00564,P\_s\_indologenes:5.5E-4):0.00563,(P\_allii:0.00279,P\_ananatis:0.0028):5.4E-4):0.01426,((P\_anthophila:0.00561,P\_vagans:5.5E-4):5.5E-4,(P\_deleyi:0.0028,(P\_agglomerans:0.0,P\_sp\_aB:0.0):5.4E-4):0.00276):0.00286):0.00422,P\_conspicua:0.00849):0.00406);

[336] tree 't336'=[&R] (T\_sp\_NML\_06:0.01178,((P\_septica:5.5E-4,((E\_pyrifoliae:0.0,E\_tasmaniensis:0.0):0.0252,E\_billingiae:0.02093):0.0302,(P\_sp\_At-9b:0.00581,((P\_agglomerans:0.0,P\_vagans:0.0,P\_deleyi:0.0,P\_allii:0.0,P\_ananatis:0.0,P\_anthophila:0.0,P\_brenneri:0.0,P\_conspicua:0.0,P\_sp\_aB:0.0,P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.5E-4,(P\_sp\_A4:0.00595,(P\_cypripedii:5.4E-4,(P\_eucrina:5.5E-4,(P\_sp\_GM01:0.00588,(P\_rodasii:0.0,P\_rwandensis:0.0):5.5E-4):0.00586):0.00588):0.00588):0.00579):5.3E-4):0.01045):0.00236):0.00588,T\_ptyseos:5.5E-4):5.4E-4,(T\_morbirosei:0.00599,(P\_wallisii:0.02988,P\_dispersa:5.4E-4):0.01193):0.00583);

[337] tree 't337'=[&R] (((P\_ananatis:5.4E-4,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00903,P\_allii:5.3E-4):0.00453):0.01829,(((T\_morbirosei:0.0,T\_sp\_NML\_06:0.0):0.00443,T\_ptyseos:5.5E-4):0.05322,((P\_cypripedii:0.00452,P\_sp\_At-9b:0.00453):5.5E-4,(E\_billingiae:0.03446,(E\_pyrifoliae:0.00577,E\_tasmaniensis:0.00783):0.02319):0.01719):0.00435):5.3E-4):0.00414,(((P\_rodasii:0.0045,P\_rwandensis:5.4E-4):0.00504,(P\_sp\_GM01:0.00787,(P\_eucrina:0.00909,(P\_dispersa:5.5E-4,P\_wallisii:0.00448):5.4E-4):0.0058):0.00878):0.00654,(P\_deleyi:5.4E-4,(P\_anthophila:0.00449,(P\_agglomerans:0.0045,P\_sp\_aB:5.5E-4):0.0045,P\_vagans:5.5E-4):5.5E-4):0.00446):0.01232):0.00603,((P\_brenneri:0.0,P\_conspicua:0.0):0.005,(P\_sp\_A4:0.02199,P\_septica:0.01954):0.00893):0.0021);

[338] tree 't338'=[&R] (P\_anthophila:5.4E-4,(P\_conspicua:0.00793,(P\_brenneri:5.5E-4,((P\_eucrina:0.02203,P\_sp\_A4:0.01771):0.0132,(P\_septica:0.03122,(((P\_cypripedii:5.3E-4,P\_sp\_At-9b:0.00846):0.01086,(((P\_sp\_GM01:0.02215,P\_rodasii:0.01778):0.00376,P\_wallisii:0.03179):0.0047,P\_rwandensis:0.03146):0.00871,P\_dispersa:0.00852):0.01584):0.01517,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01919,(P\_ananatis:0.00926,(T\_ptyseos:0.01666,(T\_morbirosei:0.03031,T\_sp\_NML\_06:0.02676):0.02098):0.05712,(E\_billingiae:0.02763,(E\_pyrifoliae:0.01854,E\_tasmaniensis:0.01137):0.0317):0.02716):0.01711):0.00361):0.0077,P\_allii:0.00937):0.02235):0.00703):0.0091):0.01318):0.00801):0.00549,(P\_deleyi:0.00426,(P\_vagans:5.5E-4,(P\_sp\_aB:0.01268,P\_agglomerans:5.5E-4):0.00422):0.00423):0.00425);

[339] tree 't339'=[&R] ((P\_sp\_GM01:0.01491,(((E\_pyrifoliae:0.04602,E\_tasmaniensis:0.05758):0.08626,(P\_sp\_A4:0.12662,(P\_septica:0.13999,(((P

\_brenneri:0.0,P\_conspicua:0.0):0.05578,(P\_deleyi:0.01345,P\_anthophila:5.4E-4):5.9E-4):0.05835,((P\_agglomerans:0.0,P\_vagans:0.0,P\_sp\_aB:0.0):6.0E-4,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.02898,(P\_allii:0.02914,P\_ananatis:5.5E-4):5.5E-4):0.08869):0.03375):0.07937):0.09591):0.07174):0.03932,(E\_billingiae:0.097,(T\_morbirosei:0.02154,(T\_sp\_NML\_06:0.13908,T\_ptyseos:0.05509):0.03498):0.10314):0.07376):0.05992):0.01377,(P\_rodasii:0.0,P\_rwandensis:0.0):5.4E-4,((P\_dispersa:0.01387,(P\_cypripedii:0.06214,P\_sp\_At-9b:0.01841):0.03027):0.01459,(P\_wallisii:0.0,P\_eucrina:0.0):5.4E-4):0.01426);

[340] tree 't340'=[&R] (P\_eucrina:0.07829,(P\_wallisii:0.01096,((P\_sp\_At-9b:0.03499,P\_cypripedii:0.03331):0.03672,(((P\_brenneri:0.0,P\_conspicua:0.0):5.4E-4,(P\_anthophila:0.04836,(P\_sp\_aB:0.00923,P\_agglomerans:5.5E-4):5.4E-4,(P\_deleyi:0.01844,P\_vagans:0.01797):5.4E-4):0.02946):0.02769):0.03485,(((T\_morbirosei:0.17435,(T\_sp\_NML\_06:0.18526,T\_ptyseos:0.17158):0.05013):0.45277,(E\_billingiae:0.11337,(E\_pyrifoliae:0.06962,E\_tasmaniensis:0.04197):0.1478):0.05479):0.02454,(P\_septica:0.09324,P\_sp\_A4:0.18542):0.02667):0.03214):0.08333):0.01989,(P\_rodasii:0.00937,P\_rwandensis:0.02795):0.04433):0.01844):0.02455,(((P\_ananatis:5.5E-4,(P\_allii:5.5E-4,(P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00896):0.01829):0.0181):0.06678,P\_dispersa:0.05602):0.01148,P\_sp\_GM01:0.02757):0.01387);

[341] tree 't341'=[&R] (((P\_cypripedii:0.02852,((E\_billingiae:0.06575,(E\_pyrifoliae:5.3E-4,E\_tasmaniensis:0.01243):0.09189):0.08221,(T\_morbirosei:0.10668,(T\_sp\_NML\_06:0.20265,T\_ptyseos:0.10921):0.05067):0.05711):0.06623):0.04237,P\_sp\_At-9b:0.01108):0.02959,(P\_rodasii:0.05509,P\_sp\_GM01:0.02608):0.0259,P\_dispersa:0.0126):5.4E-4,(P\_rwandensis:0.02596,((P\_sp\_A4:0.17703,(P\_septica:0.07664,((P\_allii:0.06568,P\_ananatis:0.01687):0.03817,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.03232,(P\_brenneri:5.5E-4,P\_conspicua:0.01207):0.03856,((P\_agglomerans:0.0,P\_vagans:0.0,P\_deleyi:0.0):0.01236,(P\_anthophila:0.04104,P\_sp\_aB:5.4E-4):5.5E-4):0.02606):0.02146):0.01074):5.4E-4):0.05595):0.068,P\_wallisii:0.02756):0.0166,P\_eucrina:0.04254):0.01204):0.01231);

[342] tree 't342'=[&R] (((P\_sp\_A4:0.08493,((P\_ananatis:5.4E-4,(P\_allii:5.4E-4,(P\_s\_stewartii:0.01467,P\_s\_indologenes:5.5E-4):0.02484):0.01469):0.04706,((P\_brenneri:0.00492,P\_conspicua:0.00478):0.0194,((P\_vagans:5.4E-4,(P\_agglomerans:0.00254,P\_sp\_aB:0.00409):0.00296):0.01727,(P\_deleyi:0.02566,P\_anthophila:0.01748):0.01337):0.00615):0.00472):0.01595):0.02031,((E\_billingiae:0.04273,(E\_pyrifoliae:0.00441,E\_tasmaniensis:0.0203):0.11378):0.03169,P\_septica:0.06442):0.01777):0.01842,((T\_morbirosei:0.0582,(T\_ptyseos:0.04485,T\_sp\_NML\_06:0.07618):0.08088):0.23514,(P\_cypripedii:0.02575,P\_sp\_At-9b:0.0095):0.02422):5.3E-4):0.01037,(P\_rodasii:0.01978,P\_rwandensis:0.02504):0.0085,((P\_wallisii:0.01484,(P\_eucrina:0.04589,P\_dispersa:0.019):0.00758):0.02394,P\_sp\_GM01:0.0204):0.00577);

[343] tree 't343'=[&R] (P\_sp\_GM01:0.02556,(P\_rodasii:0.02118,P\_rwandensis:0.01525):0.0052,(P\_dispersa:0.00889,(((P\_septica:0.06123,P\_sp\_A4:0.16461):0.03552,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.02974,(P\_allii:7.6E-4,P\_ananatis:0.01524):0.01669):0.055,(P\_anthophila:0.00679,((P\_brenneri:0.00297,(P\_deleyi:0.0205,(P\_agglomerans:5.5E-4,(P\_vagans:0.00514,P\_sp\_aB:0.00496):0.00507):0.02022):0.0093):0.00285,P\_conspicua:5.3E-4):0.01344):0.03795):0.01973):0.01663,((T\_morbirosei:0.05878,(T\_sp\_NML\_06:0.09696,T\_ptyseos:0.07247):0.08766):0.2287

3,(E\_billingiae:0.13484,(E\_pyriifoliae:0.02457,E\_tasmaniensis:0.05228):0.14177):0.086):0.06432):0.02115,((P\_cyprapedii:0.05713,P\_sp\_At-9b:0.03867):0.0543,(P\_wallisii:0.01351,P\_eucrinea:0.09971):0.00745):0.00435):0.01158):0.0062);  
[344] tree 't344'=[&R]  
(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00306,(P\_conspicua:0.00588,((E\_tasmaniensis:0.01244,(E\_pyriifoliae:0.00315,E\_billingiae:0.06682):0.00313):0.05172,(P\_sp\_aB:0.00327,(P\_deleyi:0.00274,P\_anthophila:5.4E-4):0.01239,(P\_brenneri:5.4E-4,(P\_agglomerans:0.00605,P\_vagans:0.00612):0.00572):0.00628):0.00871):0.00802):0.0109):0.02832):5.3E-4,(P\_ananatis:0.0062,P\_allii:0.01534):0.00613,(((P\_sp\_GM01:0.00373,(P\_cyprapedii:0.01862,P\_sp\_At-9b:0.01964):0.01219):0.00854,(P\_eucrinea:0.03185,(P\_septica:0.01138,((P\_dispersa:0.00513,P\_wallisii:0.00719):0.016,(P\_rodasii:0.00497,P\_rwandensis:0.00428):0.00869):0.00381):0.00698):0.00688):5.4E-4,(P\_sp\_A4:0.02365,(T\_morbirosei:0.05008,(T\_sp\_NML\_06:0.04128,T\_ptyseos:0.02827):0.03162):0.02067):0.01516):0.01202);  
[345] tree 't345'=[&R] (P\_rodasii:0.02464,((P\_sp\_A4:0.09528,P\_dispersa:0.0233):0.01635,P\_rwandensis:0.00937):5.5E-4,(P\_wallisii:0.01465,(((P\_sp\_At-9b:0.01332,P\_cyprapedii:0.02016):0.02338,(((T\_morbirosei:0.06994,(T\_ptyseos:0.08674,T\_sp\_NML\_06:0.09534):0.03913):0.18613,(E\_billingiae:0.1427,(E\_pyriifoliae:0.03332,E\_tasmaniensis:0.0364):0.04736):0.12602):0.0182,(P\_eucrinea:0.09612,(P\_septica:0.0757,(((P\_sp\_aB:0.00492,(P\_anthophila:0.03162,P\_deleyi:0.04081):0.01314):0.00478,(P\_vagans:0.00481,P\_agglomerans:5.4E-4):5.4E-4):0.02458,P\_conspicua:0.015):0.00923,P\_brenneri:5.4E-4):0.07347,((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00949):0.05132,(P\_allii:0.00984,P\_ananatis:0.03004):0.02662):0.02035):0.01214):0.01334):0.01233):0.02045):0.01333,P\_sp\_GM01:0.01878):0.00572):0.00493);  
[346] tree 't346'=[&R] (P\_vagans:0.01057,(P\_brenneri:0.0,P\_conspicua:0.0):0.01096,P\_agglomerans:5.5E-4):0.00113,(P\_sp\_aB:0.01049,(P\_anthophila:0.01107,(P\_deleyi:5.5E-4,(P\_septica:0.04646,((E\_billingiae:0.03416,(E\_pyriifoliae:0.0558,E\_tasmaniensis:0.01737):0.08046):0.02325,(((P\_allii:0.03779,(P\_ananatis:5.4E-4,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01129):0.00778):0.05055,((P\_cyprapedii:5.4E-4,((P\_sp\_GM01:0.0084,P\_eucrinea:0.0897):0.01439,(P\_dispersa:5.5E-4,(P\_rodasii:5.5E-4,P\_rwandensis:0.01101):0.04554):0.01138):0.01097,P\_wallisii:5.4E-4):0.02278):5.4E-4,P\_sp\_At-9b:0.03325):0.06064):0.02129,((T\_morbirosei:0.06546,(T\_sp\_NML\_06:0.33298,T\_ptyseos:0.28989):0.19425):0.10787,P\_sp\_A4:0.04053):0.00855):0.01123):5.4E-4):0.01135):0.01122):5.9E-4):0.01021);  
[347] tree 't347'=[&R] (P\_deleyi:9.3E-4,(P\_vagans:5.5E-4,(P\_agglomerans:8.8E-4,P\_sp\_aB:8.8E-4):0.00438):0.00175,(P\_anthophila:0.00343,((P\_allii:8.9E-4,((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00175):0.00264,P\_ananatis:5.5E-4):8.8E-4):0.00462,(P\_septica:0.0158,(((T\_ptyseos:0.00444,(T\_morbirosei:0.0129,T\_sp\_NML\_06:0.00654):9.0E-4):0.02339,(E\_billingiae:0.0122,(E\_tasmaniensis:0.00181,E\_pyriifoliae:0.00261):0.00694):0.0087):0.00685,(P\_sp\_A4:0.00913,((P\_sp\_At-9b:8.7E-4,P\_cyprapedii:8.9E-4):0.00604,((P\_dispersa:5.5E-4,P\_wallisii:8.8E-4):5.4E-4,(P\_eucrinea:0.00677,(P\_sp\_GM01:0.00334,(P\_rodasii:0.00624,P\_rwandensis:0.00262):0.00378):0.0061):0.00127):0.00113):0.00529):0.00486):0.0053):0.00393):0.00607,(P\_brenneri:9.0E-4,P\_conspicua:0.00174):0.00565):0.0034):0.00183);  
[348] tree 't348'=[&R] ((P\_sp\_At-9b:0.00687,P\_cyprapedii:0.01399):0.00696,(((T\_morbirosei:0.02576,(T\_sp\_NML\_06:0.04862,T\_ptyseos:0.02196):0.02552):0.07752,((E\_pyriifoliae:0.03476,E\_tasmaniensis:5.4E-

4):0.06765,E\_billingiae:0.0286):0.01455):0.02187,(P\_wallisii:0.00695,P\_dispersa:5.5E-4):0.00654):5.5E-4,(P\_rodasii:5.5E-4,(P\_rwandensis:0.0,P\_sp\_GM01:0.0):0.00677,(P\_sp\_A4:0.03193,(P\_eucrina:0.03272,((P\_brenneri:0.0,P\_conspicua:0.0):5.4E-4,(P\_allii:5.4E-4,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00699,P\_ananatis:5.5E-4):0.00654):0.02887,((P\_vagans:0.0,P\_deleyi:0.0):5.4E-4,(P\_anthophila:5.4E-4,P\_septica:0.01408):0.00698):0.00161,(P\_agglomerans:0.007,P\_sp\_aB:5.5E-4):0.00573):0.01069):0.01035):0.00836):0.01123):0.0168):5.4E-4):5.4E-4);

[349] tree 't349'=[&R] ((P\_sp\_GM01:0.02171,P\_wallisii:0.02062):0.01032,P\_eucrina:0.02021,((P\_sp\_At-9b:5.5E-4,(P\_septica:0.03211,(P\_rwandensis:0.01012,(P\_dispersa:0.01028,P\_rodasii:5.5E-4):0.01022):5.5E-4):0.01014):0.0102,((P\_sp\_A4:0.04668,(E\_billingiae:0.06625,(E\_pyriifoliae:0.04644,E\_tasmaniensis:0.02233):0.13359):0.0343):0.03327,(P\_conspicua:5.5E-4,(P\_brenneri:0.0106,(P\_vagans:5.5E-4,P\_deleyi:0.01099):0.01035,(P\_sp\_aB:5.5E-4,(P\_anthophila:0.01075,P\_agglomerans:0.0106):0.01081):5.4E-4):0.02131):0.02042):0.01541):0.00565,((P\_s\_indologenes:5.4E-4,P\_s\_stewartii:0.01064):0.02108,(P\_allii:0.02031,P\_ananatis:0.01039):0.01059):0.03324,(T\_ptyseos:0.02343,(T\_sp\_NML\_06:0.03949,T\_morbirosei:0.02466):0.01915):0.10643):5.5E-4):0.01048):5.5E-4,P\_cyprapedii:5.4E-4):5.5E-4);

[350] tree 't350'=[&R] (P\_anthophila:0.02844,(P\_agglomerans:0.0,P\_sp\_aB:0.0):0.01429,((P\_vagans:0.01371,P\_deleyi:0.02274):0.02147,((P\_brenneri:0.01132,P\_conspicua:5.4E-4):0.02039,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00533,(P\_allii:0.01511,P\_ananatis:0.01549):0.0262):0.04664,(P\_septica:0.07313,(P\_sp\_A4:0.07296,(T\_morbirosei:0.06967,(T\_ptyseos:0.0557,T\_sp\_NML\_06:0.04974):0.03535):0.13178,(E\_billingiae:0.1377,(E\_pyriifoliae:0.00989,E\_tasmaniensis:0.03423):0.04495):0.06637):0.04342):0.04555,(P\_sp\_At-9b:0.00899,P\_cyprapedii:0.01046):0.03042,((P\_rwandensis:0.00413,(P\_rodasii:0.04306,P\_sp\_GM01:0.01171):0.00767):0.05199,(P\_wallisii:0.02151,(P\_dispersa:0.0224,P\_eucrina:0.0594):0.01036):0.01176):0.04754):0.02757):0.01833):0.02249):0.02135):0.01752):0.00679);

[351] tree 't351'=[&R] (P\_dispersa:0.04626,((P\_rodasii:0.05605,P\_rwandensis:0.01389):0.03588,(P\_sp\_GM01:0.05306,(P\_sp\_At-9b:0.03265,P\_cyprapedii:0.02594):0.05337):0.02427):0.01372,(P\_wallisii:0.04898,((P\_s\_indologenes:5.3E-4,P\_s\_stewartii:0.00388):0.02988,(P\_allii:0.02516,P\_ananatis:0.0281):0.03231):0.04845,(P\_septica:0.16092,((P\_deleyi:0.031,(P\_anthophila:0.02689,P\_sp\_aB:0.01396):0.01109):0.0074,P\_vagans:0.01527):0.00874,P\_agglomerans:0.00572):0.04565,(P\_brenneri:0.02419,P\_conspicua:0.03603):0.00787):0.03317):0.02404):0.10105,(P\_eucrina:0.07067,(P\_sp\_A4:0.11569,(E\_billingiae:0.17011,(E\_pyriifoliae:0.0422,E\_tasmaniensis:0.02455):0.151):0.20927,(T\_sp\_NML\_06:0.1158,(T\_morbirosei:0.11624,T\_ptyseos:0.04505):0.05458):0.08735):0.03156):0.04045):0.02772):0.01451):0.0109);

[352] tree 't352'=[&R] (P\_vagans:0.02116,(P\_sp\_aB:0.00861,((P\_allii:0.02762,(P\_brenneri:0.01432,P\_conspicua:0.02771):0.02469):0.01685,P\_agglomerans:0.01233):0.0048):0.013,((P\_ananatis:5.4E-4,(P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00422):0.03969):0.05495,(P\_sp\_A4:0.05786,(P\_eucrina:0.04853,(T\_sp\_NML\_06:0.05237,(T\_morbirosei:0.05121,T\_ptyseos:0.06016):0.05776):0.05006,((P\_wallisii:0.02134,(P\_sp\_GM01:0.02159,(P\_rodasii:0.0,P\_rwandensis:0.0):0.01341):0.00965):0.00854,(P\_dispersa:0.02524,(P\_sp\_At-9b:0.00999,P\_cyprapedii:0.00849):0.02586):0.004):0.01983,(P\_septica:0.04819,(E\_billingiae:0.03584,(E\_pyriifoliae:0.01

356,E\_tasmaniensis:0.02507):0.05682):0.03247):0.02636):0.03561):0.00586):0.0269):0.03557):0.01864,(P\_deleyi:0.04187,  
P\_anthophila:0.02375):0.00899):0.01124);  
[353] tree 't353'=[&R] ((P\_vagans:0.0,P\_agglomerans:0.0):5.4E-  
4,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.0181,(P\_allii:0.00688,P\_ananatis:5.5E-  
4):0.02529):0.12917,((P\_sp\_A4:0.15844,(P\_septica:0.0545,(E\_billingiae:0.16819,((T\_sp\_NML\_06:0.18594,(T\_ptyseos:0.153  
76,T\_morbirosei:0.20895):0.06447):0.43361,(E\_pyriifoliae:0.06393,E\_tasmaniensis:0.02431):0.16283):0.04108):0.09297):0  
.05559):0.03307,((P\_sp\_At-  
9b:0.01723,P\_cyprapedii:0.0162):0.02462,(P\_sp\_GM01:0.03157,((P\_rodasii:0.02018,P\_rwandensis:5.5E-  
4):0.03731,(P\_dispersa:0.03906,(P\_eucrina:0.11753,P\_wallisii:0.03957):0.01738):0.03463):0.04144):0.0509):0.02062):0.  
0285):0.02612,(P\_conspicua:0.00677,P\_brenneri:5.5E-  
4):0.01356):0.00691,(P\_sp\_aB:0.01353,(P\_anthophila:0.02286,P\_deleyi:0.02276):0.0173):5.5E-4);  
[354] tree 't354'=[&R] (P\_eucrina:0.03121,(((P\_septica:0.06282,(((P\_conspicua:0.0,P\_agglomerans:0.0):5.4E-  
4,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01027,(P\_allii:0.01031,P\_ananatis:5.4E-4):5.5E-  
4):0.09879,P\_brenneri:5.5E-4):0.00992):5.4E-4,(P\_sp\_aB:5.4E-4,(P\_anthophila:0.03042,(P\_deleyi:0.02005,P\_vagans:5.5E-  
4):0.00918):9.5E-4):0.00986):0.04779):0.04697,((P\_sp\_At-  
9b:0.00644,P\_rwandensis:0.04394):0.15506,(E\_billingiae:0.08636,(E\_pyriifoliae:0.05456,E\_tasmaniensis:0.04607):0.08654  
) :0.08744):0.14688):0.02533,((T\_sp\_NML\_06:0.1324,(T\_morbirosei:0.08485,T\_ptyseos:0.07215):0.04155):0.17786,P\_sp\_A4:0  
.06519):0.02686):0.01296,(P\_sp\_GM01:0.00981,(P\_cyprapedii:0.07349,P\_rodasii:0.02029):0.02249):0.01153):0.01084,(P\_wa  
llisii:0.02039,P\_dispersa:0.04165):5.4E-4);  
[355] tree 't355'=[&R]  
(P\_septica:0.24671,P\_sp\_A4:0.13359):0.05947,(P\_eucrina:0.13094,(P\_wallisii:0.07828,(P\_sp\_GM01:0.12369,P\_dispersa:0.  
08627):0.02778):5.4E-4):5.5E-4,(((E\_billingiae:0.19112,(E\_pyriifoliae:5.4E-  
4,E\_tasmaniensis:0.09391):0.0733):0.31211,(T\_morbirosei:0.11274,(T\_ptyseos:0.16346,T\_sp\_NML\_06:0.21683):5.4E-  
4):0.09995):0.08524,((P\_sp\_At-9b:5.5E-4,P\_cyprapedii:0.02917):0.05719,(((P\_allii:5.4E-  
4,P\_ananatis:0.02956):0.04449,((P\_sp\_aB:0.04337,(P\_agglomerans:0.01385,P\_vagans:0.01443):0.01295):0.01481,(P\_anthop  
hila:0.01463,P\_deleyi:0.05764):5.5E-  
4):0.028,(P\_brenneri:0.01561,P\_conspicua:0.04046):0.04301):0.02376):0.03555,(P\_s\_indologenes:5.5E-  
4,P\_s\_stewartii:0.02887):0.0169):0.10035):0.04206):0.04924,(P\_rodasii:0.14677,P\_rwandensis:0.08957):0.06104):0.01855  
);  
[356] tree 't356'=[&R]  
(P\_deleyi:0.00738,(P\_anthophila:0.01232,(P\_brenneri:0.00242,P\_conspicua:0.0099):0.01159):9.6E-4,(((P\_ananatis:5.5E-  
4,(P\_allii:0.00495,(P\_s\_indologenes:5.5E-  
4,P\_s\_stewartii:0.00244):0.00745):0.00243):0.02282,(P\_septica:0.0153,(((P\_sp\_At-  
9b:0.00291,P\_cyprapedii:0.00947):0.00775,(P\_dispersa:0.00618,((P\_rodasii:0.00992,(P\_rwandensis:5.4E-  
4,P\_sp\_GM01:0.00979):0.00497):0.01617,(P\_wallisii:0.00793,P\_eucrina:0.01256):0.00351):0.00813):0.01378):0.02387,(P\_s  
p\_A4:0.048,((E\_billingiae:0.04301,(E\_pyriifoliae:0.01545,E\_tasmaniensis:0.01287):0.04143):0.06155,(T\_morbirosei:0.075  
,(T\_ptyseos:0.06352,T\_sp\_NML\_06:0.03989):0.01129):0.05447):0.0077):0.00849):0.00994):0.01876):0.0203,(P\_agglomerans:  
0.00245,(P\_sp\_aB:0.00489,P\_vagans:0.00737):0.00244):0.00465):5.4E-4);

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[357] tree 't357'=[&R] (((P_septica:0.10104,(((P_s_indologenes:5.5E-4,P_s_stewartii:0.00213):0.03811,(P_allii:0.00771,P_ananatis:0.02491):0.01357),((P_brenneri:0.00492,P_conspicua:0.01971):0.01422,(P_deleyi:0.02313,(P_anthophila:0.00694,(P_vagans:0.00761,(P_sp_aB:0.0141,P_agglomerans:0.00819):0.00607):0.005):0.01312):0.02309):0.03618):0.03148,(P_sp_A4:0.17977,((T_morbirosei:0.13838,(T_sp_NML_06:0.20351,T_ptyseos:0.14277):0.10007):0.32389,(E_billingiae:0.12512,(E_pyrifoliae:0.08407,E_tasmaniensis:0.07778):0.09835):0.06438):0.04752):0.02995):0.01702):0.0492,(P_sp_At-9b:0.01112,P_cyprapedii:0.03255):0.02991):0.02821,P_dispersa:0.02873,((P_sp_GM01:0.01917,(P_rodasii:0.00759,P_rwandensis:0.02205):0.01882):0.01016,(P_eucrina:0.08177,P_wallisii:0.01003):0.01162):0.00547);
[358] tree 't358'=[&R] (P_vagans:5.5E-4,P_sp_aB:0.00214,(P_agglomerans:0.00144,((P_deleyi:0.00451,P_anthophila:0.00339):0.00424,((P_septica:0.01219,(E_pyrifoliae:0.00488,(E_billingiae:0.00933,E_tasmaniensis:6.7E-4):0.00233):0.02211):0.00461,(((P_s_indologenes:5.5E-4,P_s_stewartii:0.00214):0.00514,(((T_morbirosei:0.00895,(T_ptyseos:0.00722,T_sp_NML_06:0.00273):0.00779):0.03162,(((P_cyprapedii:0.00745,P_sp_At-9b:0.00197):0.00769,(P_dispersa:5.5E-4,(P_eucrina:0.00573,P_wallisii:7.0E-4):0.00286):0.00616):0.00522,(P_sp_GM01:0.0021,(P_rodasii:0.00347,P_rwandensis:0.00383):0.00301):0.00369):0.00248,P_sp_A4:0.00282):0.00826):0.00865,(P_brenneri:5.5E-4,P_conspicua:7.1E-4):0.00376):0.00405):0.00599,(P_ananatis:7.8E-4,P_allii:0.00283):0.00258):0.00129):0.00464):9.9E-4):7.3E-4);
[359] tree 't359'=[&R] (P_brenneri:0.00985,((P_sp_At-9b:5.5E-4,((E_billingiae:0.02977,(E_pyrifoliae:0.04255,E_tasmaniensis:0.01816):0.03314):0.0481,P_cyprapedii:0.00529):0.01005):0.02551,(P_septica:0.04692,(P_sp_A4:0.06942,((P_rodasii:0.01059,P_rwandensis:0.0048):0.0218,(((P_wallisii:0.0162,P_eucrina:0.0376):0.01425,P_dispersa:0.00669):0.01014,P_sp_GM01:0.01539):0.00513):0.0115):0.01458):5.5E-4):0.02397,((P_deleyi:5.4E-4,(P_anthophila:0.00517,(P_agglomerans:5.3E-4,((P_sp_aB:5.4E-4,P_conspicua:0.03138):0.00513,(P_vagans:5.3E-4,(T_morbirosei:0.0797,(T_ptyseos:0.04428,T_sp_NML_06:0.08537):0.05151):0.10642):0.01026):0.0156):0.01004):0.00515):0.00513,(P_s_indologenes:5.4E-4,((P_allii:0.0,P_ananatis:0.0):0.01032,P_s_stewartii:0.01028):5.5E-4):0.02121):0.00556);
[360] tree 't360'=[&R] (P_dispersa:0.01985,(P_eucrina:0.04921,P_wallisii:0.00857):0.01558,((P_sp_GM01:0.03476,(P_rodasii:0.01106,P_rwandensis:0.01838):0.01507):0.01186,(P_cyprapedii:0.01929,(P_sp_At-9b:0.02416,(P_septica:0.05556,((P_ananatis:0.01174,((P_s_indologenes:0.0,P_s_stewartii:0.0):0.02223,P_allii:0.01087):0.00764):0.04874,((P_sp_A4:0.10617,((T_ptyseos:0.04168,(T_sp_NML_06:0.13743,T_morbirosei:0.16265):0.061):0.2658,(E_billingiae:0.09435,(E_pyrifoliae:0.04661,E_tasmaniensis:0.01806):0.07706):0.05888):0.02757):0.04039,((P_brenneri:0.00479,P_conspicua:0.0044):0.00281,((P_deleyi:0.0045,(P_vagans:5.4E-4,P_anthophila:0.01352):0.00222):0.0052,(P_sp_aB:0.01661,P_agglomerans:0.00371):0.00227):0.00975):0.03047):0.01446):0.02471):0.02493):0.0036):0.00525):0.00161);
[361] tree 't361'=[&R] ((P_s_indologenes:0.0,P_s_stewartii:0.0):0.00697,(((P_sp_At-9b:5.5E-4,P_cyprapedii:0.00338):0.00688,(P_septica:5.5E-4,((T_morbirosei:0.03251,(T_ptyseos:5.3E-4,T_sp_NML_06:0.01002):0.00844):0.02525,(((P_wallisii:0.0033,(P_dispersa:0.00706,P_eucrina:0.00678):0.00343):0.01297,P_sp_GM01:0.01958):0.00452,(P_rodasii:0.01036,P_rwandensis:0.0034):0.01091):0.00421,P_sp_A4:0.01129):0.01747):0.01404):0.00337):0.00684,((P_allii:0.0,P_brenneri:0.0,P_conspicua:0.0):5.5E-
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4,(P\_agglomerans:0.00339,(P\_vagans:0.0,P\_deleyi:0.0,P\_anthophila:0.0,P\_sp\_aB:0.0):5.5E-4):0.00341):5.4E-4):5.4E-4);

[362] tree 't362'=[&R] (P\_sp\_GM01:5.5E-4,(P\_dispersa:5.4E-4,P\_wallisii:0.00582):0.00583,(E\_pyriifoliae:0.0,E\_tasmaniensis:0.0):0.02379,P\_sp\_A4:5.5E-4):0.00581):5.4E-4),((P\_septica:0.00624,(P\_allii:0.05676,P\_ananatis:5.4E-4):0.01134,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.5E-4):0.0118):0.00561,(E\_billingiae:0.00595,(P\_brenneri:0.0059,(P\_anthophila:5.5E-4,(P\_agglomerans:5.5E-4,(P\_vagans:0.01181,P\_sp\_aB:0.00587):5.4E-4):0.00589,(P\_deleyi:5.5E-4,P\_conspicua:0.00593):5.4E-4):0.00592):5.3E-4):0.0059):0.00595):0.00592,(P\_rodasii:0.02384,(((T\_sp\_NML\_06:0.02161,(T\_morbirosei:0.03055,T\_ptyseos:0.01199):0.02575):0.06663,(P\_eucrina:5.4E-4,P\_rwandensis:0.01172):0.01165):5.4E-4,P\_sp\_At-9b:5.4E-4):0.00591,P\_cyprapedii:5.4E-4):0.00584):5.4E-4):0.00585);

[363] tree 't363'=[&R] ((P\_sp\_GM01:0.03766,(P\_rodasii:0.01463,P\_rwandensis:0.01534):0.01542):0.00713,(P\_eucrina:0.07897,P\_wallisii:0.02281):0.01979,(P\_sp\_At-9b:0.01197,P\_cyprapedii:0.03275):0.03724,(P\_dispersa:0.02636,(((P\_septica:0.12638,(((P\_s\_indologenes:0.00399,P\_s\_stewartii:5.5E-4):0.04045,(P\_allii:0.02195,P\_ananatis:0.03499):0.0152):0.08303,(P\_brenneri:0.01247,P\_conspicua:0.0318):0.02467,(P\_deleyi:0.01975,(P\_anthophila:0.05895,(P\_sp\_aB:0.01579,(P\_agglomerans:0.00402,P\_vagans:0.01654):0.00627):0.00469):0.00737):0.02624):0.05349):0.04011):0.03422,(P\_sp\_A4:0.20934,(T\_morbirosei:0.06804,(T\_sp\_NML\_06:0.14666,T\_ptyseos:0.12509):0.07645):0.35669):0.0515):0.0551,(E\_billingiae:0.09284,(E\_pyriifoliae:0.05843,E\_tasmaniensis:0.06971):0.06021):0.20859):0.03381):0.02032):0.00486);

[364] tree 't364'=[&R] ((P\_rodasii:0.00948,(P\_sp\_GM01:0.0462,P\_rwandensis:5.4E-4):0.01838):0.06707,(((P\_conspicua:0.00825,P\_anthophila:0.01635):5.4E-4,(P\_deleyi:0.00842,(P\_vagans:5.4E-4,(P\_agglomerans:5.5E-4,P\_sp\_aB:0.00832):0.00843):0.04349):0.01681):0.01518,P\_brenneri:0.00952):0.05217,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.02173,(P\_allii:0.02459,P\_ananatis:0.01126):0.03267):0.01078):0.06964,((T\_morbirosei:0.12532,(T\_ptyseos:0.06771,T\_sp\_NML\_06:0.1166):0.03258):0.163,(E\_billingiae:0.15399,(E\_pyriifoliae:0.05086,E\_tasmaniensis:0.04223):0.05418):0.07281):0.07519):0.00242,(P\_sp\_A4:0.12344,P\_septica:0.057):0.03533):0.04748,((P\_sp\_At-9b:0.00861,P\_cyprapedii:0.01726):0.00912,(P\_eucrina:0.01747,(P\_wallisii:0.02673,P\_dispersa:0.0086):0.01721):0.00982):0.01538);

[365] tree 't365'=[&R] ((P\_s\_indologenes:0.0,P\_allii:0.0,P\_s\_stewartii:0.0):5.4E-4,(P\_ananatis:0.01322,((P\_brenneri:0.0,P\_conspicua:0.0):0.01422,(P\_anthophila:0.0135,(P\_agglomerans:0.0,P\_sp\_aB:0.0,P\_deleyi:0.0):5.5E-4):0.02696):0.02786):5.3E-4,((P\_vagans:5.4E-4,(T\_morbirosei:0.02762,P\_sp\_GM01:5.4E-4):0.01346):0.01344,(P\_dispersa:5.4E-4,(P\_cyprapedii:0.01345,((P\_wallisii:5.5E-4,(T\_ptyseos:0.04154,T\_sp\_NML\_06:5.4E-4):0.02749,((P\_sp\_At-9b:0.0,P\_sp\_A4:0.0):5.4E-4,((P\_rodasii:0.0,P\_rwandensis:0.0):5.4E-4,(E\_billingiae:0.0567,(E\_pyriifoliae:0.0,E\_tasmaniensis:0.0):0.00105):0.0724):0.02801):5.3E-4):0.01339):0.01346,(P\_septica:0.02776,P\_eucrina:0.01342):5.4E-4):0.01347):5.4E-4):5.4E-4):0.01344);

[366] tree 't366'=[&R] (P\_deleyi:0.04371,P\_vagans:0.00785,((P\_anthophila:0.02112,(P\_sp\_aB:0.0219,P\_agglomerans:0.01271):0.00418):5.5E-



4,((P\_brenneri:5.5E-4,(P\_septica:0.05494,((E\_billingiae:0.13819,((E\_pyriifoliae:0.03762,E\_tasmaniensis:0.05668):0.07611,P\_sp\_A4:0.21805):0.01538):0.05856,(T\_morbirosei:0.12612,(T\_sp\_NML\_06:0.13761,T\_ptyseos:0.14302):0.01905):0.1222,((P\_wallisii:0.03883,(P\_eucrina:0.07893,(P\_sp\_At-9b:0.01904,P\_cyprapedii:0.01015):0.06913):0.02893):0.00734,(P\_dispersa:0.0702,(P\_sp\_GM01:0.03493,(P\_rodasii:0.01865,P\_rwandensis:0.006):0.01597):0.01263):0.01415):0.05411):0.05013):0.01481):0.0385):0.00854,(((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00404):0.05093,(P\_allii:0.01164,P\_ananatis:0.02286):0.03387):0.0496,P\_conspicua:0.00679):0.00598):0.02143):0.00551);

[367] tree 't367'=[&R] (P\_sp\_GM01:0.06031,(P\_eucrina:0.19231,((P\_sp\_At-9b:0.09177,P\_cyprapedii:0.07348):0.06044,(P\_sp\_A4:0.24396,((E\_billingiae:0.12371,(E\_pyriifoliae:0.11156,E\_tasmaniensis:0.06529):0.14945):0.07804,(T\_morbirosei:0.19901,(T\_ptyseos:0.2725,T\_sp\_NML\_06:0.41092):0.05809):0.22747):0.04921):0.05927,(P\_septica:0.09574,((P\_allii:8.9E-4,(P\_ananatis:0.04933,(P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.01601):0.04933):0.0214):0.04385,(((P\_anthophila:0.04531,(P\_sp\_aB:0.03837,P\_agglomerans:0.02675):0.00545):0.00504,(P\_deleyi:0.06887,P\_vagans:0.02736):0.00558):0.0803,(P\_brenneri:0.04039,P\_conspicua:0.03705):0.03427):0.03341):0.09148):0.0526):0.02291):0.03499):0.02344,(P\_wallisii:0.05408,((P\_rodasii:0.03397,P\_rwandensis:0.03835):0.03063,P\_dispersa:0.03612):0.00954):0.0194);

[368] tree 't368'=[&R] ((P\_dispersa:0.02195,(P\_eucrina:0.11385,P\_wallisii:0.0303):0.02218):0.01424,(P\_rodasii:0.01656,P\_rwandensis:0.02403):0.01186,(P\_sp\_GM01:0.03605,((P\_sp\_At-9b:0.05231,P\_cyprapedii:0.05087):0.03958,(((T\_morbirosei:0.23522,(T\_ptyseos:0.07164,T\_sp\_NML\_06:0.10332):0.07792):0.18457,P\_sp\_A4:0.17191):0.03865,((E\_billingiae:0.05117,(E\_pyriifoliae:0.02762,E\_tasmaniensis:0.02043):0.10687):0.16424,(P\_septica:0.06352,(((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00603):0.04987,(P\_allii:0.0316,P\_ananatis:0.0406):0.01879):0.03176,((P\_brenneri:0.00929,P\_conspicua:0.01263):0.03806,((P\_vagans:0.00672,(P\_anthophila:0.03168,P\_deleyi:0.04805):0.01448):0.00304,(P\_sp\_aB:0.01832,P\_agglomerans:0.00525):0.00762):0.06263):0.03139):0.06835):0.03221):0.02104):0.03549):0.03837):0.01314);

[369] tree 't369'=[&R] (P\_eucrina:0.13969,P\_wallisii:0.03721,(((P\_sp\_At-9b:0.01453,P\_cyprapedii:0.02341):0.02018,(((T\_morbirosei:0.1214,(T\_sp\_NML\_06:0.30722,T\_ptyseos:0.18398):0.06435):0.17695,(E\_billingiae:0.14595,(E\_pyriifoliae:0.05265,E\_tasmaniensis:0.05256):0.1977):0.11334):0.04103,P\_sp\_A4:0.10234):0.0417,(((P\_ananatis:5.5E-4,(P\_allii:0.03837,(P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00735):0.00791):0.01462):0.11907,(P\_septica:0.19629,((P\_brenneri:0.03378,P\_conspicua:0.01528):0.02739,(P\_anthophila:0.01872,(P\_deleyi:0.00738,(P\_vagans:0.00736,(P\_agglomerans:0.00734,P\_sp\_aB:0.01478):0.00749):0.00755):0.03649):0.01373):0.01547):0.02516):0.07633,P\_dispersa:0.05749):0.00861):0.03518):0.04918,(P\_rwandensis:0.01924,(P\_rodasii:0.06667,P\_sp\_GM01:0.06143):0.01598):0.0171):0.01017);

[370] tree 't370'=[&R] ((P\_rodasii:0.0212,P\_rwandensis:0.00556):0.00937,(P\_sp\_At-9b:0.02587,(((T\_sp\_NML\_06:0.10327,(T\_morbirosei:0.12473,T\_ptyseos:0.05137):0.06047):0.11009,((E\_billingiae:0.03152,(E\_pyriifoliae:0.03197,E\_tasmaniensis:0.01728):0.06094):0.05686,P\_sp\_A4:0.14127):5.3E-4):0.02205,(P\_septica:0.03923,((P\_anthophila:0.01704,(((P\_allii:0.02676,(P\_ananatis:0.03934,(P\_s\_indologenes:0.00425,P\_s\_stewartii:5.5E-4):0.01556):0.00991):0.05907,P\_conspicua:5.4E-4):0.00607,P\_brenneri:0.01141):0.02634):0.01073,(P\_deleyi:0.01318,((P\_agglomerans:0.0,P\_vagans:0.0):5.4E-

4,P\_sp\_aB:0.01294):0.00422):0.00524):0.03192):0.02138):0.02016,P\_cyprapedii:5.4E-4):0.01165):0.01895):0.00343,P\_sp\_GM01:0.02242,((P\_wallisii:0.04245,P\_dispersa:0.02782):0.01606,P\_eucrina:0.06358):0.00584);

[371] tree 't371'=[&R] ((P\_deleyi:0.03089,(P\_anthophila:0.02883,(P\_vagans:5.5E-4,(P\_sp\_aB:0.01057,P\_agglomerans:0.01056):0.00777):5.5E-4):0.01469):0.01585,P\_eucrina:0.19174,((P\_brenneri:0.01466,P\_conspicua:0.01483):0.04775,(((P\_septica:0.06861,(P\_sp\_A4:0.28096,(E\_billingiae:0.26607,(E\_pyriifoliae:0.13121,E\_tasmaniensis:0.00276):0.26831):0.03846):0.0507):0.07953,((T\_ptyseos:0.15306,(T\_sp\_NML\_06:0.12448,T\_morbirosei:0.11675):5.4E-4):0.32629,(P\_ananatis:5.5E-4,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01422,P\_allii:5.4E-4):0.02787):5.4E-4):0.04715):0.0141,((P\_sp\_At-9b:5.4E-4,P\_cyprapedii:0.01373):0.11108,(P\_sp\_GM01:0.07766,(P\_dispersa:5.5E-4,P\_wallisii:0.04363):0.01382,(P\_rodasii:0.03336,P\_rwandensis:0.07955):0.1032):0.01475):5.4E-4):0.06092):0.02935):0.012);

[372] tree 't372'=[&R] (P\_vagans:0.01495,(P\_anthophila:0.0099,(P\_brenneri:0.0075,((P\_deleyi:0.05176,(((T\_morbirosei:0.08779,(T\_sp\_NML\_06:0.14734,T\_ptyseos:0.10897):0.03431):0.25843,(E\_billingiae:0.09902,(E\_pyriifoliae:0.01999,E\_tasmaniensis:0.03382):0.11637):0.14844):0.06347,(P\_sp\_A4:0.16817,(P\_septica:0.04142,P\_sp\_GM01:0.06787):0.05243):0.03265):0.02915,(((P\_sp\_At-9b:0.04128,P\_cyprapedii:0.01529):0.05211,(P\_eucrina:0.02654,(P\_wallisii:5.4E-4,(P\_dispersa:0.02243,(P\_rodasii:0.00789,P\_rwandensis:0.02169):0.05145):0.01181):0.01705):0.0333):0.07133,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01571,(P\_ananatis:0.0379,P\_allii:0.02583):0.02009):0.03554):0.0204):0.02811):0.0138,P\_conspicua:0.00682):5.4E-4):0.00934):0.01061,(P\_sp\_aB:0.01487,P\_agglomerans:0.01119):0.00335);

[373] tree 't373'=[&R] ((E\_billingiae:0.01872,(E\_pyriifoliae:0.00306,E\_tasmaniensis:0.00632):0.01572):0.0035,((P\_conspicua:0.00308,P\_brenneri:0.0031):0.0062,(P\_anthophila:0.00305,(P\_agglomerans:0.0092,(P\_vagans:0.0,P\_sp\_aB:0.0):5.5E-4):5.3E-4):0.00306):0.00327,(P\_deleyi:0.00568,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01208,(P\_allii:5.4E-4,P\_ananatis:0.0031):0.00992):0.00619,((P\_septica:5.5E-4,((P\_eucrina:0.01251,P\_dispersa:0.00298):0.00641,(T\_ptyseos:5.5E-4,(T\_morbirosei:0.01894,T\_sp\_NML\_06:0.00614):0.00297):0.03498):0.00607,P\_wallisii:0.00926):0.00307):0.00486,(((P\_sp\_At-9b:0.00316,P\_cyprapedii:0.00304):0.00341,(P\_sp\_GM01:0.01035,(P\_rodasii:0.00902,P\_rwandensis:5.5E-4):0.00808):0.00996):0.00385,P\_sp\_A4:0.03522):0.00942):0.00757):0.0031):5.4E-4);

[374] tree 't374'=[&R] (P\_eucrina:0.01681,(P\_septica:0.02962,(((E\_billingiae:0.02241,(E\_pyriifoliae:0.01554,E\_tasmaniensis:0.01298):0.02609):0.04573,((T\_sp\_NML\_06:0.02123,(T\_morbirosei:0.02362,T\_ptyseos:0.0149):0.01363):0.052,P\_sp\_A4:0.01535):0.00452):0.00735,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00592,(P\_ananatis:0.01198,P\_allii:5.3E-4):0.00608):0.01485,(((P\_vagans:0.00319,(P\_sp\_aB:0.00603,P\_agglomerans:5.4E-4):0.00285):0.00302,(P\_deleyi:5.3E-4,P\_anthophila:0.0121):5.5E-4):0.00826,(P\_brenneri:5.3E-4,P\_conspicua:0.00301):0.00733):0.01966):0.00992):0.005):0.00908,((P\_sp\_GM01:0.01212,(P\_rwandensis:5.5E-4,P\_rodasii:0.00921):0.00595):0.00611,(P\_cyprapedii:0.00917,P\_sp\_At-9b:0.00291):0.00612,(P\_wallisii:0.00607,P\_dispersa:0.00606):0.00302):0.00304):0.00445);

[375] tree 't375'=[&R] ((P\_sp\_GM01:0.00303,P\_rwandensis:0.00492):0.00266,((P\_rodasii:0.0,P\_dispersa:0.0):5.5E-4,((P\_sp\_At-9b:0.0,P\_cypripedii:0.0):0.00263,(P\_septica:0.0,P\_s\_indologenes:0.0,P\_s\_stewartii:0.0,P\_ananatis:0.0):0.00263):5.5E-4):5.4E-4,(P\_wallisii:5.5E-4,(P\_eucrina:0.00529,((P\_allii:0.0,P\_brenneri:0.0,P\_conspicua:0.0):5.4E-4,(((E\_billingiae:0.00729,(E\_pyrifoliae:6.7E-4,E\_tasmaniensis:0.00466):0.0054):0.01966,((P\_vagans:0.0,P\_agglomerans:0.0,P\_sp\_aB:0.0,P\_deleyi:0.0):5.5E-4,P\_anthophila:0.00263):5.5E-4):0.00247,(P\_sp\_A4:0.00599,(T\_sp\_NML\_06:0.0222,(T\_morbirosei:0.01106,T\_ptyseos:0.01334):0.00462):0.02668):0.00852):5.5E-4):0.00263):5.4E-4):0.00224);

[376] tree 't376'=[&R] (P\_deleyi:0.01133,(P\_sp\_aB:0.0056,P\_agglomerans:0.00198):0.00193,(P\_vagans:5.4E-4,(P\_anthophila:0.00382,((E\_billingiae:0.03353,(E\_pyrifoliae:0.00503,E\_tasmaniensis:0.01822):0.0416):0.05346,((((P\_sp\_At-9b:0.00367,P\_cypripedii:0.00584):0.02449,((P\_rodasii:0.00946,P\_rwandensis:0.00387):0.02092,(P\_sp\_GM01:0.01772,(P\_wallisii:0.00777,(P\_dispersa:0.00211,P\_eucrina:0.0194):0.0038):0.00731):0.0056):0.00521):0.01465,(P\_sp\_A4:0.05708,(T\_sp\_NML\_06:0.0316,(T\_morbirosei:0.03408,T\_ptyseos:0.0293):0.01648):0.05862):0.02815):0.01082,P\_septica:0.02766):0.00699,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00566,(P\_allii:0.00764,P\_ananatis:0.00185):0.00384):0.03813):0.00539):0.00906,(P\_brenneri:0.00569,P\_conspicua:0.0019):0.00401):0.00934):0.0019):0.00197);

[377] tree 't377'=[&R] (P\_deleyi:0.0092,P\_anthophila:0.00308,((P\_agglomerans:5.3E-4,(P\_conspicua:5.3E-4,(P\_brenneri:0.00304,(P\_septica:0.03384,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.03239,(P\_allii:0.00991,P\_ananatis:0.01472):0.00627):0.03548,(P\_sp\_A4:0.07125,((((P\_dispersa:0.02143,P\_wallisii:0.00896):0.01487,(P\_sp\_GM01:0.01528,(P\_rwandensis:0.00941,P\_rodasii:0.01179):0.00794):0.0036):0.00351,(P\_eucrina:0.04851,(P\_sp\_At-9b:0.02457,P\_cypripedii:0.00349):0.02356):0.01231):0.00406,(E\_billingiae:0.06206,(E\_pyrifoliae:0.02021,E\_tasmaniensis:0.00791):0.02921):0.04034):0.00857,(T\_sp\_NML\_06:0.00524,(T\_morbirosei:0.05413,T\_ptyseos:0.03062):0.02499):0.65633):0.01737):0.01883):0.0071):0.01103):0.00309):0.00917):0.00305,(P\_vagans:0.0,P\_sp\_aB:0.0):0.00307):0.00609);

[378] tree 't378'=[&R] ((P\_septica:0.01256,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00417,(P\_allii:0.00419,P\_ananatis:0.00415):0.0042):0.00829,(P\_brenneri:5.8E-4,(P\_agglomerans:0.00413,(P\_vagans:0.0,P\_deleyi:0.0,P\_anthophila:0.0,P\_conspicua:0.0,P\_sp\_aB:0.0):5.5E-4):0.00363):0.0042):0.00841):0.0083,(((T\_sp\_NML\_06:0.02854,(T\_morbirosei:0.03084,T\_ptyseos:0.02061):0.00835):0.05402,(E\_billingiae:0.04737,(P\_sp\_A4:0.02279,(E\_pyrifoliae:5.3E-4,E\_tasmaniensis:0.01232):0.0368):0.01221):0.01467):0.00769,P\_cypripedii:5.4E-4):5.4E-4,(P\_sp\_At-9b:0.00367,((P\_eucrina:0.01654,P\_wallisii:5.5E-4):0.01618,(P\_dispersa:5.5E-4,(P\_sp\_GM01:0.01669,(P\_rodasii:0.00412,P\_rwandensis:5.5E-4):0.00844):0.00412):5.3E-4):0.01162):0.00573);

[379] tree 't379'=[&R] ((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00396):0.00398,((P\_septica:0.01617,(P\_allii:0.0,P\_ananatis:0.0):0.00404):0.00391,P\_wallisii:0.00398):5.5E-4):5.5E-4,P\_rwandensis:5.5E-4,(((P\_dispersa:0.0,P\_cypripedii:0.0,P\_sp\_At-9b:0.0):0.00396,(P\_sp\_A4:0.0119,P\_eucrina:0.0079):5.5E-4):0.00794,(P\_deleyi:0.008,(P\_sp\_aB:0.00396,(P\_vagans:0.00397,P\_agglomerans:0.01593):5.4E-4):5.4E-4,(P\_anthophila:5.3E-

4,((T\_morbirosei:0.02146,(T\_ptyseos:0.02108,T\_sp\_NML\_06:0.04252):0.01148):0.04818,(E\_billingiae:0.01933,(E\_pyriifoliae:0.00399,E\_tasmaniensis:0.00795):0.02257):0.01391):0.01092):0.00404,((P\_brenneri:0.0,P\_conspicua:0.0):0.00403,P\_rodasii:0.00397):0.00402):0.00394):0.00402):0.00798):5.5E-4,P\_sp\_GM01:0.00397):5.5E-4);

[380] tree 't380'=[&R] ((P\_dispersa:0.01736,(P\_cyprapedii:0.00337,(P\_sp\_At-9b:0.00947,(((T\_sp\_NML\_06:0.04396,(T\_morbirosei:0.03876,T\_ptyseos:0.01181):0.01961):0.05603,(P\_sp\_A4:0.04323,P\_eucriona:0.05585):0.02049):0.01746,(((P\_brenneri:5.4E-4,P\_conspicua:0.00922):0.01492,((P\_sp\_aB:5.5E-4,(P\_vagans:0.00308,P\_deleyi:0.01565):5.5E-4):5.5E-4,(P\_agglomerans:5.5E-4,P\_anthophila:0.02495):0.00308):0.03062):0.04015,((E\_billingiae:0.02972,(E\_pyriifoliae:0.01517,E\_tasmaniensis:0.01388):0.02288):0.05218,P\_septica:0.02231):0.01387):0.01858,((P\_s\_indologenes:0.00306,P\_s\_stewartii:0.00617):0.00765,(P\_allii:0.00546,P\_ananatis:0.01318):0.01576):0.0296):0.00868):0.02226):0.00662):0.00769):0.00346,(P\_rodasii:0.03159,P\_rwandensis:0.01151):0.01052,(P\_sp\_GM01:0.00951,P\_wallisii:0.01576):0.00426);

[381] tree 't381'=[&R] (P\_sp\_aB:0.00603,((P\_vagans:5.5E-4,(P\_agglomerans:0.02087,(P\_brenneri:0.0,P\_conspicua:0.0):0.01419):5.5E-4):5.4E-4,P\_anthophila:0.00345):0.00438,(P\_deleyi:0.01168,(P\_sp\_A4:0.02106,(((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00343):0.02256,(P\_allii:0.00338,P\_ananatis:5.5E-4):0.00977):0.0145,(((E\_billingiae:0.04276,(E\_pyriifoliae:0.01769,E\_tasmaniensis:0.00893):0.05186):0.03492,((T\_morbirosei:0.05804,(T\_sp\_NML\_06:0.09115,T\_ptyseos:0.04318):0.024):0.11803,P\_septica:0.00837):0.01704):0.02132,((P\_sp\_At-9b:0.01053,P\_cyprapedii:0.0106):0.00142,((P\_sp\_GM01:0.02521,(P\_rodasii:0.00475,P\_rwandensis:0.00556):0.00842):0.01563,(P\_dispersa:0.01642,(P\_eucriona:0.02602,P\_wallisii:0.01282):0.00341):0.00511):0.01232):0.01659):0.01291):0.00421):0.02092):0.00681);

[382] tree 't382'=[&R] ((P\_sp\_A4:0.0243,(T\_morbirosei:0.02113,(T\_sp\_NML\_06:0.03896,T\_ptyseos:0.02179):0.01584):0.04475):0.02259,((E\_billingiae:0.02474,(E\_pyriifoliae:0.00436,E\_tasmaniensis:0.00883):0.03859):0.0227,((P\_dispersa:0.00336,(P\_eucriona:0.01312,P\_wallisii:0.00976):5.4E-4):0.01318,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01037,(((P\_brenneri:0.0,P\_conspicua:0.0):0.00328,(P\_anthophila:0.01324,((P\_vagans:0.0,P\_deleyi:0.0):5.5E-4,(P\_agglomerans:0.00328,P\_sp\_aB:0.01318):5.5E-4):5.5E-4):0.00327):0.01591,(P\_allii:0.00946,P\_ananatis:0.00372):0.00373):0.00706):0.01292,(P\_sp\_GM01:0.01319,(P\_rodasii:0.00646,P\_rwandensis:0.00322):0.0033):0.00645):0.0034):0.00368):5.5E-4,((P\_sp\_At-9b:5.3E-4,P\_septica:0.02357):0.00329,P\_cyprapedii:0.00325):0.00599);

[383] tree 't383'=[&R] ((P\_sp\_A4:0.02943,((E\_billingiae:0.03793,(E\_pyriifoliae:0.01693,E\_tasmaniensis:0.02072):0.05619):0.05419,(T\_morbirosei:0.03536,(T\_sp\_NML\_06:0.08969,T\_ptyseos:0.05573):0.03523):0.07964):0.02974):0.03564,(P\_cyprapedii:0.03151,(P\_septica:0.03712,P\_sp\_At-9b:0.0259):0.00414):0.00605,(((P\_allii:0.00565,(P\_ananatis:0.0057,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00578):0.00295):0.02426,(((P\_anthophila:0.01759,P\_deleyi:0.01361):0.00656,(P\_agglomerans:0.00853,P\_vagans:5.4E-4):0.00278):0.00199,P\_sp\_aB:0.00247):0.00614,(P\_brenneri:0.00667,P\_conspicua:0.00478):0.01325):0.02139):0.01265,((P\_rwandensis:0.0429,P\_rodasii:0.03266):0.01447,(P\_eucriona:0.04535,(P\_dispersa:0.01218,(P\_sp\_GM01:0.01606,P\_wallisii:0.00143):0.00829):0.00435):0.00559):0.01798):0.01801);

[384] tree 't384'=[&R] ((((((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00157):0.01058,(P\_allii:0.01464,P\_ananatis:0.00973):0.00631):0.03507,(P\_septica:0.01963,((T\_sp\_NML\_06:0.02208,(T\_ptyseos:0.02107,T\_morbirosei:0.06214):0.01703):0.13476,(E\_billingiae:0.04298,(E\_pyrifoliae:0.01614,E\_tasmaniensis:0.01532):0.07262):0.02608):0.01931):0.00812):0.01332,(((P\_dispersa:0.01519,(P\_eucrina:0.0285,P\_wallisii:0.01015):0.00667):0.01121,((P\_rodasii:0.00513,P\_rwandensis:0.01169):0.01315,(P\_sp\_A4:0.02687,P\_sp\_GM01:0.01158):0.00711):0.00596):0.02253,(P\_sp\_At-9b:0.00925,P\_cyprapedii:0.01066):0.01217):0.01203):0.02215,(P\_conspicua:0.01738,P\_brenneri:0.00956):0.00778):0.00404,(P\_vagans:0.00324,(P\_agglomerans:0.00325,P\_sp\_aB:0.00162):0.00163):0.00353,(P\_deleyi:0.00816,P\_anthophila:0.00962):0.00165);

[385] tree 't385'=[&R] ((P\_eucrina:0.07186,(P\_dispersa:0.03297,((P\_sp\_At-9b:0.02573,P\_cyprapedii:0.02164):0.05873,((P\_wallisii:0.04052,P\_rwandensis:0.03132):0.00416,(P\_rodasii:0.0208,P\_sp\_GM01:0.03907):0.00431):0.01182):0.00599):0.01801):0.03979,(T\_morbirosei:0.08505,(T\_sp\_NML\_06:0.15158,T\_ptyseos:0.06549):0.03792):0.13844,(P\_sp\_A4:0.09264,((P\_septica:0.08085,(E\_billingiae:0.07404,(E\_pyrifoliae:0.01549,E\_tasmaniensis:0.02681):0.10476):0.07277):0.00602,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01436,(P\_ananatis:0.03351,P\_allii:0.01608):0.03274):0.02445,((P\_brenneri:0.01467,P\_conspicua:0.01446):0.03377,(P\_anthophila:0.02563,(P\_deleyi:0.03114,(P\_agglomerans:0.00915,(P\_vagans:0.01223,P\_sp\_aB:0.00914):0.00299):5.4E-4):0.0147):0.01455):0.01015):0.01205):0.00793):0.00862);

[386] tree 't386'=[&R] ((P\_sp\_GM01:0.02164,(((P\_septica:5.4E-4,((P\_conspicua:5.5E-4,((P\_s\_stewartii:0.00713,(P\_allii:0.0,P\_ananatis:0.0,P\_s\_indologenes:0.0):5.5E-4):0.00716,P\_brenneri:5.4E-4):0.00704):0.00472,((P\_vagans:0.0,P\_deleyi:0.0,P\_anthophila:0.0,P\_sp\_aB:0.0):0.00724,P\_agglomerans:0.00721):0.00587):0.01116):0.03695,(P\_sp\_A4:0.02306,((E\_billingiae:0.04139,(E\_pyrifoliae:0.0068,E\_tasmaniensis:9.8E-4):0.05493):0.06034,(T\_ptyseos:0.02131,(T\_morbirosei:0.04695,T\_sp\_NML\_06:0.01409):0.02017):0.11385):0.01464):0.01484):5.5E-4,P\_cyprapedii:0.00738):0.00722,P\_sp\_At-9b:5.4E-4):0.0143,(P\_rodasii:0.00719,P\_dispersa:5.5E-4):5.3E-4):0.00713):5.4E-4,P\_rwandensis:5.5E-4,(P\_wallisii:0.00716,P\_eucrina:0.00713):5.5E-4);

[387] tree 't387'=[&R] (P\_sp\_A4:0.01486,(P\_septica:0.00382,(T\_morbirosei:5.4E-4,(T\_ptyseos:0.0073,T\_sp\_NML\_06:0.01846):0.00371):0.0298):0.00363,(((E\_tasmaniensis:0.00363,(E\_billingiae:0.00364,E\_pyrifoliae:5.5E-4):5.5E-4):0.03032,(P\_anthophila:5.4E-4,((P\_deleyi:0.0,P\_brenneri:0.0,P\_conspicua:0.0,P\_agglomerans:0.0,P\_vagans:0.0,P\_sp\_aB:0.0,P\_allii:0.0,P\_s\_indologenes:0.0,P\_s\_stewartii:0.0,P\_ananatis:0.0):5.5E-4,(P\_rwandensis:0.0,P\_rodasii:0.0,P\_sp\_GM01:0.0,P\_wallisii:0.0,P\_eucrina:0.0,P\_dispersa:0.0):0.00367):0.00369):5.4E-4):0.00367,(P\_sp\_At-9b:0.00736,P\_cyprapedii:5.4E-4):0.00367):0.00384);

[388] tree 't388'=[&R] (P\_dispersa:0.00338,(P\_eucrina:0.00335,(P\_wallisii:5.4E-4,(P\_sp\_GM01:0.00675,(P\_rodasii:0.00337,P\_rwandensis:5.5E-4):5.4E-4):0.01039):0.00681):0.0034,((P\_allii:5.4E-4,(P\_ananatis:0.0,P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.0067):0.00672,((P\_sp\_At-9b:5.5E-4,P\_cyprapedii:0.00303):0.02061,(((E\_pyrifoliae:0.01172,(E\_billingiae:0.03556,E\_tasmaniensis:0.00512):0.00676):0.07062,P\_sp\_A4:0.02684):0.00357,((T\_morbirosei:0.01126,(T\_ptyseos:0.01834,T\_sp\_NML\_06:0.02072):0.01644):0.0414,(P\_septica:0.02001,((P\_vagans:0.0,P\_anthophila:0.0,P\_sp\_aB:0.0):0.00331,P\_deleyi:0.0033):0.00336,((P\_conspicua:0.01375,P\_brenneri:0.00616):0.00668,P\_agglomerans:0.01636):5.5E-4):0.01401):0.00695):5.4E-4):0.01272):0.007):0.00339);

[389] tree 't389'=[&R] ((P\_conspicua:5.3E-4,(((P\_brenneri:0.0,P\_vagans:0.0,P\_sp\_aB:0.0):5.5E-4,(P\_deleyi:0.02716,P\_agglomerans:0.00557):5.5E-4):0.00196,P\_anthophila:5.5E-4):0.00601):0.00813,(P\_eucrina:5.3E-4,(P\_rwandensis:0.00806,P\_rodasii:5.4E-4):0.002):0.00605,(((P\_dispersa:5.5E-4,(P\_wallisii:0.00201,((P\_sp\_At-9b:5.5E-4,P\_cyprapedii:0.00403):0.00597,((P\_septica:0.01096,(T\_morbirosei:0.00739,(T\_ptyseos:0.01056,T\_sp\_NML\_06:0.01197):0.00497):0.036):0.00687,(P\_sp\_A4:0.01653,(E\_billingiae:0.01223,(E\_pyriifoliae:0.0,E\_tasmaniensis:0.0):0.00201):0.01013):0.00557):5.3E-4):5.5E-4):0.002):0.00229,((P\_s\_stewartii:0.00199,P\_s\_indologenes:5.5E-4):5.3E-4,(P\_allii:0.00201,P\_ananatis:5.5E-4):0.00172):0.00202):0.00374,P\_sp\_GM01:0.0061):0.00198);

[390] tree 't390'=[&R] ((P\_vagans:0.01091,(P\_deleyi:0.00545,P\_anthophila:5.5E-4):0.00542):5.3E-4,P\_sp\_aB:5.5E-4,((P\_conspicua:5.5E-4,(P\_brenneri:0.01062,((P\_allii:0.0,P\_ananatis:0.0,P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01253,(P\_rwandensis:0.02552,(P\_rodasii:0.01469,((P\_wallisii:0.00538,(P\_eucrina:0.02781,P\_dispersa:0.00525):0.01113):0.00533,(P\_sp\_GM01:0.02574,((P\_septica:0.02859,(P\_sp\_A4:0.08435,((T\_morbirosei:0.01358,(T\_ptyseos:0.03764,T\_sp\_NML\_06:0.0446):0.06965):0.10817,(E\_billingiae:0.06126,(E\_pyriifoliae:0.01638,E\_tasmaniensis:5.5E-4):0.03778):0.05346):0.03336):0.03431):0.01252,(P\_sp\_At-9b:0.00542,P\_cyprapedii:0.0166):0.01534):0.02126):0.00707):0.00814):0.01366):0.03346):0.00985):0.00602):0.00539,P\_agglomerans:0.00539):5.5E-4);

[391] tree 't391'=[&R] ((P\_anthophila:0.03744,P\_agglomerans:5.4E-4):0.00742,P\_vagans:0.00737,((P\_deleyi:5.4E-4,(P\_conspicua:0.00743,(P\_brenneri:0.0171,((P\_allii:0.02417,(P\_ananatis:0.03844,(P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.01502):0.01632):0.00612):0.00778,(P\_septica:0.02276,(P\_sp\_A4:0.12524,((E\_billingiae:0.10906,(T\_morbirosei:0.05608,(T\_sp\_NML\_06:0.27532,T\_ptyseos:0.05216):0.2346):0.264):0.03566,((E\_pyriifoliae:0.02871,E\_tasmaniensis:0.02538):0.10343,((P\_sp\_GM01:0.02135,(P\_wallisii:0.03618,(P\_dispersa:0.04457,(P\_eucrina:0.03977,P\_rwandensis:0.08239):0.02417):0.00914):0.02241):0.02418,(P\_rodasii:0.05442,(P\_sp\_At-9b:0.01325,P\_cyprapedii:0.02818):0.07414):0.03183):0.03659):0.02544):0.01946):0.03697):0.0157):0.05501):0.00609):0.01511):0.03006,P\_sp\_aB:0.01477):5.4E-4);

[392] tree 't392'=[&R] (P\_rodasii:0.01203,(((P\_sp\_At-9b:5.5E-4,P\_cyprapedii:0.01207):0.00595,P\_rwandensis:5.5E-4):0.006,(P\_eucrina:0.00177,(P\_wallisii:0.00597,P\_dispersa:5.5E-4):0.00478):0.01152):5.5E-4,((P\_sp\_A4:0.03594,((P\_septica:0.01207,((P\_agglomerans:0.0,P\_vagans:0.0,P\_sp\_aB:0.0):5.5E-4,((T\_morbirosei:0.00728,(T\_sp\_NML\_06:0.05537,T\_ptyseos:0.00285):0.03948):0.05251,(E\_billingiae:0.03466,(E\_pyriifoliae:0.00608,E\_tasmaniensis:0.00601):0.01462):0.00846):0.03375):0.00587,P\_deleyi:5.5E-4):0.00601):0.00601,(P\_anthophila:5.5E-4,((P\_s\_stewartii:0.00602,(P\_allii:0.0,P\_ananatis:0.0,P\_s\_indologenes:0.0):5.5E-4):0.00592,(P\_brenneri:0.00599,P\_conspicua:5.5E-4):0.00606):0.01221):5.5E-4):0.0079):0.01716,P\_sp\_GM01:5.4E-4):0.00589);

[393] tree 't393'=[&R] ((E\_pyriifoliae:0.0,E\_tasmaniensis:0.0,E\_billingiae:0.0,P\_agglomerans:0.0,P\_sp\_At-9b:0.0,P\_vagans:0.0,P\_deleyi:0.0,P\_allii:0.0,P\_ananatis:0.0,P\_anthophila:0.0,P\_brenneri:0.0,P\_conspicua:0.0,P\_cyprapedii:0.0,P\_dispersa:0.0,P\_eucrina:0.0,P\_rodasii:0.0,P\_rwandensis:0.0,P\_septica:0.0,P\_sp\_A4:0.0,P\_sp\_GM01:0.0,P\_sp\_aB:0.0,P\_s\_indologenes:0.0,P\_s\_stewartii:0.0,P\_wallisii:0.0):0.02621,T\_morbirosei:0.01253,(T\_ptyseos:0.0,T\_sp\_NML\_06:0.0):0.01314);

[394] tree 't394'=[&R] ((P\_anthophila:0.04182,(P\_deleyi:5.5E-4,((P\_agglomerans:0.00783,(P\_vagans:0.0,P\_sp\_aB:0.0):5.5E-4):5.5E-4,((((P\_sp\_GM01:5.4E-4,(P\_rwandensis:0.01676,P\_rodasii:5.5E-4):0.00833):5.4E-4,(P\_sp\_At-9b:0.0,P\_cyprapedii:0.0):5.4E-4,((P\_eucrina:0.04324,P\_dispersa:5.4E-4):5.5E-4,P\_wallisii:0.0513):0.0153,(P\_septica:0.01098,(P\_sp\_A4:0.03998,(T\_morbirosei:0.01255,(T\_ptyseos:0.00825,T\_sp\_NML\_06:0.00825):0.01264):0.02769):0.03559):0.01736):0.01752):0.01673):0.01172,(E\_pyriifoliae:0.01657,E\_tasmaniensis:5.4E-4):0.0571):0.004,P\_brenneri:0.0304):0.02801,E\_billingiae:0.03793):0.01535):0.01561):0.00604):0.00268,(P\_s\_stewartii:0.0,P\_ananatis:0.0,P\_s\_indologenes:0.0):5.5E-4,(P\_allii:0.00811,P\_conspicua:0.01619):5.5E-4);

[395] tree 't395'=[&R] (P\_conspicua:0.01843,((P\_vagans:0.01818,(P\_sp\_aB:0.03666,P\_anthophila:5.5E-4):0.01332):5.5E-4,P\_deleyi:0.02593):0.01615,P\_brenneri:0.00916):5.4E-4,((((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.04562,(P\_allii:6.0E-4,P\_ananatis:0.00874):0.0114):0.04502,((P\_sp\_A4:0.17709,((P\_sp\_At-9b:0.011,P\_cyprapedii:0.02737):0.0128,(P\_eucrina:0.05633,(P\_dispersa:0.00916,P\_wallisii:5.5E-4):5.4E-4):0.01309,(P\_rodasii:0.03701,(P\_sp\_GM01:0.03764,P\_rwandensis:5.4E-4):0.02024):0.02549):0.03215):0.03232,(E\_billingiae:0.11025,(E\_pyriifoliae:0.00928,E\_tasmaniensis:5.4E-4):0.16861):0.21089,(T\_sp\_NML\_06:0.07557,(T\_morbirosei:0.02134,T\_ptyseos:0.07123):0.00667):0.20646):0.02444):0.0341):0.07121,P\_septica:0.06536):0.02324):0.01146,P\_agglomerans:0.0187):5.4E-4);

[396] tree 't396'=[&R] (((((P\_septica:0.07668,(T\_morbirosei:0.08806,(T\_ptyseos:0.06093,T\_sp\_NML\_06:0.05001):0.03614):0.13592):0.01388,(P\_s\_indologenes:0.00479,P\_s\_stewartii:5.5E-4):0.05562,((P\_sp\_A4:0.1406,P\_ananatis:0.01598):0.00528,P\_allii:0.02826):0.02471,((P\_conspicua:0.02935,P\_brenneri:0.01586):0.02031,(P\_agglomerans:5.4E-4,(P\_sp\_aB:0.01498,(P\_vagans:0.00495,P\_deleyi:0.01008):0.00989):0.00975):0.01036,P\_anthophila:0.05371):0.00873):0.04548):5.9E-4):0.04077):0.08117,(P\_sp\_At-9b:0.01019,P\_cyprapedii:0.01539):0.03563):0.02899,(E\_billingiae:0.13116,(E\_pyriifoliae:0.05522,E\_tasmaniensis:0.03503):0.09062):0.06094,P\_dispersa:0.02148):0.0022):0.02857,P\_sp\_GM01:0.0145,(P\_rwandensis:0.04477,(P\_rodasii:0.02537,(P\_eucrina:0.048,P\_wallisii:0.0258):0.0183):0.01382):0.01427);

[397] tree 't397'=[&R] (((P\_conspicua:0.0068,(P\_deleyi:0.02613,P\_brenneri:0.00634):0.02031):0.00845,(P\_dispersa:0.01204,((P\_sp\_At-9b:0.0095,P\_cyprapedii:0.01326):0.02361,P\_rodasii:0.00965):0.00368,((P\_sp\_A4:0.01323,((T\_ptyseos:0.00675,(T\_morbirosei:0.03268,T\_sp\_NML\_06:0.01496):0.01015):0.03928,(E\_billingiae:0.01571,(E\_pyriifoliae:0.0095,E\_tasmaniensis:0.00383):0.03161):0.01034):0.02436,P\_septica:0.00256):0.00708):0.01043,(P\_sp\_GM01:0.00854,((P\_eucrina:0.02249,P\_rwandensis:5.5E-4):0.00653,P\_wallisii:0.01002):0.00525):0.00509):0.00319):0.00704):0.00656):0.00423,(P\_vagans:5.5E-4,(P\_sp\_aB:0.00318,P\_agglomerans:0.00319):5.5E-4):5.4E-4,((P\_allii:0.00329,P\_ananatis:0.00328):0.01944,(P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00637):5.4E-4):0.00694,P\_anthophila:0.01346):0.00561);

[398] tree 't398'=[&R] (((P\_anthophila:0.1091,P\_cyprapedii:0.02158):0.19027,(P\_wallisii:0.18399,(P\_dispersa:0.22957,(P\_sp\_GM01:0.15846,((T\_morbirosei:0.28116,(T\_sp\_NML\_06:0.26053,T\_ptyseos:0.18073):0.06049):0.08486,(E\_pyriifoliae:0.1418,E\_tasmaniensis:0.

18642):0.34083,((P\_rodasii:0.02672,P\_rwandensis:0.07898):0.08199,(P\_sp\_A4:0.23973,((P\_agglomerans:0.0652,P\_vagans:0.04741):0.12534,(P\_s\_stewartii:0.12049,P\_allii:0.12112):0.06958):0.08241):0.13463):0.05236):0.04668):0.59391):0.05785  
,P\_sp\_At-  
9b:0.10628):0.03151):0.04261):0.05506):0.03736,(((P\_deleyi:0.04915,P\_conspicua:0.01235):0.0161,(P\_s\_indologenes:0.07147,P\_ananatis:0.08136):0.0125):0.03303,(E\_billingiae:0.0384,P\_brenneri:0.02408):0.01259):0.003,P\_eucrina:0.04938):0.01254,(P\_sp\_aB:0.03911,P\_septica:0.03532):0.01);  
[399] tree 't399'=[&R] (P\_sp\_At-9b:5.4E-  
4,(P\_cyprapedii:0.00553,((T\_morbirosei:0.01026,(T\_sp\_NML\_06:0.02032,T\_ptyseos:0.0224):0.01097):0.04937,((P\_allii:5.4E-  
4,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.03008,P\_ananatis:0.0112):0.00558):0.01108,((P\_deleyi:0.0,P\_anthophila:0.0):5.5E-4,(P\_vagans:5.3E-4,(P\_agglomerans:0.00549,P\_sp\_aB:0.01707):0.01157):0.02232):0.06279,(P\_brenneri:5.4E-4,P\_conspicua:0.02875):0.00489):0.01344):0.0518):0.00719,((P\_sp\_A4:0.06439,(E\_billingiae:0.12634,(E\_pyriifoliae:5.5E-4,E\_tasmaniensis:0.00561):0.0387):0.04445):0.16584,P\_septica:0.01312):0.01897):0.02181):5.3E-4,((P\_dispersa:5.5E-4,P\_wallisii:0.01118):0.00567,(P\_eucrina:0.01564,(P\_sp\_GM01:0.01821,(P\_rodasii:5.5E-4,P\_rwandensis:0.01122):0.00631):0.01512):0.01321):0.0057);  
[400] tree 't400'=[&R]  
(P\_sp\_GM01:0.05008,(P\_rodasii:0.03165,P\_rwandensis:0.00704):0.01081,(P\_dispersa:0.01034,((P\_sp\_A4:0.05089,P\_wallisii:0.02653):0.01838,(P\_eucrina:0.02914,(P\_septica:0.01275,((E\_billingiae:0.05584,(E\_pyriifoliae:0.04527,E\_tasmaniensis:0.00367):0.05167):0.11726,(T\_morbirosei:0.03486,(T\_sp\_NML\_06:0.05954,T\_ptyseos:0.03278):0.01435):0.05147):0.06455,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01808,(P\_allii:0.00531,P\_ananatis:0.00542):0.02103):0.02298,(P\_anthophila:0.00576,(P\_deleyi:0.02702,(P\_agglomerans:0.01076,(P\_vagans:5.5E-4,(P\_sp\_aB:0.01074,(P\_brenneri:0.0,P\_conspicua:0.0):0.00535):5.5E-4):0.00573):0.00537):0.02909):0.00383):0.02038):0.06104):0.00639):0.00476,(P\_sp\_At-9b:0.00528,P\_cyprapedii:0.01093):0.01631):0.00608):0.01151);  
[401] tree 't401'=[&R]  
(P\_septica:0.01053,((P\_agglomerans:0.0,P\_vagans:0.0,P\_deleyi:0.0,P\_anthophila:0.0,P\_brenneri:0.0,P\_conspicua:0.0,P\_sp\_aB:0.0):5.4E-4,((P\_sp\_GM01:0.0,T\_morbirosei:0.0,T\_ptyseos:0.0):0.01046,(P\_sp\_At-9b:0.0,P\_cyprapedii:0.0):5.4E-4):0.0105):0.01045,((P\_allii:0.0,P\_ananatis:0.0,P\_dispersa:0.0,P\_eucrina:0.0,P\_sp\_A4:0.0,P\_s\_indologenes:0.0,P\_s\_stewartii:0.0,P\_wallisii:0.0,T\_sp\_NML\_06:0.0):5.5E-4,((E\_billingiae:0.0,E\_tasmaniensis:0.0):0.01047,(E\_pyriifoliae:0.1347,(P\_rodasii:0.0,P\_rwandensis:0.0):5.5E-4):0.01048):5.4E-4):5.5E-4);  
[402] tree 't402'=[&R]  
((((P\_sp\_A4:0.05655,(((P\_brenneri:0.00722,P\_conspicua:0.01185):0.02873,(((P\_anthophila:0.01725,P\_deleyi:0.02209):0.00924,(P\_vagans:0.0048,P\_sp\_aB:0.00948):0.00477):0.00499,P\_agglomerans:0.01676):0.02087):0.01093,(P\_septica:0.05869,(P\_s\_indologenes:0.00237,P\_s\_stewartii:0.00712):0.03114,(P\_allii:0.01832,P\_ananatis:0.01599):0.01237):0.01811):0.0485):0.0177,((T\_sp\_NML\_06:0.05709,(T\_ptyseos:0.06718,T\_morbirosei:0.06495):0.02518):0.09622,(E\_billingiae:0.05764,(E\_pyriifoliae:0.03012,E\_tasmaniensis:0.02927):0.04187):0.02158):0.002):0.02432):0.01862,P\_cyprapedii:0.00645):0.00691),P\_sp\_At-



9b:0.0064):0.02093,(P\_sp\_GM01:0.02554,(P\_rodasii:0.01168,P\_rwandensis:0.00713):0.01297):0.00728):0.00785,P\_dispersa:0.0098,(P\_wallisii:0.02779,P\_eucrina:0.05097):0.00789);

[403] tree 't403'=[&R]

(P\_sp\_A4:0.01812,((E\_billingiae:0.03023,(E\_pyrifoliae:0.04369,E\_tasmaniensis:0.0218):0.03627):0.0156,(T\_morbirosei:0.01714,(T\_sp\_NML\_06:0.03432,T\_ptyseos:0.04036):0.01611):0.07932):0.01226,(((P\_cyripedii:0.01589,P\_sp\_At-9b:0.00482):0.00874,(((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00314):0.01396,(P\_allii:0.01115,P\_ananatis:0.01168):0.01459):0.0444,(P\_sp\_GM01:5.4E-4,(P\_rwandensis:0.01251,P\_rodasii:0.00312):0.01269):0.01837):5.5E-4,(P\_wallisii:0.0339,(P\_eucrina:0.05332,P\_dispersa:0.01777):0.00934):0.00837):0.00358):0.01426,(P\_septica:0.03067,((P\_vagans:0.00428,P\_sp\_aB:0.00212):0.01057,(P\_agglomerans:0.01159,(P\_deleyi:0.00998,P\_anthophila:0.02911):0.00754):0.00331):0.0266,(P\_brenneri:0.0064,P\_conspicua:0.00983):0.01082):0.02328):0.01537):0.00211);

[404] tree 't404'=[&R] ((P\_sp\_aB:0.00303,P\_vagans:5.5E-4):5.3E-4,((P\_allii:0.00606,P\_ananatis:5.5E-4):0.00305,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.4E-4,(((P\_sp\_GM01:5.5E-4,(P\_rodasii:0.082,(P\_wallisii:5.5E-4,(P\_eucrina:0.01194,(P\_rwandensis:0.01584,P\_sp\_A4:0.00573):0.00938):5.5E-4):0.00595):0.00628):0.00596,(P\_septica:0.01537,P\_dispersa:0.00657):5.5E-4):0.00852,((T\_morbirosei:0.00607,(T\_ptyseos:0.00613,T\_sp\_NML\_06:0.00299):0.00921):0.0382,(P\_sp\_At-9b:0.00302,P\_cyripedii:5.5E-4):0.00399):0.00232):0.00921):0.00302):0.00924):0.00304,(P\_brenneri:0.0,P\_conspicua:0.0):0.00608,(P\_agglomerans:5.5E-4,((E\_billingiae:0.0144,(E\_pyrifoliae:0.00306,E\_tasmaniensis:5.4E-4):0.00434):0.01887,(P\_deleyi:0.0,P\_anthophila:0.0):0.00303):5.4E-4):5.3E-4);

[405] tree 't405'=[&R]

(P\_sp\_aB:0.00363,(P\_agglomerans:0.00727,(P\_deleyi:0.04526,(P\_anthophila:0.02212,(P\_septica:0.01972,(((P\_sp\_A4:0.06465,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.03496,(P\_allii:0.0036,P\_ananatis:5.5E-4):0.01424):0.02675):0.01896,((T\_morbirosei:0.03631,(T\_sp\_NML\_06:0.04683,T\_ptyseos:0.02119):0.03098):0.19825,(E\_billingiae:0.03392,(E\_pyrifoliae:0.03312,E\_tasmaniensis:0.01404):0.04865):0.02086):0.01115):0.01436,((P\_sp\_At-9b:0.00739,P\_cyripedii:0.01472):0.00377,(P\_dispersa:0.01463,(((P\_rwandensis:0.03739,P\_rodasii:0.00254):0.01328,(P\_sp\_GM01:0.01855,P\_wallisii:0.00718):0.00347):0.00365,P\_eucrina:0.04477):5.4E-4):0.01476):0.01496):0.01197):0.01458):0.00716):5.5E-4):0.00363,((P\_brenneri:0.01829,P\_conspicua:5.5E-4):0.00729,P\_vagans:0.00362):5.5E-4);

[406] tree 't406'=[&R]

(P\_vagans:0.0117,P\_sp\_aB:0.01184,(P\_agglomerans:0.01437,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.02682,(P\_allii:0.01831,P\_ananatis:0.02153):0.02139):0.07045,((P\_sp\_A4:0.15833,((E\_billingiae:0.05788,(E\_pyrifoliae:0.02689,E\_tasmaniensis:0.01696):0.07388):0.09159,P\_septica:0.08876):0.01963):0.01579,((T\_morbirosei:0.05485,(T\_sp\_NML\_06:0.10481,T\_ptyseos:0.05319):0.02497):0.15562,((P\_sp\_At-9b:0.03432,P\_cyripedii:0.02791):0.03054,((P\_sp\_GM01:0.0361,(P\_rodasii:0.02119,P\_rwandensis:0.05232):0.02048):0.01023,(P\_dispersa:0.02295,(P\_eucrina:0.08871,P\_wallisii:0.0377):0.0079):0.01382):0.02939):0.02614):0.02856):0.02047):0.0325,(P\_brenneri:0.0067,P\_conspicua:0.01186):0.00689):0.02307,(P\_deleyi:0.0403,P\_anthophila:0.01381):0.00329):0.00629):0.0026);

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[407] tree 't407'=[&R]
(((T_morbirosei:0.09436,(T_ptyseos:0.07965,T_sp_NML_06:0.10179):0.06262):0.18689,(E_billingiae:0.06854,(E_pyrifoliae
:0.03038,E_tasmaniensis:0.01806):0.08009):0.03049):0.02927,(((P_allii:5.4E-
4,(P_s_indologenes:0.0,P_s_stewartii:0.0):0.0194,P_ananatis:5.3E-
4):0.00582):0.04948,((P_brenneri:0.0043,P_conspicua:0.01161):0.03007,(P_deleyi:0.02484,(P_anthophila:0.01463,(P_vaga
ns:0.00649,(P_sp_aB:0.00852,P_agglomerans:5.5E-
4):0.00196):0.01496):0.0072):0.02784):0.02453):0.0319,P_septica:0.08106):0.01337,((((P_rwandensis:0.01189,P_rodasii:
0.02061):0.01789,(P_dispersa:0.0268,P_wallisii:0.02913):0.01755):0.01874,(P_sp_GM01:0.02499,P_eucrina:0.06726):0.004
13):0.03306,(P_sp_A4:0.07392,(P_cyprapedii:0.02855,P_sp_At-9b:0.02595):0.01183):0.00745):0.00759);
[408] tree 't408'=[&R] (P_anthophila:0.00771,(P_brenneri:0.00204,P_conspicua:0.00836):0.00579,((P_vagans:5.3E-
4,(P_sp_aB:0.01038,P_agglomerans:0.00412):0.00418):0.00209,(P_deleyi:0.0159,((P_eucrina:0.02556,((P_dispersa:0.0150
3,P_wallisii:0.00878):0.00566,((P_sp_At-
9b:0.01129,P_cyprapedii:0.00963):0.00742,(P_rwandensis:0.00896,(P_rodasii:0.00334,P_sp_GM01:0.00609):0.00303):0.0202
):0.00533):0.0057,(P_sp_A4:0.02391,((T_morbirosei:0.02966,(T_sp_NML_06:0.0525,T_ptyseos:0.0419):0.04441):0.03181,(E_
billingiae:0.0407,(E_pyrifoliae:0.028,E_tasmaniensis:0.01918):0.05992):0.02586):0.01688):0.0136):0.00962):0.0077,(P_
septica:0.01388,(P_ananatis:0.00177,(P_allii:0.00454,(P_s_indologenes:0.00203,P_s_stewartii:5.3E-
4):0.0256):0.00406):0.02627):0.00625):0.00814):0.00309):0.00316);
[409] tree 't409'=[&R] ((P_sp_A4:0.02405,P_wallisii:0.03266):5.5E-
4,((P_conspicua:0.01637,(P_anthophila:0.03319,(P_vagans:5.5E-
4,(P_agglomerans:0.0163,P_sp_aB:0.00808):0.00828,P_deleyi:0.0167):5.4E-4):5.4E-4):0.00814,P_brenneri:5.4E-4):5.3E-
4):0.0256,(P_sp_At-9b:5.4E-
4,(P_cyprapedii:0.0032,(P_allii:0.02349,(P_ananatis:0.0,P_s_indologenes:0.0,P_s_stewartii:0.0):0.01451):0.07918):0.0
2227):0.01618):0.00812):0.00795,P_eucrina:0.00824,(((P_rodasii:5.4E-
4,P_rwandensis:0.00794):0.00991,((T_morbirosei:0.05234,(T_ptyseos:0.06619,T_sp_NML_06:0.02039):0.0264):0.06832,(P_sp
_GM01:0.01808,(P_septica:0.05787,(E_billingiae:0.03834,(E_pyrifoliae:0.0272,E_tasmaniensis:0.02588):0.06509):0.06756
):0.0594):0.01989):0.01464):0.01448,P_dispersa:5.4E-4):0.00809);
[410] tree 't410'=[&R] (P_sp_aB:0.00856,P_vagans:0.00855,(P_agglomerans:0.00856,((P_brenneri:5.4E-
4,P_conspicua:0.03434):0.01054,((P_ananatis:0.01449,(P_allii:0.02393,(P_s_indologenes:0.00811,P_s_stewartii:5.5E-
4):0.01215):0.04826):0.04479,((((E_pyrifoliae:0.02879,E_tasmaniensis:0.10604):0.23081,(E_billingiae:0.07592,(T_sp_NM
L_06:0.13583,(T_ptyseos:0.18905,T_morbirosei:0.31496):0.09465):0.37081):0.0643):0.07461,((P_sp_At-
9b:0.09205,P_cyprapedii:0.04507):0.02831,((P_dispersa:0.04039,((P_rodasii:0.01646,P_rwandensis:0.0669):0.03779,P_wal
lisii:0.04264):0.01084):0.02163,P_sp_GM01:0.02119):0.0865):0.01026):0.02513,(P_sp_A4:0.23266,(P_eucrina:0.14896,P_se
ptica:0.04672):0.04023):0.03209):0.03249):0.04276):0.05394,(P_deleyi:0.02598,P_anthophila:0.01689):5.5E-
4):0.01697):5.4E-4);
[411] tree 't411'=[&R]
(P_eucrina:0.08885,P_dispersa:0.02097,((P_cyprapedii:0.01622,((P_wallisii:0.02507,(P_rwandensis:0.06968,P_rodasii:0.
04107):0.00862):0.00831,(P_sp_GM01:0.01845,(((P_brenneri:5.5E-4,P_conspicua:0.00819):0.02396,(P_vagans:5.3E-
4,(P_anthophila:0.04245,(P_sp_aB:0.02441,(P_deleyi:0.00819,P_agglomerans:5.5E-
4):0.00875):0.00844):0.00887):0.01798):0.03195,(P_septica:0.06237,((P_ananatis:5.5E-
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4,(P\_allii:0.00701,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.10983):0.02638):0.09168,((T\_morbirosei:0.13946,(T\_ptyseos:0.07665,T\_sp\_NML\_06:0.17821):0.03849):0.13082,(P\_sp\_A4:0.24036,(E\_billingiae:0.11136,(E\_pyriifoliae:0.08621,E\_tasmaniensis:0.06335):0.04673):0.06383):0.02024):0.03327):8.5E-4):0.03038):0.04613):0.01675):5.4E-4):0.00785,P\_sp\_At-9b:0.02595):0.04131);

[412] tree 't412'=[&R] (P\_rodasii:0.01425,P\_rwandensis:0.00162,(P\_sp\_GM01:5.3E-4,(P\_dispersa:5.3E-4,((P\_sp\_At-9b:0.0,P\_cypripedii:0.0):0.00951,(P\_wallisii:0.01193,(P\_eucrina:0.02298,((E\_billingiae:0.03047,(E\_pyriifoliae:0.00698,E\_tasmaniensis:0.00966):0.04226):0.05504,(T\_sp\_NML\_06:0.00747,(T\_morbirosei:0.03068,T\_ptyseos:0.00916):0.01388):0.03383):0.03125,(P\_sp\_A4:0.06609,((P\_brenneri:0.00472,(P\_conspicua:5.5E-4,(P\_anthophila:0.0048,(P\_deleyi:0.00479,(P\_vagans:0.00478,(P\_sp\_aB:0.0,P\_agglomerans:0.0):5.5E-4):0.00484):0.0048):0.00486):0.00492):0.02485,(P\_ananatis:5.5E-4,(P\_septica:0.03962,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00976,P\_allii:0.00482):0.00519):0.00931):0.01992):0.00901):0.00885):0.01468):0.01049):0.01156):0.00478):0.0192):0.00848);

[413] tree 't413'=[&R] (P\_sp\_A4:0.02542,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01525,(P\_allii:0.0,P\_ananatis:0.0):0.01646):0.02121,((P\_brenneri:0.0,P\_conspicua:0.0):5.4E-4,(P\_deleyi:0.00865,((P\_sp\_aB:0.0,P\_agglomerans:0.0):5.5E-4,(P\_anthophila:0.00854,P\_vagans:5.5E-4):0.00855):0.0086):0.01722):0.00824):0.01759,(P\_septica:0.04495,((E\_billingiae:0.04485,(E\_pyriifoliae:0.05437,E\_tasmaniensis:0.02912):0.05584):0.17063,(T\_morbirosei:0.04628,(T\_ptyseos:0.02032,T\_sp\_NML\_06:0.03658):0.02308):0.13911):0.0661,((P\_cypripedii:0.00857,P\_sp\_At-9b:0.00844):5.5E-4,((P\_rodasii:0.01709,P\_sp\_GM01:5.4E-4):0.00909,((P\_dispersa:5.4E-4,(P\_eucrina:0.10046,P\_wallisii:0.01695):5.4E-4):0.00861,P\_rwandensis:5.3E-4):0.00792):0.02674):0.05742):0.03505):5.4E-4);

[414] tree 't414'=[&R] ((((((E\_billingiae:0.10727,(E\_pyriifoliae:0.05893,E\_tasmaniensis:0.02833):0.06027):0.03504,(T\_ptyseos:0.05829,(T\_sp\_NML\_06:0.13401,T\_morbirosei:0.09659):0.01774):0.04127):0.03316,(P\_sp\_A4:0.07761,(P\_septica:0.03052,((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00313):0.0223,(P\_allii:0.01234,P\_ananatis:5.5E-4):0.01707):0.0206,((P\_anthophila:0.01321,((P\_agglomerans:0.00966,(P\_sp\_aB:0.00629,P\_vagans:5.4E-4):0.00296):0.00591,P\_deleyi:0.03596):0.00325):0.0267,(P\_brenneri:0.00942,P\_conspicua:5.3E-4):0.02014):0.02228):0.01032):0.00972):0.01522):0.01129,(P\_sp\_At-9b:0.01261,P\_cypripedii:0.01285):0.02046):0.00729,P\_dispersa:0.03608):0.01436,(P\_rwandensis:0.00485,(P\_rodasii:0.01551,P\_sp\_GM01:0.03769):0.00908):0.0223,(P\_wallisii:0.00628,P\_eucrina:0.07766):0.01468);

[415] tree 't415'=[&R] (P\_deleyi:5.4E-4,P\_anthophila:0.00711,((P\_s\_indologenes:0.00186,P\_s\_stewartii:5.4E-4):0.00188,((P\_sp\_At-9b:5.5E-4,P\_cypripedii:0.00572):0.00973,((P\_sp\_A4:0.01915,(P\_sp\_GM01:5.4E-4,(P\_rodasii:5.5E-4,P\_rwandensis:0.00185):0.00365):0.00679):0.0054,P\_dispersa:0.00484):0.00463):0.00465,((E\_billingiae:0.0125,(E\_pyriifoliae:5.8E-4,E\_tasmaniensis:0.00493):0.009):0.05595,((T\_ptyseos:0.00831,(T\_morbirosei:0.01731,T\_sp\_NML\_06:0.00752):0.00486):0.04457,P\_septica:0.01659):0.00824):0.00716,P\_eucrina:0.01538):0.00709):0.00644):0.00148,((P\_allii:0.00186,P\_ananatis:0.00187):5.5E-4,((P\_vagans:0.00561,P\_sp\_aB:0.00185):0.00291,((P\_wallisii:0.03604,P\_brenneri:5.5E-4):0.01509,P\_conspicua:5.5E-4):0.00266,P\_agglomerans:0.00478):0.00376):0.00457):0.00412):0.00188);

[416] tree 't416'=[&R] (P\_vagans:5.4E-4,(P\_agglomerans:5.4E-4,((P\_sp\_GM01:0.10877,((P\_ananatis:0.07691,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.1457,P\_allii:5.5E-4):0.0264):0.12056,((P\_sp\_A4:0.0879,P\_septica:0.11982):0.02166,(((P\_eucrinea:0.05425,(T\_sp\_NML\_06:0.09326,(T\_morbiros ei:0.18525,T\_ptyseos:0.16307):0.22129):0.35703):0.11937,(E\_billingiae:0.1151,(E\_pyriifoliae:0.11743,E\_tasmaniensis:0.09807):0.09712):0.0789):0.02399,(P\_dispersa:0.01856,((P\_sp\_At-9b:5.5E-4,(P\_cyprapedii:0.01966,P\_wallisii:0.01983):5.5E-4):5.5E-4,(P\_rwandensis:0.01929,P\_rodasii:0.01965):0.04):0.04116):0.02436):0.01765):0.02434):0.03815):0.06058,P\_sp\_aB:0.03803):5.4E-4):0.01893,(P\_conspicua:0.03831,(P\_brenneri:0.01947,(P\_anthophila:0.01954,P\_deleyi:0.04179):5.3E-4):0.01951):5.4E-4);

[417] tree 't417'=[&R] ((P\_rodasii:0.02751,P\_rwandensis:0.01641):0.01453,(P\_wallisii:0.03483,P\_dispersa:0.02082):0.01382,(P\_sp\_GM01:0.02131,((P\_sp\_At-9b:0.01531,P\_cyprapedii:0.0312):0.05328,(P\_eucrinea:0.07849,((P\_sp\_A4:0.13653,((T\_sp\_NML\_06:0.07433,(T\_morbirosei:0.08559,T\_ptyseos:0.09239):0.02599):0.15192,(E\_billingiae:0.094,(E\_pyriifoliae:0.0484,E\_tasmaniensis:0.02013):0.09976):0.08148):0.03965):0.02333,(P\_septica:0.09706,(((P\_allii:0.01321,P\_ananatis:0.02776):0.04175,(P\_s\_indologenes:0.00569,P\_s\_stewartii:0.00364):0.01321):0.04565,((P\_sp\_aB:0.03002,(P\_vagans:0.01674,(P\_anthophila:0.03482,(P\_deleyi:0.05049,P\_agglomerans:0.00363):0.00582):0.00133):0.01515):0.04364,(P\_brenneri:0.01885,P\_conspicua:0.03239):0.02404):0.02534):0.03325):0.02357):0.02372):0.01974):0.01473):0.00295);

[418] tree 't418'=[&R] (P\_allii:0.00616,(P\_s\_indologenes:0.00308,P\_s\_stewartii:5.5E-4):0.00618,(((E\_billingiae:0.0309,(E\_pyriifoliae:0.00848,E\_tasmaniensis:0.01488):0.01966):0.08986,(((P\_septica:0.04384,(T\_morbirosei:0.01067,(T\_sp\_NML\_06:0.03753,T\_ptyseos:0.02207):0.0125):0.05706):9.3E-4,((P\_wallisii:0.00934,(P\_dispersa:0.01288,(P\_eucrinea:0.0222,(P\_sp\_GM01:0.01285,(P\_rodasii:0.00603,P\_rwandensis:5.4E-4):0.01226):0.00343):0.00319):0.00964):0.01261,(P\_sp\_At-9b:0.01269,P\_cyprapedii:0.01268):0.00285):0.00652):0.0235,P\_sp\_A4:0.04386):0.008):0.00568,(P\_conspicua:0.00933,(P\_brenneri:0.003,(P\_anthophila:0.0031,(P\_agglomerans:0.0031,(P\_sp\_aB:0.00307,(P\_deleyi:0.0,P\_vagans:0.0):5.5E-4):5.5E-4):0.00303):0.01244):5.4E-4):0.01133):0.00108,P\_ananatis:5.5E-4):5.5E-4);

[419] tree 't419'=[&R] ((T\_morbirosei:5.4E-4,(T\_sp\_NML\_06:0.05877,T\_ptyseos:0.05335):0.05282):0.11612,((P\_s\_indologenes:0.0,P\_eucrinea:0.0,P\_sp\_At-9b:0.0,P\_cyprapedii:0.0,P\_sp\_GM01:0.0,P\_rodasii:0.0,P\_rwandensis:0.0,P\_dispersa:0.0,P\_wallisii:0.0,P\_deleyi:0.0,P\_agglomerans:0.0,P\_vagans:0.0,P\_septica:0.0,P\_brenneri:0.0,P\_conspicua:0.0,P\_allii:0.0,P\_ananatis:0.0):5.5E-4,P\_s\_stewartii:0.02127):5.5E-4,((P\_anthophila:5.5E-4,P\_sp\_A4:0.02151):0.01579,(P\_sp\_aB:5.4E-4,(E\_billingiae:5.4E-4,(E\_pyriifoliae:0.1408,E\_tasmaniensis:0.01307):0.04097):0.04535):0.0115):0.01564);

[420] tree 't420'=[&R] ((P\_vagans:5.5E-4,P\_sp\_aB:0.0061):5.4E-4,P\_deleyi:0.01851,((P\_agglomerans:0.01237,(P\_conspicua:5.4E-4,(P\_brenneri:0.02518,(((P\_eucrinea:0.11809,((P\_sp\_At-9b:0.00624,P\_cyprapedii:5.5E-4):0.01928,((P\_sp\_GM01:5.3E-4,P\_wallisii:0.02468):0.01193,(P\_dispersa:0.02458,(P\_rodasii:5.4E-4,P\_rwandensis:0.00606):0.01216):5.5E-4):0.02038):0.01022):0.03318,((T\_morbirosei:0.07141,(T\_sp\_NML\_06:0.09361,T\_ptyseos:0.06252):0.03459):0.16966,(E\_billingiae:0.05038,(E\_pyriifoliae:0.05951,E\_tasmaniensis:0.02831):0.13298):0.03987):0.03953):0.02871,(P\_ananatis:0.00845,((P\_s\_indologenes:0.006,P\_s\_stewartii:5.5E-

4):0.02196,P\_allii:0.03309):0.0126):0.0254):0.02614,(P\_sp\_A4:0.11037,P\_septica:0.02638):0.0153):0.01563):0.01255):0.01196):5.4E-4,P\_anthophila:0.03762):0.00602);

[421] tree 't421'=[&R] (P\_sp\_aB:5.5E-4,((P\_brenneri:5.5E-4,P\_conspicua:0.00635):0.00326,((P\_ananatis:0.01611,P\_allii:0.00988):0.00657,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.0132,(P\_rodasii:0.0129,((P\_septica:0.039,(P\_eucrina:0.04806,((T\_morbirosei:0.06133,(T\_sp\_NML\_06:0.08451,T\_ptyseos:0.11143):0.04891):0.08771,(E\_billingiae:0.05609,(E\_pyriifoliae:0.0394,E\_tasmaniensis:0.02457):0.05243):0.06207):0.02879):0.01886):0.00403,(P\_sp\_A4:0.05377,P\_rwandensis:0.01133):0.00801):0.00327,((P\_sp\_GM01:0.01457,(P\_sp\_At-9b:0.00316,P\_cyprapedii:0.00631):0.00771):0.00632,(P\_dispersa:0.01256,P\_wallisii:0.01265):0.00434):0.00492):0.00304):0.01982):0.00634):0.00908):0.00642,(P\_vagans:0.00312,P\_agglomerans:5.4E-4):0.00303):5.5E-4,(P\_anthophila:0.00635,P\_deleyi:0.02258):5.5E-4);

[422] tree 't422'=[&R] ((P\_agglomerans:5.5E-4,(P\_vagans:0.01465,P\_sp\_aB:0.01937):5.5E-4):0.00487,((P\_s\_indologenes:0.00477,P\_s\_stewartii:5.5E-4):0.01169,(P\_allii:0.07229,P\_ananatis:0.00493):0.01332):0.02459):0.00487,(P\_deleyi:5.5E-4,P\_anthophila:0.00965):0.00484,(((E\_billingiae:0.04278,(E\_pyriifoliae:0.00964,E\_tasmaniensis:0.01431):0.0157):0.05688,((P\_sp\_A4:0.03315,P\_septica:0.03328):0.02037,((T\_morbirosei:0.02285,(T\_ptyseos:0.0279,T\_sp\_NML\_06:0.02446):0.03524):0.04151,((P\_dispersa:0.01194,P\_eucrina:0.02182):0.00497,(P\_wallisii:0.00417,(P\_sp\_At-9b:0.00523,P\_cyprapedii:0.00928):0.01575):0.006):0.02828,(P\_sp\_GM01:0.01353,(P\_rodasii:0.00881,P\_rwandensis:0.00536):0.01949):0.00784):0.00934):0.02904):0.01868):0.02518,(P\_brenneri:0.0048,P\_conspicua:5.5E-4):0.0274):0.00323);

[423] tree 't423'=[&R] (P\_rodasii:5.4E-4,(P\_septica:5.4E-4,((P\_brenneri:0.0,P\_conspicua:0.0):5.5E-4,(P\_sp\_aB:0.01774,(P\_anthophila:0.0,P\_deleyi:0.0,P\_agglomerans:0.0,P\_vagans:0.0):5.4E-4):0.01647):0.05235):0.01667,(P\_sp\_A4:0.05385,(P\_wallisii:0.01724,((E\_pyriifoliae:5.5E-4,E\_tasmaniensis:0.07094):0.03605,((E\_billingiae:0.03353,(T\_ptyseos:5.4E-4,(T\_morbirosei:5.4E-4,T\_sp\_NML\_06:0.05294):0.0172):0.06985):0.02253,(P\_allii:0.03364,(P\_ananatis:0.0,P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.4E-4):0.0585):0.01815):0.0172,(P\_cyprapedii:0.0,P\_sp\_At-9b:0.0,P\_dispersa:0.0,P\_sp\_GM01:0.0,P\_rwandensis:0.0,P\_eucrina:0.0):5.5E-4):5.5E-4):0.01682):5.3E-4);

[424] tree 't424'=[&R] ((((((T\_sp\_NML\_06:0.02714,(T\_morbirosei:0.05732,T\_ptyseos:5.5E-4):0.03105):0.16515,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.0095,(P\_ananatis:0.0,P\_allii:0.0):5.4E-4):0.01747):0.00961,((P\_conspicua:0.0,P\_brenneri:0.0,P\_anthophila:0.0):5.4E-4,(P\_sp\_aB:0.00882,(P\_vagans:0.00894,(P\_deleyi:0.0,P\_agglomerans:0.0):5.5E-4):5.5E-4):0.00869):0.00914):0.00901,(((P\_rodasii:0.00909,P\_rwandensis:0.00907):0.00906,(P\_wallisii:0.01723,P\_sp\_GM01:0.007):0.0027):0.00858,(P\_eucrina:0.04512,P\_dispersa:0.00167):0.02634):0.0094):5.3E-4,(E\_billingiae:0.03348,(E\_tasmaniensis:0.03889,E\_pyriifoliae:0.01223):0.03713):0.047):5.5E-4,(P\_sp\_At-9b:0.0,P\_cyprapedii:0.0):5.4E-4,(P\_septica:0.02817,P\_sp\_A4:0.05605):5.4E-4);

[425] tree 't425'=[&R] (P\_dispersa:5.5E-4,(P\_septica:0.01901,((P\_ananatis:0.00685,(P\_allii:0.00607,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01315):0.00685):0.06829,(P\_anthophila:0.01968,(((P\_sp\_aB:0.00649,(P\_brenneri:0.0,P\_conspicua:0.0):0.02661):5.5E-4,(P\_vagans:0.01334,P\_agglomerans:5.5E-4):0.0131):0.0065,P\_deleyi:0.00652):5.5E-4):0.00784):0.02096):0.0137,((P\_sp\_A4:0.09072,((E\_billingiae:0.09544,(E\_pyriifoliae:0.04967,E\_tasmaniensis:0.00705):0.10907):0.17615,(T\_morbirosei:0.02993,(T\_ptyseos:0.04568,T\_sp\_NML\_06:0.0692):0.05935):0.10157):0.03495):0.02188,((P\_

sp\_GM01:0.00693,((P\_rodasii:0.0,P\_rwandensis:0.0):5.3E-4,P\_wallisii:0.02667):0.01311):0.01318,(P\_sp\_At-9b:5.5E-4,(P\_eucrina:0.02586,P\_cyprapedii:5.5E-4):0.00641):0.00676):0.00661):0.00644);

[426] tree 't426'=[&R]  
(P\_vagans:0.0103,(P\_anthophila:0.01488,(P\_conspicua:0.02102,P\_brenneri:0.00544):0.04296):0.00658,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01523,(P\_allii:0.02246,P\_ananatis:0.04196):0.02387):0.04552,((T\_sp\_NML\_06:0.2287,(T\_morbirosei:0.11194,T\_ptyseos:0.17978):0.056):0.22851,(((P\_eucrina:0.06183,(P\_rwandensis:0.05059,(P\_dispersa:0.03222,P\_wallisii:0.01523):0.02226,(P\_sp\_GM01:0.04793,P\_rodasii:0.01701):0.00701):0.01483):0.04256):0.04779,(P\_sp\_At-9b:0.0657,P\_cyprapedii:0.07077):0.04318):0.0442,(P\_septica:0.17113,P\_sp\_A4:0.19358):0.01719):0.0181,(E\_billingiae:0.09565,(E\_tasmaniensis:0.0912,E\_pyrifoliae:0.02854):0.11114):0.19285):0.02859):0.03839):0.04815,(P\_sp\_aB:0.02093,(P\_deleyi:0.03781,P\_agglomerans:0.01565):5.4E-4):0.00519):5.4E-4);

[427] tree 't427'=[&R] ((P\_septica:0.03908,(P\_sp\_A4:0.08728,(((P\_conspicua:0.01374,P\_brenneri:5.3E-4):0.02115,(P\_agglomerans:5.5E-4),(P\_vagans:0.00694,P\_sp\_aB:0.00695):0.00354):0.00338):0.01137,P\_deleyi:0.0254):0.01364,P\_anthophila:0.02476):0.02932):0.01609):0.03188,(P\_sp\_At-9b:0.00368,P\_cyprapedii:0.00679):0.01507,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.0398,(P\_allii:0.01518,P\_ananatis:0.02073):0.01998):0.07594,((P\_eucrina:0.17841,((P\_wallisii:0.06633,P\_dispersa:0.03667):0.01265,(P\_sp\_GM01:0.08306,(P\_rodasii:5.4E-4,P\_rwandensis:0.00339):0.03154):0.01686):0.01218):0.0217,((T\_morbirosei:0.07753,(T\_ptyseos:0.02821,T\_sp\_NML\_06:0.03867):0.04653):0.18023,(E\_billingiae:0.04793,(E\_pyrifoliae:0.02564,E\_tasmaniensis:0.00276):0.04017):0.12076):0.0469):0.0193):0.00933);

[428] tree 't428'=[&R] (P\_agglomerans:0.00939,P\_vagans:5.5E-4,(P\_deleyi:0.00698,(P\_sp\_aB:0.00919,(P\_anthophila:0.01608,(((P\_brenneri:5.4E-4,(P\_septica:0.01337,((P\_cyprapedii:0.01136,P\_sp\_At-9b:0.00505):0.00491,(P\_eucrina:0.01344,(P\_dispersa:5.5E-4,((P\_rwandensis:0.01178,P\_rodasii:0.007):0.00642,(P\_sp\_GM01:0.01215,P\_wallisii:0.00413):0.00231):5.5E-4):0.01032):0.0224):0.02143,(P\_sp\_A4:0.05963,((T\_ptyseos:0.04299,T\_sp\_NML\_06:0.04609):0.02455,(T\_morbirosei:0.01957,P\_allii:0.77751):0.02473):0.07765,(E\_billingiae:0.04613,(E\_pyrifoliae:0.02985,E\_tasmaniensis:0.01402):0.04213):0.04174):0.02166):0.01377):0.01388):0.02573):0.00232,P\_conspicua:0.00236):0.00729,(P\_ananatis:0.00457,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00477):0.03393):0.00505):0.00247):0.00502):5.5E-4);

[429] tree 't429'=[&R]  
((((P\_brenneri:0.01738,P\_conspicua:0.01121):0.01142,(P\_deleyi:0.0285,(P\_anthophila:0.01535,(P\_agglomerans:0.01718,P\_sp\_aB:0.0033):0.0077):0.00563):0.02029):0.02381,((E\_billingiae:0.12045,(E\_pyrifoliae:0.03083,E\_tasmaniensis:0.04072):0.11269):0.2412,((P\_allii:0.00401,P\_ananatis:0.00761):0.03955,((P\_s\_indologenes:5.3E-4,P\_s\_stewartii:0.00279):0.01819,P\_vagans:0.1483):0.00351):0.02436):0.02886):0.02084,(P\_rodasii:0.03142,(P\_sp\_At-9b:0.01747,P\_cyprapedii:0.01428):0.02962):0.01791):0.017,(P\_sp\_A4:0.12096,P\_septica:0.07769):0.02531,(((P\_eucrina:0.03179,P\_wallisii:0.05457):0.1193,(P\_rwandensis:0.10674,(P\_dispersa:0.0156,P\_sp\_GM01:0.03833):0.06203):0.01295):0.00863,(T\_morbirosei:0.04093,(T\_ptyseos:0.06019,T\_sp\_NML\_06:0.04599):0.0119):0.07923):0.01644);

[430] tree 't430'=[&R]  
(P\_vagans:0.00619,(((T\_morbirosei:0.11868,(T\_ptyseos:0.03068,T\_sp\_NML\_06:0.09148):0.02252):0.07445,(E\_billingiae:0.09653,(E\_pyrifoliae:0.04375,E\_tasmaniensis:0.04066):0.07362):0.04691):0.03871,(((P\_s\_indologenes:0.00631,P\_s\_stewartii

i:0.01604):0.02099,(P\_allii:0.00797,P\_ananatis:0.03376):0.01949):0.05345,P\_deleyi:0.07265):0.01074):5.4E-4,((P\_anthophila:0.0232,(((P\_wallisii:0.02902,(P\_sp\_GM01:0.02272,(P\_dispersa:0.05144,(P\_rodasii:0.01823,P\_rwandensis:5.3E-4):0.02462):0.0064):0.01806):5.5E-4,(P\_eucrina:0.07773,(P\_sp\_At-9b:0.03092,P\_cypripedii:0.01683):0.02711):0.01168):0.0441,(P\_sp\_A4:0.1275,P\_septica:0.07375):0.00189):0.02135,(P\_conspicua:0.03071,P\_brenneri:0.01462):0.0089):0.00279):0.01207,(P\_agglomerans:0.00556,P\_sp\_aB:5.5E-4):0.01046):5.5E-4);

[431] tree 't431'=[&R] (P\_dispersa:0.01694,(P\_sp\_GM01:0.01396,(P\_sp\_At-9b:0.01525,(P\_cypripedii:0.01502,(P\_rodasii:0.01161,P\_rwandensis:0.00897):0.02142):0.00505):5.4E-4):0.00784,(P\_wallisii:0.01042,(P\_eucrina:0.03565,((P\_sp\_A4:0.03231,((E\_billingiae:0.03553,(E\_pyrifoliae:0.02251,E\_tasmaniensis:0.01195):0.0203):0.07251,(T\_morbirosei:0.04418,(T\_ptyseos:0.02822,T\_sp\_NML\_06:0.02777):0.01321):0.03185):0.01431):0.01363,(P\_septica:0.05384,((P\_ananatis:0.00656,P\_allii:0.00856):0.00702,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00998,(P\_conspicua:0.01617,(P\_brenneri:0.00859,(P\_deleyi:0.00734,(P\_vagans:0.00247,(P\_anthophila:0.01221,(P\_sp\_aB:0.00487,P\_agglomerans:0.00486):5.3E-4):0.00242):0.01242):0.01136):0.00983):0.01147):0.00482):0.00674):0.01066):0.03051):0.00864):0.00482);

[432] tree 't432'=[&R] (P\_agglomerans:0.02411,P\_vagans:0.01504,(P\_sp\_aB:0.01489,(P\_anthophila:0.03065,((P\_brenneri:0.00652,P\_conspicua:0.01952):0.04104,(P\_deleyi:0.03345,((P\_ananatis:0.03276,(P\_allii:0.09369,(P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00759):0.02657):0.01249):0.04962,(P\_septica:0.06278,(((P\_sp\_At-9b:0.02197,P\_cypripedii:0.02043):0.04038,((P\_sp\_GM01:0.02721,(P\_rodasii:0.01877,P\_rwandensis:0.01756):0.02959):0.02474,(P\_eucrina:0.05267,(P\_dispersa:0.06703,P\_wallisii:0.02542):0.01086):0.01704):0.03352):0.01954,((E\_billingiae:0.03652,(E\_pyrifoliae:0.05219,E\_tasmaniensis:5.4E-4):0.06878):0.09191,((T\_morbirosei:0.05384,(T\_sp\_NML\_06:0.14575,T\_ptyseos:0.05295):0.07838):0.10701,P\_sp\_A4:0.15109):0.03253):0.02111):0.02423):0.02784):0.02531):0.01288):0.0088):0.01388):0.00771);

[433] tree 't433'=[&R] (P\_vagans:0.00591,(P\_agglomerans:0.00568,(P\_deleyi:0.0,P\_sp\_aB:0.0):0.00214):0.0039,(P\_anthophila:0.00192,(P\_brenneri:0.00486,(P\_conspicua:0.0053,((P\_septica:0.02848,(((P\_sp\_At-9b:0.02208,P\_cypripedii:0.00835):0.02144,((P\_wallisii:0.01836,((P\_rodasii:0.0139,P\_rwandensis:0.01461):0.0194,(P\_eucrina:0.03433,P\_sp\_GM01:0.03148):0.00637):0.00955):0.00623,P\_dispersa:0.01228):0.0226):0.04182,(P\_sp\_A4:0.03935,((E\_billingiae:0.12531,(E\_pyrifoliae:0.0303,E\_tasmaniensis:0.04113):0.11626):0.36243,(T\_morbirosei:0.08025,(T\_sp\_NML\_06:0.15428,T\_ptyseos:0.09329):0.07918):0.15062):0.09348):0.03136):0.01738):0.02915,((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00193):0.01481,(P\_allii:0.00603,P\_ananatis:0.00577):0.00882):0.01836):0.00958):0.00587):0.01646):5.4E-4);

[434] tree 't434'=[&R] ((P\_sp\_A4:0.13204,((T\_morbirosei:0.05981,(T\_ptyseos:0.13459,T\_sp\_NML\_06:0.09675):0.04925):0.16255,(E\_billingiae:0.10447,(E\_pyrifoliae:0.05472,E\_tasmaniensis:0.02198):0.13091):0.0247):0.06004):0.03252,(P\_dispersa:0.04125,(P\_wallisii:0.09064,((P\_sp\_At-9b:0.03355,P\_cypripedii:0.03688):0.02488,(P\_sp\_GM01:0.03324,(P\_rodasii:0.05432,P\_rwandensis:0.00491):0.02598):0.02622):0.01153):0.01553):0.02185,(P\_eucrina:0.13229,(P\_septica:0.15663,(((P\_s\_indologenes:0.00601,P\_s\_stewartii:0.00569):0.06928,(P\_allii:0.02336,P\_ananatis:0.03809):0.01075):0.05425,((P\_brenneri:0.01671,P\_conspicua:0.01129):0.04005,((P

\_anthophila:0.04592,(P\_agglomerans:0.01488,P\_vagans:0.03042):0.00345):0.00922,(P\_deleyi:0.04669,P\_sp\_aB:0.02881):0.00845):0.0066):0.02772):0.02568):0.01294):0.01025);

[435] tree 't435'=[&R] ((P\_brenneri:0.005,P\_conspicua:0.005):0.00263,(P\_deleyi:0.00235,(P\_sp\_aB:5.5E-4,(P\_vagans:0.00249,P\_agglomerans:0.00249):0.0025):5.5E-4):0.00248,(P\_anthophila:0.00424,(((P\_sp\_At-9b:5.5E-4,P\_cyprapedii:0.00499):0.01072,(T\_sp\_NML\_06:0.03339,(T\_morbirosei:0.0421,T\_ptyseos:0.01421):0.01367):0.07428):0.00685,P\_sp\_A4:0.02703):0.00527,(P\_dispersa:0.00329,(P\_wallisii:5.4E-4,(P\_sp\_GM01:5.5E-4,(P\_rodasii:0.00248,P\_rwandensis:0.00246):0.00248):0.00989):0.00421):0.00233,P\_eucrina:0.0126):0.00782):0.01031,(P\_septica:0.02254,(E\_billingiae:0.0363,(E\_pyriifoliae:0.0047,E\_tasmaniensis:0.00563):0.01803):0.02128):0.00305):0.01893,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00509,(P\_ananatis:0.00245,P\_allii:0.00253):0.00244):0.00838):0.00492):0.00311);

[436] tree 't436'=[&R] (P\_brenneri:0.0115,((P\_vagans:0.0,P\_sp\_aB:0.0):5.4E-4,(P\_deleyi:0.01156,P\_anthophila:5.5E-4):0.01124):0.01111,(P\_conspicua:0.01154,((P\_allii:5.4E-4,(P\_ananatis:5.5E-4,(((E\_billingiae:0.05928,(E\_pyriifoliae:0.08885,E\_tasmaniensis:0.02499):0.09592):0.07478,(P\_septica:0.02507,((P\_sp\_At-9b:0.04667,((P\_rodasii:0.0,P\_rwandensis:0.0,P\_sp\_GM01:0.0):0.02349,(P\_wallisii:0.02367,(P\_eucrina:0.03531,P\_dispersa:5.5E-4):0.012):0.03635):0.02501):5.4E-4,P\_cyprapedii:0.01145):0.02428):0.02409):0.01236,(T\_morbirosei:0.09293,(T\_sp\_NML\_06:0.19256,T\_ptyseos:0.08515):0.04355):0.14756):0.04957,P\_sp\_A4:0.10637):0.02497,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.0347):5.3E-4):0.01161):0.02379,P\_agglomerans:5.3E-4):0.01152):5.3E-4);

[437] tree 't437'=[&R] ((P\_agglomerans:5.3E-4,(((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00388):0.01233,(P\_allii:0.0039,P\_ananatis:5.5E-4):0.00356):0.0374,((T\_morbirosei:0.10015,(T\_sp\_NML\_06:0.10311,T\_ptyseos:0.0115):0.02559):0.18158,P\_septica:0.07468):0.02506,((P\_sp\_At-9b:0.0242,P\_cyprapedii:0.02204):0.03288,((P\_sp\_GM01:0.03579,(P\_rodasii:0.01726,P\_rwandensis:0.01749):0.01195):0.0168,(P\_dispersa:0.00955,(P\_eucrina:0.03213,P\_wallisii:0.03331):0.02244):5.3E-4):0.01866):0.02296,((E\_billingiae:0.08822,(E\_pyriifoliae:0.03609,E\_tasmaniensis:0.0087):0.15187):0.10189,P\_sp\_A4:0.04959):0.02186):0.0197):0.02264):0.03792,(P\_conspicua:0.0103,P\_brenneri:0.00965):0.00547):0.02138):0.00772,(P\_deleyi:0.00385,P\_sp\_aB:0.00388):0.00388,(P\_anthophila:0.01553,P\_vagans:0.00386):5.4E-4);

[438] tree 't438'=[&R] (P\_eucrina:0.02365,(P\_septica:0.0,P\_wallisii:0.0):5.5E-4,(P\_sp\_A4:0.04902,(P\_rodasii:0.09141,((P\_dispersa:0.0,P\_rwandensis:0.0):5.4E-4,(P\_agglomerans:0.0,P\_brenneri:0.0,P\_conspicua:0.0):5.3E-4,((P\_sp\_GM01:0.01194,((P\_allii:0.0,P\_ananatis:0.0):0.01173,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.5E-4):5.5E-4):0.02344,(((P\_vagans:0.0,P\_anthophila:0.0,P\_deleyi:0.0,P\_sp\_aB:0.0):5.4E-4,((P\_sp\_At-9b:0.0,P\_cyprapedii:0.0):0.08461,((T\_morbirosei:0.0,T\_sp\_NML\_06:0.0):0.01155,T\_ptyseos:5.5E-4):0.02626):0.01019):0.0116,((E\_billingiae:0.0,E\_tasmaniensis:0.0):0.01155,E\_pyriifoliae:5.4E-4):0.01159):5.4E-4):0.01113):0.02362):5.3E-4):0.01172):5.5E-4);

[439] tree 't439'=[&R] (P\_allii:0.00492,P\_ananatis:0.00483,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00486,(((P\_anthophila:0.00744,P\_deleyi:5.5E-4):0.00487,((P\_sp\_aB:0.0,P\_agglomerans:0.0,P\_vagans:0.0,P\_brenneri:0.0):0.00241,P\_conspicua:5.5E-



4):0.0024):0.00436,(P\_septica:0.00309,((E\_billingiae:0.02476,(E\_pyriifoliae:5.5E-4,E\_tasmaniensis:0.01685):0.00892):0.01804,((T\_ptyseos:0.00698,(T\_morbirosei:0.01979,T\_sp\_NML\_06:0.00776):0.00585):0.0212,(P\_cyprapedii:0.00179,((P\_eucrinea:0.01668,((P\_dispersa:5.4E-4,P\_wallisii:0.00488):0.00252,(P\_sp\_GM01:0.01457,(P\_sp\_A4:0.00696,(P\_rwandensis:0.00962,P\_rodasii:5.4E-4):0.02042):0.01745):0.00376):0.00979):0.01047,P\_sp\_At-9b:5.4E-4):0.00664):0.00768):0.00337):0.01326):0.003):0.00423):0.00242);

[440] tree 't440'=[&R] (P\_septica:0.04001,(P\_sp\_At-9b:5.5E-4,P\_cyprapedii:0.00915):0.02809,((P\_rodasii:0.00912,P\_rwandensis:0.01832):0.01857,(P\_sp\_GM01:0.03783,(P\_dispersa:0.02272,(P\_wallisii:0.02039,(P\_sp\_A4:0.08182,(((T\_morbirosei:0.0285,(T\_sp\_NML\_06:0.11674,T\_ptyseos:0.0474):0.10865):0.46812,(E\_pyriifoliae:0.04317,(E\_billingiae:0.12371,E\_tasmaniensis:0.01441):0.0199):0.04642):0.03615,(P\_eucrinea:0.05314,(P\_anthophila:0.01524,(P\_deleyi:0.02771,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.9E-4,(P\_allii:0.00917,P\_ananatis:5.5E-4):0.02738):0.03805,(P\_brenneri:0.00919,P\_conspicua:0.01846):5.4E-4):0.01877,(P\_agglomerans:5.4E-4,(P\_vagans:0.0,P\_sp\_aB:0.0):0.009):0.00934):0.01859):0.0231):0.03211):0.04909):0.00918):0.02952):0.01593):0.01393):5.4E-4):5.4E-4);

[441] tree 't441'=[&R] (P\_rwandensis:0.05565,(P\_rodasii:0.04155,P\_sp\_GM01:0.03678):0.01974,((P\_sp\_At-9b:0.03019,P\_cyprapedii:0.00618):0.03032,((((((P\_anthophila:0.03605,((P\_agglomerans:0.01017,P\_vagans:0.0108):0.00593,(P\_sp\_aB:0.02256,P\_deleyi:0.01759):0.00726):0.00697):0.02126,P\_conspicua:0.00353):0.00585,P\_brenneri:0.01489):0.07231,(((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00304):0.03944,(P\_allii:0.01979,P\_ananatis:0.03197):0.01697):0.0428,((T\_sp\_NML\_06:0.12582,(T\_morbirosei:0.09177,T\_ptyseos:0.08771):0.02338):0.10537,(E\_billingiae:0.07356,(E\_pyriifoliae:0.01101,E\_tasmaniensis:0.01849):0.06383):0.04632):0.04742):0.01609):0.01991,(P\_sp\_A4:0.09024,P\_septica:0.08521):0.0216):0.02676,(P\_dispersa:0.04308,(P\_eucrinea:0.08564,P\_wallisii:0.07001):0.013):0.02737):0.0133):0.01894);

[442] tree 't442'=[&R] (P\_sp\_A4:5.5E-4,P\_wallisii:0.00573,(P\_sp\_GM01:0.00581,(P\_rodasii:0.00571,((P\_dispersa:0.00575,P\_eucrinea:5.5E-4):0.02916,(P\_rwandensis:5.5E-4,(((P\_allii:0.0,P\_ananatis:0.0):0.00579,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.5E-4):0.01774,(P\_sp\_At-9b:5.5E-4,(P\_cyprapedii:0.00619,(P\_septica:0.03641,((P\_anthophila:0.02593,(P\_deleyi:5.4E-4,((P\_brenneri:0.0,P\_conspicua:0.0):0.01161,(P\_sp\_aB:0.00578,(P\_agglomerans:0.0,P\_vagans:0.0):5.4E-4):0.0058):0.00594):0.00955):0.02408,((T\_sp\_NML\_06:0.0118,(T\_morbirosei:0.02332,T\_ptyseos:0.00587):0.00611):0.18254,(E\_billingiae:0.01083,(E\_pyriifoliae:5.5E-4,E\_tasmaniensis:0.00581):0.01275):0.04251):0.02257):0.13009):0.0042):0.0295):0.01165):0.02331):0.01165):0.00577):0.00571):5.5E-4);

[443] tree 't443'=[&R] (P\_sp\_aB:0.0243,P\_vagans:0.0061,(P\_agglomerans:0.00966,(P\_deleyi:0.00858,((P\_brenneri:5.5E-4,P\_conspicua:0.01192):0.01803,(P\_anthophila:0.01381,((P\_sp\_GM01:0.08692,(P\_septica:0.07578,(P\_sp\_A4:0.1166,((E\_pyriifoliae:0.0541,E\_tasmaniensis:0.02428):0.1896,(E\_billingiae:0.20412,(T\_sp\_NML\_06:0.25713,((P\_sp\_At-9b:0.08144,P\_cyprapedii:0.06681):0.10017,((T\_morbirosei:0.32268,T\_ptyseos:0.11469):0.12483,((P\_rodasii:0.08176,P\_rwandensis:0.09871):0.05967,(P\_eucrinea:0.12536,(P\_dispersa:0.08571,P\_wallisii:0.06951):0.04434):0.04894):0.09105):0.10886):0.06761):0.20162):0.06878):0.12943):0.02236):0.04238):0.01916,(P\_ananatis:0.00615,(P\_allii:0.01846,(P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.01192):0.03819):0.00517):0.01017):0.06902):0.00593):0.00947):0.01211):0.00838);

[444] tree 't444'=[&R]  
(P\_rwandensis:0.01394,(P\_rodasii:0.01847,P\_eucrina:0.02335):0.00879,(P\_wallisii:0.01305,(P\_dispersa:0.01288,(P\_sp\_GM01:0.03221,(P\_sp\_At-9b:0.0158,P\_cyprapedii:0.00653):0.01601):0.00664,((((((T\_morbirosei:0.00637,(T\_sp\_NML\_06:0.06023,T\_ptyseos:0.03763):0.04755):0.09129,(E\_billingiae:0.04553,(E\_pyriifoliae:0.02112,E\_tasmaniensis:0.01706):0.06044):0.05072):0.04215,(P\_brenneri:0.00605,(((P\_conspicua:0.00935,(P\_agglomerans:5.5E-4,P\_sp\_aB:0.0031):5.5E-4):0.00312,(P\_vagans:5.5E-4,P\_anthophila:0.00939):0.0031):5.4E-4,P\_deleyi:0.00612):0.00655):0.01158):0.00863,((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00317):0.02935,(P\_allii:0.01515,P\_ananatis:0.01028):0.01322):0.02514):0.00383,P\_sp\_A4:0.07692):0.01303,P\_septica:0.02226):0.00353):0.00373):0.00306):0.00576);  
[445] tree 't445'=[&R] ((P\_conspicua:0.00786,P\_brenneri:5.5E-4):0.00794,(P\_deleyi:0.00386,P\_anthophila:0.01188):0.00783,(((P\_ananatis:0.00737,(P\_allii:0.02857,(P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00396):0.04656):0.01087):0.04249,(P\_septica:0.03141,(P\_sp\_A4:0.05038,((P\_cyprapedii:0.01425,(P\_sp\_At-9b:0.01554,(P\_rodasii:0.03292,((P\_wallisii:0.01607,P\_rwandensis:0.01196):0.00665,(P\_eucrina:0.0266,(P\_sp\_GM01:0.02295,P\_dispersa:0.01194):0.01387):0.01034):0.00914):0.0253):0.00458):0.05283,((T\_morbirosei:0.08108,(T\_ptyseos:0.02702,T\_sp\_NML\_06:0.04241):0.06534):0.1262,(E\_billingiae:0.05332,(E\_pyriifoliae:0.0275,E\_tasmaniensis:5.3E-4):0.04858):0.09492):0.01691):0.01783):0.02293):0.01329):0.03002,(P\_agglomerans:0.00407,(P\_vagans:5.5E-4,P\_sp\_aB:0.00389):0.01154):5.3E-4):0.01169);  
[446] tree 't446'=[&R] ((P\_sp\_At-9b:0.02792,P\_cyprapedii:0.01508):0.00691,(P\_sp\_A4:0.06244,(E\_billingiae:0.07322,(E\_pyriifoliae:0.00511,E\_tasmaniensis:0.0167):0.05316):0.06039):0.01417,(((P\_sp\_GM01:0.05679,(P\_rodasii:0.03931,P\_rwandensis:0.03516):0.01263):0.00818,(P\_wallisii:0.12962,(P\_eucrina:0.04196,P\_dispersa:0.0163):5.5E-4):0.00741):0.02218,((T\_ptyseos:0.04513,(T\_morbirosei:0.04588,T\_sp\_NML\_06:0.03745):0.02855):0.10776,(P\_septica:0.04105,(((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00294):0.02816,(P\_allii:0.01723,P\_ananatis:0.00384):0.03812):0.03034,(((P\_anthophila:0.01214,P\_deleyi:0.02319):0.01743,((P\_sp\_aB:0.01854,P\_vagans:0.01194):0.00908,P\_agglomerans:0.01811):5.3E-4):0.01073,(P\_brenneri:0.01195,P\_conspicua:0.00604):0.00175):0.03349):0.02692):0.03548):0.00585):0.0084);  
[447] tree 't447'=[&R] ((E\_billingiae:0.04548,(E\_pyriifoliae:0.02481,E\_tasmaniensis:5.5E-4):0.01664):0.03536,(P\_septica:0.02265,(P\_sp\_A4:0.02205,(T\_morbirosei:0.01358,(T\_sp\_NML\_06:0.06076,T\_ptyseos:0.03206):0.02256):0.08761):0.01447):0.01165,(((P\_conspicua:0.00612,(((P\_rwandensis:0.04088,((P\_dispersa:0.01494,(P\_eucrina:0.05166,P\_wallisii:0.01483):0.01947):0.0285,(P\_brenneri:0.01078,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.04327,(P\_allii:0.01196,P\_ananatis:5.4E-4):0.01226):0.01884):0.0074):0.00658):0.00621,(P\_sp\_GM01:0.02035,P\_rodasii:0.02931):0.00625):0.00666,(P\_sp\_At-9b:0.01212,P\_cyprapedii:0.02033):0.00621):0.0125):0.00797,(P\_anthophila:0.02866,(P\_agglomerans:5.5E-4,(P\_deleyi:0.03135,(P\_vagans:0.0,P\_sp\_aB:0.0):5.3E-4):0.00548):0.01656):0.01745):0.01899);  
[448] tree 't448'=[&R]  
(P\_dispersa:0.07363,((P\_eucrina:0.13856,(((E\_billingiae:0.09921,(E\_pyriifoliae:0.06495,E\_tasmaniensis:0.04977):0.11514):0.11448,((P\_septica:0.04614,((P\_brenneri:5.5E-4,P\_conspicua:0.04198):0.01402,((P\_sp\_aB:5.4E-

4,(P\_deleyi:0.0417,P\_agglomerans:0.01351):0.01395):5.5E-  
4,(P\_anthophila:0.02451,P\_vagans:0.0421):0.00287):0.04942):0.05282,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.5E-  
4,(P\_ananatis:0.02049,P\_allii:0.01386):0.02045):0.05025):0.01482):0.02445,(P\_sp\_A4:0.15404,(T\_ptyseos:0.06327,(T\_sp\_NML\_06:0.2003,T\_morbirosei:0.10437):0.03722):0.09029):0.03036):0.06106):0.02491,P\_cyprapedii:0.00524):0.01503,P\_sp\_A  
t-  
9b:0.02914):0.03358):0.01765,(P\_rodasii:0.03584,P\_sp\_GM01:0.03779):0.01285):0.00747,(P\_wallisii:0.06537,P\_rwandensis  
:0.02059):0.00615);  
[449] tree 't449'=[&R] (P\_sp\_At-  
9b:0.0312,(P\_cyprapedii:0.0252,(((P\_wallisii:0.00937,(P\_eucrina:0.057,P\_dispersa:0.0183):0.00979):0.01125,(P\_sp\_GM01  
:0.01796,P\_rodasii:5.5E-  
4):0.00815):0.00663,P\_rwandensis:0.00906):0.0273):0.01988,(P\_sp\_A4:0.07613,(((P\_septica:0.06862,((P\_s\_indologenes:0  
.01283,P\_s\_stewartii:0.0053):0.0316,(P\_allii:0.00704,P\_ananatis:0.02984):0.02944):0.0941):0.04342,(P\_agglomerans:5.4  
E-4,(P\_anthophila:5.5E-  
4,P\_deleyi:0.00849):0.01584,(P\_sp\_aB:0.03621,P\_vagans:0.02091):0.01218):0.02444):0.00889):0.01125,(P\_brenneri:5.4E-  
4,P\_conspicua:0.03938):0.04374):0.02356,(E\_billingiae:0.0549,(E\_pyriifoliae:0.00885,E\_tasmaniensis:0.02916):0.11032)  
:0.06626,(T\_sp\_NML\_06:0.09431,(T\_morbirosei:0.15044,T\_ptyseos:0.04139):0.04066):0.05264):0.03545):0.01727):0.02186);  
[450] tree 't450'=[&R] (P\_rodasii:0.01438,P\_rwandensis:0.00713,(((P\_sp\_At-  
9b:0.01436,P\_cyprapedii:0.00719):0.014,P\_wallisii:0.02134):5.5E-  
4,(P\_dispersa:0.00792,(P\_sp\_A4:0.04938,P\_eucrina:0.06635):0.01992):0.01336):0.0071,(P\_sp\_GM01:0.00741,((P\_septica:0.  
05963,((P\_brenneri:5.5E-4,P\_conspicua:0.00695):5.5E-  
4,(P\_anthophila:0.00703,(P\_sp\_aB:0.00668,P\_deleyi:0.02872):0.01431,(P\_agglomerans:0.0,P\_vagans:0.0):5.5E-  
4):0.00672):0.00685):0.02065,((P\_s\_indologenes:0.00697,P\_s\_stewartii:5.5E-  
4):0.02425,(P\_ananatis:0.00707,P\_allii:0.00703):0.01917):0.02136):0.0173):0.00895,((T\_morbirosei:0.12589,(T\_ptyseos:  
0.06387,T\_sp\_NML\_06:0.06685):0.05233):0.11662,(E\_billingiae:0.05016,(E\_pyriifoliae:0.03786,E\_tasmaniensis:0.01285):0.  
04634):0.01989):0.00689):0.02252):0.00682):5.3E-4);  
[451] tree 't451'=[&R] (P\_ananatis:5.5E-4,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.4E-  
4,P\_allii:0.00434):0.0044,(((P\_anthophila:0.0,P\_vagans:0.0):5.5E-  
4,(P\_deleyi:0.00436,(P\_agglomerans:0.0,P\_sp\_aB:0.0):0.00436):5.5E-4):0.00485,(P\_brenneri:0.00437,P\_conspicua:5.5E-  
4):0.00386):0.00892,(P\_sp\_GM01:0.00438,((P\_septica:0.02202,((T\_morbirosei:0.01926,(T\_ptyseos:0.00765,T\_sp\_NML\_06:0.  
03297):0.0165):0.0406,(E\_billingiae:0.03517,(E\_pyriifoliae:5.4E-  
4,E\_tasmaniensis:0.01258):0.02357):0.03676):0.01551,(P\_sp\_A4:0.01766,((P\_sp\_At-9b:0.0,P\_cyprapedii:0.0):5.5E-  
4,(P\_rodasii:5.5E-4,P\_rwandensis:0.00435):0.0088):5.3E-4):5.3E-  
4):0.00845):0.00445,(P\_wallisii:0.06632,(P\_dispersa:0.0,P\_eucrina:0.0):0.00437):5.4E-4):0.00446):0.00841):5.3E-4);  
[452] tree 't452'=[&R] ((P\_sp\_GM01:0.03212,((P\_rodasii:0.01424,P\_rwandensis:0.01483):0.01833,(P\_sp\_At-  
9b:0.02309,P\_cyprapedii:0.00515):0.01512):0.01229):0.00704,(P\_dispersa:0.00868,(P\_eucrina:0.0415,P\_wallisii:0.01243)  
:0.00652):0.0072):0.00527,((E\_billingiae:0.03776,(E\_pyriifoliae:0.01011,E\_tasmaniensis:0.03542):0.0897):0.05154,(P\_sp  
\_A4:0.04477,(T\_morbirosei:0.05217,(T\_sp\_NML\_06:0.11245,T\_ptyseos:0.08665):0.03162):0.08688):0.02416):0.0154,(P\_septi  
ca:0.02237,((P\_allii:0.0148,(P\_ananatis:0.0015,(P\_s\_indologenes:5.5E-  
4,P\_s\_stewartii:0.00253):0.02044):0.00153):0.02576,(P\_conspicua:5.5E-4,(P\_brenneri:8.5E-

4,(P\_agglomerans:0.01015,(P\_sp\_aB:0.01523,(P\_deleyi:5.5E-4,(P\_anthophila:0.00761,P\_vagans:0.00504):0.00248):0.00253):0.00236):0.01456):0.00481):0.01103):0.02299):0.00662);  
[453] tree 't453'=[&R]  
(P\_sp\_A4:0.05488,((T\_ptyseos:0.03153,(T\_sp\_NML\_06:0.08843,T\_morbirosei:0.03554):0.02324):0.10421,(E\_billingiae:0.02351,(E\_pyrifoliae:0.01461,E\_tasmaniensis:0.02311):0.04056):0.02996):0.02772,((P\_septica:0.01671,((P\_allii:0.00326,(P\_ananatis:5.4E-4,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01132):0.01094):0.01927,((P\_brenneri:5.5E-4,P\_conspicua:0.01131):0.00321,((P\_agglomerans:0.00586,P\_vagans:5.4E-4):0.00293,(P\_anthophila:0.01181,(P\_deleyi:5.3E-4,P\_sp\_aB:0.00841):0.00294):0.00562):0.0115):0.0181):0.01336):0.00954,(((P\_rwandensis:0.00503,P\_rodasii:0.01525):0.02395,(P\_dispersa:0.00195,(P\_wallisii:0.01472,P\_eucrina:0.00287):0.00377):0.01105):0.00728,(P\_sp\_GM01:0.0156,(P\_sp\_At-9b:0.01782,P\_cypripedii:0.01451):0.01007):0.00525):0.01064):0.01446);  
[454] tree 't454'=[&R] (((P\_eucrina:0.01851,(P\_rodasii:0.01127,(P\_rwandensis:5.3E-4,P\_sp\_GM01:0.01393):0.00557):0.00103):0.01442,P\_dispersa:0.0145):0.00453,(P\_wallisii:0.00614,((P\_sp\_At-9b:0.02549,P\_cypripedii:0.00885):0.01203,(T\_ptyseos:0.01368,(T\_sp\_NML\_06:0.02896,T\_morbirosei:0.02008):0.00677):0.07025):0.01322):0.00679,(P\_septica:0.03109,((((P\_agglomerans:0.00271,P\_sp\_aB:0.00272):5.5E-4,(P\_deleyi:0.01348,(P\_anthophila:0.00272,P\_vagans:5.5E-4):5.5E-4):0.00263):0.01973,(P\_ananatis:5.5E-4,(P\_allii:0.01087,(P\_s\_indologenes:5.3E-4,P\_s\_stewartii:0.00271):0.01124):0.00812):0.01986):0.00806,P\_conspicua:0.01089):0.00324,P\_brenneri:0.00292):0.02504,(P\_sp\_A4:0.03755,(E\_billingiae:0.01247,(E\_pyrifoliae:0.01083,E\_tasmaniensis:0.00314):0.02173):0.03639):0.01451):0.01061):0.00777);  
[455] tree 't455'=[&R]  
(P\_anthophila:0.01415,P\_deleyi:0.01506,(P\_vagans:0.00984,((P\_brenneri:0.00512,(((P\_septica:0.04174,(((T\_morbirosei:0.02732,(T\_sp\_NML\_06:0.07037,T\_ptyseos:0.04649):0.01964):0.06816,(E\_billingiae:0.05322,(E\_pyrifoliae:0.00908,E\_tasmaniensis:0.01575):0.05263):0.08105):0.02549,(P\_sp\_A4:0.08681,((P\_sp\_At-9b:0.00797,P\_cypripedii:0.009):0.02868,((P\_dispersa:0.02606,(P\_eucrina:0.03265,P\_wallisii:0.01889):0.01019):0.01099,(P\_sp\_GM01:0.04586,(P\_rodasii:0.02456,P\_rwandensis:0.02776):0.00856):0.0255):0.01765):0.02064):0.01687):0.01396):0.03422,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00855,(P\_allii:0.00534,P\_ananatis:0.00655):0.01097):0.01309):0.03713,P\_conspicua:0.00624):0.00708):0.01569,(P\_agglomerans:0.00478,P\_sp\_aB:0.01211):0.00519):0.00326):0.00693);  
[456] tree 't456'=[&R] (P\_anthophila:0.00411,P\_sp\_aB:5.5E-4,(P\_agglomerans:0.0041,(P\_vagans:0.00414,(P\_deleyi:0.0127,((P\_brenneri:0.00134,P\_conspicua:0.01119):0.01613,(((P\_eucrina:0.01961,((P\_sp\_At-9b:0.03466,P\_cypripedii:0.00304):0.03483,(P\_dispersa:0.01681,P\_wallisii:0.0042):0.00833):0.00518):0.01348,(P\_sp\_GM01:0.02519,(P\_rodasii:0.01225,P\_rwandensis:5.3E-4):0.00489):0.01152):0.01276,(P\_septica:0.01652,(P\_sp\_A4:0.0327,((T\_morbirosei:0.0334,(T\_ptyseos:0.04145,T\_sp\_NML\_06:0.01579):0.02038):0.04865,(E\_billingiae:0.06447,(E\_pyrifoliae:0.00781,E\_tasmaniensis:5.3E-4):0.0618):0.03923):0.02759):0.00547):0.00838):0.00836,((P\_s\_stewartii:0.00824,P\_s\_indologenes:5.5E-4):0.00823,(P\_ananatis:0.00821,P\_allii:0.0041):5.5E-4):0.00424):5.4E-4):0.00837):0.00791):0.00409):5.5E-4);  
[457] tree 't457'=[&R] (((P\_sp\_At-9b:0.0439,P\_cypripedii:0.07159):0.09249,(((E\_billingiae:0.26678,(E\_tasmaniensis:0.19902,E\_pyrifoliae:0.14569):0.3470

8):0.05299,(T\_ptyseos:0.19979,(T\_morbirosei:0.27444,T\_sp\_NML\_06:0.10439):0.06509):0.45683):0.07654,P\_sp\_A4:0.27866):0.05863):0.04923,(P\_septica:0.24097,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.02978,(P\_ananatis:0.05168,P\_allii:0.02905):0.02398):0.08688):0.03101,(((P\_sp\_GM01:0.12436,(P\_rodasii:0.01982,P\_rwandensis:0.0664):0.11804):0.02242,(P\_eucrinalina:0.19239,(P\_dispersa:0.1252,P\_wallisii:0.09373):0.05195):0.01608):0.05478,(((P\_agglomerans:0.03362,(P\_vagans:0.01999,(P\_sp\_aB:0.04306,P\_deleyi:0.0216):0.01116):0.02207):0.02684,(P\_brenneri:0.02274,P\_conspicua:0.01946):0.04273):0.01029,P\_anthophila:0.02761):0.17174):0.04577);

[458] tree 't458'=[&R] (P\_wallisii:5.5E-4,((((((P\_agglomerans:0.0,P\_vagans:0.0,P\_sp\_aB:0.0):5.4E-4,(P\_deleyi:0.0,P\_anthophila:0.0):0.01461):0.02187,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.3E-4):0.00728,((P\_brenneri:0.0,P\_conspicua:0.0):0.0073,P\_allii:5.5E-4):0.0073):5.4E-4,P\_ananatis:5.4E-4):0.00738,(P\_septica:0.01485,((T\_sp\_NML\_06:0.00739,(T\_ptyseos:0.0073,T\_morbirosei:5.5E-4):5.4E-4):0.03072,(E\_billingiae:5.4E-4,(E\_pyriifoliae:0.0073,E\_tasmaniensis:5.5E-4):0.03661):0.00747):0.00666):0.01506):0.00733,(((P\_rodasii:0.0,P\_rwandensis:0.0):0.01466,(P\_sp\_A4:0.0,P\_sp\_GM01:0.0):5.4E-4):0.00728):5.4E-4,((P\_sp\_At-9b:0.0,P\_cypripedii:0.0):0.00734,(P\_dispersa:5.5E-4,P\_eucrinalina:0.00731):0.00731):5.5E-4);

[459] tree 't459'=[&R] ((P\_cypripedii:0.00721,(P\_eucrinalina:0.02953,(P\_septica:0.06297,(((P\_brenneri:0.0,P\_conspicua:0.0):0.01121,((P\_anthophila:0.00358,(P\_agglomerans:0.00686,P\_sp\_aB:0.00361):0.00349):0.00342,(P\_vagans:0.00703,P\_deleyi:0.00731):0.00326):0.01625):0.01649,((((P\_allii:0.0,P\_ananatis:0.0):0.00343,(P\_s\_stewartii:0.00709,P\_s\_indologenes:5.5E-4):0.00723):0.03149,(E\_billingiae:0.04987,(E\_pyriifoliae:0.01754,E\_tasmaniensis:0.00408):0.04127):0.01737):5.4E-4,(P\_sp\_A4:0.05013,(T\_morbirosei:0.05623,(T\_ptyseos:0.04741,T\_sp\_NML\_06:0.0337):0.06373):0.09653):0.01602):0.00763):0.00377):0.01493):0.00677):0.00338,(P\_sp\_GM01:0.01047,(P\_rodasii:0.00877,P\_sp\_At-9b:0.00689):0.00239):0.00716,(P\_dispersa:0.00684,(P\_wallisii:0.02127,P\_rwandensis:0.01076):0.00709):5.4E-4);

[460] tree 't460'=[&R] ((E\_pyriifoliae:0.0,E\_tasmaniensis:0.0,P\_sp\_At-9b:0.0,P\_allii:0.0,P\_ananatis:0.0,P\_brenneri:0.0,P\_conspicua:0.0,P\_cypripedii:0.0,P\_dispersa:0.0,P\_eucrinalina:0.0,P\_septica:0.0,P\_s\_indologenes:0.0,P\_s\_stewartii:0.0,P\_wallisii:0.0,T\_morbirosei:0.0,T\_ptyseos:0.0,T\_sp\_NML\_06:0.0):0.02787,(E\_billingiae:0.0,P\_rodasii:0.0,P\_rwandensis:0.0):0.01336,(P\_agglomerans:0.0,P\_vagans:0.0,P\_deleyi:0.0,P\_anthophila:0.0,P\_sp\_A4:0.0,P\_sp\_GM01:0.0,P\_sp\_aB:0.0):5.5E-4);

[461] tree 't461'=[&R] ((P\_sp\_A4:0.05091,P\_sp\_GM01:0.02541):0.0092,((P\_eucrinalina:0.01967,P\_wallisii:0.00654):0.00676,((P\_septica:0.00671,(P\_sp\_At-9b:0.04193,P\_cypripedii:0.00721):0.0065):0.01241,(P\_dispersa:0.00651,((P\_brenneri:0.00639,P\_conspicua:0.00644):0.03301,(((P\_deleyi:0.0,P\_anthophila:0.0):0.02792,(P\_agglomerans:0.01291,(P\_vagans:0.0,P\_sp\_aB:0.0):5.5E-4):0.01909):0.03279,((E\_billingiae:0.04059,(T\_sp\_NML\_06:0.02557,(T\_morbirosei:0.03442,T\_ptyseos:0.01792):0.01269):0.09997):0.04089,((P\_allii:0.0,P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00642,P\_ananatis:5.3E-4):5.5E-4):0.00669):0.0067):0.00639):5.4E-4):0.00648):0.00616,((P\_rodasii:0.0,P\_rwandensis:0.0):0.01293,(E\_tasmaniensis:0.01294,E\_pyriifoliae:5.4E-4):0.02606):5.4E-4);

[462] tree 't462'=[&R] ((P\_dispersa:5.5E-4,(P\_septica:0.03481,P\_eucrinalina:0.0343):0.02014):0.00986,(P\_sp\_GM01:0.00654,P\_wallisii:0.00655):0.0072,((P\_sp\_At-

9b:0.00676,P\_cyprapedii:0.00629):0.03255,((P\_rodasii:5.5E-4,P\_rwandensis:0.00653):0.02046,((P\_sp\_A4:0.02712,(T\_morbirosei:5.4E-4,(T\_sp\_NML\_06:0.02021,T\_ptyseos:0.01346):0.02047):0.06442,(E\_billingiae:0.06962,(E\_pyriifoliae:0.04287,E\_tasmaniensis:0.02634):0.02806):0.03062):0.02799):5.4E-4,(P\_sp\_aB:0.00657,((P\_allii:0.02024,(P\_ananatis:0.00651,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.5E-4):0.04024,((P\_brenneri:0.0066,P\_conspicua:0.00657):0.01343,((P\_agglomerans:0.0,P\_vagans:0.0):5.5E-4,(P\_deleyi:0.00661,P\_anthophila:5.5E-4):0.0066):5.5E-4):0.00665):5.3E-4):0.02694):0.02791):0.00766):0.00946);  
[463] tree 't463'=[&R]  
(P\_septica:0.07972,(T\_morbirosei:0.09604,(T\_sp\_NML\_06:0.1301,T\_ptyseos:0.06275):0.02826):0.14374,(((P\_sp\_GM01:0.08541,(P\_rodasii:0.01165,P\_rwandensis:0.00468):0.06266,(P\_dispersa:0.02633,P\_wallisii:0.02276):0.00857):0.00534):0.01343,(P\_eucrina:0.10246,(P\_sp\_At-9b:0.04369,P\_cyprapedii:0.02656):0.04009):0.01999):0.02037,(E\_billingiae:0.10764,(P\_sp\_A4:0.14101,(E\_pyriifoliae:0.03698,E\_tasmaniensis:0.05554):0.09875):0.03536):0.02068):0.04517,(((P\_s\_indologenes:0.00414,P\_s\_stewartii:0.00411):0.00929,(P\_allii:0.02515,P\_ananatis:0.00348):0.01288):0.0484,(((P\_deleyi:0.03411,P\_agglomerans:0.00812):5.3E-4,P\_anthophila:0.02986):0.0102,(P\_vagans:0.02034,(P\_brenneri:0.01865,P\_conspicua:0.01433):0.02394):0.01409,P\_sp\_aB:0.00627):0.00693):0.02502):0.03952):0.02235);  
[464] tree 't464'=[&R] (P\_sp\_A4:0.01607,(E\_billingiae:0.01018,(E\_tasmaniensis:0.01565,E\_pyriifoliae:5.5E-4):0.00716):0.09943,((P\_agglomerans:0.0,P\_vagans:0.0,P\_deleyi:0.0,P\_allii:0.0,P\_ananatis:0.0,P\_anthophila:0.0,P\_brenneri:0.0,P\_conspicua:0.0,P\_sp\_aB:0.0,P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.05016,((P\_septica:0.03067,(P\_cyprapedii:0.03149,P\_sp\_At-9b:5.5E-4):5.4E-4):0.01658,((P\_rodasii:0.03259,((P\_dispersa:0.0,P\_rwandensis:0.0,P\_wallisii:0.0):5.5E-4,(P\_sp\_GM01:0.01566,P\_eucrina:0.01578):5.4E-4):5.4E-4):0.01518,(T\_morbirosei:0.05688,(T\_sp\_NML\_06:0.08555,T\_ptyseos:0.04792):0.05137):0.13239):0.01673):5.4E-4):0.01559);  
[465] tree 't465'=[&R]  
(P\_eucrina:0.02564,P\_dispersa:0.01003,((P\_wallisii:0.01103,(P\_sp\_A4:0.04881,(P\_sp\_GM01:0.00914,(P\_rodasii:0.00972,P\_rwandensis:0.01363):0.00862):0.01675):0.00378):0.00762,(((P\_ananatis:5.5E-4,(P\_allii:0.00706,(P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00228):0.00928):0.00218):0.01101,(((P\_deleyi:0.0117,P\_anthophila:0.00928):0.00507,(P\_vagans:5.4E-4,(P\_agglomerans:0.00228,P\_sp\_aB:0.0046):0.00199):0.00232):0.01347,(P\_conspicua:0.00443,P\_brenneri:5.3E-4):0.00458):0.01056):0.00908,(P\_septica:0.03866,((T\_morbirosei:0.01025,(T\_ptyseos:0.02074,T\_sp\_NML\_06:0.01579):0.01703):0.06541,(E\_billingiae:0.03664,(E\_pyriifoliae:0.01719,E\_tasmaniensis:0.00724):0.03743):0.05038):0.04133,(P\_sp\_At-9b:0.01123,P\_cyprapedii:0.00899):0.00896):0.00459):0.00844):0.011):0.00283);  
[466] tree 't466'=[&R]  
(P\_septica:0.05503,(P\_sp\_A4:0.09555,((T\_sp\_NML\_06:0.13233,(T\_morbirosei:0.12162,T\_ptyseos:0.06987):0.02744):0.13209,(E\_billingiae:0.05779,(E\_pyriifoliae:0.02045,E\_tasmaniensis:0.01516):0.03616):0.07573):0.0256):0.04132):0.02335,(P\_sp\_GM01:0.03677,((P\_wallisii:0.17924,P\_dispersa:5.4E-4):0.02048,((P\_rodasii:0.00845,P\_rwandensis:0.01142):0.03251,(P\_sp\_At-9b:0.01635,P\_cyprapedii:0.03656):0.03269):0.01235):0.01839):0.01108,(P\_eucrina:0.02829,((P\_allii:5.4E-4,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.03147,P\_ananatis:5.4E-

4):0.01544):0.08255,(P\_deleyi:0.01615,(P\_anthophila:0.0078,((P\_brenneri:0.01565,P\_conspicua:0.0077):0.01231,(P\_vagans:5.4E-4,(P\_sp\_aB:0.00388,P\_agglomerans:0.0076):0.00383):0.01143):0.00383):0.01564):0.01463):0.01191):0.00958);  
[467] tree 't467'=[&R]  
(P\_dispersa:0.01416,(P\_eucrina:0.06348,P\_wallisii:0.02419):0.01374):0.01989,(P\_rodasii:0.01745,P\_rwandensis:0.00426):0.01705,(((P\_sp\_At-9b:0.02636,P\_cyprapedii:0.02171):0.03166,((P\_sp\_A4:0.14666,((T\_morbirosei:0.07342,(T\_sp\_NML\_06:0.09988,T\_ptyseos:0.10598):0.04944):0.17282,(E\_billingiae:0.08674,(E\_pyriifoliae:0.0444,E\_tasmaniensis:0.03367):0.06283):0.0728):0.02323):0.0205,(P\_septica:0.05074,((P\_allii:0.01882,(P\_ananatis:0.0127,(P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00126):0.01986):0.01458):0.07122,((P\_brenneri:0.00474,P\_conspicua:0.01595):0.02868,((P\_agglomerans:0.00625,(P\_sp\_aB:0.0142,P\_vagans:0.00981):0.00293):0.00287,(P\_deleyi:0.01583,P\_anthophila:0.03061):0.00685):0.02986):0.03399):0.01178):0.01221):0.0262):0.01817,P\_sp\_GM01:0.03175):0.00727);  
[468] tree 't468'=[&R] (P\_anthophila:5.5E-4,((P\_dispersa:0.0,P\_wallisii:0.0):0.01023,(((T\_morbirosei:0.02277,(T\_sp\_NML\_06:0.0391,T\_ptyseos:0.00744):0.01199):0.06081,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01138,(P\_allii:0.00565,P\_ananatis:5.4E-4):0.00579):0.0046,(P\_septica:0.01272,(E\_billingiae:0.02537,(E\_pyriifoliae:0.0059,E\_tasmaniensis:0.00558):0.08479):0.03268):0.02944):0.00673):0.00601,(P\_sp\_At-9b:5.5E-4,(P\_conspicua:0.0057,(P\_brenneri:0.0,P\_cyprapedii:0.0):5.5E-4):0.00571):5.4E-4):0.00733):0.00545,(((P\_sp\_A4:0.03537,P\_eucrina:0.01782):0.01122,P\_sp\_GM01:0.0055):5.3E-4,(P\_rodasii:0.0,P\_rwandensis:0.0):5.4E-4):0.01149,(P\_deleyi:0.0057,(P\_agglomerans:0.0,P\_vagans:0.0,P\_sp\_aB:0.0):5.5E-4):5.4E-4):0.0057);  
[469] tree 't469'=[&R]  
(P\_eucrina:0.02161,(P\_sp\_A4:0.01253,(((T\_morbirosei:0.04852,(T\_ptyseos:0.02929,T\_sp\_NML\_06:0.01603):0.03244):0.05884,(E\_billingiae:0.01888,(E\_pyriifoliae:0.01204,E\_tasmaniensis:0.01029):0.02651):0.02269):0.04124,(P\_septica:0.02404,(P\_allii:0.01183,(P\_ananatis:0.0,P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00344):0.00696,(P\_brenneri:0.00264,((P\_deleyi:0.0,P\_anthophila:0.0):0.00303,(P\_vagans:5.4E-4,(P\_sp\_aB:0.00615,P\_agglomerans:0.00309):0.00304):0.00313):0.00924,P\_conspicua:0.003):5.3E-4):0.0154):0.03166):0.00606):0.00836,(P\_sp\_At-9b:0.00314,P\_cyprapedii:5.5E-4):0.00412):0.00559):0.02173,((P\_dispersa:0.00637,P\_wallisii:0.00907):0.01207,(P\_rwandensis:0.00832,(P\_sp\_GM01:0.01211,P\_rodasii:0.00513):0.00374):0.00122):0.0032);  
[470] tree 't470'=[&R] (P\_agglomerans:0.01863,(P\_vagans:0.0356,P\_sp\_aB:0.01632):5.5E-4,((P\_deleyi:0.07967,(P\_conspicua:0.00745,(P\_brenneri:0.01608,((P\_allii:5.4E-4,(P\_ananatis:0.02078,(P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00352):0.02479):0.0051):0.05626,(P\_septica:0.07968,(((T\_morbirosei:0.09813,(T\_sp\_NML\_06:0.33034,T\_ptyseos:0.17016):0.07887):0.44384,(E\_billingiae:0.1627,(E\_pyriifoliae:0.08649,E\_tasmaniensis:0.0796):0.16379):0.15197):0.06504,(P\_sp\_A4:0.20644,(((P\_sp\_GM01:0.02777,(P\_rodasii:0.01513,P\_rwandensis:0.03328):0.03273):0.01756,(P\_dispersa:0.03724,(P\_sp\_At-9b:0.03939,P\_cyprapedii:0.01033):0.05174):5.4E-4):0.02634,(P\_wallisii:0.05974,P\_eucrina:0.13986):0.02846):0.07207):0.02079):0.04097):0.0413):0.06317):0.01471):0.03819):0.01122,P\_anthophila:0.01061):0.00698);  
[471] tree 't471'=[&R]  
(P\_vagans:0.02443,(P\_agglomerans:0.00832,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.02721,(P\_allii:0.02834,P\_anana

tis:0.02989):0.01836):0.08919,(P\_septica:0.166,(((T\_morbirosei:0.18378,(T\_sp\_NML\_06:0.3575,T\_ptyseos:0.22035):0.10897):0.72393,(E\_billingiae:0.15428,(E\_pyriifoliae:0.09556,E\_tasmaniensis:0.04139):0.22929):0.10673):0.07844,(P\_sp\_A4:0.23643,(P\_eucrina:0.17819,(P\_sp\_At-9b:0.07003,P\_cyprapedii:0.02755):0.06674,(P\_dispersa:0.05142,P\_wallisii:0.04402):0.02756,(P\_rwandensis:0.05854,P\_rodasii:0.05937):0.03979,P\_sp\_GM01:0.07105):0.00941):0.02013):0.03446):0.03915):0.03896):0.03834):0.03919):0.04878,(P\_brenneri:0.04583,P\_conspicua:0.02681):0.02315):0.03972):0.0088,(P\_sp\_aB:0.02381,(P\_deleyi:0.03531,P\_anthophila:0.03153):0.0091):0.00521);

[472] tree 't472'=[&R]

((((P\_deleyi:0.0,P\_anthophila:0.0):0.00727,(((T\_morbirosei:0.07691,(T\_sp\_NML\_06:0.02837,T\_ptyseos:0.01676):0.01182):0.08493,P\_septica:0.0218):0.00847,P\_sp\_A4:0.15005):0.01367,(P\_cyprapedii:5.3E-4,(E\_billingiae:0.02204,(E\_pyriifoliae:0.03558,E\_tasmaniensis:0.02887):0.00871):0.05983):5.4E-4):0.007):5.5E-4,(((P\_s\_indologenes:5.5E-4,(P\_s\_stewartii:0.04481,(P\_sp\_GM01:0.00724,(P\_dispersa:0.01458,(P\_wallisii:0.01457,(P\_rodasii:0.0,P\_rwandensis:0.0):5.5E-4):0.00683):5.4E-4):0.00725):5.3E-4):0.00733,(P\_sp\_aB:0.01456,(P\_vagans:0.00729,(P\_agglomerans:5.5E-4,(P\_allii:0.00724,P\_ananatis:0.00721):5.5E-4):5.5E-4):5.3E-4):0.00694):5.4E-4,P\_conspicua:0.00728):5.5E-4):5.5E-4,P\_brenneri:5.5E-4,(P\_sp\_At-9b:0.00719,P\_eucrina:0.00721):5.5E-4);

[473] tree 't473'=[&R]

((((P\_agglomerans:0.00575,P\_sp\_aB:0.01093):0.01702,(((P\_brenneri:0.0,P\_conspicua:0.0):0.02767,(E\_tasmaniensis:0.02956,(E\_pyriifoliae:0.05205,E\_billingiae:0.09924):0.00646):0.09216,(P\_septica:0.06995,((T\_ptyseos:0.04829,(T\_morbirosei:0.03065,T\_sp\_NML\_06:0.09853):0.0171):0.12279,(P\_cyprapedii:0.02797,P\_sp\_At-9b:0.00548):0.02274,(((P\_wallisii:0.03611,(P\_sp\_A4:0.0889,P\_sp\_GM01:0.03069):0.01604):0.01306,(P\_rwandensis:0.02789,P\_rodasii:0.03402):0.01706):0.01186,(P\_eucrina:0.03801,P\_dispersa:0.03854):0.01667):5.4E-4):0.01863):0.02611):0.00606):0.03378):0.01997,((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00548):0.01573,(P\_allii:0.01104,P\_ananatis:0.01656):0.01969):0.00708):0.01343):0.00614,P\_vagans:0.00505,(P\_deleyi:0.01108,P\_anthophila:0.01659):5.4E-4);

[474] tree 't474'=[&R] (P\_agglomerans:5.5E-4,(((P\_conspicua:0.0041,((T\_ptyseos:0.03382,(T\_morbirosei:0.0423,T\_sp\_NML\_06:0.04924):0.00733):0.18073,(((P\_s\_indologenes:0.00411,P\_s\_stewartii:5.4E-4):0.00611,(P\_ananatis:0.01817,P\_allii:0.00805):0.0055):0.0258,((P\_sp\_A4:0.057,(E\_billingiae:0.07208,(E\_pyriifoliae:0.01794,E\_tasmaniensis:0.03456):0.04268):0.06686):0.02011,((P\_sp\_At-9b:0.01796,P\_cyprapedii:0.00758):0.01473,(P\_dispersa:0.03027,(P\_eucrina:0.03189,((P\_sp\_GM01:0.0126,(P\_rodasii:0.00832,P\_rwandensis:0.01237):0.01237):0.01959,P\_wallisii:0.00573):0.00397):0.0149):0.01645):0.01305,P\_septica:0.03934):0.01275):0.02299):0.01638):5.4E-4):0.0082,P\_brenneri:5.5E-4):0.02071,P\_sp\_aB:0.00411):5.5E-4,(P\_vagans:0.0042,(P\_deleyi:0.01237,P\_anthophila:5.5E-4):0.00833):0.00407);

[475] tree 't475'=[&R] (P\_eucrina:0.01761,(P\_dispersa:5.4E-4,((P\_septica:5.3E-4,(((T\_morbirosei:0.02065,(T\_sp\_NML\_06:0.09205,T\_ptyseos:0.02947):0.01211):0.10534,(P\_sp\_A4:0.05572,(E\_billingiae:0.07066,(E\_pyriifoliae:0.03351,E\_tasmaniensis:0.00936):0.04317):0.04009):0.02435):0.01834,(P\_allii:0.01019,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01025,P\_ananatis:5.5E-4):5.5E-4):0.03137):0.01048):5.5E-4,(((P\_vagans:0.0,P\_sp\_aB:0.0):5.4E-4,(P\_deleyi:5.5E-4,P\_anthophila:0.02082):0.01011):0.01024,P\_agglomerans:5.4E-



4):0.01024,(P\_conspicua:0.0,P\_brenneri:0.0):5.5E-4):0.02077,P\_sp\_GM01:0.03245):0.03091):0.03183):0.01287,(P\_wallisii:0.01285,(P\_rodasii:0.01735,(P\_cyprapedii:5.5E-4,(P\_rwandensis:0.03093,P\_sp\_At-9b:0.01013):5.4E-4):0.01002):5.5E-4):0.01007);

[476] tree 't476'=[&R] (((((P\_brenneri:5.3E-4,((P\_deleyi:0.00488,((P\_agglomerans:0.00484,(P\_vagans:0.0,P\_anthophila:0.0,P\_sp\_aB:0.0):5.5E-4):0.00487,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00481,(P\_allii:0.0,P\_ananatis:0.0):5.4E-4):0.01281,(E\_billingiae:0.02169,(E\_pyrifoliae:0.00481,E\_tasmaniensis:5.5E-4):0.02267):0.03995):0.00675):0.00488):0.00493,P\_conspicua:5.4E-4):0.00978):0.00486,P\_rodasii:5.5E-4):0.00485,(P\_rwandensis:0.0,P\_sp\_GM01:0.0):5.4E-4):0.00486,(((P\_sp\_A4:0.01564,(T\_morbirosei:0.02112,(T\_ptyseos:0.01158,T\_sp\_NML\_06:0.00303):0.00987):0.05967):0.004,P\_septica:0.00488):0.0049,(P\_sp\_At-9b:5.5E-4,P\_cyprapedii:0.00486):0.00978):0.00486):5.3E-4,P\_dispersa:5.5E-4,(P\_eucrina:0.00973,P\_wallisii:0.00484):5.5E-4);

[477] tree 't477'=[&R] (P\_sp\_At-9b:0.05238,P\_rodasii:0.03104,(P\_dispersa:0.05256,(P\_rwandensis:0.0301,(P\_sp\_GM01:0.02017,(P\_wallisii:5.4E-4,(P\_eucrina:0.06725,(P\_cyprapedii:0.10594,(P\_septica:0.06319,(((P\_allii:5.4E-4,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00997,P\_ananatis:5.5E-4):0.01003):0.0719,(P\_sp\_A4:0.13446,((T\_morbirosei:0.18445,(T\_sp\_NML\_06:0.17677,T\_ptyseos:0.21939):0.03018):0.17939,(E\_billingiae:0.17028,(E\_pyrifoliae:0.04737,E\_tasmaniensis:0.05161):0.16265):0.20468):0.0563):0.11291):0.04449,((P\_brenneri:5.4E-4,P\_conspicua:0.02107):0.03927,((P\_agglomerans:0.0,P\_sp\_aB:0.0):5.5E-4,P\_vagans:0.01988,(P\_deleyi:0.03278,P\_anthophila:0.03147):0.00965):0.01533):0.02814):5.1E-4):0.09768):0.01049):0.04256):0.02003):0.00993):5.3E-4):0.01926);

[478] tree 't478'=[&R] (((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00635,(P\_ananatis:0.01072,P\_allii:5.5E-4):0.01519):0.04625,(P\_sp\_At-9b:0.01034,P\_cyprapedii:0.00963):0.028,(P\_septica:0.04912,(((P\_brenneri:0.01027,P\_conspicua:0.00637):0.00982,(P\_anthophila:0.02245,(P\_deleyi:0.01462,(P\_sp\_aB:0.0106,(P\_agglomerans:0.0072,P\_vagans:0.00355):5.4E-4):0.01396):0.01154):0.01303):0.01288,((T\_morbirosei:0.05773,(T\_sp\_NML\_06:0.03435,T\_ptyseos:0.03389):0.01453):0.08585,(P\_sp\_A4:0.04152,((E\_billingiae:0.04635,(E\_pyrifoliae:0.01618,E\_tasmaniensis:0.0299):0.02291):0.03762,((P\_eucrina:0.02346,(P\_wallisii:0.01434,P\_dispersa:0.01818):0.00954):0.01962,(P\_sp\_GM01:0.02086,(P\_rodasii:0.01333,P\_rwandensis:0.00122):0.01928):0.01515):0.02145):0.0166):0.01513):0.01152):0.01492):0.01461);

[479] tree 't479'=[&R] (P\_sp\_GM01:0.05132,P\_rwandensis:0.07165,(P\_dispersa:0.0827,(P\_rodasii:0.03372,(P\_wallisii:0.05081,(P\_eucrina:0.16143,(((E\_billingiae:0.13034,((T\_sp\_NML\_06:0.2422,(T\_ptyseos:0.37919,T\_morbirosei:0.23997):0.12895):0.56665,(E\_pyrifoliae:0.13762,E\_tasmaniensis:0.08585):0.0785):0.09295):0.20755,(P\_sp\_A4:0.19567,(P\_septica:0.08612,((P\_ananatis:0.02521,(P\_allii:0.00511,(P\_s\_indologenes:0.0044,P\_s\_stewartii:5.4E-4):0.06004):0.01186):0.08804,((P\_anthophila:0.05961,((P\_vagans:0.02,P\_sp\_aB:0.02007):0.00896,(P\_agglomerans:0.01134,P\_deleyi:0.05342):0.00437):5.3E-4):0.05016,(P\_brenneri:0.01901,P\_conspicua:0.04714):0.01472):0.00584):0.04754):0.05364):0.01487):0.06578,P\_cyprapedii:0.01037):0.00472,P\_sp\_At-9b:0.01682):0.03351):0.01609):0.01483):0.00495):0.00482);

[480] tree 't480'=[&R] (P\_deleyi:0.00326,P\_agglomerans:5.5E-4,((P\_anthophila:0.00659,((P\_septica:0.01665,((P\_sp\_At-9b:0.0065,P\_cyprapedii:5.4E-4):0.01098,((P\_ananatis:0.00936,(P\_allii:0.00654,(P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00325):0.0032):5.4E-4):0.03301,((P\_sp\_GM01:5.5E-4,((P\_wallisii:0.00659,(P\_eucrina:0.01706,P\_dispersa:0.00678):0.00327):0.01001,(P\_rwandensis:0.01558,P\_rodasii:0.00854):0.0023):0.00662):0.02175,(P\_sp\_A4:0.05339,((T\_morbirosei:0.04048,(T\_ptyseos:0.03668,T\_sp\_NML\_06:0.02196):0.02726):0.09132,(E\_billingiae:0.04228,(E\_pyrifoliae:0.01521,E\_tasmaniensis:0.02434):0.05182):0.01111):0.01062):0.00257):0.01338):0.00989):0.00928):0.01004,(P\_brenneri:0.00658,P\_conspicua:5.5E-4):0.00658):0.00653):0.00326,(P\_sp\_aB:0.00325,P\_vagans:5.5E-4):5.5E-4):0.00325);

[481] tree 't481'=[&R] (P\_deleyi:0.01865,(P\_brenneri:0.00926,P\_conspicua:0.00919):0.00921,((P\_septica:0.0,P\_anthophila:0.0):5.5E-4,((((P\_allii:0.02802,((P\_ananatis:0.0,P\_s\_indologenes:0.0):5.5E-4,P\_s\_stewartii:0.00904):0.00895):0.01523,(P\_eucrina:0.0486,(P\_sp\_GM01:5.4E-4,((P\_dispersa:0.00927,((P\_sp\_At-9b:5.5E-4,P\_cyprapedii:0.01854):0.02811,P\_wallisii:0.00875):5.4E-4):0.00928,(P\_rodasii:0.0,P\_rwandensis:0.0):5.4E-4):0.00923):0.02078):0.03396):0.02322,(P\_vagans:0.00921,P\_sp\_aB:5.4E-4):5.4E-4):0.00926,P\_agglomerans:5.4E-4):0.00948,((T\_sp\_NML\_06:0.04509,(T\_morbirosei:0.04713,T\_ptyseos:0.09902):0.03817):1.16925,((E\_billingiae:0.1671,(E\_pyrifoliae:0.05823,E\_tasmaniensis:0.02885):0.06805):0.1002,P\_sp\_A4:0.07081):0.02153):0.04615):5.5E-4):5.5E-4);

[482] tree 't482'=[&R] ((P\_rodasii:0.17736,P\_rwandensis:0.02436):0.02029,(P\_wallisii:0.01939,(P\_eucrina:0.03941,P\_dispersa:0.00532):0.02008):5.5E-4,(P\_sp\_GM01:0.01896,((P\_cyprapedii:0.01766,P\_sp\_At-9b:0.02566):0.00791,((P\_sp\_A4:0.02578,((E\_billingiae:0.05992,(E\_pyrifoliae:0.01645,E\_tasmaniensis:0.02705):0.03501):0.0765,((T\_morbirosei:0.04514,(T\_ptyseos:0.04057,T\_sp\_NML\_06:0.05278):0.03459):0.08257,((P\_brenneri:0.00164,(P\_conspicua:0.01691,(P\_deleyi:0.03187,((P\_anthophila:0.0,P\_sp\_aB:0.0):5.5E-4,(P\_agglomerans:0.00636,P\_vagans:0.00643):5.5E-4):5.5E-4):0.02622):5.5E-4):0.03454,(P\_allii:0.02507,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.02356,P\_ananatis:0.00109):0.01304):0.0441):0.05193):0.02337):0.01205):0.03119,P\_septica:0.03482):0.00511):0.01958):0.01236);

[483] tree 't483'=[&R] ((P\_cyprapedii:0.01169,((P\_sp\_At-9b:0.03399,(P\_dispersa:0.04455,(P\_septica:0.23973,P\_eucrina:0.13353):0.03531):5.4E-4):0.02634,(P\_sp\_A4:0.16734,((T\_sp\_NML\_06:0.18273,(T\_morbirosei:0.19966,T\_ptyseos:0.09077):0.03384):0.43835,(E\_billingiae:0.07085,(E\_pyrifoliae:5.4E-4,E\_tasmaniensis:0.0983):0.25301):0.24058):0.1692):0.11263):0.00532,((P\_ananatis:0.0026,(P\_allii:0.03573,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.03532):0.02075):0.06572,(P\_anthophila:0.02907,((P\_brenneri:5.5E-4,(P\_agglomerans:0.02277,P\_conspicua:0.01135):5.5E-4):0.01171,(P\_deleyi:5.4E-4,(P\_vagans:5.4E-4,P\_sp\_aB:0.02282):0.03401):0.01131):0.00486):0.03592):0.0354):5.3E-4):0.05965,P\_rodasii:0.0231,(P\_wallisii:0.06184,(P\_rwandensis:0.02234,P\_sp\_GM01:0.10347):0.02318):0.01067);

[484] tree 't484'=[&R] ((P\_eucrina:0.03312,P\_wallisii:5.5E-4):0.03989,(((T\_morbirosei:0.06384,(T\_ptyseos:0.03446,T\_sp\_NML\_06:0.0718):0.05285):0.11496,(E\_billingiae:0.06461,(E\_pyrifoliae:0.02217,E\_tasmaniensis:0.04375):0.05222):0.0266):0.02742,((P\_ananatis:0.01621,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01615,P\_allii:5.5E-4):5.3E-4):0.05024,(P\_septica:0.02914,((P\_brenneri:0.01611,P\_conspicua:5.3E-4):0.02552,(P\_deleyi:0.00988,(P\_vagans:0.02442,(P\_anthophila:5.4E-4,(P\_agglomerans:0.0162,P\_sp\_aB:5.5E-

4):0.01617):5.3E-4):0.01491):0.02514):0.03224):0.02477):0.01207):0.00301,((P\_sp\_At-9b:0.01635,P\_cyprapedii:0.0077):0.02579,(P\_sp\_A4:0.07486,(P\_rodasii:0.01098,(P\_sp\_GM01:0.00736,(P\_rwandensis:5.4E-4,P\_dispersa:0.05662):0.02431):0.01502):0.0237):0.00924):0.0133);

[485] tree 't485'=[&R] (P\_anthophila:5.5E-4,(((P\_allii:0.0,P\_ananatis:0.0):0.00976,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00951):0.01941,(P\_septica:0.05016,(P\_sp\_A4:0.07995,(T\_morbirosei:0.1069,(T\_sp\_NML\_06:0.12709,T\_ptyseos:0.06486):0.03835):0.27566,(((E\_billingiae:0.07642,(E\_pyriifoliae:0.03942,E\_tasmaniensis:0.03674):0.0598):0.22802,(((P\_sp\_GM01:0.02885,(P\_rwandensis:0.01523,P\_rodasii:0.01541):0.03734):0.01407,P\_dispersa:0.01893):0.01529,(P\_eucrina:0.0577,P\_wallisii:5.5E-4):5.4E-4):0.03265):0.03968,(P\_sp\_At-9b:0.03953,P\_cyprapedii:0.03249):0.07699):0.02854):0.02335):0.05138):0.0197):0.02945,(P\_deleyi:0.00952,((P\_vagans:5.4E-4,P\_sp\_aB:0.01885):0.01945,(P\_agglomerans:5.5E-4,(P\_conspicua:0.00932,P\_brenneri:5.5E-4):0.00936):0.00939):5.5E-4):0.00953);

[486] tree 't486'=[&R] (P\_deleyi:0.01893,P\_sp\_aB:0.00631,(P\_agglomerans:0.01246,(((P\_anthophila:0.02364,((((P\_s\_indologenes:0.00623,P\_s\_stewartii:5.5E-4):0.02553,(P\_allii:5.4E-4,P\_ananatis:0.01919):5.4E-4):0.04307,(P\_wallisii:0.05509,(P\_sp\_A4:0.11879,(T\_sp\_NML\_06:0.18166,(T\_morbirosei:0.14717,T\_ptyseos:0.09713):0.0631):0.44596,(E\_billingiae:0.03192,(E\_pyriifoliae:0.0419,E\_tasmaniensis:0.02853):0.05085):0.13086):0.06001):0.03391):0.0575):0.01673,((P\_cyprapedii:0.0495,P\_sp\_At-9b:0.01836):0.02304,((P\_septica:0.0569,P\_sp\_GM01:0.01348):0.03111,((P\_rodasii:0.0056,P\_rwandensis:0.02539):0.03095,(P\_eucrina:0.02772,P\_dispersa:0.02278):0.00699):0.0071):0.01171):0.02508):0.01946,(P\_brenneri:5.5E-4,P\_conspicua:0.01239):5.5E-4):0.02947):0.01014,P\_vagans:5.5E-4):0.00598):5.5E-4);

[487] tree 't487'=[&R] (P\_sp\_aB:0.02045,P\_agglomerans:0.01802,(P\_vagans:0.01358,(P\_anthophila:0.02518,(P\_deleyi:0.03693,((P\_brenneri:0.0071,P\_conspicua:0.01449):0.02444,(((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00838):0.02492,(P\_allii:0.03182,P\_ananatis:0.03144):0.00459):0.06366,((((P\_sp\_GM01:0.03197,(P\_rodasii:0.02931,P\_rwandensis:0.04594):0.06743):0.05028,(P\_sp\_At-9b:0.05294,P\_cyprapedii:0.05351):0.03066):0.03156,(P\_dispersa:0.07143,(P\_eucrina:0.08984,P\_wallisii:0.0583):0.02604):0.02661):0.09022,((T\_morbirosei:0.09607,(T\_ptyseos:0.09008,T\_sp\_NML\_06:0.12254):0.09575):0.26424,(E\_billingiae:0.28595,(E\_pyriifoliae:0.05526,E\_tasmaniensis:0.02676):0.12561):0.0783):0.022):0.04512,(P\_septica:0.08677,P\_sp\_A4:0.19053):0.0261):0.05141):0.04446):0.04083):0.01131):0.01517):0.00857);

[488] tree 't488'=[&R] (P\_sp\_GM01:5.5E-4,((P\_dispersa:0.03837,P\_sp\_At-9b:5.5E-4):0.01885,(P\_rodasii:0.01853,P\_rwandensis:0.03586):0.06006):5.5E-4,(P\_cyprapedii:0.01836,(P\_wallisii:5.4E-4,((((P\_eucrina:0.21884,(T\_morbirosei:0.02951,(T\_sp\_NML\_06:0.24202,T\_ptyseos:0.04996):0.13314):0.31437):0.03515,P\_anthophila:0.02226):0.01937,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.13394,(P\_allii:0.07535,P\_ananatis:0.15245):0.11428):0.25749,((P\_sp\_aB:0.01894,P\_vagans:5.3E-4):0.01856,(P\_agglomerans:5.5E-4,P\_deleyi:0.01877):5.3E-4):0.02057):5.3E-4,(P\_brenneri:0.00284,P\_conspicua:0.03757):0.055):0.01926):0.03662,(P\_sp\_A4:0.1159,(E\_billingiae:0.11002,(E\_pyriifoliae:0.19068,E\_tasmaniensis:0.04512):0.07504):0.11191):0.10235):0.0195,P\_septica:0.05745):5.4E-4):0.01834):5.3E-4);

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[489] tree 't489'=[&R]
(P_rwandensis:0.0352,(P_rodasii:0.02304,(((T_morbirosei:0.10999,(T_ptyseos:0.06492,T_sp_NML_06:0.10002):0.04434):0.1
8504,(P_sp_A4:0.14114,((E_billingiae:0.13853,(E_pyrifoliae:0.05795,E_tasmaniensis:0.05872):0.0526):0.19444,(P_septic
a:0.0479,(((P_s_indologenes:0.01404,P_s_stewartii:5.5E-
4):0.02928,(P_allii:0.0348,P_ananatis:0.02245):0.01357):0.08471,((P_anthophila:0.07444,(P_brenneri:5.3E-
4,P_conspicua:0.02134):0.02097):0.01546,((P_agglomerans:5.5E-
4,(P_sp_aB:0.04457,P_vagans:0.00715):0.00685):0.0301,P_deleyi:0.06001):0.01531):0.01813):0.03595):0.01716):0.0313):0
.02935):0.04441,(P_sp_At-
9b:0.05592,P_cyprapedii:0.02987):0.02309):0.01725):0.0132,((P_sp_GM01:0.03546,(P_dispersa:0.10836,P_eucrina:0.09928)
:0.02815):0.01159,P_wallisii:0.06578):0.01689);
[490] tree 't490'=[&R]
(P_sp_GM01:0.0684,P_rodasii:0.01661,(P_rwandensis:0.04157,(P_dispersa:0.01679,(P_wallisii:0.06022,(P_eucrina:0.13674
),(P_sp_At-
9b:0.0259,P_cyprapedii:0.05799):0.02557,(P_sp_A4:0.14634,(((E_billingiae:0.09016,(E_pyrifoliae:0.07017,E_tasmaniensi
s:0.09292):0.08127):0.21505,(T_morbirosei:0.16083,(T_ptyseos:0.09747,T_sp_NML_06:0.22094):0.07421):0.20977):0.06852,
(P_septica:0.07517,((P_deleyi:0.03468,((P_brenneri:0.03297,P_conspicua:0.01707):0.01657,((P_anthophila:0.04085,P_vag
ans:5.5E-
4):0.01336,(P_sp_aB:0.01409,P_agglomerans:0.01988):0.01697):0.01294):0.01277):0.06804,(P_allii:0.04617,(P_ananatis:0
.02163,(P_s_indologenes:0.0,P_s_stewartii:0.0):0.04451):0.04538):0.11926):0.02175):0.03621):0.03276):0.01883):0.0647
1):0.04071):0.02108):0.031):0.02164);
[491] tree 't491'=[&R] (P_vagans:5.4E-4,(P_anthophila:0.01938,P_deleyi:0.00955):0.00489,(P_sp_aB:5.4E-
4,(P_agglomerans:0.00832,(P_brenneri:0.00839,(((P_allii:0.01183,((P_s_indologenes:0.0,P_s_stewartii:0.0):0.03049,P
ananatis:5.5E-
4):0.00809):0.06338,((E_billingiae:0.06136,(E_pyrifoliae:0.00548,E_tasmaniensis:0.02432):0.07956):0.07984,(P_septica
:0.03011,((T_sp_NML_06:0.26626,(T_ptyseos:0.07347,T_morbirosei:0.38771):0.09294):0.7631,P_sp_A4:0.09512):0.03449):0.
01385):0.01245):0.01991,((P_sp_At-9b:0.03467,P_cyprapedii:5.3E-
4):0.02159,(P_sp_GM01:0.01777,((P_rodasii:0.01509,((P_wallisii:0.00588,P_dispersa:0.01961):0.00506,P_eucrina:0.01935
):0.01613):0.00652,P_rwandensis:0.03068):0.0022):0.03644):0.03361):0.01638,P_conspicua:5.3E-
4):0.00583):0.01998):0.006):0.00475);
[492] tree 't492'=[&R] (P_eucrina:0.15403,((P_sp_At-
9b:0.0318,P_cyprapedii:0.04998):0.05542,(P_sp_A4:0.16324,(((P_brenneri:0.04923,((P_deleyi:0.05078,(P_sp_aB:0.02259,(
P_vagans:0.03454,(P_anthophila:0.03535,P_agglomerans:0.01724):0.01246):0.01387):0.02469):0.04947,P_conspicua:0.03349
):0.02404):0.07418,(P_ananatis:0.06311,((P_s_indologenes:0.0,P_s_stewartii:0.0):0.08982,P_allii:0.04171):0.0645):0.0
7615):0.04306,(P_septica:0.1454,((T_morbirosei:0.27038,(T_ptyseos:0.22398,T_sp_NML_06:0.30673):0.1109):0.28712,(E_bi
llingiae:0.12522,(E_pyrifoliae:0.08121,E_tasmaniensis:0.04701):0.13969):0.10245):0.05691):0.06515):0.0379):0.06651):
0.02665,((P_dispersa:0.09637,P_wallisii:0.02172):0.0388,(P_rodasii:0.07358,(P_rwandensis:0.06676,P_sp_GM01:0.06151):
0.0206):0.03389):0.01478);
[493] tree 't493'=[&R] ((P_eucrina:0.01113,((P_rodasii:0.00188,P_rwandensis:5.5E-
4):0.00566,(P_sp_GM01:0.00531,(P_dispersa:0.00219,P_wallisii:0.00342):0.00376):0.00216):5.5E-
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4):0.00624,((P\_septica:0.01866,((P\_agglomerans:5.5E-4,((P\_deleyi:0.0,P\_anthophila:0.0):0.00176,P\_vagans:5.4E-4):0.00151,(P\_sp\_aB:5.4E-4,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00375,(P\_allii:0.0,P\_ananatis:0.0):0.00564):0.01318):5.4E-4):0.00374):0.00171,(P\_brenneri:0.00187,P\_conspicua:0.00187):0.0019):0.00235):0.0106,(P\_sp\_At-9b:0.01036,P\_cyprapedii:0.01043):0.00374):0.00592,(P\_sp\_A4:0.0116,((T\_morbirosei:0.01279,(T\_sp\_NML\_06:0.01987,T\_ptyseos:0.00649):0.00721):0.02597,(E\_billingiae:0.01281,(E\_pyriifoliae:0.00692,E\_tasmaniensis:0.003):0.01154):0.0121):0.00974):0.00457);

[494] tree 't494'=[&R]  
(((P\_conspicua:0.0037,(P\_brenneri:0.00326,((P\_sp\_A4:0.02084,(T\_sp\_NML\_06:0.08682,(T\_morbirosei:0.14883,T\_ptyseos:0.07858):0.04993):0.16397):0.08144,((P\_septica:0.03125,((P\_sp\_At-9b:0.01084,P\_cyprapedii:0.04125):0.05103,((P\_rodasii:0.00372,(P\_sp\_GM01:0.0385,P\_rwandensis:0.00738):0.00755):0.02039,(P\_dispersa:0.00488,(P\_eucrina:0.05801,P\_wallisii:0.00185):0.01832):0.0132):0.02321):0.01813):0.02011,(E\_billingiae:0.08665,(E\_pyriifoliae:0.05322,E\_tasmaniensis:0.05823):0.07101):0.05932):0.01336):0.04148,(P\_allii:0.01191,(P\_s\_indologenes:5.3E-4,P\_s\_stewartii:0.00371):0.02149,P\_ananatis:0.00975):0.00986):0.02416):0.01986):0.01634):0.01905,(P\_deleyi:0.03318,P\_anthophila:0.00436):0.00357):5.4E-4,P\_agglomerans:0.0103,(P\_sp\_aB:0.01025,P\_vagans:0.01189):0.00364);

[495] tree 't495'=[&R]  
((((P\_eucrina:0.10723,((E\_billingiae:0.09995,(E\_pyriifoliae:0.03803,E\_tasmaniensis:0.05261):0.09154):0.03216,(P\_sp\_A4:0.08336,(T\_morbirosei:0.11943,(T\_sp\_NML\_06:0.21255,T\_ptyseos:0.09303):0.04866):0.14629):0.03241):0.0272):0.01286,P\_wallisii:0.03254):0.00855,P\_dispersa:0.03397):0.00875,(P\_septica:0.09059,((P\_s\_indologenes:0.00457,P\_s\_stewartii:0.0023):0.03615,(P\_allii:0.00938,P\_ananatis:0.00913):0.01544):0.03631,((P\_deleyi:0.03681,((P\_vagans:0.01281,(P\_sp\_aB:0.00489,P\_anthophila:0.03354):0.00962):0.00344,P\_agglomerans:0.01429):0.00708):0.02371,(P\_brenneri:0.01736,P\_conspicua:0.01969):0.01497):0.02864):0.01322):0.03585,((P\_sp\_At-9b:0.03281,P\_cyprapedii:0.03527):0.03849,(P\_sp\_GM01:0.02875,(P\_rodasii:0.02618,P\_rwandensis:0.00926):0.00701):0.02424):0.00528);

[496] tree 't496'=[&R] ((P\_sp\_aB:0.00824,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.4E-4,(P\_allii:0.00749,P\_ananatis:0.01163):0.01143):0.02764,(((T\_morbirosei:0.02011,(T\_sp\_NML\_06:0.0725,T\_ptyseos:0.03609):0.02483):0.10413,(P\_sp\_A4:0.10751,(E\_billingiae:0.03238,(E\_pyriifoliae:0.00498,E\_tasmaniensis:0.04379):0.05242):0.05442):0.01896):0.01652,(P\_septica:0.00333,((P\_eucrina:0.01838,(P\_sp\_GM01:0.0089,(P\_wallisii:0.01717,(P\_dispersa:0.01997,(P\_rodasii:0.01186,P\_rwandensis:5.3E-4):0.01112):0.02073):0.02457):0.02135):0.01689,(P\_cyprapedii:0.01145,P\_sp\_At-9b:0.02301):0.00716):0.02293):0.02186):0.01901):0.01142,(P\_brenneri:0.01129,P\_conspicua:0.00378):5.3E-4):0.01075):0.00748,P\_anthophila:0.00324,(P\_deleyi:0.00375,(P\_vagans:0.01514,P\_agglomerans:5.4E-4):0.00377):5.4E-4);

[497] tree 't497'=[&R] (P\_septica:0.00834,P\_conspicua:5.5E-4,(P\_agglomerans:0.00405,(((P\_vagans:5.3E-4,(P\_sp\_aB:0.00818,(P\_deleyi:0.00817,((P\_cyprapedii:0.00406,(P\_sp\_GM01:5.4E-4,(P\_sp\_A4:0.02482,((P\_rodasii:0.0,P\_rwandensis:0.0):5.5E-4,(P\_wallisii:0.0041,(P\_dispersa:0.00405,P\_eucrina:0.00407):0.00403):0.00817):5.5E-4):0.00405):0.00404):0.00838,(P\_allii:5.5E-4,((P\_ananatis:5.4E-4,(P\_s\_stewartii:0.00664,P\_s\_indologenes:0.00371):0.0059):0.0081,(P\_sp\_At-9b:5.4E-4,((E\_pyriifoliae:5.4E-

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4,E_tasmaniensis:0.01218):0.01037,(E_billingiae:0.01374,(T_morbirosei:0.0331,(T_ptyseos:0.00974,T_sp_NML_06:0.01792):0.01791):0.05152):0.01081):0.03135):0.00828):0.00405):0.0081):0.004):0.00401):0.00406):0.00409,P_anthophila:5.5E-4):0.00404,P_brenneri:5.5E-4):5.5E-4):0.00404);
[498] tree 't498'=[&R]
((P_agglomerans:0.00451,P_sp_aB:0.00452):0.00931,(P_anthophila:0.01847,P_deleyi:0.00917):0.00461,(P_vagans:0.00448,((P_allii:0.01882,(P_ananatis:0.01375,(P_s_indologenes:5.3E-4,P_s_stewartii:0.00446):0.0094):0.01131):0.02382,((P_sp_A4:0.09644,((P_sp_GM01:0.00946,(P_dispersa:0.00924,(P_rodasii:0.0,P_rwandensis:0.0):5.3E-4,(P_wallisii:0.01377,P_eucrina:0.00923):0.00466):0.00457):0.01381):0.0198,(P_sp_At-9b:0.01172,P_cyprapedii:0.01664):0.01764):0.01867,((T_morbirosei:0.11355,(T_ptyseos:0.09884,T_sp_NML_06:0.12555):0.06839):0.21102,(E_billingiae:0.06954,(E_pyriifoliae:0.01749,E_tasmaniensis:0.03167):0.077):0.05817):0.05944):0.01313):0.00502,P_septica:0.02753):0.01723):0.04078,(P_brenneri:0.00454,P_conspicua:5.4E-4):5.4E-4):0.01368):0.00456);
[499] tree 't499'=[&R] (P_vagans:0.01262,P_sp_aB:0.01262,(P_agglomerans:5.3E-4,((P_deleyi:0.04404,((P_s_indologenes:5.5E-4,P_s_stewartii:0.00946):0.01326,(P_allii:0.01544,P_ananatis:0.0157):0.01479):0.03396,(((E_billingiae:0.07787,(E_pyriifoliae:0.01282,E_tasmaniensis:0.00931):0.08039):0.03473,P_septica:0.05967):0.02169,((P_sp_A4:0.08486,(T_sp_NML_06:0.06759,(T_morbirosei:0.05902,T_ptyseos:0.04574):0.02421):0.15686):0.02743,((P_sp_At-9b:0.01228,P_cyprapedii:0.01631):0.00664,((P_rodasii:0.00722,P_rwandensis:0.01502):0.03997,(P_sp_GM01:0.03172,(P_wallisii:0.00964,(P_eucrina:0.04897,P_dispersa:5.5E-4):0.00917):5.5E-4):0.01442):0.01043):0.04049):0.02061):0.01619):0.01763):0.00827,(P_anthophila:0.01259,(P_conspicua:0.01497,P_brenneri:0.01235):0.01044):0.00309):5.5E-4):0.00305);
[500] tree 't500'=[&R]
((P_sp_GM01:0.01486,(((T_morbirosei:0.02531,(T_ptyseos:0.02833,T_sp_NML_06:0.03361):0.02069):0.0332,(E_billingiae:0.01172,(E_pyriifoliae:0.00641,E_tasmaniensis:0.00212):0.01193):0.03187):0.01814,(P_septica:0.01455,P_sp_A4:0.01014):0.011):0.0029):0.0025,(P_sp_At-9b:5.3E-4,P_cyprapedii:0.01058):0.00174,((P_dispersa:0.00193,((P_eucrina:0.02085,P_wallisii:5.4E-4):0.00477,(P_rodasii:0.00871,P_rwandensis:0.00606):0.01286):0.00795):0.00232,((P_agglomerans:0.0042,((P_vagans:0.0,P_sp_aB:0.0):5.3E-4,(P_brenneri:5.5E-4,P_conspicua:0.00208):0.00209):0.00206,(P_deleyi:0.01262,P_anthophila:5.5E-4):0.00419):5.5E-4):0.01248,((P_s_indologenes:0.0,P_s_stewartii:0.0):0.00746,(P_allii:0.00894,P_ananatis:0.0049):0.00305):0.00818):0.01658):5.4E-4);
[501] tree 't501'=[&R]
(P_anthophila:0.00652,(P_agglomerans:0.00243,(((P_s_indologenes:0.0,P_s_stewartii:0.0):0.00658,(P_allii:5.4E-4,P_ananatis:0.00438):0.00219):0.00246,(P_deleyi:0.00269,((P_septica:0.03642,(T_morbirosei:0.00917,(T_ptyseos:0.01053,T_sp_NML_06:0.01145):0.01039):0.02148):0.01078,((P_rwandensis:0.00216,(P_sp_GM01:0.00219,P_rodasii:0.00653):5.4E-4):0.01342,((P_cyprapedii:0.00675,P_sp_A4:0.0199):0.00439,((P_sp_At-9b:0.01296,(P_dispersa:0.00416,P_eucrina:0.01131):0.00664):5.4E-4,P_wallisii:0.00882):0.00241):0.00626):0.01096):0.02657,((P_brenneri:0.00221,P_conspicua:0.00214):0.01522,(E_billingiae:0.02021,(E_pyriifoliae:0.00649,E_tasmaniensis:0.00222):0.01294):0.00383):0.00538):0.00255):0.00858):0.00441):0.00412,(P_vagans:0.00217,P_sp_aB:5.5E-4):5.5E-4);
```

[502] tree 't502'=[&R] ((P\_vagans:0.00807,(((P\_allii:0.00988,((P\_s\_indologenes:0.00456,P\_s\_stewartii:5.5E-4):0.02336,P\_ananatis:0.01709):0.00463):0.06042,(P\_septica:0.08942,(((P\_sp\_At-9b:0.05123,P\_cypripedii:0.02822):0.0487,(P\_rodasii:0.00708,P\_rwandensis:0.00829):0.01103,(P\_sp\_GM01:0.02998,(P\_dispersa:0.01545,(P\_wallisii:0.01841,P\_eucrina:0.06495):0.00857):0.01595):0.01049):0.03381):0.01634,(P\_sp\_A4:0.08333,((T\_morbirosei:0.0815,(T\_sp\_NML\_06:0.19968,T\_ptyseos:0.07798):0.07017):0.21387,(E\_billingiae:0.09035,(E\_pyrifoliae:0.01715,E\_tasmaniensis:0.05558):0.12213):0.137):0.05012):0.04112):0.05367):0.01632):0.05178,(P\_brenneri:0.01221,P\_conspicua:0.00468):0.00639):0.01457):0.00281,(P\_anthophila:0.01263,P\_sp\_aB:0.01691):0.00604,(P\_deleyi:0.02039,P\_agglomerans:0.00729):0.00171);

[503] tree 't503'=[&R] (((P\_allii:0.02583,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.02217,P\_ananatis:0.09696):0.01347):0.05191,((P\_sp\_At-9b:5.5E-4,(P\_cypripedii:0.03759,P\_sp\_GM01:0.01247):0.01165):0.01621,((P\_rodasii:0.0,P\_rwandensis:0.0):0.01238,(P\_dispersa:0.03702,(P\_eucrina:0.05908,P\_wallisii:0.03691):0.01302):0.05176):0.01984):0.04103):0.02978,(P\_septica:0.12581,(P\_sp\_A4:0.17735,((T\_sp\_NML\_06:0.16701,(T\_morbirosei:0.09932,T\_ptyseos:0.09795):0.07788):0.18143,(E\_billingiae:0.03132,(E\_pyrifoliae:0.03825,E\_tasmaniensis:0.02485):0.10805):0.12522):0.02682):0.0137):0.01408):0.02434,(P\_brenneri:0.02679,P\_conspicua:0.00945):0.01222,(P\_anthophila:0.04977,((P\_deleyi:0.03724,(P\_sp\_aB:0.0,P\_agglomerans:0.0):5.5E-4):0.01191,P\_vagans:0.01186):0.01153):5.4E-4);

[504] tree 't504'=[&R] ((P\_dispersa:0.01039,(P\_rodasii:0.01042,(P\_sp\_At-9b:0.0,P\_eucrina:0.0,P\_rwandensis:0.0,P\_septica:0.0,P\_wallisii:0.0):5.5E-4):5.4E-4):0.00872,(P\_sp\_A4:5.4E-4,(P\_allii:0.01065,(P\_agglomerans:0.0,P\_vagans:0.0,P\_deleyi:0.0,P\_ananatis:0.0,P\_anthophila:0.0,P\_brenneri:0.0,P\_conspicua:0.0,P\_sp\_aB:0.0,P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.3E-4):0.02123):0.00927,(P\_cypripedii:5.5E-4,((E\_billingiae:0.0,E\_pyrifoliae:0.0,E\_tasmaniensis:0.0):5.5E-4,(T\_ptyseos:0.00366,(T\_sp\_NML\_06:0.02121,(P\_sp\_GM01:0.01026,T\_morbirosei:5.5E-4):0.01024):0.00892):0.02943):0.0103):0.00295);

[505] tree 't505'=[&R] ((P\_brenneri:5.5E-4,P\_conspicua:0.00586):0.01442,(P\_deleyi:0.0156,((((P\_eucrina:0.06336,P\_septica:0.05231):0.03456,(P\_wallisii:0.05116,(P\_cypripedii:0.02617,P\_sp\_At-9b:0.01563):0.02):0.00929):0.0121,(P\_dispersa:0.01391,(P\_sp\_GM01:0.02563,(P\_rodasii:0.02592,P\_rwandensis:0.02087):0.03227):0.01362):0.00944):0.00685,(P\_sp\_A4:0.07846,(T\_morbirosei:0.13403,(T\_ptyseos:0.23692,T\_sp\_NML\_06:0.22491):0.08496):0.26853):0.0255):0.07183,((E\_billingiae:0.03117,(E\_pyrifoliae:0.00518,E\_tasmaniensis:0.00589):0.05308):0.12949,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.06047,(P\_allii:0.02927,P\_ananatis:0.01101):0.00833):0.02349):5.4E-4):0.04039):0.01708,(P\_anthophila:0.05316,(P\_agglomerans:0.01153,(P\_sp\_aB:0.00582,P\_vagans:0.00573):0.01168):0.00616):0.00963);

[506] tree 't506'=[&R] (P\_sp\_At-9b:0.03771,(((E\_billingiae:0.05006,((E\_pyrifoliae:0.02825,E\_tasmaniensis:0.02278):0.06453,(P\_sp\_A4:0.10201,(T\_morbirosei:0.09912,(T\_sp\_NML\_06:0.23392,T\_ptyseos:0.12452):0.0769):0.20267):0.06377):0.05231):0.03082,(((P\_brenneri:0.02974,P\_conspicua:0.02874):0.00935,(((P\_vagans:0.00531,(P\_agglomerans:0.00958,P\_sp\_aB:0.01426):0.0144):0.00414,(P\_anthophila:0.03416,P\_deleyi:0.03007):0.00905):0.01847,((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00924):0.02927,(P\_allii:0.02054,P\_ananatis:0.0251):0.01859):0.1104):0.00516):0.00923,P\_septica:0.0

693):0.03624):0.02117,P\_cypripedii:0.01089):0.00326,(P\_dispersa:0.02381,((P\_sp\_GM01:0.02758,(P\_rodasii:0.00478,P\_rwandensis:0.0045):0.03277):0.00622,(P\_eucrina:0.06931,P\_wallisii:0.01301):0.02334):0.00756):0.00471);

[507] tree 't507'=[&R] ((P\_wallisii:0.01842,(P\_eucrina:0.06646,P\_dispersa:0.01178):0.01019):0.01419,((P\_sp\_At-9b:0.00687,P\_cypripedii:0.02152):0.01004,((P\_sp\_A4:0.09947,((T\_morbirosei:0.04372,(T\_sp\_NML\_06:0.0596,T\_ptyseos:0.05514):0.02367):0.18238,(E\_billingiae:0.08973,(E\_pyrifoliae:0.05087,E\_tasmaniensis:0.05731):0.09216):0.03983):0.04145):0.01118,(P\_septica:0.0347,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.05441,(P\_allii:0.02207,P\_ananatis:0.0092):0.0116):0.05092,(P\_brenneri:0.01297,P\_conspicua:0.00986):0.01523,(P\_vagans:5.5E-4,((P\_agglomerans:0.00348,(P\_deleyi:0.03548,P\_anthophila:0.00495):0.01726):0.00864,P\_sp\_aB:0.02462):0.00176):0.019):0.01172):0.01411):0.01412):0.02671):0.01866,(P\_rwandensis:0.00353,(P\_sp\_GM01:0.02857,P\_rodasii:0.00361):0.01701):0.00398);

[508] tree 't508'=[&R] ((P\_deleyi:0.01716,P\_anthophila:0.00846):0.00842,(P\_conspicua:0.03385,P\_brenneri:5.4E-4):0.00844,(P\_agglomerans:0.00837,(((E\_pyrifoliae:0.0336,E\_tasmaniensis:5.4E-4):0.04442,((T\_ptyseos:0.01042,(T\_morbirosei:0.07764,T\_sp\_NML\_06:0.05):0.03836):0.1217,(((P\_dispersa:0.0084,((P\_rodasii:0.00832,P\_rwandensis:5.4E-4):0.01653,(P\_sp\_GM01:0.01762,P\_septica:0.06355):0.00535):0.0027):0.00843,(P\_wallisii:0.00836,P\_eucrina:0.00836):5.5E-4):0.00134,((P\_sp\_At-9b:0.0,P\_cypripedii:0.0):0.02611,E\_billingiae:0.02682):0.01569):0.01392):0.00834):0.0073,(P\_sp\_A4:0.04343,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.3E-4,(P\_allii:0.00849,P\_ananatis:0.00831):0.01698):0.02608):0.00867):0.00812,(P\_sp\_aB:0.01681,P\_vagans:5.5E-4):0.00838):5.5E-4):0.00839);

[509] tree 't509'=[&R] (P\_brenneri:0.00635,P\_conspicua:5.5E-4,((P\_agglomerans:0.0,P\_vagans:0.0,P\_deleyi:0.0):5.4E-4,(P\_anthophila:5.4E-4,(P\_sp\_aB:5.5E-4,((P\_allii:0.0,P\_ananatis:0.0,P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.02557,(P\_septica:5.5E-4,((P\_sp\_At-9b:0.0,P\_cypripedii:0.0):5.4E-4,(((P\_sp\_GM01:5.3E-4,(P\_rodasii:5.4E-4,((P\_sp\_A4:0.00756,(((T\_sp\_NML\_06:5.4E-4,(T\_morbirosei:0.01237,T\_ptyseos:0.01234):0.01941):0.05088,(E\_pyrifoliae:0.01285,E\_billingiae:0.03305):5.5E-4):0.01211,E\_tasmaniensis:0.00589):0.02728):0.02521,P\_rwandensis:5.5E-4):0.00616):0.00633):0.00625,(P\_dispersa:0.0,P\_wallisii:0.0):5.3E-4):0.01007,P\_eucrina:0.00564):0.00308):0.01873):0.01247):0.00642):0.0063):0.0063):0.00635);

[510] tree 't510'=[&R] ((P\_septica:0.02297,P\_wallisii:0.01132):0.00569,P\_dispersa:5.5E-4,(((P\_sp\_A4:0.03791,((P\_sp\_At-9b:0.0,P\_cypripedii:0.0):0.01215,(T\_sp\_NML\_06:0.03527,(T\_morbirosei:0.03676,T\_ptyseos:0.02838):0.02847):0.08332):0.01771):0.01059,((E\_billingiae:0.01064,(E\_pyrifoliae:0.02129,E\_tasmaniensis:0.0088):0.0342):0.05217,((P\_allii:5.4E-4,(P\_ananatis:5.5E-4,(P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00559):0.00558):0.00555):0.03525,((P\_deleyi:0.0056,(P\_anthophila:0.0,P\_agglomerans:0.0):5.5E-4):0.00396,((P\_vagans:0.0,P\_sp\_aB:0.0):5.5E-4,(P\_conspicua:0.06215,P\_brenneri:5.5E-4):0.00557):0.00173):0.02846):0.00632):0.00542):0.00561,(P\_sp\_GM01:0.00563,(P\_rodasii:0.0,P\_rwandensis:0.0):5.5E-4):5.4E-4):0.00562,P\_eucrina:0.01126):5.5E-4);

[511] tree 't511'=[&R] (((P\_dispersa:0.02208,((P\_septica:0.04536,((P\_ananatis:0.01426,(P\_allii:0.05911,(P\_s\_indologenes:0.0,P\_s\_stewartii:



0.0):0.03736):0.00451):0.02762,((P\_deleyi:0.02101,(P\_anthophila:0.02297,(P\_vagans:5.5E-4,(P\_agglomerans:0.01372,P\_sp\_aB:0.01774):0.005):5.4E-4):0.01112):0.01393,(P\_brenneri:0.19278,P\_conspicua:0.01154):0.00776):0.01613):0.0064):0.0246,(E\_billingiae:0.05796,(E\_pyrifoliae:0.00662,E\_tasmaniensis:0.0309):0.05883):0.04193):0.02415,((T\_morbirosei:0.0324,(T\_ptyseos:0.0553,T\_sp\_NML\_06:0.0281):0.03055):0.12607,P\_eucrina:0.02599):0.02554):0.01393):0.02326,(P\_wallisii:0.01923,(P\_sp\_A4:0.04251,(P\_sp\_At-9b:0.01585,P\_cyprapedii:0.02674):0.01076):0.01874):0.0047):0.00507,P\_rwandensis:0.01347,(P\_rodasii:0.00461,P\_sp\_GM01:0.02418):0.00486);

[512] tree 't512'=[&R] (((P\_wallisii:0.01739,(P\_sp\_GM01:0.01401,(P\_rwandensis:5.4E-4,P\_rodasii:0.03314):0.00538):0.01226):0.00476,(P\_dispersa:0.02037,(P\_sp\_At-9b:5.4E-4,P\_cyprapedii:0.00985):0.01835):0.0088):0.00611,((E\_billingiae:0.08207,(E\_pyrifoliae:0.02178,E\_tasmaniensis:0.01677):0.02584):0.05302,(((P\_vagans:0.00568,((P\_deleyi:0.0126,P\_anthophila:0.01764):0.0048,(P\_sp\_aB:0.00817,P\_agglomerans:0.01177):0.00237):0.00501):0.01312,(P\_brenneri:0.01333,P\_conspicua:0.01048):0.00597):0.01961,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.02025,(P\_ananatis:0.00668,P\_allii:0.02657):0.00852):0.04436,(T\_morbirosei:0.03448,(T\_ptyseos:0.04273,T\_sp\_NML\_06:0.05556):0.01382):0.1091):0.00641):0.01683):0.01211,((P\_sp\_A4:0.04701,P\_septica:0.02435):0.00901,P\_eucrina:0.03782):0.01091);

[513] tree 't513'=[&R] ((P\_sp\_aB:0.00315,(P\_brenneri:5.3E-4,(((P\_s\_indologenes:5.4E-4,P\_s\_stewartii:0.00316):0.00651,(P\_allii:0.01271,P\_ananatis:0.00324):0.00296):0.02274,(P\_cyprapedii:0.00303,(P\_sp\_At-9b:5.4E-4,((P\_wallisii:0.0032,(P\_sp\_GM01:0.01577,(P\_rodasii:0.0,P\_rwandensis:0.0):5.5E-4):0.00627):0.00615,(P\_dispersa:0.00304,P\_eucrina:0.02929):0.00643):0.00633):0.00319):0.01292):0.01268,(((T\_morbirosei:0.02686,(T\_sp\_NML\_06:0.0209,T\_ptyseos:0.01511):0.01458):0.07258,(E\_billingiae:0.02419,(E\_pyrifoliae:5.3E-4,E\_tasmaniensis:0.01875):0.04689):0.03036):0.02437,(P\_septica:0.03296,P\_sp\_A4:0.02761):0.01123):0.00484):0.0057):0.00317):5.3E-4,(P\_agglomerans:0.0,P\_vagans:0.0,P\_conspicua:0.0):5.5E-4,(P\_anthophila:0.01292,P\_deleyi:0.00953):5.5E-4);

[514] tree 't514'=[&R] (P\_deleyi:0.02086,P\_vagans:0.02002,(((P\_anthophila:0.02908,P\_sp\_aB:0.02055):0.01085,P\_agglomerans:0.01344):0.00739,((((P\_rwandensis:0.00985,P\_rodasii:0.01065):0.01045,(P\_sp\_At-9b:0.03536,P\_cyprapedii:0.0026):0.00944):0.02301,(P\_dispersa:0.01284,(P\_wallisii:0.01327,(P\_eucrina:0.03034,P\_sp\_GM01:0.0237):0.00686):0.0107):0.00415):0.02639,((T\_sp\_NML\_06:0.04577,(T\_morbirosei:0.08563,T\_ptyseos:0.06843):0.03563):0.10534,(E\_billingiae:0.05059,(E\_pyrifoliae:0.03254,E\_tasmaniensis:0.01991):0.0774):0.04391):0.01541):0.02978,((P\_sp\_A4:0.05313,(P\_s\_indologenes:0.00504,P\_s\_stewartii:5.5E-4):0.02723):0.0108,(P\_septica:0.07233,(P\_allii:0.01023,P\_ananatis:0.02605):0.01014):0.00364):0.01418):0.01298,(P\_brenneri:0.00504,P\_conspicua:0.01031):5.3E-4):0.00968):5.5E-4);

[515] tree 't515'=[&R] ((P\_deleyi:0.01032,P\_sp\_aB:5.4E-4):0.00509,P\_agglomerans:0.01012,((P\_conspicua:0.02082,(P\_brenneri:5.4E-4,((P\_septica:0.02016,(P\_sp\_A4:0.0976,((T\_ptyseos:0.06924,(T\_morbirosei:0.02148,T\_sp\_NML\_06:0.03819):0.01713):0.05353,(E\_billingiae:0.03568,(E\_tasmaniensis:0.04195,E\_pyrifoliae:0.02013):0.02143):0.03314):0.01464,(((P\_sp\_GM01:0.01293,(P\_rodasii:0.01482,P\_rwandensis:5.5E-4):0.01779):0.01616,(P\_sp\_At-9b:0.00352,P\_cyprapedii:0.00395):0.01322):0.00888,(P\_dispersa:0.00514,(P\_eucrina:0.03096,P\_wallisii:5.3E-

4):0.00532):0.00533):0.03538):0.01107):0.014):0.03761,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00517,(P\_allii:0.0155,P\_ananatis:0.00481):0.00516):0.00997):0.02268):0.00995):0.00973,(P\_vagans:0.01025,P\_anthophila:0.01545):5.5E-4):0.00486);

[516] tree 't516'=[&R] (P\_rwandensis:5.5E-4,(P\_rodasii:0.00687,((P\_eucrina:5.5E-4,P\_wallisii:0.00359):0.00332,(((P\_sp\_At-9b:5.3E-4,P\_cypripedii:0.00715):0.00363,((P\_s\_stewartii:0.00357,P\_s\_indologenes:5.5E-4):5.4E-4,(P\_allii:0.00356,(P\_ananatis:5.4E-4,((P\_agglomerans:0.00354,(P\_vagans:0.0,P\_sp\_aB:0.0):5.5E-4):0.00366,(P\_anthophila:5.5E-4,(P\_deleyi:0.00357,(P\_brenneri:0.0,P\_conspicua:0.0):0.00355):5.5E-4):0.00357):0.0036):0.00359):0.00357):0.01446,((P\_septica:0.00718,(P\_dispersa:0.00364,(E\_tasmaniensis:5.4E-4,(E\_pyrifoliae:0.00711,E\_billingiae:0.00734):0.00691):0.01889):0.00717):0.00337,(T\_morbirosei:0.01203,(T\_ptyseos:0.01282,T\_sp\_NML\_06:0.00601):0.0052):0.02904):5.4E-4):0.00387):0.00717):5.4E-4,(P\_sp\_A4:0.02161,P\_sp\_GM01:5.5E-4):0.00354);

[517] tree 't517'=[&R] (P\_vagans:0.00539,P\_sp\_aB:5.5E-4,(P\_deleyi:0.00811,(P\_anthophila:0.01073,(((P\_conspicua:0.00537,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00832,(P\_allii:0.00269,P\_ananatis:5.5E-4):0.00806):0.01216,((E\_billingiae:0.02759,(E\_pyrifoliae:0.01417,E\_tasmaniensis:0.00235):0.02793):0.02681,(((T\_sp\_NML\_06:0.05316,(T\_morbirosei:0.01463,T\_ptyseos:0.02719):0.01363):0.07119,P\_septica:0.01508):0.0073,(P\_sp\_A4:0.01664,((P\_rodasii:5.5E-4,(P\_sp\_GM01:0.01644,P\_rwandensis:0.00273):0.00537):0.01347,((P\_dispersa:0.00269,(P\_eucrina:0.00543,P\_wallisii:0.00271):0.00275):0.00824,(P\_sp\_At-9b:5.5E-4,P\_cypripedii:0.00271):0.0027):0.00283):0.00856):0.01024):0.00703):0.00645):0.00689):5.4E-4,P\_brenneri:5.5E-4):0.0027,P\_agglomerans:5.4E-4):0.00225):5.5E-4):5.4E-4);

[518] tree 't518'=[&R] (P\_dispersa:0.01731,(P\_eucrina:0.02659,((P\_agglomerans:0.03214,(P\_sp\_aB:0.04081,(P\_anthophila:0.03065,P\_deleyi:0.01598):0.01956):0.01639):0.05149,((P\_ananatis:0.0043,(P\_allii:0.01231,(P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00269):0.04214):0.00294):0.03517,(P\_sp\_A4:0.07667,((E\_billingiae:0.1292,(E\_pyrifoliae:0.05411,E\_tasmaniensis:0.02935):0.12134):0.10261,((T\_ptyseos:0.20969,(T\_sp\_NML\_06:0.30752,T\_morbirosei:0.19309):0.04713):0.31059,(P\_vagans:0.06142,(P\_brenneri:0.01733,P\_conspicua:0.02141):0.02863):0.03338,(P\_septica:0.11061,(P\_sp\_At-9b:0.02718,P\_cypripedii:0.02962):0.08955):0.03111):0.07541):0.09385):0.10959):0.03885):0.00786):0.0189):0.00696,(P\_wallisii:0.01797,(P\_sp\_GM01:0.04447,(P\_rodasii:0.01921,P\_rwandensis:5.4E-4):0.01229):0.02051):0.01502);

[519] tree 't519'=[&R] (((E\_tasmaniensis:5.3E-4,(E\_pyrifoliae:0.01546,((E\_billingiae:0.06676,T\_sp\_NML\_06:5.4E-4):0.01493,(P\_sp\_A4:0.01509,(P\_rodasii:0.0,P\_rwandensis:0.0):0.01526):0.01508):0.01517):0.01506):0.03055,(P\_cypripedii:0.01534,P\_sp\_GM01:5.4E-4):5.4E-4):0.01531,P\_eucrina:0.01541,((P\_sp\_At-9b:0.0,P\_dispersa:0.0,P\_wallisii:0.0):5.5E-4,((T\_morbirosei:0.0309,T\_ptyseos:5.5E-4):0.01517,(P\_septica:0.02574,((P\_agglomerans:0.0,P\_vagans:0.0,P\_sp\_aB:0.0):0.03109,(P\_ananatis:0.0,P\_anthophila:0.0,P\_s\_indologenes:0.0,P\_s\_stewartii:0.0,P\_deleyi:0.0,P\_allii:0.0,P\_brenneri:0.0,P\_conspicua:0.0):5.5E-4):0.02658):0.02394):5.4E-4):5.5E-4);

[520] tree 't520'=[&R] (P\_anthophila:0.02912,((P\_septica:0.03605,((P\_sp\_A4:0.13726,(T\_ptyseos:0.06775,(T\_morbirosei:0.17298,T\_sp\_NML\_06:0.0

7237):0.03637):0.22305):0.00693,(((P\_cyprapedii:0.02525,P\_sp\_At-  
9b:0.03863):0.02115,((P\_dispersa:0.01952,(P\_wallisii:0.03628,P\_eucrina:0.0849):0.01853):0.01156,(P\_sp\_GM01:0.00493,(  
P\_rodasii:0.00475,P\_rwandensis:0.01416):0.00446):0.01309):0.02237):0.05824,(E\_billingiae:0.08879,(E\_pyriifoliae:0.033  
3,E\_tasmaniensis:0.05525):0.06989):0.03554):0.028):0.01668):0.04049,(P\_brenneri:5.4E-  
4,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01593,(P\_allii:5.5E-  
4,P\_ananatis:0.00951):0.02411):0.06878,P\_conspicua:0.01108):0.0128):0.0043):0.01491,(P\_deleyi:0.05872,(P\_agglomerans  
:0.00475,(P\_sp\_aB:0.01921,P\_vagans:5.3E-4):0.00472):5.3E-4):0.00479);  
[521] tree 't521'=[&R] (((P\_conspicua:5.5E-4,(P\_brenneri:0.00689,((P\_ananatis:5.5E-  
4,(P\_allii:0.01373,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.02838):5.4E-4):0.02086,((P\_vagans:5.5E-  
4,(P\_anthophila:0.02784,(P\_agglomerans:5.5E-4,P\_sp\_aB:0.0068):0.00683):0.0069):0.02054,P\_deleyi:5.5E-  
4):0.00683):5.5E-  
4):0.00686):0.03557,(P\_septica:0.05366,P\_sp\_A4:0.0458):0.00445):0.01511,P\_dispersa:0.02092,(((P\_sp\_At-  
9b:0.00741,P\_cyprapedii:0.01368):0.02194,(T\_morbirosei:0.02424,(T\_ptyseos:0.04443,T\_sp\_NML\_06:0.03328):0.03645):0.09  
917):0.00681,((((E\_billingiae:0.03345,(E\_pyriifoliae:5.5E-  
4,E\_tasmaniensis:0.04196):0.03064):0.07325,P\_rodasii:0.07299):5.3E-  
4,(P\_sp\_GM01:0.04608,P\_eucrina:0.08015):0.00479):0.00686,P\_wallisii:0.05113):0.00709,P\_rwandensis:0.00697):0.00712):  
0.007);  
[522] tree 't522'=[&R] ((P\_deleyi:0.01963,(P\_anthophila:0.01301,(P\_brenneri:5.4E-4,(((P\_s\_indologenes:5.4E-  
4,P\_s\_stewartii:0.00641):0.05663,(P\_allii:0.01533,P\_ananatis:0.0167):0.03418):0.02714,(P\_septica:0.09645,(P\_eucrina:  
0.08175,((T\_sp\_NML\_06:0.24046,(T\_morbirosei:0.15932,T\_ptyseos:0.12241):0.04834):0.19684,(E\_billingiae:0.1048,(E\_pyri  
ifoliae:0.02009,E\_tasmaniensis:0.04372):0.11214):0.08801):0.04491,((P\_wallisii:0.04363,P\_dispersa:0.02433):0.02589,(  
P\_sp\_At-  
9b:0.00641,P\_cyprapedii:0.00638):0.00658,(P\_rodasii:0.03897,((P\_sp\_GM01:0.02133,P\_sp\_A4:0.13189):0.02642,P\_rwandensi  
s:0.02104):0.01486):0.02473):5.4E-4):0.02635):0.03358):0.03657):0.02044):0.05076,P\_conspicua:5.4E-  
4):0.01804):0.026):0.00591):0.01968,P\_agglomerans:0.01274,(P\_sp\_aB:0.0194,P\_vagans:0.01285):5.4E-4);  
[523] tree 't523'=[&R] (P\_anthophila:0.00305,P\_agglomerans:5.5E-4,((P\_deleyi:0.01864,P\_vagans:5.4E-  
4):0.003,((((P\_wallisii:0.00816,P\_eucrina:0.01137):0.00317,(P\_dispersa:0.0068,(P\_septica:0.01573,((P\_sp\_At-  
9b:0.00615,P\_cyprapedii:0.0063):0.00146,((P\_sp\_GM01:0.01078,P\_rwandensis:0.0051):0.00814,(P\_sp\_A4:0.04615,P\_rodasii:  
0.00712):0.00933):0.01588):0.00825):0.00886):0.00486):0.01971,(P\_conspicua:0.01235,(((T\_morbirosei:0.03657,(T\_sp\_NML  
\_06:0.05621,T\_ptyseos:0.01536):0.02611):0.05896,(((P\_s\_indologenes:0.00499,P\_s\_stewartii:0.00456):0.01994,(P\_allii:0  
.0215,P\_ananatis:0.00396):0.02081):0.16195,(E\_billingiae:0.03697,(E\_pyriifoliae:0.03565,E\_tasmaniensis:0.03044):0.051  
12):0.00909):0.0376):0.01184,P\_brenneri:0.0153):0.00731):0.00312):0.0031,P\_sp\_aB:5.3E-4):0.00304):5.5E-4);  
[524] tree 't524'=[&R]  
((P\_anthophila:0.03495,(P\_deleyi:0.03903,((P\_conspicua:0.03235,P\_brenneri:0.01422):0.01135,(P\_sp\_A4:0.04535,((P\_sp\_  
At-  
9b:0.0,P\_cyprapedii:0.0):0.02244,(P\_dispersa:0.01666,(P\_sp\_GM01:0.01297,((P\_eucrina:0.1047,P\_wallisii:0.05079):0.035  
78,(P\_rwandensis:0.01857,P\_rodasii:0.02196):0.00633):0.0036):0.00445):5.3E-4):0.02806,((((P\_s\_indologenes:5.4E-  
4,P\_s\_stewartii:0.00517):0.04077,(P\_allii:0.02414,P\_ananatis:0.03996):0.01398):0.05156,((T\_morbirosei:0.09623,(T\_sp\_  
NML\_06:0.10685,T\_ptyseos:0.02548):0.02749):0.08722,(E\_billingiae:0.08039,(E\_pyriifoliae:0.04538,E\_tasmaniensis:0.0596

5):0.05184):0.03349):0.03334):0.00762,P\_septica:0.06212):5.4E-4):0.00924):0.02563):0.01482):0.00967):5.5E-4,P\_sp\_aB:0.0056,(P\_agglomerans:0.01127,P\_vagans:0.02249):5.4E-4);

[525] tree 't525'=[&R] (((P\_sp\_At-9b:0.01656,P\_cypripedii:0.0084):0.00825,(P\_eucrina:0.00844,(P\_sp\_GM01:0.01696,(P\_rodasii:0.0,P\_rwandensis:0.0):0.00866):0.00815):0.00869):5.4E-4,P\_wallisii:5.4E-4,((P\_dispersa:5.4E-4,((T\_morbirosei:0.04559,(T\_ptyseos:0.02609,T\_sp\_NML\_06:0.0512):0.01591):0.11322,(E\_billingiae:5.4E-4,(E\_pyrifoliae:0.02509,E\_tasmaniensis:0.02883):0.03092):0.01387):0.01199):0.00794,(P\_sp\_A4:0.02633,(P\_septica:0.0151,(P\_ananatis:5.4E-4,((P\_deleyi:0.00873,P\_anthophila:0.00865):0.00844,(P\_agglomerans:5.5E-4,(P\_sp\_aB:5.5E-4,P\_vagans:0.00854):0.00853):5.4E-4):0.02653,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.0084,(P\_allii:0.00867,(P\_brenneri:0.00862,P\_conspicua:0.00867):0.00876):0.00814):5.5E-4):0.00851):0.03732):0.02595):0.03466):5.4E-4);

[526] tree 't526'=[&R] (P\_eucrina:0.05836,(((P\_rodasii:0.0,P\_cypripedii:0.0,P\_dispersa:0.0,P\_rwandensis:0.0):5.3E-4,(((E\_tasmaniensis:0.0,E\_pyrifoliae:0.0):5.3E-4,E\_billingiae:0.02879):0.04323,(P\_deleyi:0.01418,((P\_brenneri:0.0,P\_conspicua:0.0,P\_vagans:0.0,P\_anthophila:0.0):5.5E-4,(P\_sp\_aB:0.01414,P\_agglomerans:0.01418):5.5E-4):5.5E-4):0.02491):0.00484,(P\_sp\_GM01:0.01406,P\_sp\_At-9b:5.5E-4):0.01425):0.01404):0.02973,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.02597,P\_allii:0.00263):0.01415):5.5E-4,T\_ptyseos:0.04536):0.01286,(((P\_septica:0.08891,P\_wallisii:0.04694):0.03056,(T\_sp\_NML\_06:5.3E-4,(T\_morbirosei:0.10972,P\_sp\_A4:0.06528):0.01316):0.01405):0.01449,P\_ananatis:5.4E-4):5.4E-4);

[527] tree 't527'=[&R] (((P\_s\_indologenes:7.4E-4,P\_s\_stewartii:5.5E-4):0.00689,(P\_allii:0.00603,P\_ananatis:0.004):0.00379):0.00837,(P\_septica:0.01479,((T\_morbirosei:0.02146,(T\_sp\_NML\_06:0.04606,T\_ptyseos:0.01065):0.01561):0.02657,(P\_sp\_A4:0.0195,(E\_billingiae:0.03869,(E\_pyrifoliae:0.00825,E\_tasmaniensis:0.01117):0.02897):0.01495):0.01633):0.00812):0.00419):0.00344,((P\_eucrina:0.012,P\_wallisii:0.00275):0.00442,(P\_dispersa:0.0098,(P\_sp\_GM01:0.01182,(P\_rodasii:0.00272,P\_rwandensis:0.00271):0.00561):0.00223):0.00438):0.00195,(((P\_brenneri:9.0E-4,P\_conspicua:9.1E-4):0.00296,(P\_anthophila:0.00699,((P\_vagans:0.00337,(P\_agglomerans:0.00208,P\_sp\_aB:0.00246):9.1E-4):0.00123,P\_deleyi:0.00722):0.00303):0.00642):0.00535,(P\_sp\_At-9b:0.00511,P\_cypripedii:0.00515):0.00705):0.0026);

[528] tree 't528'=[&R] (P\_vagans:0.00716,((P\_deleyi:0.00738,((P\_brenneri:5.4E-4,P\_conspicua:0.02147):0.02335,(P\_allii:0.02127,(P\_ananatis:0.00704,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01481):0.00858):0.04084):0.02748):0.00695,P\_anthophila:0.01449):0.00722,((P\_sp\_aB:5.3E-4,((P\_sp\_A4:0.15654,(((P\_sp\_At-9b:0.01426,P\_cypripedii:0.01429):0.01809,(P\_dispersa:0.03307,P\_eucrina:0.02926):0.02919):0.01407,(P\_sp\_GM01:0.02521,P\_rodasii:0.01886):0.01488):0.01358,(P\_rwandensis:0.01432,P\_wallisii:0.01013):0.01021):0.01445):0.02101,(((T\_sp\_NML\_06:0.09052,T\_ptyseos:0.0402,T\_morbirosei:0.08947):0.01598):0.14579,(E\_billingiae:0.10405,(E\_pyrifoliae:0.03773,E\_tasmaniensis:0.03396):0.05173):0.0639):0.06742,P\_septica:0.02181):5.5E-4):0.03665):0.007,P\_agglomerans:0.00714):5.4E-4);

[529] tree 't529'=[&R] (((P\_anthophila:0.02651,P\_vagans:0.00443):0.00368,(P\_conspicua:0.0244,(P\_brenneri:0.00542,((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00379):5.4E-4,(P\_allii:0.01146,P\_ananatis:0.00752):0.02295):0.04306,(((P\_eucrina:0.04741,(((P\_rodasii:0.03152,P\_rwandensis:0.01632):0.03039,(P\_sp\_GM01:0.03329,P\_dispersa:0.04442):0.00556):0.01077,P\_wallisii:0.00886):0.00674):0.0191,(P\_sp\_A4:0.0

8822,P\_septica:0.05848):0.05164):0.04347,((P\_sp\_At-9b:0.03481,P\_cyprapedii:0.01724):0.02399,((T\_morbirosei:0.07129,(T\_ptyseos:0.03731,T\_sp\_NML\_06:0.05797):0.02069):0.16535,(E\_billingiae:0.04654,(E\_pyriifoliae:0.04551,E\_tasmaniensis:0.06352):0.11758):0.02966):0.03095):0.00366):0.04242):0.03431):0.00395):0.00596):5.5E-4,P\_agglomerans:5.5E-4,(P\_sp\_aB:0.00763,P\_deleyi:0.02313):5.5E-4);

[530] tree 't530'=[&R]  
((((E\_billingiae:0.12399,(E\_pyriifoliae:0.0334,E\_tasmaniensis:0.01798):0.12919):0.07865,(P\_sp\_A4:0.19437,((P\_sp\_At-9b:0.02787,P\_cyprapedii:0.01411):0.01541,((P\_wallisii:0.06266,(P\_eucrina:0.09538,(P\_sp\_GM01:0.02421,(P\_rodasii:0.02663,P\_rwandensis:0.00983):0.02523):0.04542):0.0177):5.4E-4,P\_dispersa:0.02208):0.03637):0.02068):0.02081):0.02554,P\_septica:0.09616):0.03636,((T\_sp\_NML\_06:0.13316,(T\_morbirosei:0.14747,T\_ptyseos:0.04182):0.02639):0.19523,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.0494,(P\_allii:0.00758,P\_ananatis:0.00856):0.04136):0.02863):0.00891):0.03815,(P\_brenneri:0.02414,P\_conspicua:5.4E-4):0.00879,((P\_agglomerans:0.0,P\_sp\_aB:0.0):5.4E-4,(P\_anthophila:0.01657,P\_deleyi:0.033):0.01632):5.4E-4,P\_vagans:0.00759):0.02362);

[531] tree 't531'=[&R] ((P\_agglomerans:0.0,P\_sp\_aB:0.0):0.01836,P\_vagans:0.00364):0.01123,(((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00364):0.01345,(P\_allii:0.02392,P\_ananatis:0.01253):0.02021):0.03619,(P\_sp\_A4:0.09513,((T\_morbirosei:0.05643,(T\_ptyseos:0.01358,T\_sp\_NML\_06:0.03002):0.03009):0.08518,(E\_billingiae:0.09611,(E\_pyriifoliae:0.02111,E\_tasmaniensis:0.00134):0.03979):0.08151):0.05356,(P\_septica:0.04602,(P\_eucrina:0.02903,((P\_dispersa:0.01483,P\_wallisii:0.00371):0.00916,(P\_cyprapedii:0.01375,(P\_sp\_At-9b:0.00708,(P\_sp\_GM01:0.01184,(P\_rodasii:0.01232,P\_rwandensis:0.02957):0.02261):0.02825):0.0188):0.01764):0.01477):0.03068):0.01729):0.02293):0.01604):0.01621,(P\_deleyi:0.00355,P\_anthophila:0.0038):0.00747):0.00399,(P\_conspicua:0.00739,P\_brenneri:0.00725):0.0036);

[532] tree 't532'=[&R] (P\_wallisii:0.05529,(P\_rodasii:0.02771,(P\_dispersa:0.048,P\_rwandensis:0.02892):0.00578):5.3E-4,(P\_eucrina:0.09638,((P\_sp\_GM01:0.03801,(P\_sp\_At-9b:0.01031,P\_cyprapedii:0.01129):0.00908):0.00805,(P\_septica:0.06208,(((P\_allii:0.00866,((P\_s\_indologenes:8.4E-4,P\_s\_stewartii:0.00528):0.04088,P\_ananatis:0.02205):0.01381):0.08226,((P\_brenneri:0.00657,P\_conspicua:0.02774):0.01391,(P\_deleyi:0.01735,(P\_anthophila:0.04681,(P\_sp\_aB:0.01026,(P\_vagans:0.0307,P\_agglomerans:0.00996):0.01055):0.01538):0.00811):0.0233):0.02795):0.02139,(P\_sp\_A4:0.13288,((T\_morbirosei:0.07449,(T\_sp\_NML\_06:0.11876,T\_ptyseos:0.10062):0.03175):0.12758,(E\_billingiae:0.06079,(E\_pyriifoliae:0.06694,E\_tasmaniensis:0.01786):0.07254):0.02333):0.0468):0.00631):0.01316):0.03207):0.00786):0.01222);

[533] tree 't533'=[&R] ((P\_rwandensis:5.4E-4,(P\_sp\_GM01:0.01678,P\_rodasii:0.02525):0.00875):0.01746,(((E\_billingiae:0.03272,(E\_pyriifoliae:0.01955,E\_tasmaniensis:0.03222):0.07735):0.0516,(P\_sp\_A4:0.04963,(T\_morbirosei:0.03303,(T\_ptyseos:0.06194,T\_sp\_NML\_06:0.04154):0.03035):0.06688):0.06095):0.03276,(P\_eucrina:0.02674,P\_wallisii:0.01708):0.00826):5.3E-4,P\_dispersa:5.4E-4):0.00874,(P\_septica:0.0346,((P\_sp\_At-9b:0.0,P\_cyprapedii:0.0):0.00848,((P\_ananatis:5.2E-4,(P\_allii:0.0032,(P\_brenneri:0.00804,(P\_anthophila:5.5E-4,(((P\_agglomerans:5.4E-4,P\_sp\_aB:0.02559):0.00871,P\_deleyi:0.01753):5.3E-4,P\_vagans:5.5E-4):5.4E-4,P\_conspicua:0.4572):0.00842):0.01756):0.02528):0.00552):0.00838,(P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00845):5.4E-4):0.02557):0.00889):0.01729);

[534] tree 't534'=[&R] (P\_vagans:0.00763,(P\_anthophila:5.3E-4,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01308,(P\_allii:0.00863,P\_ananatis:0.01084):0.0116):0.05378,(P\_septica:0.02831,(((P\_sp\_At-9b:0.00783,P\_cyprapedii:5.5E-4):0.00496,((P\_rwandensis:0.01582,((P\_wallisii:0.01574,P\_eucrina:0.03594):5.4E-4,P\_dispersa:0.00783):0.0078):5.5E-4,(P\_sp\_GM01:0.01556,P\_rodasii:5.5E-4):0.00369):0.01563):0.02289,((E\_billingiae:0.05837,(E\_pyriifoliae:0.02761,E\_tasmaniensis:0.0085):0.05613):0.04096,(P\_sp\_A4:0.15271,(T\_morbirosei:0.05874,(T\_sp\_NML\_06:0.06143,T\_ptyseos:0.04584):0.02727):0.12601):0.02183):0.01221):0.01154):0.01762):0.02088):0.00748,(P\_deleyi:0.01155,(P\_sp\_aB:0.00383,(P\_agglomerans:5.5E-4,(P\_brenneri:0.00388,P\_conspicua:0.00386):0.00381):5.5E-4):0.00368):5.3E-4);

[535] tree 't535'=[&R] (P\_sp\_aB:0.00917,(P\_deleyi:0.0285,P\_anthophila:5.3E-4):0.01845,(P\_vagans:0.00458,(P\_agglomerans:0.00913,(P\_conspicua:0.02666,(P\_brenneri:0.00887,(((P\_sp\_At-9b:0.03796,P\_cyprapedii:0.00171):0.02178,((P\_dispersa:0.01417,P\_wallisii:0.03629):0.0228,(P\_eucrina:0.06123,(P\_rodasii:0.00406,(P\_sp\_GM01:0.0387,P\_rwandensis:0.02405):0.00573):0.03689):0.02185):0.02596,(P\_sp\_A4:0.08494,((E\_billingiae:0.0528,(E\_pyriifoliae:0.02134,E\_tasmaniensis:0.02194):0.06729):0.03687,(T\_sp\_NML\_06:0.05932,(T\_morbirosei:0.09159,T\_ptyseos:0.04888):0.02128):0.08307):0.04344):0.0109):0.01871,(P\_septica:0.06513,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.03433,(P\_allii:0.02865,P\_ananatis:0.02718):0.01832):0.02678):0.01156):0.01428):0.0077):0.02802):0.00461):0.00465);

[536] tree 't536'=[&R] ((P\_vagans:0.00248,(P\_anthophila:0.01154,(((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00553):0.01934,(P\_allii:0.01106,P\_ananatis:0.00651):0.00895):0.02931,(P\_septica:0.04322,((T\_sp\_NML\_06:0.03065,(T\_morbirosei:0.04581,T\_ptyseos:0.02724):0.02762):0.14291,(((P\_sp\_At-9b:0.00567,P\_cyprapedii:0.0179):0.01667,((P\_sp\_GM01:0.018,(P\_rodasii:0.01677,P\_rwandensis:0.0194):0.00836):0.02596,(P\_dispersa:0.01706,(P\_eucrina:0.03925,P\_wallisii:0.0164):0.00529):0.00847):0.01042):0.02414,(P\_sp\_A4:0.05339,(E\_billingiae:0.0606,(E\_pyriifoliae:0.00713,E\_tasmaniensis:0.01536):0.0527):0.06699):0.01795):0.01109):0.00714):0.01428):0.01582,(P\_brenneri:0.00527,P\_conspicua:0.00989):0.01201):0.01359):0.00613):0.00471,P\_sp\_aB:0.00472,(P\_deleyi:0.01882,P\_agglomerans:0.00368):0.00189);

[537] tree 't537'=[&R] (((P\_eucrina:0.0481,P\_sp\_GM01:0.03457):0.01065,((P\_dispersa:0.01225,P\_wallisii:0.02761):0.02186,(P\_rodasii:0.01949,P\_rwandensis:0.00464):0.02479):5.5E-4):0.00402,(P\_sp\_At-9b:0.01165,P\_cyprapedii:0.0187):0.02435):0.0153,P\_septica:0.05243,(((T\_sp\_NML\_06:0.03872,(T\_morbirosei:0.07054,T\_ptyseos:0.02426):0.01933):0.10131,(E\_billingiae:0.05737,(E\_pyriifoliae:0.02441,E\_tasmaniensis:5.4E-4):0.038):0.06685):0.01414,(P\_sp\_A4:0.0574,((P\_allii:0.00896,(P\_ananatis:0.00964,(P\_s\_stewartii:0.00348,P\_s\_indologenes:5.5E-4):0.02083):0.00783):0.04675,((P\_agglomerans:5.3E-4,P\_sp\_aB:0.00338):5.4E-4,((P\_anthophila:0.00681,P\_deleyi:0.03087):0.00334,P\_vagans:0.00338):0.01019):0.00484,(P\_brenneri:5.5E-4,P\_conspicua:0.00344):0.00936):0.01173):0.02424):0.00439):0.00895);

[538] tree 't538'=[&R] ((P\_rodasii:0.01925,(P\_rwandensis:0.03491,(P\_sp\_GM01:0.01561,(P\_sp\_At-9b:0.04543,P\_cyprapedii:0.01584):0.036):0.00985):0.01301):0.01384,(P\_eucrina:0.11035,(((T\_morbirosei:0.10609,(T\_ptyseos:0.08027,T\_sp\_NML\_06:0.10398):0.04144):0.11028,(E\_billingiae:0.08869,(E\_pyriifoliae:0.02519,E\_tasmaniensis:0.01917):0.05156):0.06091):0.04145,(P\_septica:0.03578,(P\_sp\_A4:0.06948,((P\_brenneri:0.01365,P\_conspicua:0.01884):5.5E-4,((P\_vagans:0.01291,(P\_sp\_aB:0.0166,P\_agglomerans:0.00364):0.00323):0.00653,(P\_deleyi:0.01226,P\_anthophila:0.02323)

:0.00873):0.01329):0.03732,(P\_allii:0.03234,(P\_ananatis:0.01988,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.0044):0.01585):0.03994):0.01857):0.01229):0.00682):0.02992):0.00771,(P\_wallisii:0.03955,P\_dispersa:0.02312):0.00698);

[539] tree 't539'=[&R]  
(P\_anthophila:0.01628,(P\_vagans:0.00844,(P\_deleyi:0.01624,(P\_sp\_aB:0.00823,P\_agglomerans:0.00546):0.00295):0.00274):0.01262,((P\_septica:0.0805,((E\_billingiae:0.12785,(E\_pyrifoliae:0.03157,E\_tasmaniensis:0.04525):0.11685):0.09331,(P\_sp\_A4:0.20194,(((P\_sp\_At-9b:0.04914,P\_cyprapedii:0.03347):0.03959,(P\_eucrina:0.13654,((P\_dispersa:0.01882,P\_wallisii:0.05915):0.00993,((P\_rodasii:5.4E-4,P\_rwandensis:0.0161):0.01627,P\_sp\_GM01:0.06318):0.01203):0.01655):0.0202):0.06747,((T\_sp\_NML\_06:0.13515,(T\_morbirosei:0.1199,T\_ptyseos:0.07062):0.05687):0.31121,(P\_ananatis:0.01209,(P\_allii:0.02154,(P\_s\_indologenes:0.00268,P\_s\_stewartii:0.00282):0.04307):0.01583):0.23474):0.05016):0.02273):0.00938):0.02856):0.04927,(P\_brenneri:0.01355,P\_conspicua:0.01179):5.5E-4):0.01108);

[540] tree 't540'=[&R] (P\_vagans:5.4E-4,P\_anthophila:0.00487,((P\_agglomerans:0.00484,P\_sp\_aB:5.5E-4):0.00485,(P\_deleyi:0.00983,(((P\_sp\_At-9b:0.01253,P\_cyprapedii:0.01598):0.03092,(P\_sp\_GM01:5.4E-4,(P\_rwandensis:0.01573,P\_rodasii:0.02399):0.00866):0.00928):0.02367,((P\_septica:0.02615,(((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00492):0.00476,(P\_ananatis:0.01954,P\_allii:0.02388):0.02208):0.15257,((E\_billingiae:0.08741,(E\_pyrifoliae:0.01182,E\_tasmaniensis:0.04009):0.10519):0.1933,(T\_sp\_NML\_06:0.05495,(T\_morbirosei:0.06881,T\_ptyseos:0.06648):0.03205):0.03231):0.04605):0.05663,(P\_sp\_A4:0.19592,P\_eucrina:0.06665):0.00848):0.01802):0.01092,(P\_dispersa:0.00634,P\_wallisii:0.02351):0.013):0.0179):0.02959,(P\_brenneri:0.00981,P\_conspicua:0.00492):0.0049):0.00987):0.00497):5.3E-4);

[541] tree 't541'=[&R] ((P\_rodasii:0.00776,P\_rwandensis:0.01292):0.00281,(P\_sp\_GM01:0.01248,(P\_sp\_At-9b:0.00844,P\_cyprapedii:0.00646):0.00439):0.00234,(P\_wallisii:0.00451,(P\_eucrina:0.03102,(P\_dispersa:0.00692,(((T\_sp\_NML\_06:0.02278,(T\_morbirosei:0.02991,T\_ptyseos:0.0058):0.01927):0.05486,(P\_sp\_A4:0.06555,(E\_billingiae:0.03586,(E\_pyrifoliae:0.02873,E\_tasmaniensis:0.01279):0.07044):0.07228):0.02948):0.01983,(P\_septica:0.01167,((P\_ananatis:0.00225,(P\_allii:0.01427,(P\_s\_indologenes:0.00188,P\_s\_stewartii:5.5E-4):0.00975):0.00379):0.03969,(((P\_anthophila:0.00744,P\_deleyi:0.01042):0.01055,(P\_vagans:5.4E-4,(P\_agglomerans:0.0086,P\_sp\_aB:5.4E-4):0.00439):0.00225):0.01218,(P\_brenneri:0.00847,P\_conspicua:0.00219):0.01274):0.00522):0.01296):0.01109):0.02211):5.4E-4):0.0035):0.00429);

[542] tree 't542'=[&R]  
(P\_deleyi:0.01097,P\_vagans:0.00547,(P\_sp\_aB:0.00274,(P\_agglomerans:0.0055,(((P\_ananatis:0.0056,(P\_allii:0.00832,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00553):0.00249):0.04012,(P\_septica:0.04001,(((E\_billingiae:0.05408,(E\_pyrifoliae:0.00515,E\_tasmaniensis:0.01497):0.06296):0.06475,((T\_morbirosei:0.01798,(T\_ptyseos:0.02921,T\_sp\_NML\_06:0.03277):0.02452):0.13289,P\_sp\_A4:0.07615):0.0183):0.01628,((P\_sp\_At-9b:0.00278,P\_cyprapedii:0.0138):0.0205,(P\_sp\_GM01:0.02359,(P\_wallisii:0.02014,((P\_rodasii:0.01136,P\_rwandensis:0.01376):0.01437,(P\_dispersa:0.01455,P\_eucrina:0.05246):0.00267):0.01084):0.01781):0.00962):0.01317):0.01301):0.00602):0.01385,(P\_brenneri:0.00361,P\_conspicua:0.01287):0.00702):0.02893,P\_anthophila:5.4E-4):0.00247):0.00273):5.4E-4);

[543] tree 't543'=[&R]  
(P\_wallisii:0.01489,(P\_eucrina:0.01904,P\_dispersa:0.00388):0.00384,(P\_sp\_GM01:0.00403,((P\_sp\_At-

9b:0.00643,P\_cyprapedii:0.00297):0.01293,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00555,(P\_allii:0.00138,P\_ananatis:0.00252):0.00148):0.03034,((P\_brenneri:0.01304,P\_conspicua:0.00215):0.00771,(P\_anthophila:0.00969,(P\_deleyi:0.00938,(P\_vagans:0.00185,(P\_agglomerans:0.00184,P\_sp\_aB:0.00368):0.00184):0.0037):0.01121):0.00759):0.01536):0.01477,((P\_sp\_A4:0.05311,(P\_rodasii:0.00711,P\_rwandensis:0.00606):0.01111):0.03111,((T\_morbirosei:0.01691,(T\_sp\_NML\_06:0.03423,T\_ptyseos:0.01743):0.00583):0.06917,(E\_billingiae:0.06268,(E\_pyriifoliae:0.01894,E\_tasmaniensis:0.00193):0.09074):0.0368):0.0187):0.00746,P\_septica:0.01711):0.00623):0.00605):0.00304):0.00193);

[544] tree 't544'=[&R]  
(P\_dispersa:0.01304,(((P\_sp\_A4:0.03981,((T\_morbirosei:0.04291,(T\_ptyseos:0.04472,T\_sp\_NML\_06:0.06431):0.07075):0.13141,(E\_billingiae:0.05605,(E\_pyriifoliae:0.0164,E\_tasmaniensis:0.02003):0.04111):0.04623):0.02485):0.02297,(P\_cyprapedii:0.01094,P\_sp\_At-9b:0.00768):0.01544):0.01006,(((P\_sp\_aB:0.00986,(P\_vagans:0.00201,(P\_deleyi:0.04975,P\_anthophila:0.031):0.00507):0.00184):0.00353,P\_agglomerans:0.01033):0.02856,((P\_brenneri:0.00202,P\_conspicua:0.00983):0.01765,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00779,(P\_allii:0.01535,P\_ananatis:0.00826):0.007):0.03234):0.00824):0.00943):0.01045,P\_septica:0.04521):0.00888,((P\_rwandensis:0.01581,(P\_rodasii:0.00966,P\_sp\_GM01:0.00826):0.00575):0.02071,(P\_eucrina:0.02782,P\_wallisii:0.01068):0.00388):0.00876);

[545] tree 't545'=[&R] (P\_sp\_At-9b:5.4E-4,(E\_tasmaniensis:0.02369,E\_pyriifoliae:0.02648):0.02871,((P\_cyprapedii:0.01781,(P\_rodasii:0.01171,P\_sp\_GM01:5.4E-4):0.01175):0.00607,(((E\_billingiae:0.03652,((P\_allii:0.0,P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00589,P\_ananatis:5.5E-4):0.00572):0.01201,(P\_rwandensis:0.01173,P\_dispersa:0.00599):0.00596):5.4E-4,((P\_deleyi:0.0,P\_anthophila:0.0):0.00595,(P\_vagans:0.00588,((P\_agglomerans:0.0,P\_sp\_aB:0.0):5.4E-4,P\_conspicua:0.00565):0.00562,P\_brenneri:5.5E-4):5.5E-4):0.00586):0.00594):0.00589,(P\_eucrina:0.02378,P\_wallisii:0.00587):5.3E-4):5.4E-4,P\_sp\_A4:0.01784):0.01195):0.00442,(T\_morbirosei:0.07544,(T\_ptyseos:0.07775,T\_sp\_NML\_06:0.033):0.01624):0.11329):0.00106):0.00592);

[546] tree 't546'=[&R]  
(P\_sp\_aB:0.01152,(P\_septica:0.02661,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.04483,(P\_allii:0.02339,P\_ananatis:5.4E-4):0.0229):0.07563,(P\_sp\_A4:0.10078,((E\_billingiae:0.05511,(E\_pyriifoliae:0.01824,E\_tasmaniensis:0.05459):0.07928):0.02813,(T\_ptyseos:0.13915,(T\_morbirosei:0.02921,T\_sp\_NML\_06:0.30181):0.02562):0.22386):0.0473):0.01972):0.00432,P\_sp\_At-9b:0.00602):0.00593,((P\_eucrina:0.10846,(P\_sp\_GM01:0.01834,((P\_dispersa:0.02976,P\_wallisii:5.4E-4):0.01189,(P\_rodasii:0.01789,P\_rwandensis:0.01777):5.5E-4):0.0058):0.01163):0.01285,P\_cyprapedii:0.00582):5.3E-4):0.01211):0.01824):5.4E-4,P\_vagans:5.4E-4):5.3E-4,(P\_anthophila:0.00893,P\_agglomerans:0.01737):0.00912,((P\_brenneri:5.4E-4,P\_conspicua:0.01786):0.00974,P\_deleyi:0.0235):0.00862);

[547] tree 't547'=[&R] ((P\_rwandensis:0.00856,((P\_dispersa:0.0,P\_rodasii:0.0):5.5E-4,P\_wallisii:0.00859):5.4E-4):0.0179,(((P\_eucrina:0.01235,(T\_morbirosei:0.01994,(T\_sp\_NML\_06:0.01339,T\_ptyseos:0.04124):0.03739):0.11889):0.02688,(E\_billingiae:0.04463,((P\_allii:5.4E-4,(P\_ananatis:0.01025,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.02498):0.00797):0.02667,(P\_conspicua:5.4E-4,(P\_brenneri:0.0,P\_sp\_aB:0.0,P\_agglomerans:0.0,P\_vagans:0.0,P\_anthophila:0.0):5.5E-



4,P\_deleyi:0.00876):0.00864):0.00874):0.00955):0.00633):0.01896,P\_sp\_At-9b:0.00865):5.4E-4,P\_septica:0.01725):0.00822,P\_sp\_GM01:0.01738):5.3E-4,(P\_sp\_A4:0.01719,(P\_cypripedii:5.4E-4,(E\_tasmaniensis:0.03534,E\_pyriifoliae:0.02541):0.06286):0.00853):5.4E-4);

[548] tree 't548'=[&R] (((((P\_allii:0.0,P\_ananatis:0.0):5.4E-4,(P\_s\_indologenes:0.00429,P\_s\_stewartii:5.4E-4):0.01455):0.0183,(P\_septica:0.00891,(P\_sp\_At-9b:0.00997,P\_cypripedii:0.00476):0.03251):0.02239,(E\_billingiae:0.0246,(E\_tasmaniensis:0.01915,E\_pyriifoliae:5.4E-4):0.01656):0.07249,(T\_sp\_NML\_06:0.01915,(T\_ptyseos:0.00405,T\_morbirosei:0.02915):0.00548):0.03112,(P\_eucrina:0.01721,(P\_sp\_A4:0.04403,(P\_rwandensis:0.00484,(P\_sp\_GM01:0.00484,P\_rodasii:0.0145):0.0048):5.5E-4,(P\_wallisii:0.00979,P\_dispersa:0.0143):0.00958):0.00926):0.00841):0.02058):0.02096):0.0083):0.0058):0.0115,P\_deleyi:0.00946):5.4E-4,(P\_vagans:0.0,P\_conspicua:0.0,P\_sp\_aB:0.0):5.5E-4,(P\_anthophila:0.0098,P\_brenneri:5.4E-4):0.00475,P\_agglomerans:0.00477):5.5E-4);

[549] tree 't549'=[&R] (P\_dispersa:0.02009,(P\_sp\_At-9b:0.02388,P\_cypripedii:0.01623):0.02116,(P\_sp\_A4:0.03626,((((P\_allii:0.03418,P\_ananatis:0.00711):0.01931,P\_s\_stewartii:0.00657):0.00647,P\_s\_indologenes:5.4E-4):0.04423,(P\_conspicua:0.02467,((P\_vagans:5.5E-4,P\_deleyi:0.09276):0.0128,P\_anthophila:0.01297):5.4E-4,(P\_agglomerans:0.0,P\_sp\_aB:0.0):5.5E-4):0.0086):0.01252,P\_brenneri:5.4E-4):0.03371):0.02374,(P\_eucrina:0.04891,(P\_septica:0.04052,(T\_ptyseos:0.0244,(T\_morbirosei:0.04386,T\_sp\_NML\_06:0.01812):0.02075):0.04958,(E\_billingiae:0.0473,(E\_pyriifoliae:0.03303,E\_tasmaniensis:0.00752):0.0171):0.03382):0.03533):0.02203):0.01668):0.00438):0.03238,(P\_rwandensis:0.0343,(P\_rodasii:0.00641,(P\_wallisii:0.03902,P\_sp\_GM01:0.02604):0.00842):5.5E-4):0.02604):5.4E-4);

[550] tree 't550'=[&R] (P\_dispersa:0.01991,P\_sp\_GM01:0.00983,(P\_rwandensis:5.5E-4,(P\_rodasii:5.4E-4,(((P\_sp\_At-9b:0.00839,P\_cypripedii:0.0015):0.03951,((E\_billingiae:0.05349,(E\_pyriifoliae:0.00963,E\_tasmaniensis:0.03369):0.05332):0.02082,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.03859,(P\_allii:5.5E-4,P\_ananatis:0.00953):5.4E-4):0.02921,(P\_brenneri:5.4E-4,(P\_agglomerans:0.0,P\_vagans:0.0,P\_deleyi:0.0,P\_anthophila:0.0,P\_sp\_aB:0.0):0.00953,P\_conspicua:0.0098):0.0096):0.00958):0.00819):0.00955,(P\_sp\_A4:0.02964,(T\_morbirosei:0.02898,(T\_sp\_NML\_06:0.0385,T\_ptyseos:0.01935):5.5E-4):0.08472):0.02846,P\_septica:0.02955):0.01057):0.00657):0.01156,(P\_eucrina:0.00981,P\_wallisii:0.00953):0.00961):5.4E-4):0.00939):0.0092);

[551] tree 't551'=[&R] (P\_dispersa:0.05389,P\_rwandensis:0.02972,((((P\_sp\_At-9b:0.01542,P\_cypripedii:0.0262):0.03755,(P\_eucrina:0.08176,(E\_billingiae:0.08736,(E\_pyriifoliae:0.01366,E\_tasmaniensis:0.0167):0.06688):0.05517,((T\_sp\_NML\_06:0.14005,(T\_morbirosei:0.09997,T\_ptyseos:0.10658):0.03971):0.14564,(((P\_s\_indologenes:0.00261,P\_s\_stewartii:0.00262):0.04014,(P\_allii:0.02242,P\_ananatis:0.01275):0.01592):0.06976,(P\_conspicua:0.01254,(P\_brenneri:0.02011,(P\_anthophila:0.02794,(P\_sp\_aB:0.01471,(P\_vagans:0.02645,(P\_deleyi:0.03288,P\_agglomerans:5.4E-4):0.00552):0.00697):0.01043):0.03867):0.00891):0.02095):0.03398,(P\_sp\_A4:0.11763,P\_septica:0.05873):0.02302):0.02383):0.01628):0.02748):0.01044):0.00905,P\_wallisii:0.03576):0.01191,(P\_rodasii:0.03959,P\_sp\_GM01:0.04635):0.01227):0.01131);

[552] tree 't552'=[&R] (P\_agglomerans:0.02283,(P\_sp\_aB:0.0288,P\_vagans:0.03018):0.01271,(P\_deleyi:0.04211,(P\_anthophila:0.02865,(P\_brenner

i:0.02571,P\_conspicua:0.03404):0.03756,((P\_allii:0.0202,(P\_ananatis:0.0336,(P\_s\_indologenes:0.00212,P\_s\_stewartii:0.00215):0.02809):0.0315):0.04389,(P\_septica:0.09212,(P\_sp\_A4:0.12066,((P\_sp\_At-9b:0.0496,P\_cyprapedii:0.04921):0.02077,((P\_wallisii:0.04742,P\_dispersa:0.03679):0.01565,P\_eucrina:0.1441):0.01865,(P\_sp\_GM01:0.04582,(P\_rodasii:0.01482,P\_rwandensis:0.03688):0.03437):0.00855):0.03565):0.09583,((T\_sp\_NML\_06:0.07782,(T\_ptyseos:0.10307,T\_morbirosei:0.12188):0.04284):0.14665,(E\_billingiae:0.16418,(E\_pyriifoliae:0.04381,E\_tasmaniensis:0.05434):0.14847):0.04954):0.03923):0.02671):0.0147):0.04917):0.02637):0.04487):0.01934):0.00856);

[553] tree 't553'=[&R]  
(((P\_sp\_A4:0.02641,(P\_rodasii:0.00288,P\_rwandensis:0.00567):0.00819):0.00297,((E\_pyriifoliae:0.0,E\_tasmaniensis:0.0):0.05415,E\_billingiae:0.01124):0.02389):0.00282,(P\_septica:0.00304,(T\_morbirosei:0.0113,(T\_ptyseos:0.01517,T\_sp\_NML\_06:0.0109):0.00892):0.05315):0.00206):0.00345,(P\_conspicua:5.5E-4,(P\_brenneri:5.4E-4,(P\_anthophila:0.00284,(P\_agglomerans:0.0,P\_sp\_aB:0.0):5.5E-4,(P\_deleyi:0.00573,P\_vagans:0.00284):5.5E-4):0.00574):0.00281):0.00283):0.00573,((P\_sp\_GM01:0.01131,(P\_wallisii:0.00567,(P\_eucrina:0.01143,P\_dispersa:5.5E-4):0.00274):0.00291):0.00802,((P\_allii:0.0,P\_ananatis:0.0):5.5E-4,(P\_s\_stewartii:0.0028,P\_s\_indologenes:5.4E-4):0.00535):0.00854,(P\_sp\_At-9b:0.00877,P\_cyprapedii:0.00849):0.00594):0.00848):5.4E-4);

[554] tree 't554'=[&R]  
(P\_wallisii:0.0727,(P\_sp\_GM01:0.03479,(P\_rodasii:0.04352,P\_rwandensis:0.01994):0.02523):0.01619,((P\_cyprapedii:0.02723,(P\_sp\_At-9b:0.0151,(P\_eucrina:0.10393,P\_dispersa:0.04788):0.02709):0.01545):0.0081,(((P\_ananatis:0.02236,(P\_allii:0.01314,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.0315):0.00392):0.09891,((P\_sp\_A4:0.06236,(T\_morbirosei:0.13477,(T\_ptyseos:0.08683,T\_sp\_NML\_06:0.05349):0.02941):0.15191):0.05345,((P\_deleyi:0.0389,(P\_anthophila:0.00916,(P\_agglomerans:5.5E-4,(P\_vagans:0.0134,P\_sp\_aB:0.00437):0.00874):0.01289):0.01743):0.02288,(P\_brenneri:0.03773,P\_conspicua:0.02573):0.01126):0.03264):0.02282):0.01764,P\_septica:0.0679):0.01463,(E\_billingiae:0.22282,(E\_pyriifoliae:0.02198,E\_tasmaniensis:0.03189):0.10586):0.03567):0.05053):0.01124);

[555] tree 't555'=[&R]  
(P\_sp\_GM01:0.01296,(((P\_anthophila:0.00697,(P\_deleyi:0.00781,(P\_agglomerans:0.01034,(P\_vagans:0.0,P\_sp\_aB:0.0):5.4E-4):0.0052):0.00339):0.01221,((P\_allii:0.00768,(P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00254):0.01551,P\_ananatis:0.00249):0.00262):0.01277,(P\_brenneri:0.00639,P\_conspicua:0.00915):0.00713):0.00823):0.00876,((E\_billingiae:0.01636,(E\_pyriifoliae:0.01025,E\_tasmaniensis:0.00921):0.01807):0.02873,(P\_septica:0.02562,(T\_morbirosei:0.00899,(T\_ptyseos:0.01362,T\_sp\_NML\_06:0.01044):0.01908):0.07057):0.01284):0.00582):0.02506,(P\_sp\_At-9b:0.01297,(P\_sp\_A4:0.05687,P\_cyprapedii:0.00455):0.00889):0.01288):0.00579,((P\_eucrina:0.02083,P\_wallisii:5.3E-4):0.01278,(P\_dispersa:0.00248,(P\_rwandensis:0.01016,P\_rodasii:0.00257):0.01287):0.00479):0.00562);

[556] tree 't556'=[&R]  
((T\_sp\_NML\_06:0.17209,(T\_ptyseos:0.0,P\_wallisii:0.0,P\_eucrina:0.0,P\_allii:0.0,P\_ananatis:0.0,P\_sp\_A4:0.0,P\_septica:0.0,P\_rwandensis:0.0,P\_sp\_At-9b:0.0,P\_cyprapedii:0.0,P\_sp\_GM01:0.0,P\_rodasii:0.0):0.1478):5.1E-4,P\_brenneri:0.14678,((T\_morbirosei:0.0,E\_pyriifoliae:0.0,P\_s\_indologenes:0.0,P\_s\_stewartii:0.0,P\_dispersa:0.0,P\_conspicua:0.0,P\_deleyi:0.0,P\_anthophila:0.0,P\_sp\_aB:0.0,P\_vagans:0.0,P\_agglomerans:0.0):5.5E-4,(E\_tasmaniensis:0.15158,E\_billingiae:0.14699):5.4E-4):5.4E-4);

[557] tree 't557'=[&R] ((P\_sp\_At-9b:0.00912,P\_cyprapedii:0.00935):0.00461,(P\_dispersa:5.3E-4,(P\_rodasii:0.00463,P\_rwandensis:5.4E-4):0.01446):0.0093,(((P\_sp\_GM01:0.01063,(P\_septica:0.01874,(P\_sp\_A4:0.02784,((T\_morbirosei:0.01452,(T\_sp\_NML\_06:0.02216,T\_ptyseos:0.02342):0.0367):0.03795,(E\_billingiae:0.04255,(E\_pyriifoliae:0.01339,E\_tasmaniensis:0.01689):0.00753):0.02202):0.02455):0.01559,((P\_brenneri:5.5E-4,P\_conspicua:0.00463):0.0148,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01875,(P\_allii:0.00463,P\_ananatis:0.00462):5.4E-4):0.03312,(((P\_sp\_aB:0.00458,P\_deleyi:0.00933):5.5E-4,(P\_vagans:0.00457,P\_agglomerans:5.5E-4):0.00448):0.00445,P\_anthophila:5.5E-4):0.0235):0.01405):0.0135):5.5E-4):0.02232):0.00946,P\_wallisii:0.00575):0.00779,P\_eucrina:0.03864):0.00478);

[558] tree 't558'=[&R] (P\_sp\_aB:0.02146,P\_deleyi:0.016,((P\_anthophila:0.0161,(((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00509):0.0177,(P\_allii:0.00509,P\_ananatis:0.01009):0.00847):0.0395,(P\_septica:0.02839,(((E\_billingiae:0.08829,(E\_pyriifoliae:0.04341,E\_tasmaniensis:0.05533):0.06201):0.07191,(P\_sp\_A4:0.11623,(T\_morbirosei:0.01392,(T\_ptyseos:0.08269,T\_sp\_NML\_06:0.05381):0.04733):0.138):0.05414):0.02272,((P\_sp\_At-9b:0.02534,P\_cyprapedii:0.00626):0.00951,(((P\_rodasii:0.01027,P\_rwandensis:0.02033):0.00852,P\_sp\_GM01:0.03004):0.00836,((P\_wallisii:0.05227,P\_dispersa:5.5E-4):0.01352,P\_eucrina:0.04765):0.0071):0.01671):0.03275):0.00193):0.03702):0.03298,(P\_brenneri:0.00511,P\_conspicua:0.00523):5.5E-4):0.01526):0.02575,(P\_agglomerans:5.4E-4,P\_vagans:0.01546):0.00999):5.4E-4);

[559] tree 't559'=[&R] (P\_sp\_A4:0.06216,(P\_sp\_GM01:0.01562,(((P\_rwandensis:0.01112,(P\_septica:0.03742,P\_cyprapedii:0.01611):0.00999):0.01465,(P\_sp\_At-9b:0.02646,P\_dispersa:5.5E-4):0.0109):0.00499,(P\_eucrina:0.06593,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.005,(P\_allii:0.01013,P\_ananatis:5.5E-4):5.4E-4):0.02168,(P\_anthophila:0.00686,(((P\_deleyi:0.01023,(P\_vagans:0.00515,P\_sp\_aB:0.0051):0.00515):5.5E-4,P\_agglomerans:5.5E-4):5.3E-4,(P\_brenneri:0.01027,P\_conspicua:5.4E-4):0.01011):0.01938):0.01052):0.01969):0.01011):0.00531):5.5E-4,((P\_rodasii:0.01069,((T\_morbirosei:0.01359,(T\_sp\_NML\_06:0.05658,T\_ptyseos:0.01457):0.02354):0.05245,(E\_billingiae:0.03291,(E\_pyriifoliae:0.00886,E\_tasmaniensis:0.0258):0.04295):0.03221):0.0247):5.4E-4,P\_wallisii:0.01643):0.00531);

[560] tree 't560'=[&R] ((P\_wallisii:5.4E-4,((P\_allii:0.00261,(P\_ananatis:0.0,P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.1E-4):0.00261,((P\_deleyi:0.0,P\_conspicua:0.0,P\_agglomerans:0.0,P\_vagans:0.0,P\_brenneri:0.0,P\_sp\_aB:0.0):5.5E-4,P\_anthophila:0.0026):5.5E-4):0.00518):0.00261,(P\_septica:0.00251,((E\_billingiae:5.5E-4,(E\_pyriifoliae:0.0026,E\_tasmaniensis:5.5E-4):0.01027):0.01312,((T\_morbirosei:5.5E-4,(T\_sp\_NML\_06:0.01335,T\_ptyseos:0.00534):0.00526):0.02143,P\_sp\_A4:0.0052):5.4E-4):0.00526):0.00267,(P\_eucrina:0.00524,(P\_rwandensis:0.0,P\_sp\_GM01:0.0,P\_sp\_At-9b:0.0,P\_cyprapedii:0.0,P\_dispersa:0.0,P\_rodasii:0.0):5.5E-4):5.4E-4);

[561] tree 't561'=[&R] ((P\_eucrina:0.00253,P\_wallisii:5.5E-4):5.4E-4,(P\_sp\_At-9b:0.00494,((P\_sp\_GM01:0.00957,(P\_dispersa:5.4E-4,(P\_rwandensis:0.00253,P\_rodasii:0.00252):0.00253):5.4E-4):0.00254,(P\_septica:5.4E-4,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0,P\_allii:0.0,P\_ananatis:0.0,P\_anthophila:0.0,P\_brenneri:0.0,P\_conspicua:0.0):5.5E-4,(P\_deleyi:0.00251,P\_agglomerans:0.00251):5.5E-4):5.5E-4,((P\_vagans:0.0,P\_sp\_aB:0.0):5.4E-

4,(T\_sp\_NML\_06:0.02133,((E\_billingiae:0.00813,(E\_pyriifoliae:0.01029,E\_tasmaniensis:5.4E-4):0.00829):0.01669,(T\_morbirosei:8.7E-4,T\_ptyseos:0.00683):0.01021):0.00497):0.00518):0.00252):0.00505):0.0082):0.00207):0.00508,(P\_cyprapedii:0.0038,P\_sp\_A4:0.01542):0.00383);

[562] tree 't562'=[&R] (((P\_septica:0.00271,(P\_sp\_A4:0.04491,(P\_ananatis:5.5E-4,(P\_allii:5.4E-4,(P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00449):0.00899):0.00896):0.00701):0.01297):0.0109,(P\_deleyi:0.00445,(P\_agglomerans:0.00444,(P\_sp\_aB:0.0,P\_vagans:0.0,P\_brenneri:0.0):5.5E-4,(P\_anthophila:0.00442,P\_conspicua:0.00443):5.5E-4):5.5E-4):0.01347):0.00485,(((E\_billingiae:0.02116,(E\_tasmaniensis:0.00864,E\_pyriifoliae:0.00912):0.0154):0.11427,(T\_morbirosei:0.01584,(T\_ptyseos:0.0114,T\_sp\_NML\_06:0.00678):0.01855):0.0166):0.0138,(P\_rwandensis:0.00446,P\_rodasii:5.5E-4):0.00471):0.00399,(P\_sp\_GM01:0.00375,(P\_dispersa:5.4E-4,(P\_wallisii:5.4E-4,P\_eucrina:0.00448):0.00447):0.00546):0.00851,(P\_cyprapedii:0.00921,P\_sp\_At-9b:5.5E-4):5.5E-4):0.00447);

[563] tree 't563'=[&R] (((P\_eucrina:0.09357,(P\_dispersa:0.03245,(P\_sp\_At-9b:0.06704,P\_cyprapedii:5.5E-4):0.06356):0.0136):0.01128,P\_wallisii:0.02113):0.01034,P\_rwandensis:5.4E-4,(P\_rodasii:0.02098,((P\_sp\_A4:0.11434,(P\_septica:0.13006,(((T\_morbirosei:0.11457,(T\_sp\_NML\_06:0.23285,T\_ptyseos:0.01691):0.05413):0.21875,(E\_billingiae:0.17479,(E\_pyriifoliae:0.03632,E\_tasmaniensis:0.01747):0.16522):0.18544):0.05209,(((P\_allii:0.0,P\_ananatis:0.0):0.01086,(P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.01051):0.01043):0.02405,(P\_brenneri:0.0,P\_conspicua:0.0):5.5E-4,(P\_anthophila:0.01043,(P\_deleyi:0.0,P\_sp\_aB:0.0):5.5E-4,P\_agglomerans:0.01044):5.5E-4):5.5E-4,P\_vagans:0.02131):0.06556):0.04246):0.00724):0.05465):0.03802):0.10082,P\_sp\_GM01:0.02422):0.00765):5.3E-4);

[564] tree 't564'=[&R] (P\_agglomerans:0.00232,((P\_conspicua:0.00702,P\_brenneri:0.00229):0.00234,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.0145,(P\_septica:0.01813,(((E\_billingiae:0.03499,(E\_pyriifoliae:0.01031,E\_tasmaniensis:0.0109):0.02775):0.05104,(T\_sp\_NML\_06:0.01705,(T\_morbirosei:0.00885,T\_ptyseos:0.01748):0.01064):0.03838):0.01526,(P\_sp\_A4:0.031,((P\_dispersa:0.01197,(((P\_rodasii:0.01988,P\_rwandensis:0.00602):0.00677,P\_sp\_GM01:0.02267):0.00838,P\_wallisii:0.01):0.00694,P\_eucrina:0.0264):0.00937):0.01687,(P\_sp\_At-9b:0.00729,P\_cyprapedii:0.01675):0.00734):0.01757):0.00286):0.00518):0.00734):0.01137,(P\_allii:0.0053,P\_ananatis:0.01115):0.00964):0.01711,(P\_deleyi:0.00239,P\_anthophila:0.01164):0.00234):0.0023):0.00237,(P\_sp\_aB:0.00231,P\_vagans:0.007):5.5E-4);

[565] tree 't565'=[&R] ((P\_eucrina:0.08857,P\_dispersa:5.4E-4):0.01526,(P\_sp\_At-9b:0.03731,P\_cyprapedii:0.01862):0.03951,(P\_wallisii:0.06067,(P\_rodasii:0.02399,(P\_sp\_GM01:0.08283,P\_rwandensis:0.01059):0.01379):0.02546):0.01307,(((E\_billingiae:0.24342,(E\_pyriifoliae:0.06323,E\_tasmaniensis:0.10913):0.12406):0.19601,(T\_morbirosei:0.09893,(T\_ptyseos:0.06745,T\_sp\_NML\_06:0.09256):0.04307):0.07266):0.09172,(P\_sp\_A4:0.12784,(P\_septica:0.12404,((P\_allii:0.01585,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.05356,P\_ananatis:0.03484):0.0059):0.02132,(P\_anthophila:0.04342,(P\_deleyi:0.03691,(P\_vagans:0.00744,((P\_brenneri:0.00664,P\_conspicua:0.02547):0.02495,(P\_agglomerans:0.01523,P\_sp\_aB:0.01609):0.00765):0.01684):0.01112):0.01709):0.04934):0.07235):0.0078):0.06082):0.01251):0.00808);

[566] tree 't566'=[&R] (((P\_eucrina:0.03765,((P\_rodasii:0.05689,P\_rwandensis:5.3E-4):0.04084,P\_sp\_A4:0.13919):5.4E-4):0.01931,(P\_dispersa:0.03835,P\_sp\_At-9b:0.01944):0.01862):5.4E-

4,P\_wallisii:0.02125,(P\_cyripedii:0.03816,(P\_sp\_GM01:0.05849,(((E\_pyriifoliae:0.03706,E\_tasmaniensis:0.01848):0.05209,(E\_billingiae:0.13383,(T\_morbirosei:5.5E-4,(T\_ptyseos:0.13393,T\_sp\_NML\_06:0.09038):0.0392):0.24305):0.1478):0.06138,(P\_septica:0.07509,((P\_brenneri:0.0,P\_conspicua:0.0):0.00669,(((P\_allii:0.0,P\_ananatis:0.0):0.01748,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.02596):0.03427,((P\_deleyi:0.01805,P\_agglomerans:0.01807):0.01856,(P\_sp\_aB:5.5E-4,(P\_anthophila:0.05304,P\_vagans:0.01734):5.5E-4):5.3E-4):0.02187):0.02893):0.04534):0.00726):0.04302):0.01963):5.3E-4);

[567] tree 't567'=[&R]  
(P\_agglomerans:0.02911,(P\_brenneri:0.0123,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01443,(P\_allii:0.01298,P\_ananatis:0.00402):0.01823):0.1081,(P\_septica:0.05576,(((P\_sp\_At-9b:0.04229,P\_cyripedii:0.03093):0.02984,(P\_sp\_GM01:0.06652,(P\_rodasii:0.04211,P\_rwandensis:0.02954):0.00938):0.01186,(P\_dispersa:0.04517,(P\_wallisii:0.04323,P\_eucrina:0.1053):0.01977):0.02423):0.04241):0.10965,(P\_sp\_A4:0.21807,((T\_morbirosei:0.1377,(T\_sp\_NML\_06:0.20269,T\_ptyseos:0.15828):0.03654):0.30297,(E\_billingiae:0.11301,(E\_pyriifoliae:0.03073,E\_tasmaniensis:0.06766):0.13602):0.15807):0.05882):0.01187):0.03835):0.0631):0.05316,P\_conspicua:0.02273):5.4E-4):0.01803,((P\_deleyi:0.03455,P\_sp\_aB:0.01141):0.00889,(P\_anthophila:0.04096,P\_vagans:5.4E-4):0.00558):0.01381);

[568] tree 't568'=[&R] (P\_wallisii:0.1092,P\_sp\_GM01:0.07013,((((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00732):0.14074,(P\_allii:0.04396,P\_ananatis:0.10036):0.0245):0.14325,((P\_brenneri:0.03973,P\_conspicua:0.06031):0.01528,((P\_sp\_aB:0.05574,P\_vagans:0.02981):0.00874,(P\_anthophila:0.12602,(P\_agglomerans:0.01057,P\_deleyi:0.10736):0.00985):0.0096):0.0713):0.0995):0.08358,(P\_septica:0.22804,(P\_sp\_A4:0.39274,((T\_sp\_NML\_06:0.58527,(T\_morbirosei:0.33666,T\_ptyseos:0.34983):0.10043):0.61264,(E\_billingiae:0.30797,(E\_pyriifoliae:0.08318,E\_tasmaniensis:0.0537):0.26646):0.09046):0.12975):0.07124):0.03499):0.1388,(P\_eucrina:0.24484,(P\_sp\_At-9b:0.14458,P\_cyripedii:0.07821):0.04509):0.01661):0.02767,(P\_dispersa:0.09038,(P\_rwandensis:0.13437,P\_rodasii:0.1007):0.03212):0.01581):0.02793);

[569] tree 't569'=[&R]  
(P\_vagans:0.02949,((P\_septica:0.07906,(((P\_sp\_GM01:0.06696,(P\_rwandensis:0.09818,P\_rodasii:0.05774):0.03914,(P\_dispersa:0.03014,P\_wallisii:0.02569):0.02717):0.01103):0.03323,((P\_sp\_At-9b:0.02482,P\_cyripedii:0.02292):0.04641,P\_eucrina:0.11338):0.01628):0.0787,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.03047,(P\_allii:0.01534,P\_ananatis:0.05184):0.02022):0.1022,(P\_sp\_A4:0.18629,((T\_morbirosei:0.19221,(T\_sp\_NML\_06:0.21705,T\_ptyseos:0.11958):0.08213):0.35577,(E\_billingiae:0.28968,(E\_pyriifoliae:0.05208,E\_tasmaniensis:0.04298):0.0643):0.14652):0.18717):0.03111):0.04121):0.01438):0.04179,(P\_deleyi:0.06329,(P\_brenneri:0.05946,P\_conspicua:0.02383):0.02437):0.01042):0.00591):5.5E-4,P\_agglomerans:0.01336,(P\_anthophila:0.06039,P\_sp\_aB:0.05358):0.00453);

[570] tree 't570'=[&R] (P\_vagans:0.01341,(((P\_allii:0.01963,(P\_ananatis:5.4E-4,(P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00664):0.02032):0.00919):0.03266,((P\_sp\_A4:0.02812,(P\_septica:0.03535,(P\_sp\_At-9b:0.01143,P\_cyripedii:0.00193):0.02878):0.00676):0.02007,((P\_dispersa:5.4E-4,((P\_wallisii:0.01147,(P\_rodasii:5.4E-4,P\_rwandensis:0.00663):0.00862):0.00682,(P\_sp\_GM01:5.3E-4,P\_eucrina:0.04807):0.00816):0.01143):0.01427,((T\_morbirosei:0.07765,(T\_sp\_NML\_06:0.07902,T\_ptyseos:0.04495):0.05939):0.05033,(E\_billingiae:0.04002,(E\_pyriifoliae:0.02679,E\_tasmaniensis:0.03797):0.05277):0.03856):0.06629):0.00683):0.03519):0.02243,P\_anthophila:0.00632):5.4E-4,((P\_sp\_aB:0.01346,(P\_deleyi:0.02032,P\_agglomerans:5.3E-4):0.00671):5.5E-4,(P\_brenneri:0.0,P\_conspicua:0.0):5.5E-4):5.3E-4);

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[571] tree 't571'=[&R]
((P_dispersa:0.03415,P_eucrina:0.12163):0.00893,((P_rodasii:0.01743,P_rwandensis:0.02932):0.00738,((P_sp_At-
9b:0.01417,P_cypripedii:0.02906):0.0151,(((T_morbirosei:0.05814,(T_sp_NML_06:0.09306,T_ptyseos:0.04797):0.01585):0.
29361,(E_billingiae:0.09527,(E_pyrifoliae:0.03957,E_tasmaniensis:0.04083):0.09203):0.09362):0.03308,((P_s_indolgen
es:0.00697,P_s_stewartii:5.4E-
4):0.02306,(P_allii:0.02069,P_ananatis:0.02925):0.02932):0.04998,((P_brenneri:0.00974,P_conspicua:0.01796):0.01281,(
P_vagans:0.00721,(P_agglomerans:0.01446,P_sp_aB:0.00359):0.0036):5.2E-
4,(P_anthophila:0.04075,P_deleyi:0.03273):0.00432):0.03056):0.03523):0.04554):0.00967,(P_sp_A4:0.14734,P_septica:0.0
8085):0.02006):0.0387):0.01164):0.01389,(P_sp_GM01:0.02211,P_wallisii:0.04858):0.0117);
[572] tree 't572'=[&R]
(P_sp_GM01:0.02133,(P_dispersa:0.0114,(P_wallisii:0.01571,(P_eucrina:0.02651,(P_rodasii:0.00262,P_rwandensis:0.007):
0.02181):0.01891):0.01271):0.01238,((P_sp_At-
9b:0.00916,P_cypripedii:0.00825):0.01047,((P_sp_A4:0.06276,(E_pyrifoliae:0.03498,E_tasmaniensis:0.01678):0.05223):0
.02564,((P_ananatis:0.00509,(P_allii:0.0051,(P_s_stewartii:0.0049,P_s_indologenes:0.00241):0.00965):0.00506):0.04511
,(P_conspicua:0.00252,(((P_anthophila:0.00976,(P_deleyi:0.0146,P_vagans:5.4E-
4):0.00482):0.00347,P_sp_aB:0.00879):0.00244,P_agglomerans:0.00627):0.01348,P_brenneri:0.00503):0.00227):0.02175):0.
02892):0.01012,((E_billingiae:0.07558,(T_ptyseos:0.01053,(T_sp_NML_06:0.06054,T_morbirosei:0.05398):0.02419):0.09344
):0.07806,P_septica:0.03457):0.02189):0.01783):0.00973);
[573] tree 't573'=[&R]
((P_deleyi:0.00445,(P_sp_aB:0.00912,P_agglomerans:0.00444):0.00899):0.00446,(P_anthophila:0.00886,P_vagans:5.4E-
4):0.00443,(((P_sp_At-9b:5.5E-4,P_cypripedii:0.00442):5.4E-
4,((P_eucrina:0.02252,(P_dispersa:0.00432,((P_rodasii:0.0,P_rwandensis:0.0):0.01335,(P_wallisii:0.00877,P_sp_GM01:0.
00441):0.00444):5.5E-
4):0.00878):0.01848,P_septica:0.04993):0.0089):0.02016,(E_billingiae:0.03319,(P_sp_A4:0.05731,(E_pyrifoliae:0.00475,
E_tasmaniensis:0.0128):0.0523):0.01659):0.01386):0.02029,((T_sp_NML_06:0.05585,(T_morbirosei:0.08995,T_ptyseos:0.044
98):0.01202):0.15077,(P_ananatis:0.00895,(P_allii:0.0,P_s_stewartii:0.0,P_s_indologenes:0.0):5.4E-
4):0.01162):0.00457):0.01106,(P_brenneri:0.00448,P_conspicua:0.00443):0.0042):5.5E-4);
[574] tree 't574'=[&R]
(((T_morbirosei:0.02184,(T_sp_NML_06:0.03362,T_ptyseos:0.01825):0.01981):0.03999,(E_billingiae:0.04401,(E_pyrifolia
e:0.00626,E_tasmaniensis:0.00598):0.03762):0.01857):0.02658,((P_ananatis:5.4E-
4,(P_allii:0.01224,(P_s_indologenes:5.5E-
4,P_s_stewartii:0.00201):0.00199):0.00202):0.01613,(((P_sp_A4:0.01708,(P_rwandensis:0.10074,P_rodasii:0.00828):0.018
44):0.01777,(P_sp_At-9b:5.5E-
4,P_cypripedii:0.01605):0.00399):0.01054,(P_wallisii:0.00845,(P_dispersa:0.00677,(P_eucrina:0.01941,P_septica:0.008
74):0.00523):0.00723):0.00887,P_sp_GM01:0.02343):0.00584):0.01963):0.005):0.00337,(P_sp_aB:5.5E-
4,((P_conspicua:0.00361,P_brenneri:0.00166):0.00275,P_agglomerans:0.00398):5.5E-4):5.5E-
4,(P_deleyi:0.00399,(P_anthophila:0.00699,P_vagans:0.00528):0.00186):0.00198);
[575] tree 't575'=[&R] ((P_anthophila:0.01193,((P_brenneri:0.00496,P_conspicua:5.5E-
4):0.01009,((P_allii:0.01018,(P_s_indologenes:0.0,P_s_stewartii:0.0):0.00742):0.00235,((P_sp_At-
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9b:0.00963,P\_cyprapedii:5.4E-4):0.01696,((P\_sp\_A4:0.0368,(E\_pyriifoliae:5.5E-4,E\_tasmaniensis:0.0024):0.03929,(E\_billingiae:0.09942,(T\_morbirosei:0.03587,(T\_sp\_NML\_06:0.05561,T\_ptyseos:0.05605):0.00714):0.06946):0.03387):0.00887):0.01853,(P\_eucrinea:0.02906,(P\_dispersa:0.0099,P\_wallisii:0.00486):0.00688):0.00503):0.00266):0.00795,(P\_septica:0.03658,(P\_sp\_GM01:0.01131,(P\_rodasii:0.00589,P\_rwandensis:0.00644):0.01503):0.00843):0.01204):0.00579):0.00247):0.00567):0.0026,(P\_vagans:0.00739,(P\_sp\_aB:0.00495,P\_agglomerans:5.5E-4):5.5E-4):0.00297,(P\_ananatis:0.00765,P\_deleyi:0.01023):0.00428);

[576] tree 't576'=[&R] (P\_sp\_aB:0.00453,(P\_deleyi:0.00445,((P\_brenneri:5.5E-4,((P\_s\_stewartii:0.00229,P\_s\_indologenes:5.5E-4):5.5E-4,(P\_ananatis:0.0023,P\_allii:0.00228):0.00229):0.00693,P\_conspicua:0.00229):5.4E-4):0.00447,(P\_anthophila:0.00214,((P\_sp\_At-9b:0.00449,P\_cyprapedii:5.4E-4):0.00409,(P\_sp\_A4:0.03215,(P\_septica:0.02003,(E\_billingiae:0.02188,(E\_pyriifoliae:0.01164,E\_tasmaniensis:0.00974):0.03066,(T\_morbirosei:0.02,(T\_ptyseos:0.02574,T\_sp\_NML\_06:0.02632):0.01392):0.02556):0.00628):0.00582):0.01383):0.00788):0.00638,((P\_eucrinea:0.0161,P\_wallisii:0.00418):0.00509,((P\_rodasii:0.0,P\_rwandensis:0.0):0.0051,P\_sp\_GM01:0.01611):0.0042):0.00129,P\_dispersa:0.00334):0.00531):0.01971):5.4E-4):0.00231):0.00241,(P\_agglomerans:5.5E-4,P\_vagans:0.00229):5.5E-4);

[577] tree 't577'=[&R] (((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00119):0.00266,(P\_allii:0.01447,P\_ananatis:0.00125):0.00576):0.01543,(P\_septica:0.02406,((T\_morbirosei:0.0317,(T\_sp\_NML\_06:0.04819,T\_ptyseos:0.04071):0.01478):0.04468,(E\_billingiae:0.03584,(E\_pyriifoliae:0.0106,E\_tasmaniensis:0.01763):0.02173,((P\_sp\_At-9b:0.00962,P\_cyprapedii:0.00668):0.00979,(P\_sp\_GM01:0.01598,((P\_rodasii:0.00892,(P\_sp\_A4:0.02242,P\_rwandensis:0.01136):0.00222):0.00506,(P\_eucrinea:0.02986,(P\_wallisii:0.0144,P\_dispersa:0.01035):0.0098):0.00974):0.00626):0.01164):0.02155):0.0237):0.00973):0.01493):0.00797):0.01934,(P\_brenneri:0.00658,P\_conspicua:0.00327):0.00632,(P\_anthophila:0.00665,(P\_vagans:0.00647,(P\_deleyi:0.01094,(P\_agglomerans:0.01084,P\_sp\_aB:0.00466):0.00481):0.00174):0.00361):0.00508);

[578] tree 't578'=[&R] (P\_rwandensis:0.03569,P\_rodasii:0.03905,(P\_wallisii:0.01405,(P\_sp\_GM01:0.02106,((P\_sp\_At-9b:0.04127,P\_cyprapedii:0.0104):0.03538,(P\_eucrinea:0.07088,(P\_dispersa:0.02591,(P\_septica:0.11364,((T\_morbirosei:0.14262,(T\_ptyseos:0.09701,T\_sp\_NML\_06:0.07319):0.17674):0.2691,((E\_pyriifoliae:0.04167,E\_tasmaniensis:0.04826):0.12303,(E\_billingiae:0.02109,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.04086,(P\_allii:0.03109,P\_ananatis:5.2E-4):5.5E-4):0.25869):0.06961):0.02938):0.06472,(P\_sp\_A4:0.05057,((P\_brenneri:0.0,P\_conspicua:0.0):0.00858,((P\_sp\_aB:0.01001,(P\_agglomerans:0.0,P\_vagans:0.0):5.5E-4):0.0101,(P\_anthophila:0.01005,P\_deleyi:0.01002):5.3E-4):0.02185):0.12155):0.0445):0.02497):0.0585):0.02092):0.01635):0.03663):0.02903):0.01958);

[579] tree 't579'=[&R] (P\_septica:0.03813,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.02432,(P\_allii:0.01187,P\_ananatis:5.5E-4):5.4E-4):0.02306,(((P\_sp\_A4:0.06835,(T\_ptyseos:0.08344,(T\_sp\_NML\_06:0.19456,T\_morbirosei:0.06135):0.03216):0.34632):0.04664,((E\_billingiae:0.04055,(E\_pyriifoliae:0.04831,E\_tasmaniensis:0.1688):0.01207):0.05611,(P\_sp\_At-9b:0.0,P\_cyprapedii:0.0):0.01156):0.01307):0.01098,P\_eucrinea:0.05069):0.01209,((P\_rwandensis:0.01187,((P\_wallisii:0.0,P\_dispersa:0.0):0.01246,(P\_rodasii:0.0,P\_sp\_GM01:0.0):5.5E-4):0.01188):5.5E-4,((P\_agglomerans:0.0,P\_vagans:0.0,P\_sp\_aB:0.0):0.02373,((P\_anthophila:0.0,P\_brenneri:0.0):5.5E-4,(P\_conspicua:0.01199,P\_deleyi:0.01186):5.5E-4):5.5E-4):0.02403):5.5E-4):0.01352);

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[580] tree 't580'=[&R]
(P_sp_A4:0.05539,((E_pyrifoliae:0.0157,E_tasmaniensis:0.01524):0.07978,(E_billingiae:0.06691,(T_morbirosei:0.01936,(
T_ptyseos:0.008,T_sp_NML_06:0.0284):0.04397):0.06462):0.01022):0.03207,(((P_sp_GM01:0.00619,(P_septica:0.02263,(P_
anthophila:0.00387,(P_brenneri:0.0,P_conspicua:0.0):0.00589,(P_agglomerans:5.5E-
4,(P_vagans:0.00601,P_sp_aB:0.00587):0.00593):0.0059,P_deleyi:0.00588):5.3E-
4):0.00799):0.01961,(P_s_indologenes:0.0,P_s_stewartii:0.0):0.01719,(P_allii:0.01903,P_ananatis:0.00563):0.01964):0
.01392):0.03523):0.01846,(P_sp_At-
9b:0.02457,P_cyprapedii:0.01141):0.00933):0.02048):0.00575,(P_rodasii:0.00579,P_rwandensis:5.4E-
4):0.00613):0.00827,(P_eucrina:0.02486,(P_dispersa:0.01671,P_wallisii:0.00845):0.0108):0.0054):0.00917);
[581] tree 't581'=[&R]
(P_anthophila:0.01726,P_agglomerans:0.00691,(P_deleyi:0.01999,((((T_sp_NML_06:0.14989,(T_morbirosei:0.15392,T_ptys
eos:0.1521):0.06702):0.23498,P_sp_A4:0.07058):0.02464,(E_billingiae:0.06822,(E_pyrifoliae:0.03454,E_tasmaniensis:0.
02218):0.0804):0.05869,(P_sp_At-
9b:0.01051,P_cyprapedii:0.01824):0.01788,(P_dispersa:0.02603,(P_wallisii:0.02042,(P_sp_GM01:0.02035,(P_rodasii:0.00
787,P_rwandensis:0.00425):0.01739):0.01996):0.00974):0.00623,P_eucrina:0.07383):0.00872):0.02619):0.01757):0.01527,(
P_septica:0.05233,(P_s_indologenes:5.5E-
4,P_s_stewartii:0.00403):0.02735,(P_allii:0.0127,P_ananatis:0.00965):0.01313):0.0353):0.02293):0.03297,(P_brenneri:0
.01023,P_conspicua:0.01191):0.007):0.01085):0.00752,(P_sp_aB:0.01273,P_vagans:0.0073):0.0041):0.00397);
[582] tree 't582'=[&R] (P_sp_GM01:0.03555,(P_sp_At-
9b:0.0,P_cyprapedii:0.0):0.0319,(P_dispersa:0.03122,P_wallisii:0.03258):0.01092,(P_rodasii:0.01991,P_rwandensis:0.0
313):5.4E-
4):0.03179):0.03248,(((E_billingiae:0.11564,(E_pyrifoliae:0.07078,E_tasmaniensis:0.09764):0.18237):0.15992,P_eucrina
:5.4E-4):0.06302,(((P_sp_A4:0.12304,(((P_ananatis:0.05034,(P_allii:0.03253,(P_s_indologenes:5.5E-
4,P_s_stewartii:0.01607):0.05405):5.4E-4):0.05947,P_brenneri:0.33109):0.00923,(P_sp_aB:5.5E-
4,(P_anthophila:0.0,P_deleyi:0.0):0.01618,(P_vagans:0.0,P_agglomerans:0.0):5.4E-
4):0.01579):0.01584):0.03235,P_conspicua:5.4E-
4):0.04761):0.04177,(T_morbirosei:0.15246,(T_sp_NML_06:0.20268,T_ptyseos:0.07616):0.04337):0.09327,P_septica:0.0773
5):0.08113):0.03639):0.02028);
[583] tree 't583'=[&R]
(P_anthophila:0.01374,(((E_billingiae:0.00266,(E_pyrifoliae:0.02361,E_tasmaniensis:0.03799):0.03415):0.07414,(((P_se
ptica:0.04048,(((P_wallisii:0.00592,(P_sp_GM01:0.0079,(P_rodasii:0.00442,P_rwandensis:5.5E-
4):0.00673):0.00675):0.00855,(P_dispersa:5.4E-4,P_eucrina:0.01342):5.5E-4):0.01764,(P_sp_At-
9b:0.01364,P_cyprapedii:5.4E-4):0.00425):0.00863):0.01387,(P_sp_A4:0.02643,(T_morbirosei:5.3E-
4,(T_sp_NML_06:0.08699,T_ptyseos:0.03598):0.05506):0.08349):0.02211):0.01394,(P_s_indologenes:0.0,P_s_stewartii:0.0
):0.0044,(P_allii:0.00438,P_ananatis:0.0044):0.00447):0.02646):0.00532):0.00947,P_deleyi:0.01347):5.5E-
4,(P_vagans:0.00451,(P_brenneri:5.5E-
4,P_conspicua:0.00444):0.00449):0.00449,(P_sp_aB:0.01768,P_agglomerans:0.00231):0.00247):0.00448);
[584] tree 't584'=[&R] (P_sp_At-9b:0.05812,(P_dispersa:0.06641,((P_septica:0.07338,(P_brenneri:5.5E-
4,((P_vagans:0.02802,(P_sp_aB:0.02844,P_agglomerans:0.00895):0.00912):5.4E-
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4,(P\_anthophila:0.04757,P\_deleyi:0.04551):5.4E-4):0.0773,P\_conspicua:0.0189):0.00921):0.03786,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.04892,(P\_allii:0.0278,P\_ananatis:5.5E-4):0.02584):0.06087):0.01954):0.03649,(P\_sp\_A4:0.11725,((T\_morbirosei:0.15628,(T\_sp\_NML\_06:0.35281,T\_ptyseos:0.16343):0.10934):0.29462,(E\_billingiae:0.044,(E\_pyrifoliae:0.04995,E\_tasmaniensis:0.08734):0.09522):0.08168):0.02698):0.0284):0.02745):0.00978,(P\_cyprapedii:0.00933,((P\_eucrina:0.09059,P\_wallisii:0.00808):0.01929,(P\_sp\_GM01:0.05309,(P\_rodasii:0.0422,P\_rwandensis:0.00663):0.05016):0.02261):0.01025):5.5E-4);

[585] tree 't585'=[&R] ((P\_sp\_At-9b:0.03103,P\_cyprapedii:0.06218):0.06736,(P\_sp\_GM01:0.0608,((P\_rodasii:0.03149,P\_rwandensis:0.05051):0.01399,(P\_dispersa:0.04183,(P\_eucrina:0.13517,P\_wallisii:0.03136):0.00529):0.02077):0.03469):0.04106):0.05631,(P\_septica:0.12088,(P\_sp\_A4:0.14896,(((P\_deleyi:0.10036,((P\_sp\_aB:0.0443,P\_anthophila:0.04538):6.3E-4,P\_agglomerans:0.01971):5.4E-4,P\_vagans:0.05022):0.00984):0.05349,P\_conspicua:0.04288):0.01197,P\_brenneri:0.01839):0.0937,(P\_s\_indologenes:0.00628,P\_s\_stewartii:5.5E-4):0.08887,(P\_ananatis:0.0339,P\_allii:0.07371):0.02844):0.04713):0.04662):0.01907):0.04113,((T\_morbirosei:0.13035,(T\_sp\_NML\_06:0.14398,T\_ptyseos:0.11475):0.05177):0.13671,(E\_billingiae:0.16367,(E\_pyrifoliae:0.05595,E\_tasmaniensis:0.05531):0.09502):0.04807):0.0275);

[586] tree 't586'=[&R] ((P\_deleyi:0.01113,(P\_anthophila:0.00366,P\_sp\_aB:5.4E-4):0.00371):5.4E-4,P\_vagans:5.5E-4,(((P\_brenneri:5.4E-4,P\_conspicua:0.00736):0.0115,((P\_septica:0.03749,((E\_billingiae:0.04255,(E\_pyrifoliae:0.02087,E\_tasmaniensis:0.01295):0.03328):0.03025,(P\_sp\_A4:0.05789,((T\_morbirosei:0.02595,(T\_ptyseos:0.03026,T\_sp\_NML\_06:0.02357):0.01729):0.08509,(P\_eucrina:0.05048,(P\_dispersa:0.01782,((P\_sp\_GM01:0.01885,(P\_rodasii:0.02727,P\_rwandensis:0.00371):0.02698):0.01572,(P\_sp\_At-9b:0.0052,P\_cyprapedii:0.02117):0.01109):0.01595,P\_wallisii:0.01346):0.00297):0.01041):0.02165):0.01119):0.00655):0.01733):0.04429,((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00375):5.4E-4,(P\_ananatis:5.5E-4,P\_allii:0.00747):0.00374):0.02677):0.00371):0.01524,P\_agglomerans:0.00368):5.4E-4);

[587] tree 't587'=[&R] ((((((T\_morbirosei:5.4E-4,(T\_ptyseos:0.0,T\_sp\_NML\_06:0.0):0.00658):0.01314,(P\_septica:0.00678,P\_cyprapedii:5.4E-4):0.00597):5.5E-4,P\_sp\_At-9b:5.4E-4):0.00652,P\_dispersa:5.4E-4):5.5E-4,P\_eucrina:0.00663):0.01273,((P\_allii:0.0,P\_ananatis:0.0,P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.4E-4,(E\_billingiae:0.02082,(E\_pyrifoliae:5.3E-4,E\_tasmaniensis:0.00666):0.00886):0.01792):0.01397,((P\_brenneri:0.0,P\_conspicua:0.0):5.4E-4,((P\_vagans:0.0,P\_anthophila:0.0,P\_sp\_aB:0.0):5.5E-4,(P\_deleyi:0.00651,P\_agglomerans:0.0065):5.5E-4):5.4E-4,(P\_wallisii:0.01326,(P\_sp\_A4:0.00671,((P\_rodasii:0.0,P\_rwandensis:0.0):0.00677,P\_sp\_GM01:5.4E-4):0.0067):5.3E-4):0.00704):0.00656):5.4E-4);

[588] tree 't588'=[&R] (P\_wallisii:0.02885,(P\_rodasii:0.03164,(P\_sp\_GM01:0.03825,P\_rwandensis:0.03437):6.0E-4):0.01838,(P\_dispersa:0.08598,((P\_sp\_At-9b:0.02785,P\_cyprapedii:0.04356):0.05271,(P\_eucrina:0.10144,((E\_pyrifoliae:0.07313,E\_tasmaniensis:0.0666):0.11463,(E\_billingiae:0.09715,(T\_sp\_NML\_06:0.16821,(T\_morbirosei:0.13635,T\_ptyseos:0.09778):0.05073):0.20533):0.04074):0.06662,(P\_septica:0.07436,(P\_sp\_A4:0.12877,((P\_brenneri:0.02361,P\_conspicua:0.03625):0.02931,(P\_anthophila:0.06448,(P\_va

gans:0.02661,(P\_agglomerans:0.0288,(P\_deleyi:0.02747,P\_sp\_aB:0.01388):0.0117):0.00518):0.0185):0.00887):0.06303,(P\_allii:0.01312,(P\_ananatis:0.03006,(P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00451):0.04264):0.01349):0.07422):0.01535):0.00825):0.03253):0.05707):0.01573):0.00978):0.00361);

[589] tree 't589'=[&R]  
( (P\_wallisii:0.02631,(P\_dispersa:0.04858,(P\_sp\_GM01:0.01157,(P\_rwandensis:0.01923,(P\_rodasii:0.00423,(P\_sp\_At-9b:0.01328,P\_cyprapedii:0.00318):0.04059):5.3E-4):0.01249):0.02197):0.01933):0.01978,((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00382):0.04284,(P\_allii:0.00339,P\_ananatis:0.03675):0.03169):0.10501,(P\_septica:0.10782,((((P\_anthophila:0.0195,P\_deleyi:0.04459):0.00907,(P\_sp\_aB:0.02747,P\_vagans:0.00341):0.01513):0.00619,P\_agglomerans:0.01833):0.03774,(P\_brenneri:0.03088,P\_conspicua:0.03255):0.02186):0.05239,(P\_eucrina:0.04696,(T\_sp\_NML\_06:0.22348,(T\_morbirosei:0.09441,T\_ptyseos:0.20917):0.16295):0.41937,(E\_billingiae:0.12356,(E\_pyriifoliae:0.04021,E\_tasmaniensis:0.01356):0.03178):0.03263):0.05696):0.03482):0.01005,P\_sp\_A4:0.09991):0.02121):0.01626);

[590] tree 't590'=[&R] ((P\_sp\_GM01:0.0176,P\_rodasii:0.01742):5.5E-4,(P\_sp\_At-9b:0.0,P\_wallisii:0.0):5.5E-4,(((P\_dispersa:5.3E-4,(P\_sp\_A4:0.0086,(P\_ananatis:0.00861,((P\_brenneri:0.0,P\_conspicua:0.0):5.3E-4,(P\_agglomerans:5.5E-4,(P\_deleyi:0.0,P\_vagans:0.0,P\_sp\_aB:0.0):0.00862):0.00853):0.0084,(P\_eucrina:5.3E-4,((P\_allii:0.0,P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00855,P\_anthophila:0.00877):0.00856):5.3E-4):0.00835):5.4E-4):0.00866):0.00865,(P\_cyprapedii:5.5E-4,(P\_septica:5.3E-4,(E\_pyriifoliae:5.3E-4,E\_tasmaniensis:0.00827):0.04191,(E\_billingiae:0.02531,(T\_morbirosei:5.4E-4,(T\_sp\_NML\_06:0.04337,T\_ptyseos:0.03679):0.01707):0.05679):0.02635):0.01347):0.01786):0.00822):5.5E-4,P\_rwandensis:0.00871):5.5E-4);

[591] tree 't591'=[&R] (P\_sp\_At-9b:0.00886,(P\_sp\_GM01:0.02191,(((E\_billingiae:0.06921,(E\_pyriifoliae:0.02361,E\_tasmaniensis:0.05108):0.04884):0.02286,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.03117,(P\_septica:0.05081,((P\_deleyi:0.01969,(P\_anthophila:0.00671,(P\_agglomerans:0.00873,(P\_sp\_aB:0.01242,P\_vagans:0.00451):0.00412):0.01018):0.01033):0.01068,(P\_conspicua:0.02366,P\_brenneri:0.00728):0.02125):0.02462,(P\_allii:0.01146,P\_ananatis:0.01679):0.00957):0.01332):0.00784):0.0159):0.00708,(P\_eucrina:0.09208,(T\_morbirosei:0.1031,(T\_ptyseos:0.06416,T\_sp\_NML\_06:0.04256):0.01161):0.07442):0.01506):0.00677,P\_sp\_A4:0.09519):0.02001):0.00423,(P\_cyprapedii:0.00884,(P\_rodasii:0.00869,P\_rwandensis:0.00851):5.4E-4,(P\_dispersa:0.0225,P\_wallisii:0.01443):0.01556):0.00428):0.00349);

[592] tree 't592'=[&R]  
(P\_anthophila:0.01236,(P\_conspicua:0.00737,(P\_brenneri:0.00693,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.02419,(P\_ananatis:0.01193,P\_allii:0.01613):0.00298):0.04313,((P\_sp\_At-9b:0.01897,P\_cyprapedii:0.02412):0.01545,(P\_eucrina:0.067,(P\_dispersa:0.01779,P\_wallisii:0.02584):0.00416):0.0239,(P\_sp\_GM01:0.03495,(P\_rwandensis:0.01033,P\_rodasii:0.04078):0.0055):0.01619):0.02454):0.06965,(P\_sp\_A4:0.13111,(E\_billingiae:0.09851,(E\_pyriifoliae:0.05054,E\_tasmaniensis:0.048):0.12195):0.48782,(T\_morbirosei:0.10994,(T\_sp\_NML\_06:0.15864,T\_ptyseos:0.07864):0.05439):0.15094):0.06707):0.07068,P\_septica:0.04474):0.03048):0.01896):0.02285):0.003):0.01727,((P\_deleyi:0.00853,P\_vagans:0.00815):0.00156,(P\_sp\_aB:0.01069,P\_agglomerans:0.00424):0.00363):0.00241);

[593] tree 't593'=[&R] (P\_deleyi:0.03429,P\_agglomerans:5.5E-4,((P\_anthophila:0.00838,(P\_conspicua:0.0393,(P\_brenneri:5.5E-4,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.04192,(P\_allii:0.02648,P\_ananatis:0.01506):0.11272):0.18807):0.01211):0.04704,(P\_septica:0.05234,(P\_sp\_At-

9b:0.02946,(P\_cyprapedii:0.07351,(P\_eucrinea:0.07013,(P\_wallisii:0.02644,((P\_rwandensis:0.01701,(P\_sp\_GM01:0.0085,P\_r  
odasii:0.00848):0.00829):0.03392,P\_dispersa:5.5E-4):5.5E-  
4):0.01817):0.0253):0.01809):0.05586):0.03798,(P\_sp\_A4:0.1195,((E\_billingiae:0.25154,(E\_pyriifoliae:0.03233,E\_tasmani  
ensis:5.4E-  
4):0.12215):0.18557,(T\_morbirosei:0.12142,(T\_ptyseos:0.06257,T\_sp\_NML\_06:0.2154):0.05475):0.0737):0.09134):0.04081):  
0.01485):0.01554):0.00853,(P\_sp\_aB:0.0,P\_vagans:0.0):0.00834):5.3E-4);  
[594] tree 't594'=[&R] (P\_sp\_GM01:5.4E-4,P\_sp\_A4:0.07137,(((P\_dispersa:0.0,P\_wallisii:0.0):0.01533,(P\_sp\_At-  
9b:0.02262,P\_rodasii:0.0131):0.00265):0.00755,P\_septica:0.04738):5.4E-  
4,(P\_rwandensis:0.0076,((P\_eucrinea:0.03869,(T\_morbirosei:0.01406,(T\_sp\_NML\_06:0.07576,T\_ptyseos:0.01647):0.03514):0.  
11468):0.04162,(P\_cyprapedii:5.4E-4,((P\_allii:0.00765,(P\_ananatis:0.0,P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.4E-  
4):0.02535,((P\_conspicua:0.0,P\_sp\_aB:0.0,P\_agglomerans:0.0,P\_deleyi:0.0,P\_brenneri:0.0):0.00132,(P\_vagans:0.00763,P\_  
anthophila:5.5E-  
4):0.00669):0.01324):0.00841,(E\_billingiae:0.03911,(E\_pyriifoliae:0.04382,E\_tasmaniensis:0.0033):0.04302):0.01704):0.  
02437):0.01478):5.4E-4):0.00763):0.00751);  
[595] tree 't595'=[&R] (P\_sp\_GM01:0.02624,(((P\_sp\_At-9b:0.00711,P\_cyprapedii:5.5E-  
4):0.00385,((T\_morbirosei:0.02633,(T\_ptyseos:0.03068,T\_sp\_NML\_06:0.0104):0.02863):0.04711,(P\_septica:0.04188,(E\_bill  
ingiae:0.03038,(E\_pyriifoliae:0.02418,E\_tasmaniensis:0.00803):0.01861):0.03809):0.01436):0.01015):0.02183,(P\_dispersa  
:0.00622,(P\_wallisii:0.02151,(P\_rodasii:0.00704,P\_rwandensis:5.4E-4):0.00823):0.00375):0.0108):5.4E-  
4,(P\_eucrinea:5.5E-4,((P\_sp\_A4:0.02534,(P\_ananatis:0.0032,(P\_allii:0.01059,(P\_s\_indologenes:5.5E-  
4,P\_s\_stewartii:0.00352):0.00352):5.4E-4):0.01469):0.00773,(P\_anthophila:0.00371,(P\_deleyi:5.4E-4,((P\_brenneri:5.5E-  
4,(P\_conspicua:0.00715,P\_agglomerans:0.00356):5.4E-4):5.4E-  
4,(P\_sp\_aB:0.00717,P\_vagans:0.00357):0.00715):0.0104):0.01074):0.00702):0.01056):0.01437);  
[596] tree 't596'=[&R] (P\_agglomerans:0.00829,P\_vagans:0.00818,(P\_anthophila:5.5E-  
4,(((P\_deleyi:0.01223,P\_sp\_aB:5.5E-4):5.4E-4,((P\_s\_indologenes:5.5E-  
4,P\_s\_stewartii:0.00831):0.01696,(P\_ananatis:0.00396,(P\_allii:0.00412,(P\_sp\_A4:0.04198,(((P\_dispersa:5.5E-  
4,P\_wallisii:0.00807):0.0161,((P\_eucrinea:0.02491,P\_sp\_GM01:5.5E-  
4):0.00412,(P\_rwandensis:0.01547,P\_rodasii:0.00719):0.01033):0.00409):0.02919,P\_cyprapedii:5.3E-4):0.00388,P\_sp\_At-  
9b:0.01298):0.01863,(P\_septica:0.04243,((E\_billingiae:0.03468,(E\_pyriifoliae:0.01935,E\_tasmaniensis:0.0091):0.03994):  
0.02532,(T\_morbirosei:0.06048,(T\_ptyseos:5.4E-  
4,T\_sp\_NML\_06:0.02034):0.04215):0.02112):0.03214):0.00367):0.04025):5.4E-  
4):0.00813):0.01256):0.00388,(P\_brenneri:0.00808,P\_conspicua:5.3E-4):0.02624):0.00424):0.00412);  
[597] tree 't597'=[&R] (((P\_sp\_At-  
9b:0.0,P\_cyprapedii:0.0):0.00457,(((P\_agglomerans:0.0,P\_sp\_aB:0.0):0.00457,P\_vagans:5.5E-  
4):0.00459,(((P\_deleyi:5.4E-4,E\_billingiae:0.03307):5.4E-4,(P\_conspicua:0.00445,P\_anthophila:5.3E-  
4):0.00458):0.00445,P\_brenneri:5.5E-  
4):0.00458):0.00468,((P\_allii:0.0,P\_ananatis:0.0):0.00917,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.3E-  
4):0.01861):0.00455):5.5E-4,P\_dispersa:5.5E-  
4):0.00463,P\_wallisii:0.00461,(P\_eucrinea:0.01371,(P\_sp\_A4:0.00543,((P\_rodasii:0.00915,P\_sp\_GM01:5.4E-  
4):0.01803,((P\_septica:0.01097,(T\_morbirosei:0.03065,((T\_ptyseos:0.01283,T\_sp\_NML\_06:0.01141):0.02134,(E\_pyriifoliae:

0.1639,E\_tasmaniensis:0.01996):0.03974):0.00499):0.00558):0.01378,P\_rwandensis:0.00944):0.00508):0.0092):0.00852):5.4E-4);

[598] tree 't598'=[&R] ((P\_sp\_aB:0.00684,(P\_vagans:5.5E-4,P\_agglomerans:0.00683):5.4E-4):0.00341,(P\_dispersa:0.01397,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01107,(P\_allii:0.01012,P\_ananatis:5.5E-4):0.00688):0.00893,(P\_septica:0.03559,(((P\_sp\_At-9b:0.00682,P\_cypripedii:5.4E-4):0.02771,(P\_sp\_A4:0.03502,(P\_eucrina:0.01042,(((P\_wallisii:0.01376,P\_sp\_GM01:0.01741):0.0107,P\_rodasii:0.01066):0.01431,P\_rwandensis:0.01368):0.01435):0.007):0.02008):0.01705,((T\_morbirosei:0.03158,(T\_ptyseos:0.01952,T\_sp\_NML\_06:0.02472):0.0136):0.17498,(E\_billingiae:0.02966,(E\_pyrifoliae:0.0054,E\_tasmaniensis:0.00859):0.0253):0.01847):0.03027):0.01662):0.00996):0.01307):0.00686,((P\_deleyi:0.0034,(P\_brenneri:0.00682,P\_conspicua:5.5E-4):0.0034):0.00343,P\_anthophila:5.4E-4):5.5E-4);

[599] tree 't599'=[&R] ((P\_sp\_At-9b:5.5E-4,((E\_tasmaniensis:5.4E-4,(E\_pyrifoliae:5.5E-4,(T\_ptyseos:0.00821,(T\_morbirosei:0.01225,T\_sp\_NML\_06:5.4E-4):0.01652):0.04146):0.00401):0.0253,((E\_billingiae:0.02457,P\_anthophila:5.5E-4):0.00405,(P\_deleyi:5.3E-4,((P\_brenneri:0.0,P\_conspicua:0.0):0.00251,(P\_agglomerans:5.5E-4,(P\_vagans:0.00404,P\_sp\_aB:0.00406):0.00407):0.0115):0.00219,((P\_ananatis:0.0,P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.4E-4,P\_allii:0.00395):0.00811):5.5E-4):5.5E-4):0.00793):5.4E-4):5.5E-4,((P\_sp\_GM01:0.01065,(P\_rodasii:5.4E-4,P\_rwandensis:0.0041):0.00597):0.00798,P\_cypripedii:5.4E-4):0.00406,(P\_dispersa:0.00794,(P\_wallisii:0.00431,(P\_sp\_A4:0.00407,(P\_septica:5.5E-4,P\_eucrina:0.00406):0.00407):0.00382):0.00406):5.5E-4);

[600] tree 't600'=[&R] ((P\_deleyi:0.00585,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.04981,(P\_allii:0.01739,P\_ananatis:0.01274):0.00929):0.04327,(P\_conspicua:0.00484,P\_brenneri:5.5E-4):0.00606):0.0105,((P\_septica:0.07057,((P\_sp\_At-9b:0.02231,P\_cypripedii:0.01897):0.00794,((P\_wallisii:0.04171,(P\_sp\_GM01:0.02754,(P\_rodasii:5.5E-4,P\_rwandensis:0.00979):0.02387):0.00606):0.01171,(P\_dispersa:0.02693,P\_eucrina:0.08375):0.0112):0.03354):0.02589,(P\_sp\_A4:0.0899,((T\_sp\_NML\_06:0.12805,(T\_morbirosei:0.17069,T\_ptyseos:0.05897):0.07196):0.09305,(E\_billingiae:0.04452,(E\_pyrifoliae:0.02563,E\_tasmaniensis:0.03542):0.0843):0.06091):0.02475):0.04333):0.04786):0.01781,P\_anthophila:0.01966):0.01253):0.01368):0.01857,P\_sp\_aB:0.00942,(P\_vagans:0.01941,P\_agglomerans:0.00481):5.4E-4);

[601] tree 't601'=[&R] ((P\_dispersa:0.00924,(P\_sp\_A4:0.06183,(((P\_sp\_aB:0.01275,(P\_agglomerans:0.00429,(P\_vagans:0.0,P\_deleyi:0.0,P\_anthophila:0.0):5.4E-4):5.4E-4):0.01701,(P\_brenneri:0.0043,(((P\_allii:0.0,P\_ananatis:0.0):5.5E-4,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00428):0.02605,P\_conspicua:0.00555):0.00311):0.00106):0.05173,(P\_septica:0.02923,((T\_sp\_NML\_06:0.15872,(T\_morbirosei:0.10051,T\_ptyseos:0.03571):0.04704):0.1674,(E\_billingiae:0.04374,(E\_pyrifoliae:0.03143,E\_tasmaniensis:0.00541):0.05094):0.03128):0.04454):0.0041):0.01574):0.01382):0.01732,(P\_wallisii:0.02628,(P\_eucrina:0.01878,(P\_rodasii:0.00433,P\_rwandensis:5.5E-4):0.00864):0.00448):5.5E-4,((P\_sp\_At-9b:0.00441,P\_cypripedii:0.00867):0.00907,P\_sp\_GM01:0.01364):0.00408);

[602] tree 't602'=[&R] (P\_agglomerans:0.00618,P\_sp\_aB:0.01245,(P\_deleyi:0.00619,(P\_vagans:5.5E-4,(P\_anthophila:0.00824,((P\_conspicua:5.5E-4,(E\_billingiae:0.07476,(E\_pyrifoliae:0.07075,E\_tasmaniensis:0.04371):0.09272):0.13539):0.00618,P\_brenneri:5.4E-4):0.01576,((T\_morbirosei:0.05663,(T\_ptyseos:0.03769,T\_sp\_NML\_06:0.12034):0.09641):0.21744,((P\_septica:0.0566,(P\_sp\_

A4:0.07752,(P\_eucrina:0.11354,((P\_rwandensis:0.0395,(P\_dispersa:0.01478,(P\_wallisii:0.0374,(P\_rodasii:0.01578,P\_sp\_GM01:0.03741):0.01777):0.02025):0.00602):0.00636,(P\_cyprapedii:0.01826,P\_sp\_At-9b:0.01947):0.02062):0.03709):0.06963):0.01667):0.02257,((P\_s\_indologenes:5.4E-4,P\_s\_stewartii:0.00632):0.05367,(P\_allii:0.03088,P\_ananatis:0.01862):0.01763):0.09492):0.0137):0.0307):0.01374):0.03699):0.00616):5.4E-4);

[603] tree 't603'=[&R] (P\_deleyi:0.01947,P\_agglomerans:0.00279,(((P\_allii:5.4E-4,((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00222):0.02508,P\_ananatis:0.00674):0.00889):0.04641,((P\_sp\_At-9b:0.01054,P\_cyprapedii:0.01552):0.01114,((E\_billingiae:0.06056,(E\_pyriifoliae:0.0445,E\_tasmaniensis:0.04458):0.08747):0.08838,((T\_sp\_NML\_06:0.07033,(T\_morbirosei:0.10675,T\_ptyseos:0.07178):0.0326):0.18719,P\_eucrina:0.04141):0.03111):0.01451,((P\_sp\_GM01:0.02319,(P\_rodasii:0.01123,P\_rwandensis:0.00211):0.01132):0.00524,(P\_dispersa:0.02166,P\_wallisii:0.02789):0.00333):0.00987):0.01321):0.01874,(P\_sp\_A4:0.08224,P\_septica:0.06685):0.01435):0.01258):0.0364,(P\_anthophila:0.02301,(P\_brenneri:0.00958,P\_conspicua:0.01319):0.01266):0.00435):0.00356,(P\_vagans:0.00829,P\_sp\_aB:0.00429):0.00241):0.00224);

[604] tree 't604'=[&R] ((E\_billingiae:0.0,E\_pyriifoliae:0.0,E\_tasmaniensis:0.0,P\_sp\_At-9b:0.0,P\_vagans:0.0,P\_deleyi:0.0,P\_allii:0.0,P\_ananatis:0.0,P\_anthophila:0.0,P\_brenneri:0.0,P\_conspicua:0.0,P\_cyprapedii:0.0,P\_dispersa:0.0,P\_eucrina:0.0,P\_rodasii:0.0,P\_septica:0.0,P\_sp\_A4:0.0,P\_s\_indologenes:0.0,P\_s\_stewartii:0.0,P\_wallisii:0.0):0.00226,(P\_agglomerans:0.0,P\_rwandensis:0.0,P\_sp\_GM01:0.0,P\_sp\_aB:0.0):0.01795,(T\_morbirosei:0.0,T\_ptyseos:0.0,T\_sp\_NML\_06:0.0):0.01627);

[605] tree 't605'=[&R] (P\_deleyi:0.00392,(P\_sp\_aB:0.00625,(P\_anthophila:0.01258,P\_vagans:0.00125):0.00194):5.5E-4,(P\_agglomerans:0.00142,(((P\_sp\_At-9b:0.00246,P\_cyprapedii:0.02318):0.00749,(((P\_dispersa:0.00495,P\_eucrina:0.02213):0.00419,P\_wallisii:0.00982):0.00417,(P\_sp\_GM01:0.01482,(P\_rodasii:0.00412,P\_rwandensis:0.00846):0.00545):0.01325):0.00936,P\_sp\_A4:0.06125):0.00487):0.0125,((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00248):0.0044,(P\_allii:0.00627,P\_ananatis:0.00364):0.00594):0.03563,(P\_septica:0.01929,((T\_morbirosei:0.03904,(T\_ptyseos:0.04268,T\_sp\_NML\_06:0.03069):0.02537):0.07032,(E\_billingiae:0.03433,(E\_pyriifoliae:0.03101,E\_tasmaniensis:0.02391):0.04719):0.04305):0.02594):0.00797):0.00333):0.0228,(P\_brenneri:0.0033,P\_conspicua:0.00795):0.00276):0.00806):0.00382);

[606] tree 't606'=[&R] (P\_sp\_aB:5.5E-4,P\_vagans:0.00344,((P\_deleyi:0.01045,P\_agglomerans:0.00346):0.00338,(((P\_conspicua:0.00347,P\_brenneri:5.5E-4):0.00371,((P\_eucrina:0.02955,((T\_sp\_NML\_06:0.07213,(T\_morbirosei:0.01629,T\_ptyseos:0.04648):0.02563):0.03947,(E\_billingiae:0.02639,(E\_pyriifoliae:0.01305,E\_tasmaniensis:0.02624):0.05892):0.03511):0.02421):0.00995,(P\_septica:0.01666,(P\_sp\_A4:0.01846,(P\_wallisii:0.01098,(P\_dispersa:5.4E-4,(P\_sp\_At-9b:0.00348,((P\_sp\_GM01:0.01059,(P\_rodasii:0.00831,P\_rwandensis:0.00959):0.00684):0.01046,P\_cyprapedii:0.00688):5.4E-4):0.01022):0.00987):0.01462):0.00709):0.00588):0.01251,((P\_allii:0.01401,P\_ananatis:0.01209):0.02296,(P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00345):0.01175):0.01319):0.01177):0.00689,P\_anthophila:0.00696):0.00342):5.3E-4);

[607] tree 't607'=[&R] ((P\_brenneri:0.0,P\_conspicua:0.0):5.4E-4,(P\_sp\_A4:0.07331,((E\_pyriifoliae:0.03677,E\_tasmaniensis:0.00502):0.01253,E\_billingiae:0.00867):5.4E-4):0.00862,(((P\_wallisii:0.02716,(P\_eucrina:0.0,P\_sp\_GM01:0.0):5.5E-4):0.00872,(P\_cyprapedii:0.00891,(P\_sp\_At-9b:0.0,P\_dispersa:0.0,P\_rodasii:0.0,P\_rwandensis:0.0,P\_septica:0.0):5.5E-4):5.5E-

4):0.00867,((P\_agglomerans:0.0,P\_vagans:0.0,P\_deleyi:0.0,P\_sp\_aB:0.0):0.00864,(P\_anthophila:5.4E-4,((T\_morbirosei:0.02658,(T\_ptyseos:0.0087,T\_sp\_NML\_06:5.5E-4):5.4E-4):0.03648,(P\_allii:0.00872,(P\_ananatis:0.0,P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.3E-4):0.01808):0.01718):5.3E-4):0.00861):5.5E-4);

[608] tree 't608'=[&R]

((P\_allii:0.04127,(P\_ananatis:0.0142,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00432):0.0118):0.01491,((P\_brenneri:0.0,P\_conspicua:0.0):0.02109,(P\_anthophila:0.00371,(P\_deleyi:0.00211,(P\_vagans:5.4E-4,(P\_agglomerans:0.00741,P\_sp\_aB:5.0E-4):0.00368):0.00679):0.00217):0.01698):0.0144):0.00925,(P\_septica:0.03338,(T\_morbirosei:0.02916,(T\_sp\_NML\_06:0.10439,T\_ptyseos:0.02543):0.01327):0.06236):0.01314,(P\_sp\_A4:0.0458,(((P\_sp\_At-9b:0.00533,P\_cyprapedii:0.01376):0.01476,(E\_billingiae:0.09021,(E\_pyrifoliae:0.0242,E\_tasmaniensis:0.03052):0.07261):0.0642,(P\_wallisii:0.01683,(P\_eucrina:0.06669,P\_dispersa:0.01513):0.00929):0.02589):0.00823):0.00455,(P\_rodasii:0.01128,P\_rwandensis:5.4E-4):0.0073):0.00773,P\_sp\_GM01:0.00745):0.00522):0.01184);

[609] tree 't609'=[&R]

((T\_morbirosei:0.12463,(T\_sp\_NML\_06:0.08437,T\_ptyseos:0.02376):0.12343):0.02763,((P\_deleyi:0.0,P\_vagans:0.0,P\_sp\_aB:0.0):5.5E-4,(P\_anthophila:0.02106,P\_agglomerans:0.02117):5.4E-4):5.3E-4):0.04411,(P\_brenneri:5.4E-4,P\_conspicua:0.04556):5.4E-4,((P\_sp\_At-9b:5.5E-4,(P\_cyprapedii:0.04028,P\_sp\_A4:0.05874):0.0117):0.05759,((P\_allii:0.02245,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.06354,P\_ananatis:5.5E-4):0.02072):0.04381,(P\_septica:0.04366,((P\_rodasii:0.01415,P\_rwandensis:0.06441):0.0298,((P\_wallisii:0.02207,P\_sp\_GM01:0.02137):0.0225,(P\_dispersa:5.4E-4,(E\_billingiae:0.04501,(P\_eucrina:0.05579,(E\_pyrifoliae:0.0372,E\_tasmaniensis:0.03346):0.06309):0.05166):0.02901):0.02169):0.00191):0.02195):5.4E-4):0.01169):0.04456);

[610] tree 't610'=[&R]

(P\_vagans:0.00326,(P\_conspicua:0.00222,(P\_brenneri:0.00321,(((P\_wallisii:0.01223,(P\_eucrina:0.01794,P\_dispersa:0.0113):0.00428):0.00513,((P\_rodasii:0.00776,P\_rwandensis:0.00906):0.01241,P\_sp\_GM01:0.0152):0.00286):0.01399,(((P\_sp\_A4:0.03146,((T\_morbirosei:0.0156,(T\_ptyseos:0.01317,T\_sp\_NML\_06:0.01845):0.00858):0.02893,(E\_billingiae:0.02858,(E\_pyrifoliae:0.00927,E\_tasmaniensis:0.0086):0.03088):0.03276):0.00653):0.00689,(P\_septica:0.01374,(P\_sp\_At-9b:0.00643,P\_cyprapedii:0.01046):0.01705):0.00426):0.0093,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00322,(P\_allii:0.0053,P\_ananatis:5.5E-4):0.00105):0.00872):0.00552):0.01759):0.00108):0.0022,(P\_sp\_aB:0.00325,(P\_agglomerans:0.00203,(P\_anthophila:0.00742,P\_deleyi:0.00217):0.00248):0.00121):0.00217);

[611] tree 't611'=[&R]

((P\_deleyi:0.01259,P\_anthophila:5.5E-4):0.00623,P\_vagans:0.00311):5.4E-4,P\_sp\_aB:5.5E-4,(((P\_sp\_A4:0.03147,(P\_septica:0.01151,(P\_eucrina:0.01964,(((E\_billingiae:0.01016,(E\_pyrifoliae:0.00749,E\_tasmaniensis:0.00529):0.03489):0.04201,(T\_morbirosei:0.03015,(T\_ptyseos:0.02144,T\_sp\_NML\_06:0.02033):0.02059):0.03543):0.01509,((P\_cyprapedii:5.5E-4,(P\_sp\_GM01:0.01882,(P\_rwandensis:0.00624,P\_rodasii:0.00312):5.4E-4):0.0063):0.00624,(P\_sp\_At-9b:0.00955,(P\_wallisii:0.00309,P\_dispersa:0.00628):0.00318):0.0031):0.00946):0.0029):0.01221):0.01982):0.00901,(P\_conspicua:5.5E-4,(P\_brenneri:0.00312,((P\_s\_indologenes:5.5E-

4,P\_s\_stewartii:0.00313):0.00313,(P\_allii:0.00316,P\_ananatis:5.5E-4):0.00318):0.01261):5.4E-4):5.4E-4):0.00312,P\_agglomerans:0.00312):5.5E-4);

[612] tree 't612'=[&R]  
( (P\_anthophila:0.04794,P\_deleyi:0.01719):0.01732,(P\_agglomerans:0.01546,P\_sp\_aB:0.01611):5.3E-4,((P\_conspicua:5.4E-4,(P\_brenneri:0.02028,(P\_septica:0.05884,(P\_sp\_A4:0.10228,(P\_sp\_At-9b:0.02146,(P\_eucrina:0.06775,(P\_sp\_GM01:0.01648,(P\_rodasii:0.00789,P\_rwandensis:5.5E-4):5.4E-4):0.00788,(P\_wallisii:0.01593,P\_dispersa:0.02421):5.4E-4):0.01726):0.02403):0.02581,P\_cyprapedii:5.3E-4):0.09951):0.05329,((T\_morbirosei:0.14981,(T\_sp\_NML\_06:0.13958,T\_ptyseos:0.24568):0.08834):0.1806,(E\_billingiae:0.14595,(E\_pyriifoliae:0.10954,E\_tasmaniensis:0.14157):0.16675):0.07176):0.13392,(P\_allii:0.03795,(P\_ananatis:0.04647,(P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00763):0.02001):0.01031):0.08295):0.02026):0.05572):0.03863):0.01157):0.03288,P\_vagans:0.01754):0.00645);

[613] tree 't613'=[&R]  
(P\_septica:0.03091,(E\_billingiae:0.07118,(E\_pyriifoliae:0.04934,E\_tasmaniensis:0.00517):0.01605):0.1262,((T\_morbirosei:0.04134,(T\_ptyseos:0.11778,T\_sp\_NML\_06:0.04069):0.02973):0.37603,((P\_cyprapedii:5.5E-4,(P\_sp\_At-9b:0.0176,(P\_anthophila:0.03307,(P\_vagans:5.4E-4,(P\_agglomerans:0.0,P\_sp\_aB:0.0):0.02591):0.01334,((P\_brenneri:0.0,P\_conspicua:0.0):0.0676,P\_deleyi:0.01248):0.01354):0.02471):0.04784,((P\_allii:5.5E-4,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.07148,P\_ananatis:5.4E-4):0.03914):0.03428,((P\_eucrina:5.5E-4,(P\_rodasii:0.02605,P\_rwandensis:0.0127):0.01257):0.01311,(P\_wallisii:0.02572,P\_sp\_GM01:0.10992):0.01297):0.01122,P\_dispersa:0.06743):0.0223):0.01298):0.01287):0.03602):0.02249,P\_sp\_A4:0.08465):0.01155):0.03394);

[614] tree 't614'=[&R]  
(T\_morbirosei:0.0,T\_ptyseos:0.0,T\_sp\_NML\_06:0.0,P\_septica:0.0,P\_brenneri:0.0,P\_conspicua:0.0,P\_deleyi:0.0,P\_anthophila:0.0,P\_vagans:0.0,P\_sp\_aB:0.0,P\_agglomerans:0.0,P\_s\_indologenes:0.0,P\_s\_stewartii:0.0,P\_allii:0.0,P\_ananatis:0.0,P\_sp\_A4:0.0,P\_rwandensis:0.0,P\_rodasii:0.0,P\_eucrina:0.0,P\_dispersa:0.0,P\_wallisii:0.0,P\_sp\_GM01:0.0,P\_sp\_At-9b:0.0,P\_cyprapedii:0.0,E\_billingiae:0.0,E\_pyriifoliae:0.0,E\_tasmaniensis:0.0);

[615] tree 't615'=[&R]  
( ((P\_wallisii:0.04518,P\_dispersa:0.04681):0.01309,((P\_sp\_GM01:0.01433,(P\_rodasii:0.00847,P\_rwandensis:0.0224):0.03748):0.01646,(P\_sp\_At-9b:0.02015,P\_cyprapedii:0.01983):0.02762):0.01543):0.01649,(P\_eucrina:0.07997,(P\_anthophila:0.01527,(P\_deleyi:0.0208,(P\_conspicua:0.01757,P\_brenneri:0.01401):0.0157,(P\_vagans:0.00763,(P\_agglomerans:0.01699,P\_sp\_aB:0.00581):0.01141):0.00925):0.00489):0.00999):0.01903):0.02425):0.01331,((P\_s\_indologenes:0.00328,P\_s\_stewartii:5.4E-4):0.02361,(P\_allii:0.00971,P\_ananatis:0.0094):0.01109):0.02573,(P\_sp\_A4:0.06543,(P\_septica:0.04544,((T\_morbirosei:0.04777,(T\_sp\_NML\_06:0.1204,T\_ptyseos:0.07775):0.03352):0.14964,(E\_billingiae:0.09572,(E\_pyriifoliae:0.03013,E\_tasmaniensis:0.03243):0.05781):0.03304):0.02923):0.00816):0.00817);

[616] tree 't616'=[&R] (P\_wallisii:0.02734,(P\_eucrina:5.3E-4,(P\_sp\_GM01:0.01269,(P\_rwandensis:0.01281,P\_rodasii:5.5E-4):0.01272):0.02624):0.02627,(P\_dispersa:5.4E-4,((E\_billingiae:0.09358,(E\_pyriifoliae:0.05862,E\_tasmaniensis:0.08648):0.10456):0.06984,((P\_deleyi:0.01294,(P\_vagans:5.4E-

4,(P\_agglomerans:0.0,P\_sp\_aB:0.0):0.01284):0.01284,(P\_anthophila:0.0,P\_brenneri:0.0,P\_conspicua:0.0):0.01277):5.3E-4):0.06494,(P\_ananatis:5.5E-4,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.02553,P\_allii:5.3E-4):0.01249):5.4E-4):0.08449,(P\_septica:0.07031,(P\_sp\_A4:0.0167,(T\_ptyseos:0.0187,(T\_sp\_NML\_06:0.22029,T\_morbirosei:0.05019):0.0432):0.12826):0.05774):0.01472):0.04037):0.03155,(P\_cyprapedii:0.06878,P\_sp\_At-9b:5.4E-4):0.03628):0.01684):0.02642);

[617] tree 't617'=[&R] ((P\_brenneri:0.00364,P\_conspicua:5.5E-4):0.00365,((((P\_sp\_At-9b:0.00366,P\_cyprapedii:0.00365):0.00365,(P\_dispersa:0.00364,P\_wallisii:0.02983):0.00367,(P\_sp\_GM01:0.0113,(P\_rodasii:5.5E-4,P\_rwandensis:0.00358):5.5E-4):0.01468):0.00746):5.4E-4,(P\_eucrina:0.03905,P\_septica:0.01451):0.0111):0.01445,(P\_sp\_A4:0.04961,(T\_morbirosei:0.06039,(T\_ptyseos:0.0567,T\_sp\_NML\_06:0.0141):0.04073):0.02869):5.5E-4):0.01877,((E\_billingiae:0.04504,(E\_pyriifoliae:0.01448,E\_tasmaniensis:0.01117):0.01295):0.0537,((P\_allii:0.0,P\_ananatis:0.0):5.3E-4,(P\_s\_stewartii:0.00361,P\_s\_indologenes:5.5E-4):0.00362):0.00435):0.01643):0.01366,(P\_sp\_aB:0.01098,P\_agglomerans:0.00584):0.00514):5.4E-4,(P\_vagans:0.00351,(P\_anthophila:0.01852,P\_deleyi:0.0074):0.01119):5.4E-4);

[618] tree 't618'=[&R] ((E\_billingiae:0.0344,(T\_ptyseos:5.4E-4,(T\_morbirosei:5.5E-4,T\_sp\_NML\_06:0.01473):0.03047):0.08166):0.03027,(P\_rwandensis:0.01533,P\_rodasii:5.4E-4):5.5E-4,(((P\_brenneri:0.0,P\_vagans:0.0,P\_anthophila:0.0,P\_conspicua:0.0,P\_agglomerans:0.0,P\_sp\_aB:0.0,P\_deleyi:0.0,P\_s\_stewartii:0.0,P\_s\_indologenes:0.0):5.3E-4,(((P\_sp\_GM01:0.0,P\_wallisii:0.0,P\_sp\_At-9b:0.0,P\_cyprapedii:0.0):5.4E-4,((P\_eucrina:0.04656,P\_dispersa:5.5E-4):5.5E-4,P\_sp\_A4:0.05466):0.01484):5.4E-4,P\_septica:0.01516):0.01526):0.01476,((P\_ananatis:0.0,P\_allii:0.0):5.4E-4,(E\_tasmaniensis:5.3E-4,E\_pyriifoliae:0.03186):0.01479):5.5E-4):0.01513);

[619] tree 't619'=[&R] (P\_sp\_GM01:0.02585,(((P\_sp\_At-9b:0.0262,P\_cyprapedii:0.00831):0.02541,(P\_septica:0.05469,((P\_sp\_A4:0.05311,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.02592,(P\_allii:0.00399,P\_ananatis:0.00865):0.00842):0.0223,(P\_anthophila:5.5E-4,((P\_brenneri:0.0086,P\_conspicua:0.0085):0.01316,(P\_deleyi:0.013,(P\_vagans:5.4E-4,(P\_sp\_aB:0.00854,P\_agglomerans:0.00423):0.00426):0.00424):0.0086):0.00424):0.0138):0.02871):0.02202,((T\_morbirosei:0.1129,(T\_ptyseos:0.09221,T\_sp\_NML\_06:0.09923):0.11883):0.16391,(E\_billingiae:0.04753,(E\_pyriifoliae:0.02336,E\_tasmaniensis:0.06779):0.0417):0.04404):0.03088):0.00688):0.01584):0.00966,(P\_dispersa:5.3E-4,(P\_eucrina:0.03961,P\_wallisii:0.0091):0.01242):0.00838):5.5E-4,(P\_rodasii:0.0126,P\_rwandensis:0.00863):0.00445);

[620] tree 't620'=[&R] (P\_deleyi:5.5E-4,(P\_anthophila:0.01446,(P\_sp\_aB:0.0,P\_vagans:0.0):5.5E-4):0.00286,(P\_agglomerans:5.5E-4,(((P\_allii:0.01423,(P\_ananatis:0.00313,(P\_s\_indologenes:0.00284,P\_s\_stewartii:0.00296):0.02053):5.4E-4):0.04447,(((E\_billingiae:0.07735,(E\_pyriifoliae:0.02789,E\_tasmaniensis:0.03698):0.07854):0.08678,((T\_morbirosei:0.05491,(T\_ptyseos:0.05429,T\_sp\_NML\_06:0.07697):0.03882):0.13293,P\_sp\_A4:0.05634):0.01733):0.01409,(P\_septica:0.06253,(P\_sp\_At-9b:0.01714,P\_cyprapedii:0.00887):0.02927,(P\_dispersa:0.01213,(((P\_sp\_GM01:0.01974,(P\_rodasii:5.4E-4,P\_rwandensis:0.00837):0.0184):0.01076,P\_wallisii:0.01115):0.00651,P\_eucrina:0.04369):0.00309):0.03048):0.02842):0.0142):0.02151):0.03186,(P\_brenneri:5.5E-4,P\_conspicua:0.00287):5.3E-4):0.00558):0.00284);

[621] tree 't621'=[&R] (P\_sp\_GM01:0.02986,(P\_cyprapedii:0.0807,(P\_rodasii:0.31224,P\_rwandensis:0.06518):0.01108):0.02782,(P\_sp\_At-9b:0.04717,(P\_wallisii:0.07263,(P\_dispersa:0.07325,(P\_eucrina:0.20727,((P\_sp\_A4:0.17434,(((P\_brenneri:0.00932,P\_cons



picua:0.04296):0.05326,(P\_agglomerans:0.00628,(P\_deleyi:0.05834,(P\_sp\_aB:0.04462,(P\_anthophila:0.04501,P\_vagans:0.0107):0.00853):0.00596):0.00588):0.03008):0.04279,((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00615):0.03807,(P\_ananatis:0.06894,P\_allii:0.03185):0.0327):0.03797):0.08224):0.02817,(P\_septica:0.17076,(T\_morbirosei:0.17476,(T\_ptyseos:0.16418,T\_sp\_NML\_06:0.15122):0.07093):0.20094,(E\_billingiae:0.1123,(E\_pyri foliae:0.08397,E\_tasmaniensis:0.04065):0.16932):0.05814):0.06244):0.0573):0.03703):0.02258):0.02398):0.02338):0.01044);

[622] tree 't622'=[&R] (P\_sp\_aB:0.02426,(P\_deleyi:0.02449,P\_vagans:5.3E-4):0.00484,((P\_brenneri:0.01118,P\_conspicua:0.0094):0.01882,((P\_anthophila:0.0212,(((P\_dispersa:0.05685,P\_wallisii:0.01883):0.02643,(P\_eucrina:0.10665,((P\_rodasii:0.04209,P\_rwandensis:0.01861):0.02511,(P\_sp\_GM01:0.04331,(P\_sp\_At-9b:0.01459,P\_cyprapedii:0.01925):0.04001):0.00906):0.022):0.00649):0.05365,((T\_morbirosei:0.12776,(T\_sp\_NML\_06:0.22328,T\_ptyseos:0.20033):0.09119):0.19875,(E\_billingiae:0.12147,(E\_pyri foliae:0.07821,E\_tasmaniensis:0.0847):0.10898):0.12395):0.11158):0.01979,(P\_septica:0.04239,(P\_sp\_A4:0.16359,((P\_s\_indologenes:0.00486,P\_s\_stewartii:5.4E-4):0.05499,(P\_allii:0.00901,P\_ananatis:5.4E-4):0.02035):0.0622):0.02579):0.01053):0.05175):0.0264,P\_agglomerans:0.01801):0.00672):5.5E-4);

[623] tree 't623'=[&R] (P\_agglomerans:5.5E-4,(P\_vagans:0.00668,(P\_anthophila:0.00945,P\_deleyi:0.0197):0.0118):5.5E-4,((P\_conspicua:0.0068,(P\_brenneri:5.5E-4,(((T\_sp\_NML\_06:0.03303,(T\_morbirosei:0.06931,T\_ptyseos:0.04045):0.01144):0.11389,((P\_sp\_At-9b:0.00675,P\_cyprapedii:0.00629):0.04173,((E\_billingiae:0.05938,(E\_pyri foliae:0.04888,E\_tasmaniensis:5.5E-4):0.08322):0.04953,(P\_sp\_GM01:0.02799,(P\_rwandensis:0.04183,P\_rodasii:0.01097):0.02249):0.0098):0.03079):5.4E-4):0.02044,((P\_dispersa:5.5E-4,(P\_eucrina:0.05869,P\_wallisii:0.00723):0.02686):0.02408,(P\_septica:0.06428,P\_sp\_A4:0.09029):0.04183):0.01189):0.03166,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.02078,(P\_ananatis:0.0067,P\_allii:0.01368):0.00623):0.02053):0.01068):0.01354):0.01375,P\_sp\_aB:0.00671):5.4E-4);

[624] tree 't624'=[&R] (P\_deleyi:0.04719,P\_sp\_aB:0.00627,((P\_anthophila:0.01315,(P\_agglomerans:0.0064,(P\_brenneri:5.4E-4,(((P\_sp\_At-9b:0.01267,P\_cyprapedii:0.00648):0.00681,((P\_sp\_GM01:5.4E-4,(P\_rodasii:0.01298,P\_rwandensis:0.01348):0.0135):0.02095,(P\_wallisii:0.03396,(P\_dispersa:0.0133,P\_eucrina:0.03471):0.00603):0.015):0.02507):0.02087,(P\_sp\_A4:0.07517,P\_septica:0.04549):0.01241):0.01584,(E\_billingiae:0.06452,(E\_pyri foliae:0.00641,E\_tasmaniensis:0.01265):0.04272):0.04485):0.01862,((P\_ananatis:0.00663,(P\_allii:0.00657,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.02636):0.0066):0.00683,(T\_sp\_NML\_06:0.0338,(T\_ptyseos:0.02326,T\_morbirosei:0.05879):0.00992):0.11854):0.01391):0.02608):0.01315):0.00639):5.4E-4,(P\_vagans:0.0,P\_conspicua:0.0):5.5E-4):5.5E-4);

[625] tree 't625'=[&R] ((P\_anthophila:0.00991,(P\_deleyi:0.02596,P\_agglomerans:0.01289):5.3E-4):0.00671,P\_vagans:0.00293,(((P\_brenneri:0.0036,P\_conspicua:0.00638):0.0039,((P\_allii:0.01362,((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00977):0.02278,P\_ananatis:0.00751):0.0055):0.02375,(P\_septica:0.0346,(P\_sp\_A4:0.04481,(((T\_sp\_NML\_06:0.07847,(T\_ptyseos:0.08577,T\_morbirosei:0.0822):0.0363):0.18334,(E\_billingiae:0.03354,(E\_pyri foliae:0.02157,E\_tasmaniensis:0.01541):0.06615):0.03463):0.00637,(((P\_rodasii:0.0194,P\_rwandensis:0.01006):0.02633,(P\_sp\_GM01:0.01724,(P\_sp\_At-

9b:0.00844,P\_cyprapedii:0.01532):0.0161):0.00651):0.00675,((P\_wallisii:0.04787,P\_dispersa:0.02053):0.01301,P\_eucrina:0.05858):5.2E-4):0.01342):0.0167):0.0106):0.01205):0.00641):0.0084,P\_sp\_aB:0.00898):0.0078);

[626] tree 't626'=[&R]  
(P\_deleyi:0.03408,(((T\_morbirosei:0.06701,(T\_ptyseos:0.10338,T\_sp\_NML\_06:0.11864):0.04526):0.27677,(P\_sp\_A4:0.19083,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01897,(P\_ananatis:0.03477,P\_allii:0.02424):0.01528):0.03472,(P\_eucrina:0.12377,(P\_rwandensis:0.0305,(P\_sp\_GM01:0.05749,((P\_wallisii:0.02511,P\_dispersa:0.00595):0.01657,(P\_cyprapedii:0.02541,P\_sp\_At-9b:0.02662):0.0164):0.00846):0.01322):0.00192,P\_rodasii:0.04718):0.02331):0.03152):0.00961):0.00952):0.02307,(P\_septica:0.07765,(E\_billingiae:0.06454,(E\_pyriifoliae:0.04165,E\_tasmaniensis:0.04662):0.0677):0.05975):0.00442):0.01687,P\_brenneri:0.00794):0.01407,P\_conspicua:0.0126):0.0381,(P\_agglomerans:0.01257,(P\_anthophila:0.04395,(P\_vagans:0.03088,P\_sp\_aB:0.03212):5.4E-4):0.00621):0.01776);

[627] tree 't627'=[&R] ((P\_sp\_At-9b:0.02068,P\_cyprapedii:0.06206):0.02086,(E\_billingiae:0.04001,(E\_pyriifoliae:0.04494,E\_tasmaniensis:0.02692):0.11313):0.0219):5.4E-4,(((T\_sp\_NML\_06:0.0332,(T\_ptyseos:0.03582,T\_morbirosei:0.02407):0.02364):0.13512,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.4E-4,(P\_allii:0.00152,P\_ananatis:0.0176):0.06213):0.04322):0.04064,(P\_septica:0.13562,P\_eucrina:0.03016):0.01107):0.0247,(((P\_sp\_A4:0.07633,P\_sp\_GM01:0.00987):0.01869,(P\_rodasii:0.02729,(P\_deleyi:0.04223,((P\_anthophila:5.5E-4,(P\_conspicua:5.5E-4,P\_brenneri:0.02062):0.01899):5.3E-4,(P\_sp\_aB:0.01944,(P\_agglomerans:5.4E-4,P\_vagans:0.01862):0.01858):5.4E-4):0.01882):0.0885):0.03021):0.03123,(P\_wallisii:0.0204,(P\_rwandensis:5.5E-4,P\_dispersa:0.02048):5.5E-4):5.4E-4):0.02133);

[628] tree 't628'=[&R]  
(P\_rodasii:0.0412,(P\_septica:0.25226,(P\_eucrina:0.14328,P\_wallisii:0.07927):0.02188):0.04355,(((P\_sp\_At-9b:0.03117,P\_cyprapedii:0.00657):0.01775,(E\_tasmaniensis:0.09531,E\_pyriifoliae:0.02688):0.0593):0.04194,(P\_rwandensis:0.01894,(P\_dispersa:0.03784,P\_sp\_GM01:5.5E-4):0.0188):5.4E-4):0.03826):0.05035,(P\_sp\_A4:0.14094,(E\_billingiae:0.14303,((T\_morbirosei:0.12769,(T\_ptyseos:0.0917,T\_sp\_NML\_06:0.13031):0.06967):0.16854,(((P\_deleyi:0.03275,(P\_anthophila:0.04066,(P\_agglomerans:0.0,P\_sp\_aB:0.0,P\_vagans:0.0):5.3E-4):0.03064):0.04371,(P\_conspicua:0.12504,P\_brenneri:0.02333):0.07795):0.09342,(P\_allii:0.02826,(P\_ananatis:0.0853,(P\_s\_indologenes:0.01844,P\_s\_stewartii:5.5E-4):0.06387):5.2E-4):0.06872):0.03188):0.02313):0.05463):0.05316);

[629] tree 't629'=[&R] ((P\_septica:0.03467,P\_wallisii:0.06423):0.03458,(P\_dispersa:0.06417,(P\_brenneri:5.5E-4,P\_conspicua:0.10478):0.02288):0.04301,((P\_sp\_aB:0.04223,(P\_vagans:0.02055,P\_agglomerans:0.02078):5.5E-4):0.03986,((P\_sp\_GM01:5.3E-4,(P\_anthophila:5.5E-4,P\_deleyi:0.02097):0.04185):0.02064,(((P\_rodasii:0.0,P\_rwandensis:0.0):5.5E-4,(P\_cyprapedii:0.04177,((P\_allii:0.31608,(P\_ananatis:5.5E-4,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01964):5.4E-4):0.06037,P\_sp\_At-9b:5.4E-4):0.01958):0.01997):0.01997,((E\_tasmaniensis:5.4E-4,(E\_billingiae:0.01956,E\_pyriifoliae:0.02083):0.01999):0.04805,((T\_morbirosei:0.14311,(T\_ptyseos:0.12121,T\_sp\_NML\_06:0.04601):0.06645):0.06137,(P\_sp\_A4:0.10779,P\_eucrina:0.03355):0.02333):0.02555):0.03065):5.4E-4):5.5E-4):0.02345);

[630] tree 't630'=[&R]  
(T\_morbirosei:0.07521,(T\_ptyseos:0.10437,T\_sp\_NML\_06:0.07576):0.04501):0.18588,(E\_billingiae:0.10267,(E\_pyriifoliae

:0.01145,E\_tasmaniensis:0.00655):0.05214):0.03644):0.03606,((P\_septica:0.07463,P\_eucrina:0.09833):0.02012,P\_sp\_A4:0.09088):0.02204,(((P\_sp\_At-9b:0.01062,P\_cyprapedii:0.01412):0.0042,(P\_rodasii:0.00462,(P\_rwandensis:0.02369,P\_sp\_GM01:0.01998):0.00235):0.01294):0.01481,(P\_wallisii:0.04165,P\_dispersa:0.02212):0.01911):0.01864,(((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00684):0.02565,(P\_allii:0.00406,P\_ananatis:0.01305):0.01973):0.07177,((P\_brenneri:0.0,P\_conspicua:0.0):0.02609,(((P\_vagans:0.00971,P\_sp\_aB:0.01472):0.00668,P\_deleyi:0.04264):0.00801,P\_agglomerans:0.00351):0.00321,P\_anthophila:0.01436):0.03028):0.02616):0.01991):0.00581);

[631] tree 't631'=[&R] ((P\_sp\_At-9b:0.01672,P\_cyprapedii:0.00608):0.03158,((P\_brenneri:0.00462,P\_conspicua:0.01798):0.02959,(P\_deleyi:0.00729,(P\_anthophila:0.01484,(P\_sp\_aB:0.0038,(P\_vagans:0.01502,P\_agglomerans:0.00739):0.00737):0.00374):5.5E-4):0.01165):0.01078,(((T\_morbirosei:0.09044,(T\_ptyseos:0.0558,T\_sp\_NML\_06:0.07168):0.03219):0.11111,P\_eucrina:0.03781):0.02642,((P\_sp\_GM01:0.01537,(P\_rwandensis:5.4E-4,(P\_rodasii:0.02176,P\_wallisii:0.06135):0.00613):0.0073):0.01089,(P\_dispersa:0.01243,(E\_billingiae:0.05868,(E\_pyriifoliae:0.04377,E\_tasmaniensis:0.0522):0.10235):0.07425):0.00716):0.01361):0.00522,((P\_sp\_A4:0.09534,P\_septica:0.03695):0.02175,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00962,(P\_allii:0.02018,P\_ananatis:0.0063):0.0149):0.04211):0.00657):0.0076);

[632] tree 't632'=[&R] (P\_rodasii:0.00485,P\_rwandensis:0.00982,(P\_sp\_GM01:0.01009,(P\_dispersa:0.01822,(((P\_cyprapedii:0.00997,P\_sp\_At-9b:0.01978):0.01801,(P\_septica:0.04828,((E\_pyriifoliae:0.01623,E\_tasmaniensis:0.01548):0.04106,(E\_billingiae:0.01104,(T\_sp\_NML\_06:0.04353,(T\_morbirosei:0.08253,T\_ptyseos:0.03597):0.01717):0.15812):0.01331):0.02376,((P\_sp\_A4:0.0932,(P\_conspicua:0.01967,(P\_anthophila:0.00926,(P\_deleyi:5.5E-4,(P\_agglomerans:0.00486,(P\_sp\_aB:0.0049,P\_vagans:5.5E-4):5.5E-4):0.00977):0.01185):0.02957,P\_brenneri:5.3E-4):0.00844):0.01198):0.00681,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00644,(P\_allii:0.00488,P\_ananatis:5.5E-4):0.00376):0.03411):5.9E-4):0.01434):0.01123):0.01876,(P\_eucrina:0.04565,P\_wallisii:0.02461):0.01271):0.01298):0.00708):0.00455);

[633] tree 't633'=[&R] ((P\_vagans:0.00499,(P\_agglomerans:0.00987,(P\_deleyi:0.01826,P\_sp\_aB:0.00721):0.00953):5.5E-4):5.4E-4,(P\_eucrina:0.0458,(P\_septica:0.02838,(P\_dispersa:0.00897,(((P\_rwandensis:0.00431,(P\_rodasii:0.0102,((P\_sp\_At-9b:0.0203,P\_cyprapedii:0.00451):0.01664,((E\_billingiae:0.02492,(E\_pyriifoliae:0.02154,E\_tasmaniensis:0.01409):0.09799):0.07354,((T\_ptyseos:0.06388,(T\_morbirosei:0.06159,T\_sp\_NML\_06:0.06019):0.03739):0.18311,P\_sp\_A4:0.04294):0.02172):0.01647):0.01486):0.00558):0.0068,(P\_wallisii:0.02137,P\_sp\_GM01:0.02377):0.02105):0.01193,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01189,(P\_allii:0.00477,P\_ananatis:5.5E-4):0.01229):0.03932):0.01147):0.02545):0.01629):0.01677,(P\_anthophila:0.01505,(P\_brenneri:0.00498,P\_conspicua:0.00975):0.02049):0.00576);

[634] tree 't634'=[&R] ((P\_brenneri:0.01229,P\_conspicua:0.00421):0.00413,(P\_anthophila:0.00833,P\_deleyi:0.00414):0.01228,(P\_agglomerans:0.00824,(P\_sp\_aB:0.00821,(P\_vagans:5.5E-4,((E\_billingiae:0.0471,(E\_pyriifoliae:0.02104,E\_tasmaniensis:0.0111):0.0488):0.02145,(((T\_sp\_NML\_06:0.01433,(T\_ptyseos:0.04226,T\_morbirosei:0.03728):0.02026):0.07766,(P\_s\_indologenes:0.00387,((P\_allii:0.0,P\_ananatis:0.0):0.00417,P\_s

\_stewartii:5.5E-4):5.4E-4):0.01752):0.01538,((P\_eucrina:0.03563,((P\_rwandensis:0.00409,(P\_rodasii:0.00407,P\_sp\_GM01:0.00818):5.5E-4):0.00412,(P\_dispersa:0.00111,P\_wallisii:0.01159):0.00396):0.00327):0.00776,(P\_sp\_A4:0.02586,(P\_sp\_At-9b:5.4E-4,P\_cypripedii:0.00822):0.00931):0.0041):0.01577):0.00475):0.01518):0.0041):5.5E-4,P\_septica:0.04747):0.0041):5.5E-4);

[635] tree 't635'=[&R] ((T\_morbirosei:0.05581,(T\_ptyseos:0.07651,T\_sp\_NML\_06:0.05084):0.02301):0.09452,((P\_sp\_At-9b:0.00676,P\_cypripedii:0.00373):0.02654,(P\_sp\_A4:0.03698,(P\_sp\_GM01:0.01524,(P\_rodasii:0.02317,P\_rwandensis:0.0072):0.00329):0.00384):0.00842):0.01333,((P\_eucrina:0.04283,(P\_wallisii:0.04228,((E\_pyriifoliae:0.01069,E\_tasmaniensis:0.00995):0.07375,P\_dispersa:0.01284):0.01246):0.01242):0.00275,(P\_septica:0.05474,(E\_billingiae:0.04484,((P\_allii:0.03437,(P\_ananatis:0.00764,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01032):0.01071):0.02976,((P\_brenneri:0.00387,P\_conspicua:0.00421):0.03261,(P\_anthophila:0.02302,((P\_agglomerans:0.01029,P\_vagans:0.01218):0.00639,(P\_deleyi:0.02324,P\_sp\_aB:0.00813):0.0056):0.00881):0.00918):0.02283):0.00918):0.01675):0.01777):0.00385);

[636] tree 't636'=[&R] ((P\_vagans:0.00855,(P\_sp\_aB:0.01752,P\_deleyi:0.04363):0.00844):0.00461,P\_agglomerans:0.01358,(P\_anthophila:0.03963,(P\_brenneri:0.01757,P\_conspicua:0.01305):0.02634,(((E\_billingiae:0.093,(E\_pyriifoliae:0.04317,E\_tasmaniensis:0.0137):0.16477):0.12277,((P\_sp\_A4:0.20229,(T\_morbirosei:0.15975,(T\_ptyseos:0.09158,T\_sp\_NML\_06:0.11247):0.07527):0.14917):0.11193,(P\_allii:0.07202,(P\_ananatis:0.03054,(P\_s\_indologenes:0.00678,P\_s\_stewartii:0.00547):0.07947):0.0288):0.07992):0.02099):0.02283,(P\_septica:0.07211,(P\_eucrina:0.13881,(P\_dispersa:0.05093,(((P\_rodasii:0.02976,P\_rwandensis:0.01371):0.03263,(P\_sp\_At-9b:0.0116,P\_cypripedii:0.00569):0.03596):0.02184,P\_sp\_GM01:0.0379):0.00996,P\_wallisii:0.05036):0.04843):0.03977):0.02538):0.03485):0.04606):0.01801):0.01038);

[637] tree 't637'=[&R] (P\_rwandensis:0.05222,P\_rodasii:0.04158,(((P\_sp\_GM01:0.07287,(((T\_sp\_NML\_06:0.11706,(T\_morbirosei:0.14754,T\_ptyseos:0.07549):0.02433):0.21429,(E\_billingiae:0.15115,(E\_pyriifoliae:0.03352,E\_tasmaniensis:0.0465):0.09315):0.17766):0.0483,P\_septica:0.10287):0.03727,(((P\_s\_indologenes:0.00412,P\_s\_stewartii:0.00852):0.04861,(P\_ananatis:0.06738,P\_allii:0.05484):0.00585):0.09542,((P\_conspicua:0.03257,P\_brenneri:0.01908):0.026,((P\_anthophila:0.03483,P\_agglomerans:0.02659):0.01126,((P\_sp\_aB:0.03268,P\_vagans:0.00835):0.00774,P\_deleyi:0.09202):0.00892):0.03674):0.04899):0.03571):0.01237,P\_sp\_A4:0.11801):0.05952):0.02276,(P\_cypripedii:0.0571,P\_sp\_At-9b:0.03239):0.02382):0.02544,(P\_dispersa:0.06148,P\_wallisii:0.03915):0.01957):0.00619,P\_eucrina:0.1269):0.01013);

[638] tree 't638'=[&R] ((P\_septica:0.04006,(T\_morbirosei:0.06579,(T\_ptyseos:0.04586,T\_sp\_NML\_06:0.0579):0.03318):0.1073):0.01584,(E\_billingiae:0.09519,(E\_pyriifoliae:0.02575,E\_tasmaniensis:0.01774):0.05304):0.06296,(((P\_allii:0.03027,(P\_ananatis:0.02483,(P\_s\_indologenes:0.0025,P\_s\_stewartii:5.5E-4):0.02634):0.01647):0.06396,(P\_sp\_A4:0.0882,(((P\_rodasii:0.00446,P\_rwandensis:0.02215):0.03389,(P\_sp\_GM01:0.04825,(P\_sp\_At-9b:0.01257,P\_cypripedii:0.0072):0.01857):0.00616):0.01767,(P\_dispersa:0.05575,(P\_eucrina:0.14168,P\_wallisii:0.06894):0.03097):0.02167):0.02331):0.01477):0.01161,((P\_brenneri:0.02615,P\_conspicua:0.01795):0.03735,((P\_agglomerans:0.00739,(P\_sp\_aB:0.02054,P\_vagans:0.01031):0.00281):0.00919,(P\_anthophila:0.03352,P\_deleyi:0.03759):0.00931):0.04024):0.04189):0.01045);

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[639] tree 't639'=[&R] ((P_anthophila:0.0,P_conspicua:0.0,P_sp_aB:0.0,P_brenneri:0.0):5.3E-4,(P_vagans:5.5E-4,(P_eucrina:0.01876,P_wallisii:0.01903):5.4E-4):0.00947,(((P_deleyi:0.0188,P_septica:5.5E-4):0.00925,(P_sp_GM01:5.5E-4,((P_s_stewartii:0.01848,(P_s_indologenes:5.5E-4,(P_allii:0.02857,P_ananatis:0.0092):5.5E-4):5.4E-4):0.02918,(P_sp_A4:0.01272,(T_ptyseos:0.03045,(T_morbirosei:0.02839,T_sp_NML_06:0.01866):0.00916):0.04595):0.00948):0.01751,(P_sp_At-9b:0.00928,P_cyprapedii:5.5E-4):0.00933):5.4E-4):5.4E-4):0.00919,((P_rodasii:0.0,P_rwandensis:0.0,P_dispersa:0.0,P_agglomerans:0.0):5.5E-4,(E_pyriifoliae:5.5E-4,E_tasmaniensis:0.00947):0.00965):5.4E-4):0.00941,E_billingiae:0.03852):5.4E-4);
[640] tree 't640'=[&R]
(((T_ptyseos:0.08704,(T_morbirosei:0.04622,T_sp_NML_06:0.02447):0.01954):0.04762,(E_billingiae:0.03775,(E_pyriifoliae:0.0131,E_tasmaniensis:0.00817):0.04504):0.05251):0.00674,(P_sp_A4:0.04805,(((P_brenneri:0.0,P_conspicua:0.0):5.4E-4,(P_vagans:5.3E-4,(P_anthophila:0.01285,(P_deleyi:0.00416,P_sp_aB:0.00503):5.2E-4):0.00315):0.00421):5.5E-4,P_agglomerans:0.01243):0.02788,(P_allii:0.00946,(P_ananatis:0.00429,(P_s_indologenes:0.0,P_s_stewartii:0.0):0.00425):0.00367):0.01518,P_septica:0.05036):0.01174):0.02923):0.01181,((P_eucrina:0.06572,((P_dispersa:0.01851,P_wallisii:0.02475):0.01306,(P_rwandensis:0.02199,(P_sp_GM01:0.02253,P_rodasii:0.02068):0.01218):0.00636):0.01583):0.00644,(P_sp_At-9b:0.00432,P_cyprapedii:0.01278):0.01286):0.0044);
[641] tree 't641'=[&R] ((P_brenneri:0.00544,P_conspicua:5.5E-4):0.00555,(((P_sp_At-9b:0.02749,P_cyprapedii:0.01781):0.05829,P_septica:0.08131):0.00696,((P_sp_A4:0.1444,((P_rodasii:5.5E-4,P_rwandensis:0.00548):0.01638,(P_eucrina:0.05701,(P_dispersa:0.01662,(P_sp_GM01:0.04526,P_wallisii:0.02261):0.00519):5.3E-4):0.01718):0.06679,(T_morbirosei:0.02164,(T_sp_NML_06:0.21013,T_ptyseos:0.07429):0.08785):0.11681,(E_billingiae:0.11718,(E_pyriifoliae:0.01294,E_tasmaniensis:0.02706):0.08836):0.09261):0.07071):0.02706):0.0085,((P_s_indologenes:5.5E-4,P_s_stewartii:0.00552):5.4E-4,(P_ananatis:0.00549,P_allii:0.01102):0.00555):0.02728):0.00503):0.03876):0.00561,((P_sp_aB:0.01097,P_vagans:0.01101):0.011,P_anthophila:5.5E-4):0.0053,(P_deleyi:0.07868,P_agglomerans:0.0111):5.4E-4);
[642] tree 't642'=[&R] (P_agglomerans:0.00795,P_sp_aB:0.00398,(P_vagans:0.01396,(P_deleyi:5.4E-4,(P_anthophila:0.01537,(P_brenneri:0.12564,P_conspicua:5.4E-4):0.03146,((P_septica:0.0498,((T_sp_NML_06:0.09102,(T_morbirosei:0.11273,T_ptyseos:0.11009):0.0405):0.23373,(E_billingiae:0.09624,(E_pyriifoliae:0.02111,E_tasmaniensis:0.02087):0.10225):0.05917):0.01726):0.02987,(((P_s_indologenes:0.0,P_s_stewartii:0.0):0.00442,(P_allii:0.01259,P_ananatis:0.00804):0.01171):0.06077,((P_sp_At-9b:0.03415,P_cyprapedii:0.00859):0.03051,(P_wallisii:0.03331,(P_eucrina:0.09036,(P_dispersa:0.03002,(P_sp_GM01:0.0428,(P_rodasii:0.01048,P_rwandensis:0.01378):0.01242):0.01887):0.00793):0.0127):0.03529):0.04245,P_sp_A4:0.10436):0.01536):0.0169):0.02515):0.0135):0.01169):0.0175):0.00799);
[643] tree 't643'=[&R] (P_deleyi:0.01195,P_vagans:0.01143,(P_sp_aB:5.4E-4,(P_agglomerans:0.00994,(P_anthophila:0.01878,(((P_s_indologenes:5.5E-4,P_s_stewartii:0.00772):0.02173,(P_allii:0.09759,P_ananatis:0.01165):0.01935):0.04388,((P_sp_A4:0.07891,(((P_rodasii:0.01004,P_rwandensis:0.00985):0.03085,(P_sp_GM01:0.06217,P_eucrina:0.08322):0.02275):0.02111,(P_dispersa:0.01895,P_wallisii:0.02095):0.03231):0.00621,((P_sp_At-9b:0.00861,P_cyprapedii:0.0327):0.02538,(T_morbirosei:0.07187,(T_ptyseos:0.1556,T_sp_NML_06:0.06461):0.14599):0.302
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76,(E\_billingiae:0.15229,(E\_pyriifoliae:0.07524,E\_tasmaniensis:0.08114):0.12367):0.0954):0.12183):0.01121):0.02585):0.07383,P\_septica:0.18273):0.00545):0.04493,(P\_brenneri:0.01048,P\_conspicua:0.00929):0.00557):0.03573):0.00812):0.00954):0.00393);

[644] tree 't644'=[&R] ((P\_vagans:0.00701,P\_sp\_aB:5.5E-4):0.00709,P\_anthophila:0.00708,((P\_deleyi:0.0,P\_agglomerans:0.0):5.5E-4,(P\_rodasii:0.00701,((P\_wallisii:0.0,P\_eucrina:0.0,P\_rwandensis:0.0,P\_sp\_GM01:0.0):5.4E-4,((P\_sp\_At-9b:0.0,P\_cyprapedii:0.0):5.4E-4,(E\_billingiae:5.5E-4,(E\_pyriifoliae:0.0123,E\_tasmaniensis:0.01631):0.06663):0.02156,(P\_septica:5.4E-4,(P\_sp\_A4:0.01303,(T\_morbirosei:0.01911,(T\_sp\_NML\_06:0.03019,T\_ptyseos:0.01837):0.01196):0.04863):0.02968):0.00669):0.0212):0.01416,P\_dispersa:5.4E-4):0.00701):0.00699,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0,P\_brenneri:0.0,P\_ananatis:0.0):5.5E-4,(P\_conspicua:0.26392,P\_allii:9.5E-4):0.00619):5.5E-4):0.00705):5.3E-4):5.5E-4);

[645] tree 't645'=[&R] ((P\_anthophila:0.01345,P\_sp\_aB:0.01214):0.01452,P\_vagans:0.0088):0.00431,P\_agglomerans:5.4E-4,(P\_deleyi:0.04069,(((P\_s\_indologenes:0.00867,P\_s\_stewartii:5.4E-4):0.04087,(P\_allii:0.01405,P\_ananatis:0.0405):0.01301):0.11002,((P\_sp\_A4:0.20001,((T\_morbirosei:0.16483,(T\_sp\_NML\_06:0.36038,T\_ptyseos:0.18832):0.06614):0.23678,((P\_dispersa:0.01672,((P\_sp\_GM01:0.04514,(P\_rodasii:0.04118,P\_rwandensis:0.01051):0.02998):0.01353,(P\_eucrina:0.06696,(P\_sp\_At-9b:0.03024,P\_cyprapedii:0.01416):0.06865):0.01941):0.01005):0.00604,P\_wallisii:0.03182):0.10352):0.03891):0.03889,(P\_septica:0.12273,(E\_billingiae:0.11103,(E\_pyriifoliae:0.1123,E\_tasmaniensis:0.07496):0.14533):0.06551):0.03098):0.06594):0.06434,(P\_brenneri:0.00955,P\_conspicua:0.01762):0.01745):0.0202):0.01422);

[646] tree 't646'=[&R] ((T\_sp\_NML\_06:0.0,T\_ptyseos:0.0,T\_morbirosei:0.0,E\_billingiae:0.0,E\_pyriifoliae:0.0,E\_tasmaniensis:0.0,P\_sp\_A4:0.0,P\_septica:0.0,P\_anthophila:0.0,P\_deleyi:0.0,P\_sp\_aB:0.0,P\_agglomerans:0.0,P\_vagans:0.0,P\_conspicua:0.0,P\_brenneri:0.0,P\_allii:0.0,P\_ananatis:0.0,P\_sp\_At-9b:0.0,P\_cyprapedii:0.0,P\_sp\_GM01:0.0,P\_eucrina:0.0,P\_rwandensis:0.0,P\_dispersa:0.0,P\_wallisii:0.0):0.16345,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.3E-4,P\_rodasii:1.09639);

[647] tree 't647'=[&R] ((P\_sp\_At-9b:0.02151,P\_cyprapedii:0.0235):0.037,P\_sp\_GM01:0.01043,(P\_dispersa:0.03547,((P\_rodasii:0.02706,P\_rwandensis:0.0134):0.01301,(P\_wallisii:0.03279,(P\_eucrina:0.08483,((T\_morbirosei:0.09065,(T\_sp\_NML\_06:0.11542,T\_ptyseos:0.08581):0.03509):0.13632,((E\_billingiae:0.07145,(E\_pyriifoliae:0.0147,E\_tasmaniensis:0.0053):0.03778):0.11667,(((P\_agglomerans:0.00981,(P\_sp\_aB:0.01496,P\_vagans:0.01214):0.00289):0.004,(P\_anthophila:0.0476,P\_deleyi:0.03413):0.00509):0.02091,(P\_brenneri:0.0237,P\_conspicua:0.01662):0.01823):0.03186,((P\_ananatis:0.02343,(P\_allii:0.01919,(P\_s\_indologenes:0.00243,P\_s\_stewartii:5.5E-4):0.05488):0.00571):0.04712,(P\_septica:0.05835,P\_sp\_A4:0.07149):0.01973):0.02099):0.03333):0.02882):0.01774):0.02838):0.02005):0.00637):0.00246);

[648] tree 't648'=[&R] (P\_rodasii:0.02498,P\_rwandensis:0.01649,(P\_wallisii:0.01085,(((P\_sp\_At-9b:0.01127,P\_cyprapedii:0.00797):0.01265,(P\_septica:0.02141,((P\_ananatis:0.0112,(P\_allii:0.0128,(P\_s\_indologenes:0.00232,P\_s\_stewartii:0.00234):0.00859):0.01106):0.0216,(P\_brenneri:5.4E-4,((P\_anthophila:0.01434,((P\_agglomerans:0.00487,P\_deleyi:0.01709):0.00175,(P\_vagans:0.00708,P\_sp\_aB:0.00473):5.4E-

4):0.00865):0.00799,P\_conspicua:0.00468):0.00457):0.03):0.008,(P\_sp\_A4:0.08903,((T\_morbirosei:0.05207,(T\_sp\_NML\_06:0.10557,T\_ptyseos:0.06997):0.02651):0.12125,(E\_billingiae:0.04528,(E\_pyrifoliae:0.02817,E\_tasmaniensis:0.01298):0.06257):0.07456):0.02955):0.0195):0.02808):0.03264):0.00929,(P\_sp\_GM01:0.01712,(P\_eucrina:0.04912,P\_dispersa:0.01072):0.00365):0.0024):0.00616):0.00859);

[649] tree 't649'=[&R] (P\_vagans:0.02567,((((P\_sp\_At-9b:0.128,((P\_wallisii:0.05069,(P\_dispersa:0.00338,(P\_cyprapedii:0.05105,(P\_sp\_GM01:0.01657,(P\_rodasii:0.00835,P\_rwandensis:5.5E-4):5.3E-4):0.04349):0.06969):0.02489):0.02703,(P\_septica:0.11117,P\_eucrina:0.06598):0.02677):0.04064):0.0476,(P\_sp\_A4:0.03557,(E\_billingiae:0.16057,(E\_pyrifoliae:0.12633,E\_tasmaniensis:0.04961):0.22199):0.13163):0.03687):0.08587,((T\_morbirosei:0.04623,(T\_ptyseos:0.06,T\_sp\_NML\_06:0.02802):0.06002):0.23083,(P\_allii:0.01513,(P\_ananatis:0.03044,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00559):0.09123):0.05707):0.01368):0.07952,(P\_conspicua:0.02802,P\_brenneri:0.01532):0.02013):0.03566,P\_anthophila:5.3E-4):5.5E-4,(P\_agglomerans:0.05394,(P\_deleyi:0.01765,P\_sp\_aB:0.03468):0.0085):0.00889);

[650] tree 't650'=[&R] ((P\_rodasii:5.5E-4,P\_rwandensis:0.00559):0.01741,(P\_dispersa:0.01712,P\_wallisii:0.01704):0.01741,(((P\_sp\_GM01:0.07728,(P\_eucrina:0.04602,(P\_septica:0.04157,((E\_billingiae:0.29419,(E\_pyrifoliae:0.17095,E\_tasmaniensis:0.24075):0.27927):0.51681,(T\_morbirosei:0.04364,(T\_ptyseos:0.08501,T\_sp\_NML\_06:0.14946):0.05608):0.16369):0.08593,((P\_sp\_aB:5.4E-4,(P\_agglomerans:5.4E-4,(P\_anthophila:0.01707,P\_deleyi:0.01119):5.3E-4):0.00564,P\_vagans:0.00567):0.00569):0.00639,(P\_brenneri:5.3E-4,P\_conspicua:0.01131):0.01084):0.03998):0.0256):0.03479):0.01998):0.03035,((P\_ananatis:5.5E-4,(P\_allii:0.01125,(P\_s\_indologenes:5.4E-4,P\_s\_stewartii:0.01118):0.02275):0.00556):0.05189,(P\_sp\_At-9b:0.00636,P\_cyprapedii:0.02216):0.01201):0.0289):5.5E-4,P\_sp\_A4:0.04656):0.01767);

[651] tree 't651'=[&R] ((P\_allii:5.4E-4,((P\_s\_indologenes:5.3E-4,P\_s\_stewartii:0.01274):0.16269,P\_ananatis:0.02523):0.03979):0.12613,((P\_sp\_A4:0.83437,((T\_morbirosei:0.17023,(T\_sp\_NML\_06:0.27507,T\_ptyseos:0.15958):0.0633):0.1794,(E\_billingiae:0.11694,(E\_pyrifoliae:0.09133,E\_tasmaniensis:0.03409):0.09165):0.13597):0.05591):0.03964,((P\_dispersa:0.05995,((P\_rwandensis:0.05846,P\_rodasii:0.15628):0.05495,(P\_sp\_GM01:0.05087,(P\_cyprapedii:0.05628,P\_sp\_At-9b:0.08564):0.08626):0.01605):0.06524,P\_wallisii:0.08354):0.03665):0.05282,P\_eucrina:0.20884):0.08838):0.02008,(P\_septica:0.22507,(P\_agglomerans:5.4E-4,(P\_vagans:0.01351,(P\_deleyi:0.04123,(P\_anthophila:0.01347,P\_sp\_aB:0.01368):0.01374):5.4E-4):0.0135):0.05565,(P\_brenneri:0.02098,P\_conspicua:0.04788):0.06173):0.10703):0.07076);

[652] tree 't652'=[&R] (((P\_anthophila:0.08514,(P\_deleyi:0.05726,((P\_vagans:0.0,P\_sp\_aB:0.0):5.5E-4,P\_agglomerans:0.01108):5.5E-4):0.00912):0.05698,(P\_brenneri:0.04864,((P\_allii:0.04455,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.08103,P\_ananatis:0.06773):0.02615):0.12222,P\_conspicua:0.02993):0.03484):0.0222):0.06458,(P\_sp\_At-9b:0.01084,((P\_rodasii:0.04453,P\_rwandensis:0.02171):0.03386,P\_cyprapedii:5.5E-4):0.01061):5.5E-4):0.01454,((P\_sp\_A4:0.17196,((T\_morbirosei:0.04888,(T\_ptyseos:0.05232,T\_sp\_NML\_06:0.10932):0.0965):0.24723,(E\_tasmaniensis:0.07967,(E\_pyrifoliae:0.10595,E\_billingiae:0.08155):0.00952):0.1498):0.04571):0.07161,P\_sp\_GM01:0.08909):0.02531,((P\_septica:0.13724,P\_dispersa:0.04674):0.01535,(P\_eucrina:0.22335,P\_wallisii:0.07923):0.06017):0.0396);

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[653] tree 't653'=[&R] (P_sp_GM01:0.04562,((((P_agglomerans:0.0,P_sp_aB:0.0):5.5E-4,(P_vagans:0.02838,((P_deleyi:0.0277,P_anthophila:0.01388):5.5E-4,(P_brenneri:5.4E-4,P_conspicua:0.01387):0.01348):0.01407):5.5E-4):0.01458,(E_billingiae:0.01419,(P_eucrina:0.17639,(T_morbirosei:0.06807,(T_ptyseos:0.04915,T_sp_NML_06:0.04552):0.02043):0.04453):0.0324):5.4E-4):0.01421,P_septica:5.4E-4):0.01434,(E_pyrifoliae:0.02886,E_tasmaniensis:5.4E-4):0.02897):5.4E-4,((P_sp_At-9b:0.0,P_cypripedii:0.0,P_dispersa:0.0,P_rodasii:0.0,P_rwandensis:0.0,P_wallisii:0.0):5.5E-4,(P_sp_A4:0.04364,((P_s_indologenes:0.0,P_s_stewartii:0.0):5.4E-4,(P_allii:0.0141,P_ananatis:5.4E-4):0.01421):0.01487):5.5E-4):5.4E-4);
[654] tree 't654'=[&R] (P_ananatis:0.0078,((((P_sp_At-9b:0.02044,((P_wallisii:0.01351,((P_sp_GM01:0.00658,(P_rodasii:5.5E-4,P_rwandensis:0.01363):0.02766):0.01404,(P_eucrina:0.02125,P_dispersa:0.00673):0.00692):5.4E-4):0.02128,P_cypripedii:5.5E-4):5.4E-4):0.08097,((E_billingiae:0.08752,(E_pyrifoliae:0.00729,E_tasmaniensis:0.00601):0.02531):0.1145,(T_sp_NML_06:0.02965,(T_morbirosei:0.03634,T_ptyseos:0.0796):0.0265):0.08789):0.02648):0.02322,(P_sp_A4:0.09938,P_septica:0.03744):0.02776):0.0283,((P_brenneri:5.5E-4,P_conspicua:0.00666):0.0317,(P_anthophila:0.009,(P_deleyi:5.5E-4,(P_agglomerans:0.01358,(P_vagans:0.00678,P_sp_aB:5.5E-4):5.4E-4):0.01352):0.01801):0.00667):0.02854):0.01594,(P_allii:0.00658,(P_s_indologenes:0.0,P_s_stewartii:0.0):0.03459):0.00623);
[655] tree 't655'=[&R] (P_sp_GM01:0.051,((P_septica:0.06795,((P_brenneri:0.01817,P_conspicua:0.03579):0.05035,(P_deleyi:0.02864,(P_anthophila:0.01672,(P_vagans:0.02852,(P_agglomerans:0.01122,P_sp_aB:0.01116):0.01126):0.01101):0.00486):0.03744):0.08777):0.04009,((P_eucrina:0.22334,((T_sp_NML_06:0.21375,(T_morbirosei:0.08206,T_ptyseos:0.07996):0.06698):0.38307,(E_billingiae:0.14819,(E_pyrifoliae:0.08241,E_tasmaniensis:0.0627):0.11168):0.12853):0.06193):0.0458,(P_sp_A4:0.18721,((P_s_indologenes:0.0,P_s_stewartii:0.0):0.02447,(P_allii:0.01123,P_ananatis:0.0227):0.02976):0.05485):0.02617):0.01497):0.01535,(P_wallisii:0.03562,(P_dispersa:0.0519,((P_sp_At-9b:0.02076,P_cypripedii:0.03343):0.05885,(P_rodasii:0.00583,P_rwandensis:0.03764):0.02139):0.00846):0.01682):0.0163);
[656] tree 't656'=[&R] ((P_agglomerans:0.0,P_vagans:0.0,P_anthophila:0.0):5.5E-4,(P_sp_aB:0.01078,((P_sp_A4:0.06913,(T_sp_NML_06:0.08557,(T_morbirosei:0.07911,T_ptyseos:5.4E-4):0.01329):0.19881):0.0875,(P_cypripedii:0.00299,(P_sp_GM01:0.0482,(P_rodasii:0.0225,(P_eucrina:0.02222,(P_dispersa:0.0,P_wallisii:0.0):5.5E-4):5.4E-4,(P_rwandensis:0.01096,P_sp_At-9b:0.0109):0.01082):0.01794):5.4E-4):0.011):0.00414):0.05911,((E_pyrifoliae:5.5E-4,E_tasmaniensis:0.02144):0.12439,E_billingiae:0.03852):0.02058):0.0115):5.4E-4,(P_deleyi:0.0108,((P_s_indologenes:0.0,P_s_stewartii:0.0):5.5E-4,(P_allii:0.04386,P_ananatis:5.4E-4):0.01058):0.01062,(P_septica:0.01072,(P_brenneri:5.4E-4,P_conspicua:0.0107):0.01057):0.01083):0.0108):5.4E-4);
[657] tree 't657'=[&R] (((((T_morbirosei:0.06043,(T_ptyseos:0.04534,T_sp_NML_06:0.03396):0.04265):0.15347,(E_billingiae:0.06783,(E_pyrifoliae:0.00568,E_tasmaniensis:0.01579):0.05356):0.02888):0.02808,P_septica:0.01401):0.00725,(P_sp_A4:0.07246,((P_sp_At-
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9b:0.01579,(P\_dispersa:0.00526,P\_wallisii:0.01049):0.00512):0.0053,(P\_sp\_GM01:5.5E-4,(P\_rwandensis:0.0213,(P\_rodasii:0.01051,P\_eucrina:0.07242):5.5E-4):0.00526):0.00526):5.4E-4,P\_cypripedii:0.01045):0.03721):0.01668):5.4E-4,P\_s\_indologenes:5.5E-4,((P\_ananatis:0.00514,(P\_allii:0.00518,(P\_conspicua:0.01589,P\_brenneri:5.4E-4):0.00522,((P\_agglomerans:0.00524,(P\_vagans:5.4E-4,P\_deleyi:0.01599):0.0053,P\_sp\_aB:0.00527):0.00529):0.00533,P\_anthophila:0.01056):0.01056):0.00531):0.01563):0.01049,P\_s\_stewartii:0.0105):5.5E-4);

[658] tree 't658'=[&R]  
(((P\_sp\_GM01:0.06378,(P\_rodasii:0.01649,P\_rwandensis:0.03991):0.01808):0.00893,P\_wallisii:0.07967):0.00838,((P\_sp\_At-9b:0.02911,P\_cypripedii:0.01654):0.05534,(((T\_sp\_NML\_06:0.1138,(T\_morbirosei:0.14787,T\_ptyseos:0.09953):0.07265):0.27049,(E\_billingiae:0.13166,(E\_pyrifoliae:0.04458,E\_tasmaniensis:0.02297):0.10359):0.08381):0.07215,(P\_sp\_A4:0.17884,(P\_septica:0.12541,((P\_brenneri:0.01561,P\_conspicua:0.01463):0.01608,(P\_anthophila:0.01949,(P\_vagans:0.01526,P\_agglomerans:0.00434):0.0044,(P\_sp\_aB:0.00822,P\_deleyi:0.04785):0.00244):0.00798):0.02866):0.08988,((P\_s\_indologenes:0.00771,P\_s\_stewartii:5.4E-4):0.06043,(P\_allii:0.02722,P\_ananatis:0.03373):0.02354):0.0122):0.0465):0.04984):0.0295):0.04136):0.01494,(P\_dispersa:0.05935,P\_eucrina:0.10248):0.02698);

[659] tree 't659'=[&R]  
(P\_sp\_GM01:0.02665,P\_wallisii:0.02648,((P\_eucrina:0.06556,P\_dispersa:0.03331):0.00479,((P\_rwandensis:0.04868,P\_rodasii:0.02297):0.02272,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.03221,(P\_allii:0.10464,P\_ananatis:0.04687):0.01263):0.0465,(P\_sp\_A4:0.08482,(E\_billingiae:0.18165,(E\_pyrifoliae:0.04402,E\_tasmaniensis:0.02771):0.26161,(T\_morbirosei:0.08541,(T\_sp\_NML\_06:0.13767,T\_ptyseos:0.06267):0.03244):0.15124):0.2557):0.15874):0.0661):0.02049,(P\_conspicua:0.02031,P\_brenneri:0.01651):0.00633,(P\_anthophila:0.01038,(P\_deleyi:0.04361,(P\_sp\_aB:0.02506,(P\_agglomerans:0.01234,P\_vagans:0.01706):5.3E-4):0.00581):0.00593):0.02155):0.01926):0.01689,P\_septica:0.04817):0.04565,(P\_sp\_At-9b:0.04151,P\_cypripedii:0.01324):0.01565):0.00499):0.00655):0.00729);

[660] tree 't660'=[&R] (P\_sp\_aB:0.0043,(P\_agglomerans:0.0,P\_sp\_At-9b:0.0,P\_vagans:0.0,P\_deleyi:0.0,P\_brenneri:0.0,P\_conspicua:0.0,P\_cypripedii:0.0):5.5E-4,((P\_septica:0.0086,(P\_rodasii:0.00431,P\_rwandensis:5.5E-4):5.5E-4):0.00431,(P\_dispersa:5.5E-4,(P\_sp\_A4:0.01304,((P\_anthophila:0.00831,P\_eucrina:5.4E-4):0.01205,P\_wallisii:0.00869):5.4E-4,((E\_billingiae:5.3E-4,(E\_tasmaniensis:0.01769,(E\_pyrifoliae:0.02655,(T\_morbirosei:0.03312,(T\_sp\_NML\_06:0.10826,T\_ptyseos:0.00923):0.02302):0.09161):0.01419):0.01531):0.02189,((P\_allii:0.0,P\_ananatis:0.0,P\_s\_indologenes:0.0):5.5E-4,P\_s\_stewartii:0.00428):0.00999):0.00796,P\_sp\_GM01:5.4E-4):0.00874):5.5E-4):5.5E-4):5.4E-4):0.00427);

[661] tree 't661'=[&R]  
(P\_agglomerans:0.0069,P\_sp\_aB:0.00608,(P\_vagans:0.00535,(P\_anthophila:0.01151,(P\_deleyi:0.01494,(((P\_ananatis:0.00529,(P\_allii:0.00889,(P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00728):0.0088):0.00656):0.03672,(((P\_sp\_GM01:0.02933,(P\_rodasii:0.01715,P\_rwandensis:0.00836):0.02094):0.01002,(P\_eucrina:0.08761,P\_dispersa:0.01396):0.00994,P\_wallisii:0.03211):0.01119):0.03795,(P\_sp\_At-9b:0.02172,P\_cypripedii:0.03016):0.0091):0.02072,((T\_morbirosei:0.12337,(T\_sp\_NML\_06:0.1709,T\_ptyseos:0.09494):0.061

24):0.27349,(E\_billingiae:0.06495,(E\_pyriifoliae:0.08876,E\_tasmaniensis:0.04333):0.08313):0.05108):0.05752):0.0108,(P\_sp\_A4:0.06835,P\_septica:0.05587):0.01673):0.03519):0.0262,(P\_brenneri:0.00308,P\_conspicua:0.01418):0.00275):0.02436):0.00613):0.00624):0.00419);

[662] tree 't662'=[&R] ((P\_sp\_At-9b:0.0224,P\_cyprapedii:0.02191):0.03776,(P\_sp\_GM01:0.03072,(P\_rodasii:0.03752,P\_rwandensis:0.01282):0.0575):0.01017,((P\_eucrinea:0.07277,P\_wallisii:0.02866):0.02328,((P\_sp\_A4:0.07866,(P\_septica:0.08721,(((T\_morbirosei:0.08376,(T\_ptyseos:0.0856,T\_sp\_NML\_06:0.0495):0.03536):0.12547,(E\_billingiae:0.10745,(E\_pyriifoliae:0.03937,E\_tasmaniensis:0.02602):0.06018):0.05291):0.03024,(P\_allii:0.02004,((P\_s\_indologenes:0.00332,P\_s\_stewartii:0.00333):0.04434,P\_ananatis:0.0224):0.0103):0.06446,(P\_conspicua:0.00788,(P\_brenneri:0.01259,(((P\_agglomerans:0.00659,P\_sp\_aB:0.02003):0.00836,P\_deleyi:0.04196):0.00885,P\_anthophila:0.01035):0.00315,P\_vagans:0.0172):0.03485):0.01093):0.0322):0.03316):0.00891):0.05886):0.0302,P\_dispersa:0.05457):5.4E-4):0.02236);

[663] tree 't663'=[&R] (((P\_brenneri:0.0127,((P\_sp\_A4:0.06417,((E\_billingiae:0.05073,(E\_pyriifoliae:0.02595,E\_tasmaniensis:0.02186):0.11062):0.08807,(((P\_wallisii:0.02,P\_dispersa:0.02382):0.01958,(P\_sp\_At-9b:0.00854,P\_cyprapedii:0.00893):0.02352):0.00811,(P\_sp\_GM01:0.03324,(P\_rodasii:5.3E-4,P\_rwandensis:0.0128):0.02821):0.00899):0.00964,P\_eucrinea:0.05737):0.01475):0.0079):0.01872,P\_septica:0.08325):0.01597,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.02217,(P\_allii:0.00904,P\_ananatis:0.01747):0.00408):0.0551):0.01627):0.00334,((T\_morbirosei:0.05281,(T\_sp\_NML\_06:0.11153,T\_ptyseos:0.07605):0.05768):0.14598,P\_conspicua:5.4E-4):0.0151):0.01684,P\_agglomerans:5.5E-4,(P\_vagans:0.00432,((P\_sp\_aB:0.00439,P\_deleyi:0.01311):0.00431,P\_anthophila:0.00433):5.4E-4):0.00431);

[664] tree 't664'=[&R] (P\_agglomerans:5.5E-4,P\_vagans:0.00426,((P\_anthophila:0.01016,(((P\_cyprapedii:0.03665,P\_sp\_At-9b:0.01865):0.01554,(((P\_sp\_GM01:0.04634,P\_rodasii:0.0439):0.01703,(P\_eucrinea:0.09008,P\_wallisii:0.01042):0.00449):0.02336,P\_dispersa:0.0087):0.01815):0.02709,((P\_sp\_A4:0.06092,P\_rwandensis:0.05478):0.03034,((T\_morbirosei:0.02426,(T\_sp\_NML\_06:0.07663,T\_ptyseos:0.04499):0.04668):0.13456,(E\_billingiae:0.09456,(E\_pyriifoliae:0.0148,E\_tasmaniensis:0.02132):0.06125):0.09991):0.02328):0.02467):0.05003,(P\_septica:0.05654,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01577,(P\_allii:0.01934,P\_ananatis:0.01576):0.01368):0.01955):0.01266):0.01211):0.01189,(P\_sp\_aB:5.5E-4,(P\_deleyi:0.01845,(P\_brenneri:0.01277,P\_conspicua:5.5E-4):0.00854):0.01281):0.00422):5.4E-4);

[665] tree 't665'=[&R] (P\_agglomerans:0.0241,P\_sp\_aB:0.03143,(P\_vagans:0.01112,(P\_deleyi:0.07224,(P\_anthophila:0.03605,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.05906,(P\_allii:0.0421,P\_ananatis:0.0424):0.05731):0.08661,((P\_septica:0.20904,(P\_sp\_A4:0.3111,((P\_sp\_At-9b:0.10526,P\_cyprapedii:0.08828):0.03451,((P\_wallisii:0.09495,(P\_sp\_GM01:0.06414,(P\_rodasii:0.01886,P\_rwandensis:0.063):0.02899):0.01826):0.01499,(P\_dispersa:0.07043,P\_eucrinea:0.13569):0.04789):0.07865):0.01308):0.02894):0.02481,((T\_morbirosei:0.19307,(T\_ptyseos:0.126,T\_sp\_NML\_06:0.21451):0.05502):0.31555,(E\_billingiae:0.24899,(E\_pyriifoliae:0.13459,E\_tasmaniensis:0.07712):0.13643):0.20849):0.04975):0.04497):0.07133,(P\_brenneri:0.04206,P\_conspicua:0.05329):0.02906):0.02736):0.02296):0.01293):0.00617);

[666] tree 't666'=[&R] (P\_deleyi:0.00646,(((P\_sp\_At-9b:0.01808,P\_cyprapedii:0.02405):0.01178,(P\_sp\_GM01:0.03192,(P\_dispersa:0.01806,(P\_eucrinea:0.03627,((P\_rodasii:0.009

48,P\_rwandensis:5.4E-4):0.01171,P\_wallisii:0.01421):0.00668):0.0068):0.01009):0.01814):0.01326,(P\_septica:0.01705,(P\_sp\_A4:0.05614,((E\_billingiae:0.0383,(E\_pyriifoliae:0.03053,E\_tasmaniensis:0.02126):0.08527):0.06828,(T\_sp\_NML\_06:0.05696,(T\_ptyseos:0.04012,T\_morbirosei:0.07537):0.01035):0.0157):0.02256):0.0195):0.01999):0.03348,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01681,(P\_allii:0.00964,P\_ananatis:5.4E-4):0.00604):0.01002):0.00377,((P\_brenneri:0.00647,P\_conspicua:0.00957):0.01689,((P\_vagans:5.4E-4,P\_sp\_aB:0.00636):0.00323,(P\_agglomerans:0.00955,P\_anthophila:0.00649):5.4E-4):0.00635):5.4E-4);

[667] tree 't667'=[&R]  
(((E\_pyriifoliae:0.00848,E\_tasmaniensis:0.01361):0.01676,((P\_brenneri:0.0,P\_conspicua:0.0):0.00489,(P\_agglomerans:5.4E-4,((P\_deleyi:0.00168,(P\_anthophila:0.0083,P\_sp\_aB:0.00275):0.00142):0.00241,P\_vagans:5.5E-4):0.00277):0.00619):0.01643):0.00618,(E\_billingiae:0.0432,((P\_sp\_GM01:0.01124,(P\_rodasii:0.00273,P\_rwandensis:0.00553):0.00828):0.00835,(P\_eucrina:0.00276,(P\_dispersa:0.00553,P\_wallisii:0.00551):0.00275):5.4E-4):0.01192):0.01237):0.00347,((P\_septica:0.00821,(P\_sp\_At-9b:0.00273,P\_cypripedii:0.00548):0.00277):0.00535,(T\_morbirosei:0.01457,(T\_sp\_NML\_06:0.03241,T\_ptyseos:0.00878):0.01668):0.03205):0.00269,(P\_sp\_A4:0.01952,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00511,(P\_allii:0.00453,P\_ananatis:0.00411):0.00438):0.0065):0.00306);

[668] tree 't668'=[&R] (P\_wallisii:5.4E-4,(P\_sp\_At-9b:0.00858,((T\_morbirosei:0.02689,(T\_ptyseos:0.04445,T\_sp\_NML\_06:5.4E-4):0.02666):0.00918,((P\_cypripedii:0.0085,(P\_sp\_GM01:0.02659,(P\_rwandensis:0.01747,P\_rodasii:5.5E-4):5.5E-4):0.00892):0.00916,(((P\_brenneri:0.0,P\_conspicua:0.0):5.4E-4,P\_septica:0.00876):0.01742,(P\_agglomerans:5.5E-4,(P\_sp\_aB:0.0087,(P\_vagans:0.0,P\_deleyi:0.0,P\_anthophila:0.0):5.5E-4):0.00872):0.00901):0.0224,(E\_billingiae:0.03096,(E\_pyriifoliae:0.00874,E\_tasmaniensis:5.5E-4):0.04326):0.01709):0.02349):0.00894):0.0085):5.4E-4,(P\_sp\_A4:0.02591,(P\_dispersa:5.5E-4,(P\_eucrina:0.00873,(P\_allii:0.0,P\_ananatis:0.0,P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00883):0.00891):0.00488):0.0048);

[669] tree 't669'=[&R]  
((P\_brenneri:0.09099,P\_conspicua:0.00761):0.00971,(P\_agglomerans:0.01008,P\_sp\_aB:0.00202):0.00609,(P\_vagans:5.3E-4,(((P\_s\_indologenes:0.00199,P\_s\_stewartii:0.00201):0.01273,(P\_allii:0.01224,P\_ananatis:5.5E-4):0.0036):0.02805,((E\_billingiae:0.0669,(E\_pyriifoliae:0.02217,E\_tasmaniensis:0.01092):0.04798):0.02728,(P\_sp\_A4:0.05591,(T\_morbirosei:0.0591,(T\_sp\_NML\_06:0.05744,T\_ptyseos:0.02949):0.0167):0.0737):0.01387):0.02026,(P\_septica:0.03732,((P\_sp\_GM01:0.02249,(P\_rwandensis:0.03946,P\_rodasii:0.01643):0.01711):0.01293,((P\_sp\_At-9b:0.00829,P\_cypripedii:0.00609):0.02294,(P\_dispersa:0.00374,(P\_eucrina:0.03238,P\_wallisii:0.00849):0.01726):0.02062):0.00788):0.01268):0.01675):0.01492):0.01222,(P\_deleyi:0.01349,P\_anthophila:0.00523):0.00752):5.4E-4):5.5E-4);

[670] tree 't670'=[&R] (P\_sp\_At-9b:0.02497,(P\_sp\_GM01:0.04193,P\_cypripedii:0.01647):0.01018,(((P\_septica:0.09917,(((P\_brenneri:0.01365,((P\_sp\_aB:0.0099,(P\_agglomerans:0.00325,P\_vagans:0.01323):0.00328):0.00413,(P\_deleyi:0.0319,P\_anthophila:0.03705):0.00904):0.01954):0.00462,P\_conspicua:0.00908):0.03601,((P\_s\_indologenes:0.0011,P\_s\_stewartii:0.00534):0.07272,(P\_allii:0.03575,P\_ananatis:0.06264):0.0116):0.06948):0.02409):0.03615,(P\_sp\_A4:0.07559,((T\_morbirosei:0.1224,(T\_ptyseos:0.0708,T\_sp\_NML\_06:0.10214):0.0383):0.12294,(E\_billingiae:0.09764,(E\_pyriifoliae:0.05407,E\_tasmaniensis:0.04866):0.14859):0.05064):

0.03319):0.04293):0.03955,(P\_eucrina:0.05555,P\_dispersa:0.0479):0.00815):0.01839,(P\_wallisii:0.02353,(P\_rwandensis:0.0425,P\_rodasii:0.01994):0.01614):0.00768):0.01179);

[671] tree 't671'=[&R]  
(P\_deleyi:0.01238,P\_vagans:0.00304,((P\_anthophila:0.007,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01129,(P\_allii:0.00305,P\_ananatis:0.00607):9.8E-4):0.03238,((P\_septica:0.0588,(P\_sp\_At-9b:0.01224,P\_cyprapedii:0.02141):0.01388):0.01794,((P\_sp\_A4:0.05558,((E\_pyrifoliae:0.0165,E\_tasmaniensis:0.02101):0.07411,(E\_billingiae:0.07659,(T\_morbirosei:0.01684,(T\_sp\_NML\_06:0.05017,T\_ptyseos:0.02911):0.01165):0.08576):0.08303):0.03354):0.0336,(P\_eucrina:0.00839,((P\_rodasii:0.00846,P\_rwandensis:0.00704):0.03544,(P\_dispersa:0.00974,(P\_wallisii:0.01351,P\_sp\_GM01:0.02046):0.00606):5.4E-4):0.00909):0.01024):0.02131):0.01099):0.01541):0.00306,((P\_agglomerans:5.5E-4,P\_sp\_aB:0.00307):0.01254,(P\_brenneri:5.5E-4,P\_conspicua:0.00305):0.00308):0.00241):0.00364);

[672] tree 't672'=[&R]  
((((P\_sp\_aB:0.0,P\_agglomerans:0.0,P\_vagans:0.0,P\_deleyi:0.0,P\_anthophila:0.0,P\_brenneri:0.0,P\_conspicua:0.0):0.00851,(P\_eucrina:0.02519,((P\_rodasii:0.0,P\_rwandensis:0.0):0.00821,(P\_wallisii:0.00824,P\_dispersa:5.5E-4):5.5E-4):0.00831):0.01697):0.00801,((P\_allii:0.0,P\_ananatis:0.0,P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01649,P\_sp\_At-9b:5.5E-4):0.00815):5.5E-4,P\_cyprapedii:5.5E-4,(P\_septica:0.00818,(P\_sp\_GM01:0.01675,((T\_sp\_NML\_06:0.01745,(T\_morbirosei:0.00854,T\_ptyseos:0.01699):0.00808):0.11072,(P\_sp\_A4:0.02033,(E\_billingiae:0.02563,(E\_tasmaniensis:0.0167,E\_pyrifoliae:0.01689):0.02939):0.04717):0.01484):0.00774):0.00811):5.3E-4);

[673] tree 't673'=[&R] ((P\_brenneri:0.0,P\_conspicua:0.0):5.5E-4,(P\_dispersa:5.5E-4,(P\_wallisii:0.02493,(P\_sp\_GM01:5.3E-4,((P\_sp\_A4:0.0,P\_septica:0.0):5.5E-4,(P\_eucrina:0.02506,(P\_sp\_At-9b:0.0,P\_cyprapedii:0.0,P\_rodasii:0.0,P\_rwandensis:0.0):0.01223):5.3E-4):0.01233):5.5E-4):0.01247):0.02556,((P\_agglomerans:5.4E-4,(P\_anthophila:0.01224,(P\_sp\_aB:0.0,P\_vagans:0.0,P\_deleyi:0.0):5.5E-4):0.01214):0.01226,((P\_allii:0.01247,(P\_ananatis:0.0,P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.5E-4):0.01234,(E\_billingiae:5.4E-4,(E\_pyrifoliae:0.0127,(E\_tasmaniensis:0.01159,((T\_ptyseos:0.0,T\_sp\_NML\_06:0.0):0.01215,T\_morbirosei:5.5E-4):0.01312):0.01263):0.01315):0.01256):0.01221):5.4E-4);

[674] tree 't674'=[&R] (P\_rodasii:0.02136,(P\_wallisii:0.00726,((P\_sp\_At-9b:5.5E-4,((T\_morbirosei:0.01059,(T\_ptyseos:0.01053,T\_sp\_NML\_06:0.04046):0.04549):0.06267,(E\_pyrifoliae:0.02142,E\_tasmaniensis:5.4E-4):0.02673):0.01032):0.00704,(P\_septica:0.01421,((P\_brenneri:5.4E-4,(P\_conspicua:5.5E-4,((P\_agglomerans:5.4E-4,(P\_sp\_aB:0.00683,(P\_allii:0.00717,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01433,P\_ananatis:5.3E-4):0.00711):0.01469):5.3E-4):0.0071,P\_vagans:5.3E-4):0.00715,(P\_deleyi:0.0,P\_anthophila:0.0):5.4E-4):0.00715):0.00723):0.01424,(P\_eucrina:0.02144,P\_cyprapedii:0.00686):5.5E-4):5.5E-4):0.00707):0.0069):0.01431,((E\_billingiae:0.03657,(P\_sp\_A4:0.00714,P\_dispersa:0.01434):0.00726):5.5E-4,(P\_rwandensis:0.0,P\_sp\_GM01:0.0):5.4E-4):5.3E-4);

[675] tree 't675'=[&R] (((P\_ananatis:0.00614,(P\_allii:0.01095,(P\_s\_indologenes:0.00574,P\_s\_stewartii:5.5E-4):0.04437):0.00956):0.09767,(P\_septica:0.04918,(((T\_ptyseos:0.0854,(T\_morbirosei:0.07247,T\_sp\_NML\_06:0.07478):0.02198):0.07453,(E\_billingiae:0.07571,(E\_pyrifoliae:0.05667,E\_tasmaniensis:0.03242):0.06213):0.06724):0.03147,(P\_sp\_A4:0

.10464,((P\_sp\_At-  
9b:0.02903,P\_cyprapedii:0.01925):0.04222,((P\_eucrino:0.04432,(P\_rodasii:0.03999,(P\_dispersa:0.01294,P\_wallisii:0.018  
41):0.00881):0.00392):0.00277,(P\_sp\_GM01:0.05156,P\_rwandensis:0.02896):0.00593):0.01361):0.02206):0.00947):0.0436):0  
.02746):0.01202,(P\_brenneri:0.01256,P\_conspicua:0.00622):0.00134):0.00796,P\_agglomerans:5.3E-  
4,((P\_deleyi:0.02487,(P\_vagans:0.01566,P\_anthophila:0.00619):5.5E-4):0.00307,P\_sp\_aB:0.01562):0.00318);  
[676] tree 't676'=[&R] (P\_dispersa:0.00907,((P\_sp\_At-  
9b:0.01237,P\_cyprapedii:0.01119):0.01921,(((T\_morbirosei:0.03901,(T\_ptyseos:0.0111,T\_sp\_NML\_06:0.0385):0.00561):0.06  
24,(E\_billingiae:0.03258,(E\_pyrifoliae:0.0198,E\_tasmaniensis:0.00804):0.02781):0.04425):0.0177,(P\_sp\_A4:0.02301,(((P  
\_deleyi:0.00672,(P\_agglomerans:0.0,P\_sp\_aB:0.0):5.3E-  
4,(P\_vagans:0.00465,P\_anthophila:0.00457):0.00459):0.00242):0.01284,(P\_brenneri:0.0192,P\_conspicua:0.0045):0.0016):0  
.00587,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00729,(P\_ananatis:0.00903,P\_allii:0.00479):0.00467):0.02492,P\_sep  
tica:0.04734):0.00813):0.02928):0.02271):0.00692):0.01334,(P\_sp\_GM01:0.01785,(P\_rodasii:0.00399,P\_rwandensis:0.0029  
4):0.00525):0.00745,(P\_eucrino:0.02572,P\_wallisii:0.00944):5.5E-4):0.00279);  
[677] tree 't677'=[&R] ((P\_sp\_GM01:0.01614,P\_eucrino:0.11759):0.00481,((P\_sp\_At-  
9b:0.00958,P\_cyprapedii:0.01946):0.01957,((E\_billingiae:0.06154,(E\_pyrifoliae:0.04559,E\_tasmaniensis:0.01231):0.0791  
2):0.04704,(((P\_s\_indologenes:5.3E-4,P\_s\_stewartii:0.00702):0.04357,(P\_allii:0.01438,P\_ananatis:5.4E-  
4):0.00934):0.053,(P\_brenneri:0.01406,P\_conspicua:0.01539):0.01409,((P\_vagans:0.01403,(P\_sp\_aB:5.5E-  
4,P\_agglomerans:0.00702):5.5E-4):5.5E-  
4,(P\_anthophila:0.02775,P\_deleyi:0.37883):0.00842):0.04903):0.02227):0.00755):0.03338):5.4E-  
4,((P\_rodasii:0.02112,P\_rwandensis:0.00684):5.5E-  
4,((P\_dispersa:0.0299,(P\_septica:0.08029,P\_wallisii:0.04899):0.02336):0.01103,(P\_sp\_A4:0.10838,(T\_sp\_NML\_06:0.1455,(  
T\_ptyseos:0.11122,T\_morbirosei:0.12523):0.04215):0.16798):0.02944):0.02527):0.01407);  
[678] tree 't678'=[&R] (((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.03674,(((P\_agglomerans:0.0,P\_deleyi:0.0):5.5E-  
4,P\_anthophila:0.01224):0.01211,(P\_vagans:5.5E-4,P\_sp\_aB:0.01233):5.5E-4):0.0252,(P\_brenneri:5.2E-  
4,P\_conspicua:0.01221):0.01238):0.01251):5.4E-4,(P\_allii:0.0,P\_ananatis:0.0):5.5E-4,(P\_septica:5.5E-  
4,(P\_sp\_A4:0.03261,(((P\_dispersa:0.04197,P\_eucrino:0.02711):0.0178,(((P\_sp\_GM01:0.0373,P\_rodasii:5.5E-4):5.4E-  
4,((P\_sp\_At-9b:0.01211,P\_cyprapedii:0.01275):0.02222,P\_wallisii:0.03694):0.00391):0.0131,(T\_morbirosei:5.4E-  
4,(T\_sp\_NML\_06:0.11105,T\_ptyseos:0.04337):0.06994):0.27389,P\_rwandensis:0.01414):0.0111):0.03271):0.0282,(E\_tasmani  
ensis:0.05194,E\_pyrifoliae:0.02424):0.07242,E\_billingiae:0.04308):0.02509):0.01764):0.02166):0.01232);  
[679] tree 't679'=[&R] ((P\_sp\_A4:0.08096,(P\_sp\_At-  
9b:0.01979,P\_cyprapedii:0.01969):0.01632):0.00809,((P\_septica:0.04362,(((P\_s\_indologenes:5.5E-  
4,P\_s\_stewartii:0.00294):0.01003,(P\_allii:0.00919,P\_ananatis:0.00865):0.01156):0.04619,(P\_anthophila:0.01077,(((P\_ag  
glomerans:0.01447,(P\_vagans:0.0117,P\_sp\_aB:5.5E-4):5.4E-  
4):0.01194,P\_deleyi:0.00589):0.00445,(P\_brenneri:0.00903,P\_conspicua:0.00878):0.02158):0.00845):0.03305):0.0417):0.0  
2238,(E\_billingiae:0.05767,(E\_pyrifoliae:0.01113,E\_tasmaniensis:0.02944):0.05988):0.03017):0.01077,(((P\_sp\_GM01:0.02  
853,(P\_rodasii:0.0234,P\_rwandensis:0.00909):0.01846):0.01242,P\_wallisii:0.01843):0.00537,((P\_eucrino:0.04983,(T\_morb  
irosei:0.04871,(T\_ptyseos:0.04428,T\_sp\_NML\_06:0.03434):0.02644):0.09755):0.02504,P\_dispersa:5.3E-  
4):0.01872):0.00264);

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[680] tree 't680'=[&R] (P_dispersa:0.01711,((P_sp_At-
9b:0.01772,P_cyprapedii:0.02394):0.02387,(((P_septica:0.05842,(((T_morbirosei:0.09239,(T_sp_NML_06:0.12721,T_ptyseos
:0.08974):0.07522):0.23985,((P_s_indologenes:0.0,P_s_stewartii:0.0):0.0055,(P_ananatis:0.03172,P_allii:0.03833):0.00
939):0.03315):0.04261,((P_brenneri:0.0103,P_conspicua:0.00501):0.03562,(P_anthophila:0.02665,(P_vagans:5.4E-
4,(P_deleyi:0.0358,(P_agglomerans:0.01487,P_sp_aB:5.5E-
4):0.00964):0.00533):0.02426):0.00888):0.01354):0.00599):0.00665,(E_billingiae:0.09184,(E_pyrifoliae:0.03291,E_tasma
niensis:0.03785):0.09215):0.06098):0.01708,P_sp_A4:0.17627):0.01235):0.01106,((P_eucrina:0.0783,P_wallisii:0.03782):
0.01448,(P_sp_GM01:0.03032,(P_rodasii:0.03598,P_rwandensis:0.02035):0.0259):0.03012):0.01361);
[681] tree 't681'=[&R] (P_wallisii:0.01318,(((P_s_indologenes:5.5E-4,P_s_stewartii:0.00331):0.01003,(P_allii:5.5E-
4,P_ananatis:0.00995):0.01324):0.02284,(P_sp_A4:0.05302,(P_septica:0.04993,(((T_morbirosei:0.03447,(T_sp_NML_06:0.05
775,T_ptyseos:0.03375):0.02115):0.06434,(E_billingiae:0.02874,(E_pyrifoliae:0.01426,E_tasmaniensis:0.02332):0.06219)
:0.06692):0.03186,(P_deleyi:0.01948,((P_vagans:5.4E-4,(P_sp_aB:0.00331,P_agglomerans:5.5E-4):0.00333):5.4E-
4,(P_brenneri:0.00666,(P_anthophila:0.00669,P_conspicua:0.00669):0.00337):0.00307):0.01854):0.03055):0.02167):0.0097
1):0.00584):0.00984,(P_dispersa:0.00335,(((P_sp_At-
9b:0.00971,P_cyprapedii:0.01731):0.01379,(P_rwandensis:0.01349,(P_rodasii:0.01723,P_sp_GM01:0.01361):0.0103):0.0069)
:0.00346,P_eucrina:0.01366):0.00311):0.00719);
[682] tree 't682'=[&R]
(P_sp_GM01:0.06018,(P_rwandensis:0.04073,P_rodasii:0.02494):0.00682,(P_dispersa:0.04641,((P_sp_At-
9b:0.0138,P_cyprapedii:0.03214):0.03073,(P_wallisii:0.06832,(P_eucrina:0.19039,(P_septica:0.09729,(((P_sp_A4:0.24783,
((T_sp_NML_06:0.21242,(T_morbirosei:0.12909,T_ptyseos:0.21074):0.14526):0.5402,(E_billingiae:0.07282,(E_pyrifoliae:0
.04061,E_tasmaniensis:0.03881):0.13026):0.18128):0.06812):0.05554,(((P_deleyi:0.03008,P_sp_aB:0.0139):0.01498,(P_ant
hophila:0.01686,(P_vagans:0.01505,P_agglomerans:0.01009):0.00419):5.5E-4):0.00846,((P_brenneri:5.1E-
4,P_conspicua:0.03183):0.02412,((P_s_indologenes:5.5E-
4,P_s_stewartii:0.00356):0.05362,(P_ananatis:0.02705,P_allii:0.02135):0.01354):0.15202):0.01964):0.08192):0.047):0.0
633):0.02141):0.02304):0.0042):0.00699);
[683] tree 't683'=[&R]
(((T_ptyseos:0.02817,(T_sp_NML_06:0.04247,T_morbirosei:0.0306):0.00279):0.02556,(((P_agglomerans:0.0,P_vagans:0.0,P_
brenneri:0.0,P_conspicua:0.0,P_sp_aB:0.0):5.4E-4,(P_deleyi:0.01197,P_anthophila:5.4E-
4):0.00599):0.0605,(P_septica:0.05602,(((E_billingiae:0.06418,(E_pyrifoliae:0.00389,E_tasmaniensis:0.01451):0.09515)
:0.04103,(P_allii:0.0061,P_ananatis:0.00594):0.01183):0.00601,(P_s_indologenes:0.0,P_s_stewartii:0.0):0.00647):0.016
89):0.0243):0.01197):0.02215,(P_sp_A4:0.01815,((P_sp_GM01:0.01816,P_rodasii:0.00567):0.01821,(P_dispersa:0.01802,(P_
wallisii:0.01785,P_rwandensis:0.00592):0.00605):5.5E-4):0.01208):0.00631,(P_eucrina:0.03043,(P_sp_At-
9b:0.00593,P_cyprapedii:5.4E-4):0.01217):0.01212);
[684] tree 't684'=[&R] ((P_agglomerans:0.00235,P_sp_aB:5.5E-4):5.5E-
4,(((P_s_indologenes:0.0,P_s_stewartii:0.0):0.0234,(P_allii:0.01036,P_ananatis:0.01958):0.02111):0.04484,(P_septica
:0.04048,(((P_sp_At-
9b:0.0187,P_cyprapedii:0.02268):0.02027,((P_sp_GM01:0.03053,(P_wallisii:0.02402,(P_dispersa:0.00797,P_eucrina:0.0467
6):0.01186):0.0105):0.00498,(P_rodasii:0.01059,P_rwandensis:0.02274):0.01939):0.01846):0.02067,((E_billingiae:0.0752
3,(E_pyrifoliae:0.03281,E_tasmaniensis:0.02172):0.10507):0.04764,((T_morbirosei:0.03626,(T_sp_NML_06:0.05646,T_ptyse
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os:0.05888):0.02414):0.10048,P\_sp\_A4:0.07867):0.02692):0.02341):0.02649):0.02748):0.01326,(P\_brenneri:0.00493,P\_conspicua:0.00703):0.01146):0.01042,((P\_anthophila:0.01128,P\_vagans:0.00525):0.0024,P\_deleyi:0.01614):0.00288);

[685] tree 't685'=[&R] (((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.5E-4,(P\_allii:0.00441,P\_ananatis:5.4E-4):0.00443):5.3E-4,(((T\_morbirosei:0.00733,(T\_ptyseos:0.0369,T\_sp\_NML\_06:0.02735):0.02545):0.05354,(E\_billingiae:0.02469,(E\_pyriifoliae:5.5E-4,E\_tasmaniensis:0.00442):0.02674):0.02393):0.00757,(P\_sp\_A4:0.04667,(P\_conspicua:0.00465,(P\_brenneri:5.4E-4,((P\_agglomerans:0.0,P\_vagans:0.0):5.5E-4,P\_sp\_aB:0.00441):5.5E-4,(P\_deleyi:0.00455,P\_anthophila:0.0043):0.00442):0.01318):0.00863):0.00804):0.00427):0.00573):0.01335,((P\_sp\_At-9b:0.0,P\_cypripedii:0.0):0.01807,(P\_rodasii:5.5E-4,(P\_rwandensis:5.5E-4,P\_sp\_GM01:0.00442):0.00441):0.00441):0.00443,(P\_wallisii:0.00331,(P\_eucrina:0.01331,(P\_septica:0.0178,P\_dispersa:5.5E-4):0.00446):0.0086):0.00164);

[686] tree 't686'=[&R] ((P\_eucrina:5.4E-4,((P\_sp\_At-9b:0.02241,P\_cypripedii:5.4E-4):0.03263,(P\_dispersa:0.0,P\_wallisii:0.0):5.5E-4):0.01064):0.02194,(P\_conspicua:0.01107,(P\_deleyi:0.0,P\_agglomerans:0.0,P\_vagans:0.0,P\_anthophila:0.0,P\_brenneri:0.0,P\_sp\_aB:0.0):5.5E-4):0.01089,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.3E-4,(((E\_billingiae:0.1323,((T\_morbirosei:5.4E-4,(T\_ptyseos:0.05177,T\_sp\_NML\_06:0.04221):0.06281):0.11078,(E\_pyriifoliae:0.01099,E\_tasmaniensis:5.4E-4):0.03668):0.01072):0.03936,((P\_septica:0.16971,P\_sp\_A4:0.0174):0.05598,(P\_sp\_GM01:0.01355,(P\_rodasii:0.01123,P\_rwandensis:5.5E-4):0.00991):0.01141):5.4E-4):0.02191,(P\_allii:0.0,P\_ananatis:0.0):5.5E-4):0.011):5.4E-4);

[687] tree 't687'=[&R] ((P\_sp\_At-9b:0.01501,P\_cypripedii:5.4E-4):0.02045,(P\_rwandensis:0.005,(P\_rodasii:0.0,P\_sp\_GM01:0.0):0.00509):0.00513,(P\_wallisii:5.4E-4,(P\_dispersa:0.01014,(P\_eucrina:0.01079,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.4E-4,(((P\_vagans:0.0,P\_brenneri:0.0,P\_conspicua:0.0,P\_sp\_aB:0.0):0.00519,(P\_deleyi:0.00518,(P\_agglomerans:0.0,P\_anthophila:0.0):5.5E-4):5.5E-4):0.01834,(P\_septica:0.08813,(P\_sp\_A4:0.03946,((E\_pyriifoliae:5.4E-4,E\_tasmaniensis:0.02088):0.04025,(E\_billingiae:0.07106,(T\_morbirosei:0.02675,(T\_sp\_NML\_06:0.10699,T\_ptyseos:0.03368):0.03677):0.08221):0.01848):0.02409):0.02697):0.01771):0.01325,(P\_allii:0.00514,P\_ananatis:5.4E-4):0.01477):5.5E-4):0.02094):0.01219):0.00854):0.01004);

[688] tree 't688'=[&R] ((P\_septica:0.02973,(P\_allii:0.02763,P\_ananatis:0.00214):0.00537):0.00308,((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00163):0.01046,(((P\_anthophila:5.4E-4,(P\_deleyi:0.00983,(P\_sp\_aB:5.4E-4,(P\_vagans:5.5E-4,P\_agglomerans:0.0116):0.00302):0.00986):0.01019):0.0116,P\_conspicua:0.005):0.00166,P\_brenneri:0.00166):0.03548):0.00338,(((T\_morbirosei:0.02176,(T\_ptyseos:0.02585,T\_sp\_NML\_06:0.05126):0.02936):0.05779,(E\_billingiae:0.03659,(E\_pyriifoliae:0.00263,E\_tasmaniensis:0.00396):0.0223):0.0361):0.02134,((P\_sp\_At-9b:0.0069,P\_cypripedii:0.00457):0.01708,(P\_sp\_A4:0.07091,((P\_sp\_GM01:0.00851,(P\_rodasii:0.00353,P\_rwandensis:0.01845):0.00166):0.01132,(P\_eucrina:0.01098,(P\_dispersa:0.00461,P\_wallisii:0.00204):0.00525):0.01201):0.00849):0.00931):0.01742):0.00326);

[689] tree 't689'=[&R] (((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00369):0.00705,(P\_allii:5.5E-4,P\_ananatis:0.00741):0.00407):0.01399,((P\_anthophila:5.5E-4,((P\_brenneri:0.0,P\_conspicua:0.0):0.01022,(P\_deleyi:5.4E-

4,(P\_vagans:0.00745,(P\_agglomerans:0.00371,P\_sp\_aB:0.00372):5.4E-4):0.00373):0.00488):0.01467):0.01201,P\_septica:0.02714):0.00649):0.01723,((P\_sp\_At-9b:5.4E-4,P\_cypripedii:0.01138):0.00763,(P\_sp\_A4:0.04624,(P\_sp\_GM01:0.01197,(P\_rwandensis:0.0191,P\_rodasii:0.00755):0.01061):0.00767):0.00806):0.0081,((P\_wallisii:0.01799,(P\_eucrina:0.03394,((T\_morbirosei:0.0344,(T\_ptyseos:0.07009,T\_sp\_NML\_06:0.05083):0.03147):0.04575,(E\_billingiae:0.02643,(E\_pyrifoliae:0.01066,E\_tasmaniensis:0.01168):0.09976):0.03657):0.01282):0.00593):0.00289,P\_dispersa:5.3E-4):0.00699);

[690] tree 't690'=[&R] ((P\_sp\_GM01:0.03493,(P\_rodasii:0.04076,P\_rwandensis:0.03987):0.01091):0.0234,(P\_sp\_At-9b:0.05822,P\_cypripedii:0.03099):0.02391,(P\_wallisii:0.07513,((P\_eucrina:0.11327,(((T\_morbirosei:0.10664,(T\_ptyseos:0.08323,T\_sp\_NML\_06:0.09238):0.05362):0.21282,(E\_billingiae:0.07509,(E\_pyrifoliae:0.0825,E\_tasmaniensis:0.02143):0.1132):0.16273):0.03985,((P\_s\_indologenes:5.4E-4,P\_s\_stewartii:0.00439):0.06317,(P\_allii:0.02766,P\_ananatis:0.02699):0.02112):0.07547,(P\_anthophila:0.03337,((P\_brenneri:0.04029,P\_conspicua:0.0229):0.02861,(P\_deleyi:0.03566,(P\_sp\_aB:0.01153,(P\_vagans:0.02401,P\_agglomerans:0.0172):0.00251):0.00699):0.00924):0.00907):0.05671):0.04812):0.02167,P\_septica:0.1102):0.01857,P\_sp\_A4:0.19457):0.0311):0.01849,P\_dispersa:0.04505):0.01097):0.00871);

[691] tree 't691'=[&R] (((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.0076,(P\_allii:0.01877,P\_ananatis:7.6E-4):0.00647):0.0359,((P\_brenneri:5.4E-4,(P\_anthophila:0.03443,(P\_sp\_aB:5.5E-4,(P\_agglomerans:0.00498,(P\_deleyi:0.01989,P\_vagans:5.5E-4):0.0049):0.0148):0.0066):0.00403):0.00485,P\_conspicua:5.3E-4):0.01152):0.02459,((P\_sp\_GM01:0.01462,(P\_rodasii:5.5E-4,P\_rwandensis:0.01479):0.01008):0.01005,(P\_dispersa:0.00479,(P\_wallisii:0.01375,P\_eucrina:0.01776):0.00786):0.00968):0.00982,(P\_sp\_At-9b:0.01479,P\_cypripedii:0.01969):5.4E-4):0.02437,((E\_billingiae:0.047,(E\_pyrifoliae:0.02503,E\_tasmaniensis:0.05319):0.0915):0.03173,(P\_septica:0.01184,(P\_sp\_A4:0.07271,(T\_morbirosei:0.04672,(T\_ptyseos:0.02814,T\_sp\_NML\_06:0.04129):0.05521):0.09585):0.01428):0.02333):0.00809);

[692] tree 't692'=[&R] (P\_wallisii:0.01146,(P\_sp\_GM01:0.01433,(P\_rodasii:0.00586,P\_rwandensis:0.00782):0.00347):0.00389,(P\_dispersa:0.00182,(((P\_sp\_At-9b:0.01196,P\_cypripedii:0.01206):0.01337,((P\_sp\_A4:0.06212,(P\_septica:0.04755,((P\_brenneri:0.00331,P\_conspicua:0.00696):0.01681,(P\_anthophila:0.01668,((P\_vagans:0.00508,(P\_agglomerans:5.5E-4,P\_sp\_aB:0.00673):5.4E-4):0.00842,P\_deleyi:0.00701):0.0042):0.00834):0.01751):0.01444):0.02205,(T\_sp\_NML\_06:0.05091,(T\_morbirosei:0.04591,T\_ptyseos:0.02045):0.01496):0.0535):0.01385):0.03242,P\_s\_indologenes:0.65325):0.03138,(P\_eucrina:0.04301,((P\_allii:0.00174,(P\_s\_stewartii:0.02114,P\_ananatis:0.00322):0.00356):0.02394,(E\_billingiae:0.03343,(E\_pyrifoliae:0.0168,E\_tasmaniensis:0.01822):0.04958):0.02381):0.00568):0.0062):0.00461):0.00807);

[693] tree 't693'=[&R] ((P\_rodasii:5.4E-4,P\_rwandensis:0.05427):0.07367,(P\_eucrina:5.4E-4,(P\_sp\_GM01:0.01802,((E\_billingiae:0.05842,(E\_pyrifoliae:0.10958,E\_tasmaniensis:0.02245):0.07299):0.05167,((T\_ptyseos:0.10692,(T\_sp\_NML\_06:0.08943,T\_morbirosei:0.0772):0.05406):0.06419,(P\_sp\_A4:0.12922,((P\_allii:0.03348,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.5E-4,P\_ananatis:0.01706):5.4E-4):0.03946,(P\_septica:0.1664,((P\_brenneri:0.017,(P\_anthophila:0.05105,(P\_agglomerans:0.0,P\_vagans:0.0):5.5E-4):0.01703):5.5E-4,(P\_conspicua:0.0,P\_sp\_aB:0.0):5.3E-4):5.4E-



4,P\_deleyi:0.03379):0.05889):0.0273):0.01964):0.05243):5.4E-4):0.02699,(P\_sp\_At-9b:0.01804,P\_cyprapedii:0.01791):0.0351):0.04027):0.01848):0.03557,(P\_dispersa:0.01836,P\_wallisii:5.4E-4):5.5E-4);  
[694] tree 't694'=[&R]  
((((T\_morbirosei:0.08333,(T\_sp\_NML\_06:0.08305,T\_ptyseos:0.03191):0.01964):0.14323,(E\_billingiae:0.09795,(E\_tasmaniensis:0.10741,E\_pyriifoliae:0.11069):0.10925):0.05073):0.04069,((((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.4E-4,(P\_septica:5.3E-4,(P\_conspicua:5.5E-4,(P\_brenneri:5.4E-4,(P\_vagans:0.02945,(P\_agglomerans:0.0,P\_deleyi:0.0,P\_anthophila:0.0,P\_sp\_aB:0.0):5.4E-4):0.03009):0.00955):0.00985):0.01935):0.01983,P\_allii:0.01621):0.00385,P\_ananatis:0.0095):0.01628):0.01852,(P\_sp\_A4:0.08096,(P\_sp\_At-9b:5.4E-4,P\_cyprapedii:0.01896):0.04209):0.01417):0.02219,P\_eucrina:0.03672):0.00379,P\_sp\_GM01:5.5E-4,((P\_dispersa:0.02071,(P\_rodasii:0.00968,P\_rwandensis:5.4E-4):0.03022):0.00982,P\_wallisii:0.02954):0.00914);  
[695] tree 't695'=[&R] (P\_vagans:0.0089,P\_sp\_aB:0.0022,(P\_agglomerans:5.5E-4,(P\_brenneri:0.00661,(P\_conspicua:5.4E-4,((((T\_morbirosei:0.03209,(T\_sp\_NML\_06:0.05591,T\_ptyseos:0.02215):0.0273):0.07986,(E\_billingiae:0.03456,(E\_pyriifoliae:0.01606,E\_tasmaniensis:0.00891):0.03797):0.04045):0.01716,((P\_septica:0.0288,P\_sp\_A4:0.04565):0.00537,(P\_rodasii:0.00721,P\_rwandensis:0.00835):0.00576,(P\_wallisii:0.01118,(P\_eucrina:0.06158,P\_dispersa:0.00522):0.01868):0.02113,P\_sp\_GM01:0.00996):0.00195):0.0289):0.0088):0.00939,(P\_sp\_At-9b:0.00247,P\_cyprapedii:0.00865):0.03563):0.02859,((P\_allii:0.00894,P\_ananatis:0.00451):0.01305,(P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00224):0.00282):0.01175):0.0231):0.00224):0.01093,(P\_deleyi:0.0106,P\_anthophila:0.00505):0.00643):0.00729):0.00419);  
[696] tree 't696'=[&R] ((P\_allii:5.4E-4,(P\_anthophila:5.5E-4,((P\_brenneri:0.0,P\_sp\_aB:0.0):5.5E-4,(P\_deleyi:0.00476,(P\_agglomerans:0.0,P\_vagans:0.0,P\_conspicua:0.0):5.5E-4):0.00476):0.00475):0.00474):0.00475,((P\_ananatis:0.0,P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.5E-4,(P\_septica:0.0189,(P\_dispersa:0.0,P\_wallisii:0.0,P\_eucrina:0.0):0.00958):5.4E-4):5.5E-4):0.00484,(P\_cyprapedii:0.00474,P\_sp\_At-9b:5.3E-4):0.00475,((P\_rodasii:0.0,P\_rwandensis:0.0):5.5E-4,(P\_sp\_GM01:0.00477,(P\_sp\_A4:5.4E-4,(E\_billingiae:0.03156,(E\_pyriifoliae:0.00204,E\_tasmaniensis:0.00269):0.06766,(T\_ptyseos:5.4E-4,(T\_morbirosei:0.03434,T\_sp\_NML\_06:0.00928):0.00967):0.04697):0.03235):0.01611):0.00475):5.5E-4):5.4E-4);  
[697] tree 't697'=[&R] (P\_septica:0.00299,P\_rodasii:0.003,((P\_sp\_At-9b:0.0,P\_wallisii:0.0,P\_cyprapedii:0.0,P\_eucrina:0.0,P\_dispersa:0.0):5.5E-4,((((T\_ptyseos:0.00583,(T\_morbirosei:0.00565,T\_sp\_NML\_06:0.01411):0.00328):0.0206,((P\_ananatis:5.4E-4,(P\_allii:5.4E-4,(P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00302):0.00294):0.00301):0.00358,((P\_deleyi:0.0,P\_vagans:0.0,P\_sp\_aB:0.0,P\_anthophila:0.0):5.4E-4,(P\_agglomerans:0.00301,(P\_conspicua:5.5E-4,P\_brenneri:0.00301):0.003):0.00301):0.00537):0.00304,(P\_sp\_A4:0.00937,(E\_billingiae:0.02037,(E\_pyriifoliae:5.5E-4,E\_tasmaniensis:0.00297):0.02094):0.00812):0.0092):0.00297):0.00233,(P\_rwandensis:0.00301,P\_sp\_GM01:0.006):0.00299):5.4E-4):5.5E-4);  
[698] tree 't698'=[&R] (((P\_allii:0.00306,((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00158):0.00444,P\_ananatis:0.00199):0.00214):0.00516,((((P\_sp\_A4:0.03758,(T\_morbirosei:0.01926,(T\_p

tyseos:0.02294,T\_sp\_NML\_06:0.01716):0.0132):0.04355):0.01123,((P\_cypripedii:0.00645,(P\_dispersa:0.00618,(P\_wallisii:0.00768,P\_eucrina:0.01013):0.00164):0.00816):5.3E-4,P\_sp\_At-9b:5.4E-4):0.00275):0.00449,(P\_sp\_GM01:0.01394,(P\_rodasii:0.00195,P\_rwandensis:0.00127):0.01546):0.0034):0.00554,(P\_septica:0.01897,(E\_billingiae:0.01593,(E\_pyriifoliae:0.0054,E\_tasmaniensis:0.00586):0.00775):0.02308):0.0022):0.00489):0.00644,(P\_anthophila:0.00642,(P\_conspicua:0.0031,P\_brenneri:0.00189):0.00283):5.4E-4):0.00162,(P\_vagans:0.0,P\_sp\_aB:0.0):5.5E-4,(P\_deleyi:0.0048,P\_agglomerans:0.00483):5.5E-4);

[699] tree 't699'=[&R] ((P\_sp\_GM01:0.0479,(P\_rodasii:0.0,P\_rwandensis:0.0):5.4E-4):0.01166,P\_septica:0.03513,((P\_sp\_At-9b:0.0,P\_allii:0.0,P\_ananatis:0.0,P\_brenneri:0.0,P\_conspicua:0.0,P\_cypripedii:0.0,P\_dispersa:0.0):5.4E-4,(((P\_agglomerans:0.0,P\_anthophila:0.0):0.01148,(P\_vagans:0.0,P\_deleyi:0.0,P\_sp\_aB:0.0):5.5E-4):0.01147,(P\_eucrina:0.07321,(E\_billingiae:0.02424,((P\_sp\_A4:0.18174,(E\_pyriifoliae:0.26879,E\_tasmaniensis:0.03383):0.02847):0.03656,(T\_sp\_NML\_06:5.3E-4,(T\_morbirosei:0.01149,T\_ptyseos:5.4E-4):0.01151):0.02359):0.01161):0.01165):0.01197):0.01172,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.5E-4,P\_wallisii:0.01136):0.01145):5.4E-4);

[700] tree 't700'=[&R] ((P\_sp\_At-9b:0.01459,P\_cypripedii:0.01057):0.03711,(P\_sp\_GM01:0.02688,(P\_rodasii:0.02762,P\_rwandensis:0.03456):0.01817):0.00973,((P\_eucrina:0.10306,(P\_septica:0.08174,((P\_sp\_A4:0.12898,((T\_morbirosei:0.14479,(T\_ptyseos:0.07878,T\_sp\_NML\_06:0.11373):0.05171):0.18476,(E\_billingiae:0.11332,(E\_pyriifoliae:0.05164,E\_tasmaniensis:0.06042):0.12696):0.11114):0.04625):0.03578,(((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00304):0.0453,(P\_allii:0.02809,P\_ananatis:0.00957):0.01278):0.04563,(((P\_agglomerans:0.014,P\_deleyi:0.01867):0.00404,((P\_sp\_aB:0.009,P\_vagans:0.01559):0.00477,P\_anthophila:0.03012):0.00236):0.0221,(P\_conspicua:0.03388,P\_brenneri:0.01118):0.01408):0.0426):0.02256):0.00911):0.04065):0.00838,(P\_dispersa:0.01798,P\_wallisii:0.04293):0.00914):0.0061);

[701] tree 't701'=[&R] ((P\_septica:0.20371,((P\_sp\_GM01:0.04848,((P\_dispersa:0.02184,(P\_wallisii:0.05205,(P\_eucrina:0.07785,P\_sp\_A4:0.30147):0.05906):0.03969):0.01147,(P\_rodasii:0.02246,P\_rwandensis:0.06089):0.04562):5.4E-4):0.0413,(P\_sp\_At-9b:0.00804,P\_cypripedii:0.06266):0.06756):0.08981):0.00427,(P\_brenneri:0.05493,(((P\_agglomerans:5.4E-4,(P\_sp\_aB:0.02492,P\_anthophila:0.05003):0.02394):0.02407,(P\_vagans:0.01097,P\_deleyi:0.12882):0.01249):0.07087,P\_conspicua:0.01919):0.0402):0.06497,((P\_ananatis:0.03494,(P\_allii:0.02225,(P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.01174):0.04901):0.03137):0.13889,((T\_ptyseos:0.2433,(T\_morbirosei:0.29619,T\_sp\_NML\_06:0.44937):0.08268):0.18991,(E\_billingiae:0.36824,(E\_pyriifoliae:0.11518,E\_tasmaniensis:0.14085):0.21105):0.05938):0.07354):0.00331);

[702] tree 't702'=[&R] ((P\_brenneri:0.01308,P\_conspicua:0.008):0.03015,((P\_sp\_aB:0.0217,P\_agglomerans:0.00783):0.01557,((P\_allii:0.02275,P\_anthophila:0.03539):0.01493,(P\_deleyi:0.025,P\_vagans:0.04441):0.00543):0.01383):5.3E-4,((P\_ananatis:0.01139,(P\_s\_indologenes:5.4E-4,P\_s\_stewartii:0.00684):0.03599):0.03566,(P\_septica:0.02074,(P\_sp\_A4:0.03044,((T\_sp\_NML\_06:0.01177,(T\_ptyseos:0.01624,T\_morbirosei:0.02912):0.04569):0.04067,(((P\_rwandensis:0.00712,P\_sp\_GM01:0.01427):0.01427,((P\_eucrina:0.04375,(P\_cypripedii:5.4E-4,(P\_wallisii:0.08128,P\_dispersa:0.03435):0.01287):0.01373):5.4E-4,(P\_rodasii:0.00715,P\_sp\_At-

9b:5.5E-4):5.4E-4):0.00732):0.02265,(E\_billingiae:0.03568,(E\_pyrifoliae:0.02675,E\_tasmaniensis:0.03006):0.08811):0.0239):0.00798):5.3E-4):0.01314):0.01611):0.00878);

[703] tree 't703'=[&R] ((P\_s\_stewartii:0.41002,P\_septica:0.09351):0.06722,(((P\_brenneri:0.01129,(P\_anthophila:5.4E-4,(P\_sp\_aB:5.3E-4,(P\_deleyi:0.03533,(P\_agglomerans:0.00853,P\_vagans:5.4E-4):0.01733):5.4E-4):0.00859):0.02373):0.00894,P\_conspicua:0.01975):0.02551,((P\_sp\_At-9b:0.01785,P\_cypripedii:5.5E-4):0.0179,(P\_dispersa:5.4E-4,(P\_eucrina:0.02788,P\_wallisii:0.03676):0.01759):0.03575,((P\_sp\_GM01:0.03617,P\_rodasii:0.01336):0.03472,P\_rwandensis:0.01765):5.5E-4):0.01767):0.00889):0.0107,(((T\_morbirosei:0.14747,(T\_sp\_NML\_06:0.08454,T\_ptyseos:0.0955):0.01601):0.16446,P\_sp\_A4:0.0628):0.05696,((P\_s\_indologenes:0.01917,(P\_allii:0.02668,P\_ananatis:0.00858):0.01715):0.07821,(E\_billingiae:0.08551,(E\_pyrifoliae:0.02841,E\_tasmaniensis:0.0292):0.08064):0.0555):0.00412):0.01373);

[704] tree 't704'=[&R] (P\_dispersa:0.03279,((P\_sp\_At-9b:0.03955,P\_cypripedii:0.01444):0.0208,(P\_eucrina:0.0925,((P\_sp\_A4:0.12065,((T\_morbirosei:0.06347,(T\_ptyseos:0.10678,T\_sp\_NML\_06:0.08407):0.03767):0.17229,(E\_billingiae:0.08885,(E\_pyrifoliae:0.06035,E\_tasmaniensis:0.05196):0.07763):0.08291):0.04086):0.04094,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01139,(P\_allii:0.00896,P\_ananatis:0.00853):0.01703):0.08094,(P\_septica:0.06232,((P\_anthophila:0.01955,((P\_deleyi:0.02099,P\_vagans:0.02552):0.00396,(P\_sp\_aB:0.01516,P\_agglomerans:0.01842):0.00767):0.01391):0.03116,(P\_brenneri:0.02367,P\_conspicua:0.01272):0.01172):0.02016):0.02601):0.02495):0.02619):0.0128):0.01549,(P\_wallisii:0.01295,(P\_sp\_GM01:0.0314,(P\_rwandensis:0.0281,P\_rodasii:0.01376):0.00675):0.01183):0.00604);

[705] tree 't705'=[&R] ((P\_sp\_aB:0.07203,(P\_deleyi:0.02014,P\_agglomerans:0.04307):0.01104):5.4E-4,(P\_brenneri:0.01857,(((T\_morbirosei:0.23506,(T\_ptyseos:0.18398,T\_sp\_NML\_06:0.22085):0.13223):0.15854,(E\_billingiae:0.02059,(E\_pyrifoliae:0.06237,E\_tasmaniensis:0.04152):0.10356):0.07276):0.06097,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.05393,(P\_allii:0.00581,P\_ananatis:0.03098):0.02419):0.05437):0.02711,((P\_sp\_A4:0.14587,((P\_rodasii:0.02285,(P\_wallisii:0.04844,(P\_dispersa:0.03114,P\_eucrina:0.31859):0.02299):0.05989,(P\_sp\_GM01:0.02847,P\_rwandensis:0.04297):0.0142):0.00517):0.04096,(P\_sp\_At-9b:0.02345,P\_cypripedii:0.02921):0.01406):0.05478):0.03024,P\_septica:0.12402):0.01147):0.03984):0.02295,((P\_anthophila:0.0383,P\_vagans:0.00697):5.4E-4,P\_conspicua:0.0535):0.01457);

[706] tree 't706'=[&R] ((P\_rodasii:0.02276,P\_rwandensis:0.01535):0.01618,P\_sp\_GM01:0.02892,(P\_wallisii:0.03703,(((P\_sp\_At-9b:0.02086,P\_cypripedii:0.02103):0.01768,(P\_septica:0.06514,(((E\_billingiae:0.08676,(E\_pyrifoliae:0.04294,E\_tasmaniensis:0.06822):0.0794):0.09534,(P\_sp\_A4:0.11136,(T\_morbirosei:0.13195,(T\_sp\_NML\_06:0.27736,T\_ptyseos:0.10992):0.05966):0.34228):0.04439):0.02509,(((P\_s\_indologenes:0.00337,P\_s\_stewartii:5.4E-4):0.02949,(P\_allii:0.03143,P\_ananatis:0.01016):0.02374):0.03261,((P\_brenneri:0.00857,P\_conspicua:0.01052):0.01594,(P\_sp\_aB:0.01987,(P\_agglomerans:0.00892,P\_vagans:0.0154):0.00331):0.00381,(P\_anthophila:0.01997,P\_deleyi:0.02085):0.00566):0.03502):0.02841):0.02672):0.01365):0.04916):0.01791,(P\_eucrina:0.10596,P\_dispersa:0.03274):0.0087):0.00452):0.00541);

[707] tree 't707'=[&R] ((P\_allii:0.0,P\_ananatis:0.0):0.00868,(P\_agglomerans:0.0,P\_vagans:0.0,P\_deleyi:0.0,P\_anthophila:0.0,P\_brenneri:0.0,P

\_conspicua:0.0,P\_eucrina:0.0,P\_sp\_aB:0.0,P\_s\_indologenes:0.0,P\_s\_stewartii:0.0,P\_wallisii:0.0):5.5E-4,((E\_tasmaniensis:0.00637,(P\_sp\_A4:0.01755,((E\_pyrifoliae:0.00868,(P\_rodasii:5.5E-4,((T\_ptyseos:0.0,T\_sp\_NML\_06:0.0):0.01738,T\_morbirosei:5.5E-4):0.01747):0.00867):5.5E-4,(E\_billingiae:0.0,P\_sp\_At-9b:0.0,P\_cyprapedii:0.0,P\_dispersa:0.0,P\_rwandensis:0.0,P\_sp\_GM01:0.0):5.5E-4):5.5E-4):0.00466):0.00633,P\_septica:0.00867):5.5E-4);

[708] tree 't708'=[&R] ((P\_agglomerans:0.00986,(P\_conspicua:5.5E-4,P\_brenneri:0.00244):0.00247):0.00487,(P\_deleyi:0.00739,(P\_vagans:0.00736,P\_sp\_aB:0.00248):0.00247):0.00758,((P\_septica:0.03174,((P\_sp\_At-9b:7.4E-4,P\_cyprapedii:0.00169):0.01481,(E\_billingiae:0.07132,(E\_pyrifoliae:0.03755,E\_tasmaniensis:0.01502):0.0453):0.0535):0.01136,(((P\_sp\_A4:0.05648,(T\_morbirosei:0.02621,(T\_sp\_NML\_06:0.06188,T\_ptyseos:0.0095):0.02923):0.12358):0.02101,(P\_dispersa:0.01694,((P\_rwandensis:0.0025,(P\_rodasii:5.5E-4,P\_sp\_GM01:0.02736):0.00971):0.01402,(P\_eucrina:0.02666,P\_wallisii:0.01477):0.0252):0.00704):0.01569):0.01077,(P\_ananatis:0.00864,((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00476):0.01918,P\_allii:0.01507):0.00775):0.02683):0.00613):0.00941):0.0178,P\_anthophila:0.00147):0.00623);

[709] tree 't709'=[&R] ((P\_sp\_aB:0.0163,P\_vagans:0.06336):0.01472,P\_deleyi:0.07972,(P\_anthophila:0.07721,(((P\_conspicua:0.01472,P\_brenneri:0.01499):0.04633,((((((P\_sp\_At-9b:0.01595,P\_cyprapedii:5.4E-4):0.11289,(P\_sp\_GM01:0.02783,((P\_rodasii:5.4E-4,(P\_wallisii:5.3E-4,P\_dispersa:0.03315):0.03304):0.01716,P\_rwandensis:5.5E-4):0.07186):0.0917):0.02062,(P\_sp\_A4:0.06704,(P\_eucrina:0.26636,(T\_sp\_NML\_06:0.16491,(T\_morbirosei:0.21591,T\_ptyseos:0.03389):0.07928):0.08467):0.02201):0.04202):0.02517,(E\_billingiae:0.0491,(E\_pyrifoliae:0.12203,E\_tasmaniensis:0.06619):0.06588):0.07036):0.0256,P\_septica:0.07691):0.08779,(P\_allii:5.5E-4,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.03126):5.5E-4):0.01505,P\_ananatis:5.5E-4):0.04725):0.03054,P\_agglomerans:5.4E-4):0.00197):0.01738);

[710] tree 't710'=[&R] (((P\_brenneri:0.0,P\_conspicua:0.0,P\_agglomerans:0.0,P\_vagans:0.0,P\_anthophila:0.0,P\_sp\_aB:0.0):5.4E-4,P\_deleyi:0.0477):0.02271,P\_wallisii:5.3E-4):0.02276,((P\_septica:0.0,P\_sp\_At-9b:0.0,P\_cyprapedii:0.0):5.4E-4,(P\_sp\_A4:0.06417,((T\_sp\_NML\_06:0.0433,(T\_morbirosei:0.0,T\_ptyseos:0.0):0.04682):0.07917,(((P\_s\_stewartii:0.0,P\_s\_indologenes:0.0):5.4E-4,(P\_rwandensis:0.02141,(E\_billingiae:0.04348,(E\_pyrifoliae:0.0,E\_tasmaniensis:0.0):5.4E-4):0.02179):5.5E-4):5.5E-4,(P\_allii:5.5E-4,((P\_sp\_GM01:0.0,P\_rodasii:0.0):0.02195,P\_ananatis:0.02209):5.4E-4):0.02193):0.01658):0.00813):0.01058):0.04542,(P\_dispersa:5.3E-4,P\_eucrina:0.0248):5.3E-4);

[711] tree 't711'=[&R] (P\_sp\_At-9b:0.00798,P\_cyprapedii:5.5E-4,(P\_rodasii:0.00788,((P\_sp\_GM01:0.00788,(((E\_billingiae:0.06713,(E\_tasmaniensis:0.07283,E\_pyrifoliae:0.04172):0.0344):0.09685,P\_eucrina:0.10678):0.0405,((T\_morbirosei:0.11842,(T\_sp\_NML\_06:0.40436,T\_ptyseos:0.08046):0.03853):0.56522,(P\_wallisii:0.0162,P\_dispersa:5.3E-4):5.5E-4):0.01005):0.00794):0.00793,(P\_rwandensis:0.016,(((P\_ananatis:0.02072,(P\_allii:5.4E-4,(P\_s\_indologenes:0.008,P\_s\_stewartii:0.00783):0.0491):0.00666):0.02,((P\_brenneri:0.0,P\_conspicua:0.0):5.4E-4,(P\_deleyi:0.01576,(P\_agglomerans:0.0,P\_sp\_aB:0.0):5.5E-4):5.5E-4,(P\_vagans:5.5E-

4,P\_anthophila:0.01583):0.00784):0.02379):0.00791):0.018,(P\_septica:0.0583,P\_sp\_A4:0.06158):0.02147):0.01439):0.00804):0.00782):5.4E-4);

[712] tree 't712'=[&R] (P\_dispersa:0.00717,P\_wallisii:0.00877,((P\_eucrina:0.0266,((P\_sp\_At-9b:0.01149,P\_cypripedii:0.01898):0.02451,((P\_septica:0.05211,((E\_billingiae:0.0586,(E\_pyrifoliae:0.01722,E\_tasmanien sis:0.03677):0.07636):0.01902,((T\_morbirosei:0.03049,(T\_ptyseos:0.04489,T\_sp\_NML\_06:0.03887):0.02318):0.07419,P\_sp\_A 4:0.03902):0.00873):0.00919):0.0154,((P\_allii:0.00417,((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00119):0.01576,P\_ananatis:0.00463):0.00334):0.0438,(P\_brenneri:0.01202,(P\_anthophila:0.02126,(P\_co nspicua:0.02554,(P\_deleyi:0.00648,(P\_vagans:0.00421,(P\_sp\_aB:0.00947,P\_agglomerans:0.00237):0.00525):0.01316):0.0055 4):0.00817):0.01355):0.01961):0.02041):0.01278):0.00982):0.00431,(P\_sp\_GM01:0.02997,(P\_rodasii:0.01121,P\_rwandensis: 0.00201):0.01424):0.00635):0.00356);

[713] tree 't713'=[&R] (P\_sp\_aB:0.01706,P\_agglomerans:0.01201,(P\_vagans:0.00475,(P\_deleyi:0.01638,(P\_anthophila:0.01898,(((P\_s\_indologenes :0.00243,P\_s\_stewartii:5.5E-4):0.00543,(P\_allii:0.0151,P\_ananatis:0.00701):0.01231):0.08174,(P\_septica:0.06519,(((P\_rodasii:0.00981,P\_rwandensi s:0.01216):0.00861,(P\_sp\_GM01:0.03604,(P\_dispersa:0.01505,(P\_wallisii:0.02305,P\_eucrina:0.0496):0.00739):0.01575):0. 00619):0.03998,(P\_sp\_At-9b:0.01638,P\_cypripedii:0.03498):0.00468):0.02015,(P\_sp\_A4:0.06528,((T\_morbirosei:0.06705,(T\_ptyseos:0.06351,T\_sp\_NM L\_06:0.04462):0.05565):0.0853,(E\_billingiae:0.06268,(E\_pyrifoliae:0.04207,E\_tasmaniensis:0.03116):0.06441):0.07078): 0.02127):0.01259):0.01991):0.03305):0.02169,(P\_brenneri:0.00327,P\_conspicua:0.01849):0.00592):0.02002):0.00481):5.5E -4):0.00471);

[714] tree 't714'=[&R] (P\_anthophila:0.03454,P\_deleyi:0.00992,((P\_vagans:0.01468,P\_agglomerans:0.01453):0.00466,(P\_sp\_aB:0.02653,((P\_brenne ri:0.0097,P\_conspicua:0.01438):0.0313,((P\_allii:0.00958,(P\_ananatis:0.02426,(P\_s\_indologenes:0.00855,P\_s\_stewartii:0 .00221):0.01802):0.00546):0.12557,(((T\_morbirosei:0.12394,(T\_ptyseos:0.06263,T\_sp\_NML\_06:0.12313):0.07507):0.25821, (E\_billingiae:0.07895,(E\_pyrifoliae:0.0591,E\_tasmaniensis:0.07179):0.13027):0.16132):0.07291,((P\_sp\_At-9b:0.03822,P\_cypripedii:0.04328):0.03807,((P\_rodasii:0.01667,P\_rwandensis:0.02295):0.05875,(P\_sp\_GM01:0.01529,(P\_wal lisii:0.03455,(P\_eucrina:0.05447,P\_dispersa:0.0294):0.02048):0.04071):0.00919):0.03146):0.03384):0.04672,(P\_sp\_A4:0. 10605,P\_septica:0.04877):0.02217):0.02337):0.02178):0.02191):0.01053):0.00469);

[715] tree 't715'=[&R] (P\_eucrina:0.02003,(P\_dispersa:0.01334,(P\_rodasii:0.0136,P\_rwandensis:0.00669):0.00688):0.00664,(P\_wallisii:5.4E-4,((P\_sp\_GM01:0.01675,((T\_ptyseos:5.5E-4,(T\_sp\_NML\_06:0.02711,T\_morbirosei:0.02046):0.00653):0.05652,(E\_billingiae:0.02679,(E\_pyrifoliae:0.02447,E\_tasmanie nsis:0.02363):0.01602):0.05146):0.02291):0.03149,((P\_sp\_At-9b:0.0,P\_cypripedii:0.0):5.3E-4,((P\_sp\_A4:0.04157,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.5E-4,(P\_allii:0.00667,P\_ananatis:5.5E-4):0.00666):0.02731,(((P\_agglomerans:0.0,P\_vagans:0.0):5.5E-4,(P\_sp\_aB:0.0067,(P\_anthophila:0.01979,P\_deleyi:5.5E-4):0.01344):5.5E-4):0.0067,(P\_brenneri:0.0,P\_conspicua:0.0):5.4E-4):5.4E-4):0.01399):0.00622,P\_septica:0.00683):0.01364):0.00663):0.00673):5.4E-4);

[716] tree 't716'=[&R] ((P\_sp\_GM01:0.00826,((P\_conspicua:5.4E-4,(P\_brenneri:0.02315,((P\_anthophila:5.4E-4,((P\_deleyi:0.04612,(P\_agglomerans:0.00751,P\_vagans:5.5E-4):5.4E-4):0.01509,P\_sp\_aB:5.4E-4):0.01516):5.3E-

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4,((P_s_indologenes:0.0,P_s_stewartii:0.0):0.01524,(P_allii:0.41631,P_ananatis:0.02172):0.00144):0.031):0.02274):0.0
0744):0.02616,((T_ptyseos:5.5E-
4,(T_morbirosei:0.05545,T_sp_NML_06:0.03029):0.00754):0.16978,(E_billingiae:0.04069,(E_pyriifoliae:0.01058,E_tasmanie
nsis:0.01226):0.03532):0.06625):0.01106):0.02283,(P_sp_A4:0.06294,P_septica:0.02276):0.01356):0.03072):0.00645,(P_sp
_At-9b:0.0,P_cyprapedii:0.0):0.03733,(P_rwandensis:5.5E-
4,(P_eucrina:0.06304,(P_rodasii:0.00732,(P_wallisii:0.01554,P_dispersa:0.00729):0.00732):0.00731):5.4E-4):5.4E-4);
[717] tree 't717'=[&R]
(((P_conspicua:0.0,P_brenneri:0.0,P_eucrina:0.0,P_rodasii:0.0,P_rwandensis:0.0,P_wallisii:0.0):5.4E-
4,((P_sp_A4:0.02791,((P_cyprapedii:0.0,P_sp_At-9b:0.0):5.5E-4,P_dispersa:0.00911):5.5E-
4):0.00912,((P_anthophila:0.0,P_septica:0.0):5.3E-
4,((T_sp_NML_06:0.03809,T_morbirosei:0.0091):0.01851,((T_ptyseos:0.02021,(E_billingiae:0.0472,(E_pyriifoliae:0.01778,
E_tasmaniensis:0.03663):0.02908):0.0253):0.00923,((P_allii:0.0,P_ananatis:0.0):0.00904,(P_s_stewartii:0.01808,P_s_in
dologenes:5.5E-4):5.5E-4):0.02561):0.01109):0.00924):0.01809):5.5E-
4):0.00907,(P_agglomerans:0.0,P_vagans:0.0,P_sp_aB:0.0):5.5E-4,(P_sp_GM01:0.00898,P_deleyi:0.018):5.3E-4);
[718] tree 't718'=[&R]
((P_anthophila:0.00586,(P_sp_A4:0.02336,(((P_s_indologenes:0.0,P_s_stewartii:0.0):0.0174,(P_allii:0.01161,P_ananatis
:5.5E-4):0.00566):0.00587,(((P_cyprapedii:0.01654,P_sp_At-9b:0.0066):0.01736,(P_wallisii:5.4E-
4,((P_dispersa:0.01164,P_eucrina:0.01162):0.00582,(P_sp_GM01:5.5E-4,(P_rodasii:0.01761,P_rwandensis:5.4E-
4):0.00547):0.00592):0.00573):0.00579):0.00583,((P_brenneri:0.0,P_conspicua:0.0):0.00601,((T_ptyseos:0.02086,(T_sp_
NML_06:0.04288,T_morbirosei:0.02482):0.01355):0.07774,(E_tasmaniensis:0.02134,E_pyriifoliae:0.00904):0.02068):0.01492
,(P_septica:0.03616,E_billingiae:0.03476):5.4E-4):8.6E-4):0.01158):0.00581):0.01208):0.00578):5.4E-
4,(P_agglomerans:0.0,P_sp_aB:0.0):5.5E-4,(P_deleyi:0.00584,P_vagans:0.00573):5.5E-4);
[719] tree 't719'=[&R]
(P_deleyi:0.00616,(P_agglomerans:0.00514,(P_vagans:0.00346,P_sp_aB:0.00471):0.00656):0.01533,(P_anthophila:0.01275,(
P_brenneri:0.00331,(P_conspicua:0.00669,(((P_sp_At-
9b:0.01228,P_cyprapedii:0.01075):0.01832,(((P_dispersa:0.01816,P_eucrina:0.02187):0.00699,P_wallisii:0.00656):0.0033
2,(P_sp_GM01:0.01442,(P_rwandensis:0.01867,P_rodasii:0.00431):0.01168):0.00709):0.01911):0.0117,((T_morbirosei:0.034
97,(T_ptyseos:0.03127,T_sp_NML_06:0.03292):0.00791):0.09541,(P_sp_A4:0.04691,(E_billingiae:0.06291,(E_pyriifoliae:0.0
1769,E_tasmaniensis:0.0054):0.03957):0.03598):0.01612):0.01314):0.01844,(P_septica:0.04881,((P_s_indologenes:5.5E-
4,P_s_stewartii:0.00161):0.01697,(P_allii:0.01205,P_ananatis:0.00975):0.01422):0.01531):0.01395):0.00645):0.00325):0
.01052):0.0064);
[720] tree 't720'=[&R]
((((T_ptyseos:0.03621,(T_sp_NML_06:0.04857,T_morbirosei:0.05338):0.01258):0.07319,((P_rodasii:0.01031,P_rwandensis:0
.01034):0.01621,(P_sp_GM01:0.0479,P_sp_At-9b:0.00992):0.00533):5.5E-
4):0.01504,P_cyprapedii:0.00824):0.01424,P_dispersa:0.01492,(((P_eucrina:0.04489,P_septica:0.03276):0.01845,(P_sp_A4
:0.10932,((P_s_indologenes:5.5E-4,P_s_stewartii:0.01035):5.5E-4,(P_allii:0.01562,(P_ananatis:5.3E-
4,((E_billingiae:0.02865,(E_pyriifoliae:0.03129,E_tasmaniensis:0.02724):0.02515):0.02373,(P_conspicua:0.01013,((P_ag
glomerans:0.005,(P_deleyi:0.00474,P_sp_aB:0.0102):5.5E-4):5.4E-4,(P_anthophila:0.01003,P_vagans:5.3E-
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4):0.00495):0.00501,P\_brenneri:5.5E-4):0.005):0.00573):0.03056):0.01573):0.00501):0.03136):5.4E-4):0.0163,P\_wallisii:0.0222):0.00515);

[721] tree 't721'=[&R] ((P\_wallisii:0.02078,P\_sp\_GM01:0.01603):0.00791,(P\_eucrina:0.02589,(P\_sp\_At-9b:0.01128,P\_cypripedii:0.03408):0.01196):0.00977,(P\_dispersa:0.02308,(P\_rodasii:0.02147,(((E\_billingiae:0.11857,(E\_pyrifoliae:0.04608,E\_tasmaniensis:0.0139):0.06002):0.02603,(T\_morbirosei:0.06036,(T\_ptyseos:0.04945,T\_sp\_NML\_06:0.04421):0.05093):0.12202):0.02384,(P\_sp\_A4:0.14826,(P\_septica:0.03149,((P\_brenneri:5.5E-4,P\_conspicua:0.01575):0.01083,(P\_anthophila:0.02002,((P\_vagans:0.0039,(P\_deleyi:0.01187,P\_sp\_aB:0.00795):0.00795):0.00768,P\_agglomerans:5.3E-4):0.01201):0.01858):0.03902,((P\_allii:0.00821,P\_ananatis:0.00336):0.02628,(P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00389):0.01798):0.01324):0.02525):0.01446):0.03015):0.02749,P\_rwandensis:0.01297):0.01392):0.00763):0.00497);

[722] tree 't722'=[&R] (P\_sp\_GM01:0.02628,((P\_eucrina:0.20026,((P\_sp\_At-9b:0.05105,P\_cypripedii:0.04545):0.06267,(((T\_sp\_NML\_06:0.21496,(T\_morbirosei:0.176,T\_ptyseos:0.1785):0.11425):0.30185,(E\_billingiae:0.22771,(E\_pyrifoliae:0.11221,E\_tasmaniensis:0.10502):0.20353):0.14955):0.10774,(P\_sp\_A4:0.358,(P\_septica:0.1765,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.11044,(P\_allii:0.0132,P\_ananatis:0.02251):0.05849):0.14919,((P\_brenneri:0.01938,P\_conspicua:0.02089):0.05164,(P\_anthophila:0.05232,(P\_agglomerans:0.00737,(P\_deleyi:0.05276,(P\_sp\_aB:0.04503,P\_vagans:0.03348):0.00796):0.00512):0.02429):0.08542):0.05748):0.03756):0.06326):0.03876):0.0909):0.04262):0.03417,(P\_wallisii:0.04805,P\_dispersa:0.0721):0.02343):0.058,(P\_rwandensis:0.05468,P\_rodasii:0.06347):0.02584);

[723] tree 't723'=[&R] (((T\_morbirosei:0.09112,(T\_sp\_NML\_06:0.10237,T\_ptyseos:0.0518):0.05421):0.2128,(E\_billingiae:0.11176,(E\_pyrifoliae:0.07601,E\_tasmaniensis:0.0757):0.06025):0.05159):0.10374,(P\_sp\_At-9b:0.01536,P\_cypripedii:0.00715):0.02327):5.5E-4,((P\_sp\_A4:0.16962,P\_eucrina:0.10527):0.01021,((P\_septica:0.08069,P\_wallisii:5.4E-4):0.00799,(P\_dispersa:0.03217,(P\_rodasii:0.01418,(P\_sp\_GM01:0.03016,P\_rwandensis:5.5E-4):5.4E-4):0.03065):0.02249):0.01472):5.4E-4,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01074,(P\_allii:0.00727,P\_ananatis:0.00762):0.01227):0.07977,((P\_deleyi:0.02418,P\_agglomerans:0.02138):0.0077,((P\_brenneri:0.01532,P\_conspicua:0.01475):0.01371,(P\_sp\_aB:0.03048,(P\_vagans:0.01605,P\_anthophila:0.00749):0.01483):0.01262):0.0168):0.01571):0.00953);

[724] tree 't724'=[&R] (P\_agglomerans:5.4E-4,((P\_deleyi:0.03234,P\_sp\_aB:0.00352):0.00705,P\_vagans:0.00348):0.00352,(P\_anthophila:0.0319,(((P\_sp\_A4:0.10215,(T\_morbirosei:0.04468,(T\_sp\_NML\_06:0.09367,T\_ptyseos:0.0308):0.02736):0.14851):0.03806,((P\_sp\_At-9b:0.01119,P\_cypripedii:0.02218):0.0249,((P\_sp\_GM01:0.03901,(P\_rodasii:0.03593,P\_rwandensis:0.01496):0.02595):0.00788,(P\_dispersa:0.0213,(P\_wallisii:0.03328,P\_eucrina:0.07249):0.00608):0.02784):0.03584):0.02078,P\_septica:0.06312):0.02043):0.00325,((E\_billingiae:0.08828,(E\_pyrifoliae:0.03586,E\_tasmaniensis:0.00141):0.06541):0.08731,((P\_allii:0.01047,P\_ananatis:5.4E-4):0.02154,(P\_s\_indologenes:0.00346,P\_s\_stewartii:5.4E-4):0.00703):0.03731):0.01982):0.01908,(P\_brenneri:0.01588,P\_conspicua:0.0125):0.01409):0.01265):5.4E-4);

[725] tree 't725'=[&R] ((P\_agglomerans:0.02274,((P\_brenneri:0.01438,P\_conspicua:0.0352):0.02637,((P\_septica:0.16002,(((T\_sp\_NML\_06:0.16856,(T\_morbirosei:0.10501,T\_ptyseos:0.12537):0.02732):0.17199,(E\_billingiae:0.13252,(E\_pyrifoliae:0.05292,E\_tasmaniensis

:0.02183):0.11775):0.05127):0.06524,((P\_sp\_At-9b:0.03775,P\_cyprapedii:0.03904):0.03009,((P\_dispersa:0.0451,(P\_eucrina:0.04942,P\_wallisii:0.0364):0.02471):0.02831,(P\_sp\_GM01:0.04942,(P\_rodasii:0.05303,P\_rwandensis:0.03304):0.014):0.01762):0.04495):0.04098):0.01542):0.02509,(P\_sp\_A4:0.20615,((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00436):0.04391,(P\_allii:0.01202,P\_ananatis:0.03809):0.04191):0.03437):0.0483):0.05435):0.0362):0.0826,P\_anthophila:0.02193,((P\_sp\_aB:0.00923,P\_vagans:0.04179):0.00386,P\_deleyi:0.01371):0.01017);

[726] tree 't726'=[&R]  
(P\_agglomerans:0.01261,(P\_anthophila:0.02791,(P\_sp\_aB:0.01825,(P\_deleyi:0.01538,P\_vagans:0.00908):0.00322):0.00309):0.00285,(((P\_ananatis:0.01602,(P\_allii:0.00982,(P\_s\_indologenes:0.00291,P\_s\_stewartii:5.5E-4):0.02829):0.01232):0.03418,(((T\_morbirosei:0.04451,(T\_sp\_NML\_06:0.05756,T\_ptyseos:0.07314):0.02104):0.11265,(P\_sp\_GM01:0.02299,(P\_rodasii:0.01232,(P\_rwandensis:0.01128,((P\_sp\_At-9b:0.02847,P\_cyprapedii:0.01401):0.0078,P\_eucrina:0.05547):5.5E-4,(P\_wallisii:0.02369,P\_dispersa:0.00655):0.00749):0.01253):0.00366):0.01061):0.03209):0.01506,(P\_sp\_A4:0.04567,(E\_billingiae:0.04106,(E\_pyriifoliae:0.01299,E\_tasmaniensis:0.05192):0.05668):0.0624):0.01227):0.00262,P\_septica:0.0504):0.01598):0.01275,(P\_brenneri:0.00602,P\_conspicua:0.00596):0.00464):0.01047);

[727] tree 't727'=[&R]  
(E\_billingiae:0.08305,P\_sp\_A4:0.04293,(P\_septica:0.02041,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.5E-4,(P\_ananatis:0.00647,P\_allii:0.02888):0.01302):0.01184,((P\_brenneri:0.03487,P\_conspicua:5.5E-4):0.03366,(((P\_vagans:0.0064,P\_agglomerans:0.02767):0.00657,P\_sp\_aB:0.00681):5.5E-4,(P\_anthophila:0.02139,P\_deleyi:0.00651):0.00668):0.01653):0.0118):0.00941,(T\_ptyseos:0.04439,(T\_morbirosei:0.01692,T\_sp\_NML\_06:0.02581):0.01778):0.13128,((P\_sp\_GM01:0.01782,(P\_sp\_At-9b:5.4E-4,P\_cyprapedii:0.01326):0.01592):0.0077,((P\_rodasii:0.0,P\_rwandensis:0.0):0.03631,P\_dispersa:0.02895):0.01361,P\_wallisii:0.01316):0.00552):0.01289,P\_eucrina:0.06734):0.00716):0.00685):0.00888,(E\_pyriifoliae:0.03221,E\_tasmaniensis:0.01367):0.06155):0.00307):0.00889);

[728] tree 't728'=[&R] (P\_sp\_A4:0.12263,((P\_dispersa:0.06362,(P\_wallisii:0.05856,(P\_sp\_GM01:0.07453,((P\_sp\_At-9b:0.05285,P\_cyprapedii:0.02719):0.04829,(P\_rodasii:0.08787,P\_rwandensis:0.01813):0.03798):0.01962):0.02682):0.03401):0.03917,(P\_eucrina:0.07762,((E\_billingiae:0.1546,(E\_pyriifoliae:0.09164,E\_tasmaniensis:0.01941):0.06466):0.20142,(T\_ptyseos:0.10809,(T\_sp\_NML\_06:0.12327,T\_morbirosei:0.10657):0.0395):0.14485):0.03751):0.05536):0.01946,(P\_septica:0.12749,((P\_s\_indologenes:0.00439,P\_s\_stewartii:0.01438):0.04101,(P\_allii:0.01094,P\_ananatis:0.05986):0.02462):0.0356,(P\_brenneri:6.2E-4,P\_conspicua:0.02822):0.04077,((P\_sp\_aB:0.03187,(P\_agglomerans:0.01311,P\_vagans:0.0395):0.00776):0.00812,(P\_anthophila:0.02036,P\_deleyi:0.07071):0.02006):0.01003):0.02415):0.08057):0.03751);

[729] tree 't729'=[&R]  
((((P\_sp\_A4:0.0641,(P\_sp\_GM01:0.02785,(P\_eucrina:0.01263,(P\_wallisii:0.00602,P\_dispersa:0.00581):0.0113):0.01226):0.00636):0.00217,(P\_rodasii:0.01192,P\_rwandensis:5.5E-4):0.006):0.01717,(E\_billingiae:0.02871,(E\_pyriifoliae:0.00585,E\_tasmaniensis:5.4E-4):0.01486):0.00571):0.01357,(P\_sp\_At-9b:0.01188,P\_cyprapedii:0.00595):0.01102):0.00711,(P\_anthophila:5.4E-4,((P\_deleyi:5.4E-4,(P\_septica:0.00596,(T\_sp\_NML\_06:0.0476,(T\_morbirosei:0.00612,T\_ptyseos:0.04818):0.0056):0.00821):0.02356):0.00557,



(P\_sp\_aB:5.5E-4,P\_agglomerans:0.0118):5.4E-4):0.01191,(P\_vagans:5.5E-4,(P\_brenneri:5.5E-4,P\_conspicua:0.00587):0.01777):5.4E-4):0.00556):0.02379,P\_ananatis:5.5E-4):0.00578,(P\_allii:0.00589,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.4E-4):5.4E-4);

[730] tree 't730'=[&R]  
 (((P\_deleyi:0.02014,P\_anthophila:0.01231):0.00794,(P\_conspicua:0.04504,((P\_septica:0.03108,((T\_morbirosei:0.02232,(T\_ptyseos:0.05747,T\_sp\_NML\_06:0.03322):0.02656):0.06665,(E\_billingiae:0.06799,(E\_pyriifoliae:0.0198,E\_tasmaniensis:0.01299):0.03648):0.04162):0.01098,((P\_sp\_A4:0.04162,(P\_eucrina:0.02354,(P\_wallisii:0.01341,(P\_dispersa:0.01491,((P\_sp\_GM01:0.0295,(P\_sp\_At-9b:0.00544,P\_cypripedii:0.02082):0.00768):0.00431,(P\_rodasii:0.01351,P\_rwandensis:0.01599):0.05332):5.4E-4):0.0069):0.02028):0.02761):0.01693,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01739,(P\_allii:5.5E-4,P\_ananatis:0.01208):0.01576):0.03424):0.00887):0.00956):0.01217,P\_brenneri:0.00766):0.00409):0.00407):0.00397,P\_agglomerans:0.00395,(P\_sp\_aB:0.00398,P\_vagans:0.00794):5.4E-4);

[731] tree 't731'=[&R] (((P\_sp\_GM01:0.02883,(P\_rodasii:0.04212,P\_rwandensis:5.4E-4):0.02867):0.05915,(P\_anthophila:0.0279,((P\_agglomerans:0.0,P\_sp\_aB:0.0):0.01406,P\_vagans:5.5E-4):0.0287,((P\_brenneri:0.0,P\_conspicua:0.0):5.3E-4,P\_deleyi:0.04305):0.01458):0.01515):0.01526):0.03157,(P\_septica:0.01748,((T\_ptyseos:0.04159,(T\_sp\_NML\_06:0.06293,T\_morbirosei:0.07351):0.01556):0.10978,(E\_billingiae:0.11835,(E\_pyriifoliae:0.03447,E\_tasmaniensis:0.05788):0.13472):0.04589):0.07474):0.0571,((P\_ananatis:0.02458,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.04967,P\_allii:0.03141):5.4E-4):0.04843,(P\_cypripedii:0.01622,((P\_dispersa:5.3E-4,(P\_wallisii:0.02134,P\_sp\_A4:0.10872):0.02765):0.04494,(P\_eucrina:0.04259,P\_sp\_At-9b:0.02147):0.00733):0.02907):0.03238):0.02463);

[732] tree 't732'=[&R]  
 (((E\_billingiae:0.02903,(E\_pyriifoliae:0.02583,E\_tasmaniensis:0.00483):0.07947):0.03402,(P\_wallisii:0.00816,(P\_eucrina:0.06048,P\_dispersa:0.01127):0.01664):0.02323):0.00828,((P\_sp\_A4:0.04229,(T\_ptyseos:0.03592,(T\_morbirosei:0.03738,T\_sp\_NML\_06:0.04473):0.01813):0.10139):0.02259,((P\_sp\_At-9b:0.0111,P\_cypripedii:0.01507):0.01928,(P\_sp\_GM01:0.01264,(P\_rodasii:0.02548,P\_rwandensis:0.00894):0.0147):0.00786):5.4E-4):0.00562):0.00586,((P\_brenneri:0.0,P\_conspicua:0.0):0.01498,(P\_vagans:0.00376,((P\_anthophila:0.02681,P\_sp\_aB:0.00376):0.0076,(P\_agglomerans:5.5E-4,P\_deleyi:0.02219):0.00369):0.00372):0.0128):0.01488,((P\_allii:0.0156,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.028,P\_ananatis:0.01166):0.00332):0.02052,P\_septica:0.03324):0.00786);

[733] tree 't733'=[&R]  
 (P\_vagans:0.00855,(P\_deleyi:0.02604,P\_sp\_aB:0.00672):0.003,(P\_agglomerans:0.00189,(P\_anthophila:0.01811,((P\_septica:0.03528,((P\_sp\_A4:0.08721,(P\_eucrina:0.06236,(((P\_sp\_At-9b:0.00275,P\_cypripedii:0.01122):0.026,(P\_sp\_GM01:0.02153,(P\_rodasii:5.5E-4,P\_rwandensis:0.00307):0.02381):0.01654):0.01241,P\_wallisii:0.01577):0.00366,P\_dispersa:0.01381):0.00998):0.01566):0.00744,((E\_billingiae:0.11034,(E\_pyriifoliae:0.03331,E\_tasmaniensis:0.01384):0.14865):0.13571,(T\_morbirosei:0.20274,(T\_ptyseos:0.0429,T\_sp\_NML\_06:0.04076):0.17535):0.12109):0.11226):0.00822):0.01648,((P\_s\_indologenes:0.00152,P\_s\_stewartii:0.0):0.01739):0.01739):0.01739):0.01739);

ewartii:0.00305):0.01678,(P\_allii:0.02319,P\_ananatis:0.01109):0.00947):0.04383,(P\_brenneri:0.00419,P\_conspicua:0.00802):0.00889):0.01305):0.02008):0.00523):0.00624);

[734] tree 't734'=[&R] ((P\_deleyi:0.01164,(P\_sp\_aB:0.0351,P\_vagans:5.5E-4):0.02444):0.03593,(P\_conspicua:0.01204,(P\_brenneri:5.4E-4,(((P\_dispersa:0.01197,P\_eucrina:0.03629):0.01166,(P\_rodasii:0.0,P\_rwandensis:0.0):0.01947,(P\_sp\_At-9b:0.03143,P\_cypripedii:0.02971):0.13471):0.04348):5.4E-4,P\_sp\_GM01:0.02379):0.01141,P\_wallisii:5.4E-4):0.37777,(E\_billingiae:0.11875,(E\_pyrifoliae:0.0097,E\_tasmaniensis:0.02827):0.05349):0.71698,(T\_ptyseos:0.01809,(T\_sp\_NML\_06:0.06002,T\_morbirosei:0.07529):0.03846):0.2701):0.10064):0.15048):0.01205):5.4E-4,((P\_allii:0.02507,(P\_ananatis:5.5E-4,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01212):5.4E-4):0.04713,(P\_septica:0.0423,P\_sp\_A4:0.37125):0.02608):0.15493):0.01221,(P\_agglomerans:5.4E-4,P\_anthophila:0.03633):5.3E-4);

[735] tree 't735'=[&R] ((E\_billingiae:0.0,E\_pyrifoliae:0.0,E\_tasmaniensis:0.0):0.0577,(P\_dispersa:0.0,P\_eucrina:0.0):5.4E-4):0.01428,((T\_morbirosei:0.0148,(P\_agglomerans:0.0,P\_sp\_At-9b:0.0,P\_vagans:0.0,P\_deleyi:0.0,P\_allii:0.0,P\_ananatis:0.0,P\_anthophila:0.0,P\_brenneri:0.0,P\_conspicua:0.0,P\_sp\_A4:0.0,P\_sp\_aB:0.0,P\_s\_indologenes:0.0,P\_s\_stewartii:0.0,T\_ptyseos:0.0,T\_sp\_NML\_06:0.0):5.5E-4):5.4E-4,P\_septica:0.01419):0.01428,(P\_sp\_GM01:0.01325,(P\_cypripedii:0.0,P\_rodasii:0.0,P\_rwandensis:0.0,P\_wallisii:0.0):0.01396):0.00214);

[736] tree 't736'=[&R] ((P\_sp\_GM01:0.04691,P\_wallisii:0.03992):0.00763,((T\_morbirosei:0.04465,P\_eucrina:0.01503):0.00519,(T\_ptyseos:0.02488,T\_sp\_NML\_06:0.14036):0.0296):0.04036,(((P\_sp\_A4:0.07948,P\_septica:0.01366):0.03206,(P\_rodasii:0.01563,(E\_billingiae:0.06605,(E\_pyrifoliae:0.18641,E\_tasmaniensis:0.08673):0.18507):0.05997,(P\_deleyi:0.01426,(P\_agglomerans:0.0,P\_vagans:0.0,P\_sp\_aB:0.0):5.5E-4,(P\_conspicua:0.01415,P\_anthophila:0.01438):5.5E-4):5.3E-4):0.01475,(P\_brenneri:5.4E-4,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0,P\_allii:0.0):0.01424,P\_ananatis:5.3E-4):0.03169):0.01407):0.02962):0.04675):0.01308):0.03051,((P\_dispersa:0.02896,(P\_cypripedii:5.4E-4,P\_rwandensis:0.02912):5.3E-4):0.01406,P\_sp\_At-9b:5.4E-4):5.3E-4):0.01289);

[737] tree 't737'=[&R] (P\_vagans:5.5E-4,(P\_agglomerans:5.5E-4,P\_sp\_aB:0.0036):0.00726,((P\_deleyi:0.0,P\_anthophila:0.0):0.00365,(P\_brenneri:0.00362,((P\_sp\_A4:0.03235,((P\_sp\_GM01:0.00746,((P\_dispersa:5.5E-4,P\_eucrina:0.00696):0.00691,(P\_wallisii:5.4E-4,(P\_rodasii:0.01087,P\_rwandensis:5.5E-4):0.00361):0.00368):0.00406):0.02245,((T\_ptyseos:0.0278,(T\_sp\_NML\_06:0.02537,T\_morbirosei:0.01873):0.00892):0.10351,(P\_sp\_At-9b:0.01505,P\_cypripedii:0.00341):0.01027):0.00445):0.00737,(P\_septica:0.0062,(E\_billingiae:0.0233,(E\_pyrifoliae:0.01575,E\_tasmaniensis:0.01409):0.04595):0.05257):0.00877):5.1E-4):0.01104,(P\_conspicua:0.00717,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00722,(P\_allii:5.5E-4,P\_ananatis:0.00361):0.00737):0.02618):0.00371):5.4E-4):0.00729):0.00364);

[738] tree 't738'=[&R] (((P\_brenneri:0.00626,P\_conspicua:5.5E-4):5.5E-4,((P\_sp\_aB:0.00311,(P\_vagans:0.00307,P\_agglomerans:5.5E-4):0.00311):5.5E-4,(P\_deleyi:5.4E-4,P\_anthophila:0.00627):0.00614):0.00634):0.01273,(P\_allii:5.4E-4,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00936,P\_ananatis:5.5E-

4):0.0031):0.01236):0.00986,(P\_sp\_GM01:0.01895,(P\_rwandensis:0.00304,P\_rodasii:0.00315):0.00636):0.00639,((P\_eucrina:0.00913,(P\_sp\_A4:0.02908,(P\_sp\_At-9b:0.00616,(P\_cyprapedii:5.4E-4),((T\_morbirosei:0.03807,(T\_ptyseos:0.0056,T\_sp\_NML\_06:0.05059):0.02427):0.05712,(E\_billingiae:0.03275,(E\_pyrifoliae:0.00617,E\_tasmaniensis:0.00632):0.01528):0.01638):5.4E-4):0.00618):5.5E-4):0.00328):0.00315,((P\_septica:0.02613,P\_dispersa:0.00286):0.00673,P\_wallisii:0.00294):0.00311):0.00317);

[739] tree 't739'=[&R] (P\_dispersa:0.08224,((P\_sp\_At-9b:0.02621,P\_cyprapedii:0.01):0.05219,((P\_brenneri:0.01507,P\_conspicua:0.0204):0.06836,(P\_deleyi:6.0E-4,(P\_vagans:0.01336,(P\_anthophila:0.04764,(P\_agglomerans:0.01929,P\_sp\_aB:0.00671):0.01341):0.0065):0.05359):0.02413):0.08505,(P\_septica:0.06705,((P\_sp\_A4:0.19236,(P\_allii:0.0187,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.06449,P\_ananatis:5.4E-4):0.0082):0.06032):0.05418,((T\_ptyseos:0.18706,(T\_morbirosei:0.22599,T\_sp\_NML\_06:0.15922):0.07393):0.17684,(E\_billingiae:0.12278,(E\_pyrifoliae:0.06114,E\_tasmaniensis:0.07767):0.07555):0.05632):0.12245):5.4E-4):0.04562):0.02646):0.03065,P\_sp\_GM01:0.02146):0.01316,((P\_wallisii:0.08384,P\_rodasii:0.01701):0.02298,(P\_eucrina:0.13609,P\_rwandensis:0.05219):0.03464):0.01066);

[740] tree 't740'=[&R] ((P\_septica:5.5E-4,(P\_eucrina:5.5E-4,((P\_cyprapedii:0.02235,P\_rwandensis:5.5E-4):0.01105,(P\_sp\_At-9b:5.3E-4,P\_sp\_GM01:0.02252):5.4E-4):0.02142,((E\_billingiae:0.04475,(E\_pyrifoliae:0.01111,E\_tasmaniensis:0.01119):5.4E-4):0.04582,P\_sp\_A4:0.09629):5.4E-4,P\_rodasii:0.011):0.02578):0.00734):0.01115):0.01111,(T\_sp\_NML\_06:0.02258,(T\_ptyseos:0.05692,((P\_allii:0.0,P\_ananatis:0.0,P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.03502,(P\_anthophila:5.4E-4,(P\_vagans:5.4E-4,(P\_conspicua:5.4E-4,((P\_deleyi:0.01136,P\_brenneri:5.5E-4):5.5E-4,(P\_agglomerans:0.0,P\_sp\_aB:0.0):0.01119):0.01124):0.01147):0.01144):0.01173):0.02271):5.4E-4):0.0111,(T\_morbirosei:0.01112,(P\_dispersa:0.0,P\_wallisii:0.0):5.5E-4):5.4E-4);

[741] tree 't741'=[&R] ((P\_wallisii:0.00497,(P\_eucrina:0.02826,P\_dispersa:0.00251):0.00247):5.4E-4,(P\_septica:0.03014,((T\_morbirosei:0.08266,(T\_sp\_NML\_06:0.1411,T\_ptyseos:0.09845):0.03668):0.06281,(E\_billingiae:0.04985,(E\_pyrifoliae:0.01087,E\_tasmaniensis:0.01694):0.01092):0.02957):0.02013,(P\_sp\_A4:0.05597,((P\_brenneri:0.0,P\_conspicua:0.0):0.00659,(P\_agglomerans:5.4E-4,(P\_sp\_aB:0.00992,(P\_vagans:5.4E-4,(P\_deleyi:0.00494,P\_anthophila:0.01248):0.00241):0.00243):0.00245):0.00603):0.02816,(P\_allii:5.5E-4,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00744,P\_ananatis:0.00246):0.00482):0.00592):0.0154):0.00724):0.01049):0.0111,((P\_sp\_GM01:0.01615,(P\_rodasii:0.02163,P\_rwandensis:0.00349):0.01227):0.00701,(P\_sp\_At-9b:0.00228,P\_cyprapedii:5.5E-4):0.01481):0.00264);

[742] tree 't742'=[&R] (P\_septica:0.01695,(P\_rodasii:0.02245,P\_rwandensis:5.3E-4):0.01129,((P\_eucrina:0.00565,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.4E-4,(P\_ananatis:5.5E-4,P\_allii:0.01122):0.00556):0.01209,((E\_billingiae:0.02717,(E\_pyrifoliae:0.04496,E\_tasmaniensis:5.3E-4):0.02426):0.0098,(P\_sp\_A4:0.01781,(T\_morbirosei:5.5E-4,(T\_ptyseos:0.03975,T\_sp\_NML\_06:0.02825):0.0125):0.05413):0.0276):0.01689):0.00597,((P\_conspicua:0.0,P\_brenneri:0.0):0.00638,((P\_sp\_aB:0.00561,P\_agglomerans:5.5E-4):0.00639,(P\_anthophila:5.4E-4,(P\_deleyi:0.0059,P\_vagans:5.4E-4):0.01122):0.01034):0.0113):0.02335):0.00447,(P\_wallisii:5.5E-4,(P\_sp\_GM01:0.00556,P\_dispersa:0.00556):5.5E-4):5.4E-4):0.00556):5.4E-4,(P\_sp\_At-9b:0.02876,P\_cyprapedii:0.01069):0.0119):0.00565);

```
[743] tree 't743'=[&R] (P_dispersa:0.00845,(P_sp_GM01:0.00846,(P_rodasii:0.03019,P_rwandensis:5.3E-4):0.0037):0.00851,(P_wallisii:5.5E-4,(P_eucrina:0.00761,((P_sp_At-9b:0.02534,P_cypripedii:0.00476):0.01386,((((P_agglomerans:0.01245,((P_vagans:0.0,P_sp_aB:0.0):0.00811,(P_deleyi:5.5E-4,P_anthophila:0.01244):5.3E-4):0.00412):0.00862,(P_conspicua:0.00407,P_brenneri:5.4E-4):0.01275):0.02103,(P_allii:0.00376,P_ananatis:0.00742):0.00537):0.00454,((P_s_indologenes:0.0,P_s_stewartii:0.0):0.00482,(T_morbirosei:0.05186,(T_sp_NML_06:0.0746,T_ptyseos:0.05749):0.01555):0.07066):0.00364):0.00903,(P_septica:0.01007,(E_billingiae:0.04021,(E_pyriifoliae:0.01208,E_tasmaniensis:0.01777):0.06139):0.08951,P_sp_A4:0.02728):0.01595):0.00721):0.02363):0.01324):0.00498):0.0042);
[744] tree 't744'=[&R]
((P_rodasii:0.00676,(T_morbirosei:0.01396,(T_ptyseos:0.02157,(T_sp_NML_06:0.03939,P_sp_A4:0.02403):0.01318):0.00676):0.00638):5.4E-4,((P_ananatis:0.00675,((E_pyriifoliae:0.0486,(E_billingiae:0.04109,E_tasmaniensis:5.5E-4):5.5E-4):0.01395,(P_septica:0.01372,(P_sp_At-9b:0.01364,P_cypripedii:5.4E-4):0.00692):0.01366):0.01351):5.5E-4,(P_allii:0.0,P_s_indologenes:0.0,P_s_stewartii:0.0):5.5E-4):0.00691,(P_sp_GM01:0.00677,((P_wallisii:5.4E-4,P_sp_aB:0.00685):0.00682,(P_dispersa:0.00679,P_eucrina:0.00693):5.4E-4):5.4E-4,((P_vagans:0.0,P_rwandensis:0.0):5.5E-4,(P_anthophila:0.0067,((P_brenneri:0.0,P_conspicua:0.0):5.5E-4,(P_agglomerans:0.0067,P_deleyi:0.01337):5.5E-4):5.5E-4):0.01342):0.00683):0.00673):5.4E-4);
[745] tree 't745'=[&R]
(((T_morbirosei:0.01835,(T_sp_NML_06:0.05955,T_ptyseos:0.00806):0.06886):0.14991,((((((P_sp_At-9b:0.00144,(P_sp_A4:0.07034,((P_brenneri:5.4E-4,(P_vagans:0.00955,((P_deleyi:0.0,P_agglomerans:0.0,P_conspicua:0.0):5.5E-4,(P_anthophila:0.00931,P_sp_aB:0.00934):5.5E-4):5.4E-4):0.00946):0.03086,(P_allii:5.4E-4,(P_ananatis:0.00949,(P_s_indologenes:0.0,P_s_stewartii:0.0):5.3E-4):0.00943):0.01998):0.02522):0.04106):0.00997,P_cypripedii:0.00958):0.01937,P_eucrina:0.04913):0.00944,(P_septica:0.03072,P_sp_GM01:0.07569):0.01394):0.01947,P_dispersa:5.4E-4):0.02362,P_wallisii:0.024):0.01135):0.0194,(P_rwandensis:0.00385,(E_pyriifoliae:0.02881,E_tasmaniensis:5.5E-4):0.11488):0.01222,(P_rodasii:0.02201,E_billingiae:0.0834):5.4E-4);
[746] tree 't746'=[&R]
((P_brenneri:0.01278,P_conspicua:0.01629):0.01734,((P_sp_aB:0.02026,P_vagans:0.00581):0.00278,(P_deleyi:0.03492,P_agglomerans:0.00976):0.00535):0.00724,(P_anthophila:0.02462,((P_s_indologenes:0.00278,P_s_stewartii:0.01125):0.03093,(P_allii:0.00887,P_ananatis:0.02012):0.0233):0.06247,((P_sp_At-9b:0.02828,P_cypripedii:0.01359):0.01926,(P_wallisii:0.03962,((P_eucrina:0.08559,P_dispersa:0.04388):0.03478,(P_sp_GM01:0.02651,(P_rodasii:0.03733,P_rwandensis:0.01561):0.01986):0.00792):0.00923):0.01624):0.07167,(P_septica:0.0564,(P_sp_A4:0.14919,((T_morbirosei:0.15764,(T_sp_NML_06:0.17533,T_ptyseos:0.11785):0.0453):0.26584,(E_billingiae:0.09063,(E_pyriifoliae:0.05962,E_tasmaniensis:0.06215):0.10496):0.10152):0.0542):0.03803):0.01842):0.02734):0.03918):0.00662);
[747] tree 't747'=[&R]
((P_septica:0.0693,((P_deleyi:0.02559,(P_sp_aB:0.01074,(P_agglomerans:0.01706,(P_vagans:5.4E-4,P_anthophila:0.01644):0.01416):0.00593):0.01775):0.03384,(P_brenneri:0.0126,P_conspicua:0.04996):0.01946):0.02233,((P_s_indologenes:5.4E-
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4,P\_s\_stewartii:0.00533):0.07196,(P\_allii:0.03699,P\_ananatis:0.01969):0.03788):0.0626,(P\_sp\_A4:0.10513,((T\_sp\_NML\_06:0.09195,(T\_morbirosei:0.11504,T\_ptyseos:0.07066):0.06256):0.30044,(E\_billingiae:0.14208,(E\_pyriifoliae:0.05351,E\_tasmaniensis:0.04804):0.11933):0.18145):0.15407):0.05014):0.031):0.03352):0.02847,P\_sp\_GM01:0.039,((P\_sp\_At-9b:0.01935,P\_cypripedii:0.06895):0.03969,(P\_dispersa:0.01873,(P\_wallisii:0.02652,(P\_rwandensis:0.02324,P\_rodasii:0.00526):0.02521):0.01803):0.01308,P\_eucrina:0.06543):0.02949):0.01028);

[748] tree 't748'=[&R] ((P\_sp\_At-9b:0.03811,P\_cypripedii:0.00849):0.04036,((E\_pyriifoliae:0.02685,E\_tasmaniensis:0.01133):0.08892,(T\_sp\_NML\_06:0.07832,(T\_morbirosei:0.09483,T\_ptyseos:0.02734):0.05631):0.09894):5.4E-4,(((P\_vagans:5.5E-4,((P\_agglomerans:0.00636,(P\_deleyi:0.03027,P\_anthophila:0.03959):0.01048):0.00469,P\_sp\_aB:0.00336):0.00464):0.02489,((P\_brenneri:0.0066,P\_conspicua:0.01304):0.02025,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.05578,(P\_ananatis:0.027,P\_allii:0.01465):0.00985):0.02911):5.5E-4):0.03823,(P\_septica:0.09909,(P\_eucrina:0.03219,((P\_rwandensis:0.01059,(P\_rodasii:0.00633,P\_sp\_GM01:0.04759):0.01828):0.01721,P\_wallisii:5.3E-4):0.02389,P\_dispersa:0.01052):0.01131):0.01729):0.0183):0.01151,(P\_sp\_A4:0.08264,E\_billingiae:0.04801):0.01347):0.01438);

[749] tree 't749'=[&R] ((P\_cypripedii:0.02942,P\_sp\_At-9b:0.01096):0.00482,(((P\_rodasii:0.02099,P\_rwandensis:0.01809):0.01792,(P\_sp\_A4:0.04339,((P\_septica:0.02369,((T\_sp\_NML\_06:0.02735,(T\_morbirosei:0.05846,T\_ptyseos:0.05358):0.01759):0.06937,(E\_billingiae:0.06673,(E\_pyriifoliae:0.02755,E\_tasmaniensis:0.01749):0.0392):0.02666):0.02322):0.01461,(((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00787):0.00721,(P\_ananatis:0.01603,P\_allii:0.00993):0.00263):0.03376,((P\_anthophila:0.02123,(P\_agglomerans:0.00737,(P\_deleyi:0.02004,(P\_vagans:0.01185,P\_sp\_aB:0.01139):0.00632):0.00345):0.00679):0.01234,P\_conspicua:0.011):0.00567,P\_brenneri:0.00214):0.02189):0.01874):0.01248):0.02085):0.01086,P\_sp\_GM01:0.02844):0.00696,(P\_wallisii:0.02714,(P\_dispersa:0.00619,P\_eucrina:0.04318):0.00874):0.01129);

[750] tree 't750'=[&R] ((P\_sp\_GM01:0.02896,(P\_rwandensis:0.0146,P\_rodasii:0.00727):0.0107):0.00421,(P\_wallisii:0.00484,(P\_eucrina:0.01878,P\_dispersa:0.01103):0.00249):0.00742,((P\_sp\_At-9b:5.4E-4,P\_cypripedii:0.0074):0.00823,(((E\_billingiae:0.04459,(E\_pyriifoliae:0.02068,E\_tasmaniensis:0.0052):0.02466):0.0569,(((P\_deleyi:5.5E-4,((P\_agglomerans:0.0,P\_sp\_aB:0.0):0.00725,(P\_vagans:5.5E-4,P\_anthophila:0.00363):5.4E-4):0.00728):0.01099,P\_conspicua:0.00367):0.00357,P\_brenneri:0.0037):0.01892,(P\_ananatis:5.4E-4,(P\_allii:5.4E-4,(P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00364):0.01114):0.00728):0.02224):0.00525):0.00475,(P\_septica:0.02674,(P\_sp\_A4:0.04466,(T\_morbirosei:0.03563,(T\_ptyseos:0.01527,T\_sp\_NML\_06:0.03129):0.0227):0.0948):0.01684):0.01735):0.02472):0.00404);

[751] tree 't751'=[&R] (((((P\_sp\_A4:0.0593,(E\_billingiae:0.10046,(E\_pyriifoliae:0.06887,E\_tasmaniensis:0.04691):0.02503):0.06836):0.03987,((P\_deleyi:0.01946,P\_anthophila:0.00611):0.01952,((P\_brenneri:0.01441,P\_conspicua:0.0243):0.03941,(P\_sp\_aB:0.01259,(P\_agglomerans:0.01931,P\_vagans:0.00637):0.00632):5.5E-4):0.01264):0.04436,(T\_ptyseos:0.04859,(T\_morbirosei:0.07944,T\_sp\_NML\_06:0.05145):0.0078):0.05975):5.4E-4):0.01639,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01364,(P\_allii:0.03954,P\_ananatis:5.4E-4):0.02622):0.04656):0.0101,P\_septica:0.0167):0.05053,(P\_sp\_At-9b:0.01348,P\_cypripedii:0.01997):5.4E-

4,(P\_eucrina:0.04526,(P\_dispersa:0.02711,(P\_wallisii:0.02572,(P\_rwandensis:0.00949,(P\_rodasii:0.01095,P\_sp\_GM01:0.02314):0.01769):0.00547):0.00659):0.01942):0.01751);  
[752] tree 't752'=[&R]  
(((P\_eucrina:0.01624,(P\_dispersa:0.00341,P\_wallisii:0.0176):0.01096):0.00532,((P\_rodasii:0.02393,P\_rwandensis:0.01123):0.01571,P\_sp\_GM01:0.06202):0.01053):0.02113,((P\_sp\_At-9b:0.00601,P\_cyprapedii:0.00561):0.01769,(((P\_s\_stewartii:0.00574,P\_s\_indologenes:5.5E-4):0.00304,(P\_allii:0.00291,P\_ananatis:0.00287):0.00271):0.01223,(P\_conspicua:0.00283,(P\_brenneri:5.4E-4,(P\_deleyi:0.01183,(P\_anthophila:0.00836,(P\_agglomerans:0.00291,(P\_vagans:0.0,P\_sp\_aB:0.0):0.00574):5.5E-4):0.00579):0.0084):0.00288):0.01479):0.01227):0.00871,(P\_septica:0.02794,(T\_morbirosei:0.01855,(T\_ptyseos:0.02411,T\_sp\_NML\_06:0.0338):0.02491):0.07677,(P\_sp\_A4:0.03225,(E\_billingiae:0.04977,(E\_pyrifoliae:0.04257,E\_tasmaniensis:0.03456):0.03451):0.02064):0.01511):0.01662):0.00823);  
[753] tree 't753'=[&R]  
((E\_billingiae:0.09259,(E\_pyrifoliae:0.03212,E\_tasmaniensis:0.02238):0.03703):0.01863,((P\_sp\_GM01:0.03325,(P\_rodasii:0.02244,P\_rwandensis:0.01518):0.03507):0.03913,(P\_wallisii:0.0224,(P\_dispersa:0.01369,P\_eucrina:0.03216):0.00574):0.01281):0.01798,(P\_sp\_A4:0.09405,((((P\_anthophila:0.01685,(P\_vagans:0.00266,(P\_deleyi:0.0083,(P\_agglomerans:0.00271,P\_sp\_aB:0.00629):0.00481):0.00494):0.00793):0.01135,P\_conspicua:0.00503):0.00611,P\_brenneri:5.3E-4):0.01411,((P\_sp\_At-9b:0.01862,P\_cyprapedii:0.00897):0.0111,((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00457):0.00918,(P\_allii:0.03613,P\_ananatis:0.00198):0.00725):0.01491):0.00671):0.01034,(P\_septica:0.01307,(T\_sp\_NML\_06:0.01586,(T\_morbirosei:0.0351,T\_ptyseos:0.01908):0.0103):0.04739):0.0044):0.0104):0.01204);  
[754] tree 't754'=[&R] (P\_wallisii:0.06735,((P\_sp\_At-9b:0.02556,P\_cyprapedii:0.02162):0.05959,(P\_sp\_GM01:0.08068,(P\_rodasii:0.06372,P\_rwandensis:0.03884):0.01115):0.01825):0.0222,(P\_dispersa:0.07187,(P\_eucrina:0.11254,(((E\_billingiae:0.14908,(E\_pyrifoliae:0.03785,E\_tasmaniensis:0.05286):0.06362):0.12627,((P\_s\_indologenes:0.00249,P\_s\_stewartii:5.5E-4):0.03664,(P\_allii:0.02698,P\_ananatis:0.03532):0.02868):0.10081,(P\_septica:0.11304,((P\_brenneri:0.00139,P\_conspicua:0.0192):0.03122,(P\_anthophila:0.02652,((P\_sp\_aB:0.01528,(P\_agglomerans:0.00757,P\_deleyi:0.03372):0.0026):5.5E-4,P\_vagans:0.00999):0.00964):0.03246):0.03249):0.03779):0.07068):0.01734,P\_sp\_A4:0.16863):0.02533,(T\_ptyseos:0.06897,(T\_morbirosei:0.17576,T\_sp\_NML\_06:0.08478):0.08357):0.24932):0.07704):0.04054):0.01709);  
[755] tree 't755'=[&R]  
(P\_sp\_aB:0.00545,P\_agglomerans:0.00363,(P\_vagans:0.00246,((P\_brenneri:0.00191,(P\_deleyi:0.00967,(P\_anthophila:0.00774,((T\_morbirosei:0.02276,(T\_sp\_NML\_06:0.0323,T\_ptyseos:0.02682):0.01503):0.0573,(E\_billingiae:0.03327,(E\_pyrifoliae:0.02666,E\_tasmaniensis:0.01274):0.03309):0.00972):0.02119,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00769,(P\_allii:0.00764,P\_ananatis:0.00529):0.00857):0.01137,((P\_sp\_GM01:0.0218,((P\_sp\_A4:0.00903,(P\_rodasii:0.009,P\_rwandensis:0.00189):0.00765):0.01407,(P\_wallisii:0.0084,(P\_dispersa:0.01234,P\_eucrina:0.00793):0.00997):0.00671):0.00974):0.00822,(P\_septica:0.02179,(P\_sp\_At-9b:0.00926,P\_cyprapedii:0.00735):0.00974):0.00865):0.01228):0.00277):0.00723):0.00341):0.00478):0.00483,P\_conspicua:0.00253):0.00716):0.00299);  
[756] tree 't756'=[&R]  
((P\_rwandensis:0.00705,(P\_eucrina:0.04264,P\_rodasii:0.00266):0.00523):0.00597,P\_wallisii:0.01675,(((P\_dispersa:0.00146,((P\_septica:0.03619,((P\_brenneri:0.00626,P\_conspicua:0.01103):0.00665,((P\_sp\_aB:0.01202,(P\_agglomerans:0.00472,P\_

vagans:0.00471):0.00456):0.0047,(P\_anthophila:0.0095,P\_deleyi:0.02174):0.00236):0.00809):0.01176):0.00916,(((E\_tasma  
niensis:0.07468,E\_pyrifoliae:0.0547):0.05772,E\_billingiae:0.03967):0.03577,(((T\_sp\_NML\_06:0.13311,(T\_morbirosei:0.09  
787,T\_ptyseos:0.14189):0.03447):0.22676,((P\_s\_indologenes:0.0023,P\_s\_stewartii:0.00238):0.01804,(P\_ananatis:0.02049,  
P\_allii:0.02078):0.00751):0.05313):0.02582,P\_sp\_A4:0.09059):0.00734):0.01151):0.02557):0.00358,(P\_sp\_At-  
9b:0.00235,P\_cyprapedii:0.00235):0.00689):0.00447,P\_sp\_GM01:0.01743):0.00371);  
[757] tree 't757'=[&R] ((P\_sp\_At-  
9b:0.02145,P\_cyprapedii:0.02684):0.02836,(P\_sp\_GM01:0.01415,(P\_rodasii:0.02094,P\_rwandensis:0.01895):0.01883):0.0079  
4,((P\_septica:0.05952,((P\_brenneri:0.01225,P\_conspicua:0.01917):0.02166,(P\_anthophila:0.03347,((P\_vagans:0.00976,P\_  
sp\_aB:0.01063):0.0051,(P\_agglomerans:0.01603,P\_deleyi:0.03181):0.00584):0.02078):0.01738):0.02595,((P\_s\_indologenes  
:5.5E-  
4,P\_s\_stewartii:0.00249):0.03324,(P\_allii:0.02497,P\_ananatis:0.02319):0.03122):0.09438,(P\_sp\_A4:0.09968,((E\_billingi  
ae:0.09981,(E\_pyrifoliae:0.03759,E\_tasmaniensis:0.05292):0.10786):0.09039,(T\_morbirosei:0.12365,(T\_sp\_NML\_06:0.1616,  
T\_ptyseos:0.10571):0.05466):0.13336):0.03362):0.02389):0.02823):0.01622):0.05527,(P\_eucrina:0.13162,(P\_dispersa:0.02  
395,P\_wallisii:0.02772):0.01053):0.01659):0.01433);  
[758] tree 't758'=[&R] ((P\_sp\_At-  
9b:0.01503,P\_cyprapedii:0.01266):0.01098,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01302,(P\_allii:0.0111,P\_ananat  
is:0.01104):0.00424):0.02298,(((P\_brenneri:0.00493,P\_conspicua:0.01342):0.01428,((P\_sp\_aB:0.02056,P\_vagans:0.00745):  
0.00135,(P\_anthophila:0.01611,P\_agglomerans:0.00932):0.00573,P\_deleyi:0.03342):0.00223):0.01734):0.02896,(E\_billing  
iae:0.04485,(E\_pyrifoliae:0.02533,E\_tasmaniensis:0.02604):0.05421):0.0483):0.01173):0.008,((P\_sp\_A4:0.05888,(T\_sp\_NM  
L\_06:0.05798,(T\_morbirosei:0.05341,T\_ptyseos:0.04217):0.01636):0.07952):0.02777,P\_septica:0.037):0.00603):0.01961):0  
.00884,(P\_dispersa:0.00991,(P\_eucrina:0.02615,P\_wallisii:0.02237):0.00196):0.00796,(P\_sp\_GM01:0.02544,(P\_rodasii:0.0  
1917,P\_rwandensis:0.01569):0.0185):0.00645);  
[759] tree 't759'=[&R] (P\_eucrina:0.02669,((P\_septica:0.02512,(((P\_vagans:5.5E-  
4,((P\_agglomerans:0.0,P\_sp\_aB:0.0):5.5E-4,(P\_anthophila:0.00668,P\_deleyi:0.00332):0.00335):0.00333):5.5E-  
4,(P\_allii:0.04207,(P\_brenneri:0.02691,P\_conspicua:0.0096):0.00813):0.02976):0.01668,(P\_ananatis:0.00592,(P\_s\_indolo  
genes:0.0,P\_s\_stewartii:0.0):0.0041):0.01343):0.01263):0.00628,(P\_rodasii:0.00655,P\_rwandensis:0.00336):0.01353):0.0  
0337,(P\_wallisii:0.03778,((P\_sp\_GM01:0.0198,(P\_sp\_A4:0.05206,((E\_billingiae:0.03133,(E\_pyrifoliae:0.01937,E\_tasmani  
ensis:0.00802):0.05614):0.04917,(T\_morbirosei:0.03327,(T\_sp\_NML\_06:0.04141,T\_ptyseos:0.01976):0.02446):0.03067):0.01  
738):5.4E-4):0.01088,(P\_cyprapedii:0.00663,P\_sp\_At-9b:5.4E-4):0.00238):0.00438,P\_dispersa:0.00331):5.5E-4):0.00395);  
[760] tree 't760'=[&R] ((P\_dispersa:5.5E-4,(P\_rwandensis:0.00676,(P\_rodasii:0.0,P\_sp\_GM01:0.0,P\_wallisii:0.0):5.5E-  
4):0.00674):0.02054,(((P\_brenneri:5.4E-4,((P\_agglomerans:0.0,P\_vagans:0.0,P\_anthophila:0.0):5.5E-  
4,(P\_deleyi:0.01377,P\_sp\_aB:5.5E-4):0.00679):0.00683,P\_conspicua:0.00682):5.4E-  
4):0.00685,((P\_allii:0.00682,P\_ananatis:5.5E-4):5.4E-4,((P\_s\_stewartii:0.00678,P\_s\_indologenes:5.5E-4):5.5E-  
4,P\_septica:0.02093):0.00676):0.00686):5.5E-  
4,(E\_pyrifoliae:0.0069,(E\_billingiae:0.03655,E\_tasmaniensis:0.00702):0.0066):0.02091):0.00684,((P\_sp\_A4:0.03498,(P\_e  
ucrina:0.01571,(T\_morbirosei:0.00587,(T\_sp\_NML\_06:0.06075,T\_ptyseos:0.0156):0.00716):0.02979):5.4E-  
4):0.01946,(P\_sp\_At-9b:0.0,P\_cyprapedii:0.0):5.4E-4):5.3E-4);  
[761] tree 't761'=[&R] ((P\_dispersa:5.5E-  
4,(P\_sp\_A4:0.08605,P\_septica:0.01231):0.01841):0.01188,P\_cyprapedii:0.00549,(P\_sp\_At-9b:5.5E-

4,((P\_wallisii:0.00623,(P\_rodasii:0.0058,P\_rwandensis:5.2E-4):0.01182):0.00608,((E\_billingiae:0.042,((T\_morbirosei:0.03827,(T\_sp\_NML\_06:0.035,T\_ptyseos:0.01283):0.03156):0.02928,(P\_deleyi:0.0053,((P\_brenneri:0.00597,P\_conspicua:5.5E-4):0.00603,(P\_vagans:0.01194,(P\_sp\_aB:0.00586,(P\_anthophila:0.01176,P\_agglomerans:5.5E-4):0.00592):0.01185):0.00601):0.00669):0.01779):5.5E-4):0.01291,(P\_sp\_GM01:0.01153,P\_eucrina:0.03802):5.5E-4):5.4E-4):0.00559,((E\_pyrifoliae:0.02437,E\_tasmaniensis:0.03559):0.03723,(P\_allii:0.00588,(P\_ananatis:0.0,P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.4E-4):0.00572):0.0061):5.5E-4):5.3E-4);

[762] tree 't762'=[&R] ((P\_sp\_At-9b:0.0,P\_cyprapedii:0.0):5.5E-4,((P\_eucrina:0.02216,P\_wallisii:5.4E-4):0.01095,(P\_dispersa:0.01093,(P\_septica:0.02094,((P\_agglomerans:0.0111,(P\_vagans:0.0,P\_deleyi:0.0,P\_sp\_aB:0.0):5.4E-4):0.01106,(P\_anthophila:0.02243,((P\_brenneri:0.0,P\_conspicua:0.0):5.3E-4,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.02251,(P\_allii:0.01112,P\_ananatis:5.4E-4):0.01125):0.02253):0.01108):5.5E-4):0.0223,((E\_billingiae:0.05675,(E\_pyrifoliae:0.03361,E\_tasmaniensis:5.4E-4):0.06293):0.0926,((T\_morbirosei:0.01954,(T\_sp\_NML\_06:0.06917,T\_ptyseos:5.5E-4):0.02417):0.13147,P\_sp\_A4:0.03442):0.01064):0.01158):0.00261):0.0319):0.0109):5.4E-4,((P\_rodasii:0.01087,P\_sp\_GM01:0.01087):0.011,P\_rwandensis:0.01086):5.5E-4);

[763] tree 't763'=[&R] (P\_cyprapedii:0.01261,P\_sp\_At-9b:5.3E-4,((P\_dispersa:0.00621,(P\_eucrina:0.04561,(P\_sp\_A4:0.05262,((E\_billingiae:0.05062,(E\_pyrifoliae:0.06783,E\_tasmaniensis:0.01188):0.06029):0.06719,((T\_sp\_NML\_06:0.05272,(T\_morbirosei:0.02775,T\_ptyseos:0.03756):0.02316):0.15175,P\_septica:0.01227):0.03332):0.01405,((P\_allii:0.01268,(P\_ananatis:0.01236,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01262):0.00702):0.03127,((P\_vagans:0.0,P\_sp\_aB:0.0):5.5E-4,(P\_deleyi:0.00616,((P\_brenneri:5.3E-4,P\_conspicua:0.00613):0.01259,P\_anthophila:0.00611):0.00626,P\_agglomerans:5.5E-4):0.00616):5.5E-4):5.4E-4):0.02007):0.01219):0.00333):0.00353):0.0062,(P\_wallisii:0.01247,(P\_rwandensis:5.5E-4,(P\_sp\_GM01:5.5E-4,P\_rodasii:0.00617):0.00612):0.01244):5.3E-4):0.0062);

[764] tree 't764'=[&R] ((P\_rodasii:0.00281,P\_rwandensis:0.02903):0.05555,(P\_cyprapedii:0.03031,(P\_sp\_At-9b:0.02236,(P\_sp\_A4:0.09693,(P\_septica:0.08066,((P\_brenneri:0.00699,P\_conspicua:0.03126):0.03566,((P\_vagans:0.0148,(P\_agglomerans:5.5E-4,P\_deleyi:0.05399):0.00738):5.4E-4,(P\_sp\_aB:0.0227,P\_anthophila:0.05547):0.01487):0.01046):0.07016,(P\_allii:0.05465,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.07756,P\_ananatis:0.04623):0.02394):0.03894):0.03084):0.03728):0.05033):6.0E-4):0.02307,(P\_sp\_GM01:0.03842,(P\_wallisii:0.06696,((P\_eucrina:0.0301,((E\_billingiae:0.10926,(E\_pyrifoliae:0.01322,E\_tasmaniensis:0.05343):0.09526):0.04489,(T\_sp\_NML\_06:0.10822,(T\_morbirosei:0.08991,T\_ptyseos:0.03233):0.09881):0.11491):0.04146):0.02939,P\_dispersa:0.06002):0.01085):0.01376):0.01599);

[765] tree 't765'=[&R] (P\_anthophila:0.03331,((P\_agglomerans:0.01623,P\_sp\_aB:0.0328):0.00272,(P\_vagans:0.01353,P\_deleyi:0.07143):5.4E-4):0.02959,((P\_septica:0.10695,(P\_allii:0.01395,((P\_s\_indologenes:0.00384,P\_s\_stewartii:0.0039):0.1142,P\_ananatis:0.02129):0.01696):0.06417):0.04637,(P\_brenneri:0.0161,P\_conspicua:0.03022):0.02221):0.00989,((P\_sp\_A4:0.18952,((T\_sp\_NML\_06:0.13709,(T\_morbirosei:0.15972,T\_ptyseos:0.19768):0.03825):0.19046,(E\_billingiae:0.11156,(E\_pyrifoliae:0.07056,E\_tasmaniensis:0.06447):0.17745):0.09488):0.04075):0.03466,((P\_sp\_At-9b:0.0759,P\_cyprapedii:0.03267):0.04653,(P\_eucrina:0.08382,(P\_dispersa:0.05534,(P\_rodasii:0.02464,(P\_sp\_GM01:0.03367,(P\_wallisii:0.03207,P\_rwandensis:0.04148):0.00948):0.01293):0.02389):0.02367):0.02776):0.01748):0.04829):0.00928);



[766] tree 't766'=[&R] (P\_sp\_At-9b:0.01024,((P\_sp\_GM01:5.3E-4,(P\_rodasii:0.00227,P\_rwandensis:0.00235):0.01644):0.00835,(P\_dispersa:0.00397,P\_wallisii:0.01015):0.00798):0.00307,(P\_eucrina:0.01948,(((P\_sp\_A4:0.04744,(T\_morbirosei:0.03871,(T\_sp\_NML\_06:0.03802,T\_ptyseos:0.0257):0.02375):0.04382):0.01744,(P\_septica:0.00807,((P\_brenneri:0.0,P\_conspicua:0.0):5.4E-4,(P\_deleyi:0.00487,(P\_vagans:0.00398,(P\_sp\_aB:5.5E-4,(P\_agglomerans:5.4E-4,P\_anthophila:0.01648):0.00189):0.003):0.00304):0.01323):0.01437):0.00536):0.00552,((E\_billingiae:0.03537,(E\_pyrifoliae:0.0097,E\_tasmaniensis:0.00468):0.02995):0.05979,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.02086,(P\_allii:0.00812,P\_ananatis:0.00459):0.00753):0.01037):0.01539):0.00766,P\_cyprapedii:0.01091):0.00127):0.00298);  
[767] tree 't767'=[&R] ((P\_sp\_aB:0.01708,P\_vagans:5.5E-4):0.01553,(P\_brenneri:0.01578,P\_conspicua:5.5E-4):0.01558,(P\_agglomerans:5.5E-4,(P\_anthophila:6.3E-4,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.04839,(P\_allii:0.01614,P\_ananatis:5.3E-4):5.4E-4):0.03639,((P\_cyprapedii:0.01362,(P\_sp\_A4:0.09411,((P\_dispersa:0.0,P\_eucrina:0.0,P\_wallisii:0.0):0.08704,(P\_sp\_GM01:5.4E-4,(P\_sp\_At-9b:5.3E-4,(P\_rodasii:0.0,P\_rwandensis:0.0):0.01555):0.01514):0.00872):0.07458):0.04714):0.07611,(P\_septica:0.118,(E\_pyrifoliae:0.01708,E\_tasmaniensis:0.03043):0.13598,(E\_billingiae:0.00456,(T\_morbirosei:0.13496,(T\_ptyseos:0.16002,T\_sp\_NML\_06:0.30623):0.103):0.14264):0.05663):0.0557):0.06115):5.4E-4):0.08331,P\_deleyi:5.4E-4):0.01499):0.0154):5.4E-4);  
[768] tree 't768'=[&R] ((P\_sp\_GM01:0.01845,(P\_rodasii:0.00941,P\_rwandensis:5.5E-4):0.04973):0.05995,((P\_septica:0.10713,P\_wallisii:0.03391):0.02776,(P\_eucrina:0.05918,((P\_allii:0.00946,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00931):0.00901,((P\_sp\_aB:0.01984,(P\_brenneri:0.01927,(P\_agglomerans:0.0,P\_vagans:0.0,P\_deleyi:0.0,P\_anthophila:0.0,P\_conspicua:0.0):5.5E-4):5.4E-4):0.04952,P\_ananatis:0.01915):0.00978):0.03988):0.02812):0.02068,(((E\_billingiae:0.0433,(E\_pyrifoliae:5.4E-4,E\_tasmaniensis:0.02862):0.05604):0.1013,(P\_sp\_A4:0.13294,(T\_sp\_NML\_06:0.19493,(T\_morbirosei:0.11732,T\_ptyseos:0.05465):0.05321):0.16166):0.03844):0.0475,P\_dispersa:0.00902):5.5E-4,(P\_sp\_At-9b:0.0,P\_cyprapedii:0.0):5.4E-4):5.0E-4);  
[769] tree 't769'=[&R] (P\_sp\_GM01:0.01738,(((P\_wallisii:0.01389,(P\_eucrina:0.01411,P\_dispersa:0.00917):0.00682):0.0179,(P\_septica:0.03244,(P\_sp\_At-9b:0.03551,(((T\_sp\_NML\_06:0.04616,(T\_morbirosei:0.03574,T\_ptyseos:0.0836):0.02316):0.04933,((E\_billingiae:0.04956,(E\_pyrifoliae:0.01462,E\_tasmaniensis:0.01559):0.0512):0.06241,P\_sp\_A4:0.04781):0.01128):0.04333,(P\_cyprapedii:0.01801,((P\_deleyi:0.00805,(P\_vagans:5.4E-4,(P\_sp\_aB:0.01732,(P\_anthophila:0.0043,P\_agglomerans:0.01295):5.4E-4):0.00425):0.00482):0.01328,(P\_brenneri:5.4E-4,P\_conspicua:0.00854):0.00457):0.02589):0.00402):5.4E-4):0.02062):0.02284):0.01654,((P\_allii:0.0043,P\_ananatis:5.4E-4):0.01314,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00437):0.00424):0.00439,(P\_rodasii:5.5E-4,P\_rwandensis:0.00432):5.5E-4);  
[770] tree 't770'=[&R] ((P\_dispersa:0.0,P\_rodasii:0.0,P\_sp\_GM01:0.0,P\_wallisii:0.0):5.4E-4,P\_rwandensis:0.00407):0.00405,P\_cyprapedii:5.5E-4,(P\_sp\_At-9b:0.00414,(((T\_morbirosei:0.01633,(T\_ptyseos:0.01506,T\_sp\_NML\_06:0.02793):0.02276):0.04448,(E\_billingiae:0.01745,(E\_pyrifoliae:0.01781,E\_tasmaniensis:0.01544):0.02377):0.03033):0.00601,(P\_eucrina:0.0186,P\_septica:0.01235):0.00392):0.0041,((P\_conspicua:0.0043,((P\_agglomerans:0.0,P\_vagans:0.0,P\_anthophila:0.0):5.5E-4,(P\_sp\_aB:0.00431,P\_deleyi:0.00862):5.5E-4):5.5E-4):5.4E-4,(P\_brenneri:5.4E-

4,P\_sp\_A4:0.03573):0.0086):0.00865,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.3E-4,(P\_allii:5.5E-4,P\_ananatis:0.0043):0.00431):0.00431):5.3E-4):0.0128):5.4E-4);

[771] tree 't771'=[&R] (P\_septica:0.02607,((((E\_pyriifoliae:0.00435,E\_tasmaniensis:0.0088):0.02413,E\_billingiae:0.04161):0.01916,(P\_rodasii:0.00526,P\_rwandensis:0.00823):0.01527):0.00304,(P\_sp\_A4:0.06419,(T\_morbirosei:0.02679,(T\_sp\_NML\_06:0.04049,T\_ptyseos:0.03278):0.01237):0.05305):0.02018):0.00438,(P\_sp\_At-9b:0.01292,P\_cyprapedii:5.5E-4):0.01713):5.5E-4,(P\_sp\_GM01:0.02161,((P\_eucrina:0.01826,((P\_brenneri:0.0,P\_conspicua:0.0):0.01272,(P\_vagans:5.5E-4,(P\_agglomerans:0.00429,(P\_deleyi:0.0,P\_anthophila:0.0):0.00428,P\_sp\_aB:0.0043):5.5E-4):0.00429):5.5E-4):0.00973,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01752,(P\_allii:0.00872,P\_ananatis:0.00434):0.00436):0.00815):0.01204):0.01691,(P\_dispersa:0.0089,P\_wallisii:0.00836):0.00432):5.4E-4):0.01309);

[772] tree 't772'=[&R] (P\_anthophila:0.00434,(P\_sp\_aB:5.5E-4,(P\_vagans:0.00482,P\_agglomerans:0.00321):0.00161):0.00211,(P\_deleyi:0.00692,((((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00635,(P\_allii:0.00804,P\_ananatis:5.5E-4):0.00326):0.01646,(((P\_dispersa:0.00174,P\_wallisii:0.01115):0.01088,(P\_sp\_GM01:0.01213,(P\_rwandensis:0.01241,P\_rodasii:0.00701):0.0045):0.01361):0.00585,(P\_eucrina:0.01571,(P\_septica:0.02056,(E\_billingiae:0.01958,(E\_pyriifoliae:0.00564,E\_tasmaniensis:0.01109):0.02038):0.05755):0.00294):0.01077):0.0064,((P\_sp\_At-9b:0.00678,P\_cyprapedii:0.01275):0.01909,(P\_sp\_A4:0.02589,(T\_morbirosei:0.02981,(T\_sp\_NML\_06:0.03903,T\_ptyseos:0.0315):0.02022):0.08278):0.00661):0.01):0.0183):0.01177,(P\_brenneri:0.07212,P\_conspicua:0.00111):0.00453):0.00425):0.0022);

[773] tree 't773'=[&R] (P\_vagans:0.01054,((((P\_brenneri:5.4E-4,P\_conspicua:0.00543):0.01659,P\_sp\_aB:0.00233):5.4E-4,((((E\_billingiae:0.06492,(E\_pyriifoliae:0.01327,E\_tasmaniensis:5.4E-4):0.03768):0.02182,P\_septica:0.03053):0.02177,(P\_eucrina:0.03084,((P\_sp\_GM01:0.01694,(P\_wallisii:0.02769,P\_dispersa:0.01541):0.01343):0.00125,(P\_sp\_A4:0.04637,(P\_rodasii:0.00823,P\_rwandensis:0.00269):0.02806):0.00549):0.01117):0.01153):0.00405,(P\_sp\_At-9b:0.01257,P\_cyprapedii:0.02386):0.0254):0.01483,(T\_morbirosei:0.05677,(T\_ptyseos:0.05561,T\_sp\_NML\_06:0.05269):0.04654):0.03809):0.00977,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01717,(P\_allii:0.01194,P\_ananatis:0.01893):0.00739):0.00956):0.0102):0.00271,P\_agglomerans:5.5E-4):0.00625,(P\_deleyi:0.01836,P\_anthophila:0.01041):0.00669);

[774] tree 't774'=[&R] (P\_wallisii:0.00265,((P\_sp\_At-9b:0.0,P\_cyprapedii:0.0):0.01636,P\_eucrina:5.4E-4):0.00533,((P\_sp\_GM01:0.00265,(P\_rwandensis:0.0053,P\_rodasii:0.00265):0.00264):0.00301,((P\_allii:0.0,P\_ananatis:0.0):5.4E-4,(P\_dispersa:0.0,P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.4E-4,((((T\_morbirosei:0.02366,(T\_ptyseos:0.03559,T\_sp\_NML\_06:0.03075):0.01137):0.04304,(E\_billingiae:0.01915,(E\_pyriifoliae:0.00169,E\_tasmaniensis:0.00651):0.01854):0.01285):0.01074,(P\_sp\_A4:0.04261,P\_septica:0.00825):0.01055):0.00563,(P\_anthophila:5.3E-4,((P\_brenneri:0.0,P\_conspicua:0.0):0.00266,(P\_agglomerans:0.0,P\_vagans:0.0,P\_deleyi:0.0,P\_sp\_aB:0.0):5.5E-4):0.00264):0.00795):0.00268):0.00261):0.005):0.00259);

[775] tree 't775'=[&R] ((P\_sp\_aB:0.00341,(P\_agglomerans:5.5E-4,(P\_rodasii:0.00683,P\_rwandensis:5.5E-4):0.00341):5.3E-4):0.00341,((P\_brenneri:0.0,P\_conspicua:0.0,P\_dispersa:0.0,P\_wallisii:0.0):5.5E-4,(P\_septica:0.00342,((P\_sp\_At-9b:0.00322,((T\_morbirosei:5.4E-4,(T\_sp\_NML\_06:0.02981,T\_ptyseos:0.01962):0.01688):0.03477,P\_cyprapedii:0.00341):5.3E-4):0.00687,(P\_sp\_GM01:5.4E-

4,(P\_sp\_A4:0.0106,(E\_pyrifoliae:0.00345,(E\_billingiae:0.00342,E\_tasmaniensis:0.00347):0.00341):0.0137):0.00689):0.00643):0.00366):5.5E-4):5.2E-4,((P\_deleyi:0.00333,((P\_allii:0.0,P\_ananatis:0.0):5.5E-4,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00341,P\_eucrina:0.00343):5.5E-4):5.4E-4):0.0034,(P\_vagans:5.5E-4,P\_anthophila:0.00343):0.00334):5.5E-4);

[776] tree 't776'=[&R] (((P\_anthophila:0.00709,((P\_allii:0.00713,P\_ananatis:5.3E-4):0.0071,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01434):5.4E-4):0.00712,(P\_deleyi:0.00718,(P\_sp\_aB:0.00718,(P\_agglomerans:0.0,P\_vagans:0.0):0.00714):0.00706):0.01443):5.3E-4,P\_brenneri:5.5E-4):5.3E-4,P\_conspicua:0.0071,((P\_sp\_A4:0.01498,(E\_pyrifoliae:0.0377,(E\_tasmaniensis:0.03031,E\_billingiae:0.04489):0.00719):0.05386):0.02891,((P\_sp\_At-9b:0.00748,P\_cyprapedii:0.00715):0.01483,(((P\_dispersa:5.3E-4,P\_wallisii:0.02148):0.01342,((P\_rodasii:5.5E-4,P\_rwandensis:0.0071):0.00724,(P\_eucrina:0.05055,P\_sp\_GM01:5.4E-4):0.02924):0.00807):0.02957,(P\_septica:0.02216,(T\_morbirosei:0.04129,(T\_sp\_NML\_06:0.08158,T\_ptyseos:0.07199):0.04541):0.14907):5.3E-4):0.01423):0.00711):5.4E-4);

[777] tree 't777'=[&R] (((P\_sp\_At-9b:0.0,P\_cyprapedii:0.0):0.00673,(P\_dispersa:5.5E-4,P\_wallisii:0.00422):0.01552):0.00815,(P\_rodasii:0.00874,(P\_sp\_GM01:0.01306,P\_rwandensis:5.5E-4):0.00426):5.4E-4):0.00884,(P\_eucrina:0.01342,(E\_billingiae:0.01878,(E\_pyrifoliae:0.00656,E\_tasmaniensis:0.01261):0.02939):0.02138):0.00425):0.00482,(P\_septica:0.00907,((T\_morbirosei:0.01935,(T\_ptyseos:0.00563,T\_sp\_NML\_06:0.016):0.0061):0.03216,((P\_allii:0.00397,P\_ananatis:5.5E-4):0.01293,(P\_s\_indologenes:0.00431,P\_s\_stewartii:5.5E-4):0.00462):0.00831):0.00408):0.01314,((P\_anthophila:0.01722,((P\_brenneri:0.0,P\_conspicua:0.0):5.4E-4,(P\_deleyi:0.00423,(P\_agglomerans:0.00432,(P\_vagans:0.0,P\_sp\_aB:0.0):5.5E-4):0.01297):0.00406):0.00876):0.00616,P\_sp\_A4:0.01831):0.00695);

[778] tree 't778'=[&R] ((E\_billingiae:0.00801,(E\_pyrifoliae:5.4E-4,E\_tasmaniensis:0.01317):0.06502):0.01261,(((P\_dispersa:0.0,P\_wallisii:0.0):5.5E-4,((P\_rwandensis:5.5E-4,(P\_sp\_GM01:0.00668,P\_rodasii:0.00668):5.3E-4):0.00668,P\_eucrina:0.00669):5.4E-4):0.00128,(P\_sp\_A4:0.02036,(P\_sp\_At-9b:0.00674,P\_cyprapedii:5.5E-4):5.5E-4):0.01246):0.00678,(P\_septica:5.5E-4,((P\_agglomerans:0.0,P\_brenneri:0.0,P\_conspicua:0.0):0.0068,(P\_sp\_aB:5.5E-4,((P\_vagans:0.0,P\_deleyi:0.0):0.0067,P\_anthophila:0.00639):5.5E-4):5.5E-4):0.01772,((T\_sp\_NML\_06:0.04805,(T\_morbirosei:0.05587,T\_ptyseos:0.00691):0.00801):0.05845,((P\_allii:0.0,P\_ananatis:0.0):5.5E-4,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00657):0.01145):0.01748):0.0237):0.01358);

[779] tree 't779'=[&R] ((P\_sp\_aB:5.5E-4,(P\_anthophila:0.03321,P\_deleyi:0.01957):0.00914):0.00442,P\_agglomerans:5.4E-4,(P\_vagans:0.01882,(P\_brenneri:5.4E-4,((P\_eucrina:0.03282,(((P\_wallisii:0.14266,((T\_morbirosei:0.19132,(T\_ptyseos:0.04692,T\_sp\_NML\_06:0.11746):0.05413):0.11632,(E\_billingiae:0.12307,(E\_pyrifoliae:0.11376,E\_tasmaniensis:0.06417):0.13564):0.07008):0.03612):0.09121,(P\_sp\_GM01:0.06914,P\_conspicua:0.19031):0.0761):0.03494,((P\_septica:0.07936,(P\_rodasii:0.00487,P\_rwandensis:0.01388):0.02012):0.01117,((P\_sp\_At-9b:0.00502,P\_cyprapedii:0.00898):0.02753,P\_sp\_A4:0.1413):0.04147):0.01977):0.03639,P\_dispersa:0.00524):0.05333):0.05418,(P\_allii:5.5E-4,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.02352,P\_ananatis:5.5E-4):0.00462):0.07747):0.04412):0.04268):5.3E-4);

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[780] tree 't780'=[&R]
((P_sp_A4:0.02429,(T_morbirosei:0.06044,(T_ptyseos:0.03909,T_sp_NML_06:0.02343):0.00519):0.06837):0.02461,P_septica:
5.3E-4,(((P_sp_At-9b:5.4E-
4,P_dispersa:0.00589):0.00602,P_cyprapedii:0.00595):0.00588,((P_anthophila:0.00591,((P_agglomerans:0.0,P_vagans:0.0
,P_sp_aB:0.0):0.00173,(P_brenneri:0.0,P_conspicua:0.0):0.01126):0.00463,P_deleyi:5.4E-
4):0.00588):0.0069,((E_billingiae:0.00885,(E_pyriifoliae:5.5E-
4,E_tasmaniensis:0.02372):0.01509):0.05539,((P_s_indologenes:0.0,P_s_stewartii:0.0):0.00585,(P_allii:0.00581,P_anana
tis:5.5E-4):5.4E-
4):0.01802):0.00436):0.01213):0.00588,(P_eucrina:0.01796,(P_wallisii:0.00593,(P_sp_GM01:0.00572,(P_rwandensis:0.0064
3,P_rodasii:0.01166):0.00601):5.5E-4):0.00601):0.006):0.01183);
[781] tree 't781'=[&R] (((P_sp_GM01:0.02879,((P_sp_At-9b:0.04492,P_cyprapedii:5.5E-
4):0.03228,((P_sp_A4:0.29588,(E_billingiae:0.07372,(E_pyriifoliae:0.07723,E_tasmaniensis:0.09532):0.16837):0.33891):0
.03563,(((P_s_indologenes:5.5E-
4,P_s_stewartii:0.01266):0.02381,(P_ananatis:0.05535,P_allii:0.01006):0.03832):0.11814,((P_brenneri:5.5E-
4,P_conspicua:0.01301):0.02648,(P_deleyi:0.07022,(P_vagans:0.02323,(P_anthophila:0.04605,(P_agglomerans:0.00654,P_sp
_aB:0.01924):0.01636):6.5E-
4):0.02293):0.05022):0.08368):0.06624,(P_septica:0.11895,(T_morbirosei:0.29176,(T_ptyseos:0.27847,T_sp_NML_06:0.1255
1):0.13562):0.45773):5.4E-
4):0.0157):0.03704):0.05305):0.00894,P_rodasii:0.03725):0.01628,(P_dispersa:0.03131,P_rwandensis:0.00767):0.00613,(P
_wallisii:0.02586,P_eucrina:0.09457):0.00689);
[782] tree 't782'=[&R] (((P_dispersa:0.00929,(P_sp_GM01:0.05684,(((P_sp_At-
9b:0.0,P_cyprapedii:0.0):0.00964,P_sp_A4:0.04834):0.00925,(P_rodasii:0.02829,P_rwandensis:5.5E-
4):0.03849):0.00995):5.3E-4):5.3E-
4,(P_wallisii:0.01853,P_eucrina:0.03781):0.00914):0.02234,(E_billingiae:0.0755,(E_pyriifoliae:0.07099,E_tasmaniensis:
0.04291):0.02069):0.11138,((T_sp_NML_06:0.04848,(T_ptyseos:0.07218,T_morbirosei:0.04096):0.02128):0.16414,(((P_s_ind
ologenes:0.0,P_s_stewartii:0.0):5.5E-4,(P_allii:5.3E-4,P_ananatis:0.00943):0.01873):0.02022,(P_brenneri:5.3E-
4,(P_conspicua:0.00862,(P_septica:0.01855,(P_deleyi:0.00928,(P_anthophila:0.00925,(P_sp_aB:0.0,P_agglomerans:0.0,P_v
agans:0.0):5.5E-4):0.00924):0.00976):0.00959):0.00935):0.03529):0.02148):0.00743);
[783] tree 't783'=[&R]
((P_brenneri:0.05159,P_conspicua:0.04433):0.04783,(P_anthophila:0.05499,(P_septica:0.08803,((T_sp_NML_06:0.17131,(T
_ptyseos:0.21912,T_morbirosei:0.10196):0.13033):0.29374,(E_tasmaniensis:0.15854,E_pyriifoliae:0.23212):0.25356):0.046
14,((P_sp_A4:0.206,(((P_s_indologenes:0.0,P_s_stewartii:0.0):0.07214,(P_allii:0.01271,P_ananatis:0.02676):0.00942):0
.15546,(P_eucrina:0.14298,((P_sp_At-
9b:0.03278,P_cyprapedii:0.01939):0.02305,(P_sp_GM01:0.05754,(P_dispersa:0.03309,(P_rwandensis:0.02654,(P_wallisii:0.
04019,P_rodasii:5.4E-
4):0.01301):0.00758):0.00307):0.03815):0.05537):0.12247):0.02538):0.03466,E_billingiae:0.32482):0.04346):0.13384):0.
07423):0.02611,(P_deleyi:0.07689,(P_agglomerans:0.01365,(P_vagans:0.02528,P_sp_aB:0.04807):0.0207):0.00738):0.01248)
;
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[784] tree 't784'=[&R]  
(P\_wallisii:0.0251,(P\_dispersa:0.03085,P\_eucrina:0.0956):0.00739,(P\_sp\_GM01:0.02507,((P\_septica:0.09717,((P\_sp\_At-9b:0.01161,P\_cypripedii:0.02677):0.03952,(((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00352):0.03986,(P\_allii:0.02202,P\_ananatis:0.00345):0.05191):0.0941,((P\_conspicua:0.02342,P\_brenneri:0.0096):0.00901,((P\_anthophila:0.02908,P\_deleyi:0.03045):0.0082,(P\_sp\_aB:0.0355,P\_vagans:0.0085):0.00739):0.00596,P\_agglomerans:5.5E-4):0.02561):0.05288):0.04845,((T\_morbirosei:0.18884,(T\_ptyseos:0.12502,T\_sp\_NML\_06:0.16024):0.0438):0.18916,(P\_sp\_A4:0.10853,((E\_pyrifoliae:0.05693,E\_tasmaniensis:0.0431):0.11724,E\_billingiae:0.12027):0.0661):0.02463):0.02391):0.02561):0.00939):0.047,(P\_rodasii:0.011,P\_rwandensis:0.03148):0.00812):0.00605):0.00684);  
[785] tree 't785'=[&R]  
(P\_sp\_A4:0.05596,((P\_dispersa:0.01187,(P\_wallisii:0.01224,P\_eucrina:0.00402):0.01202):0.00428,((P\_rodasii:5.1E-4,(P\_rwandensis:0.00402,P\_sp\_GM01:5.5E-4):0.00401):0.02029,(P\_sp\_At-9b:0.00381,P\_cypripedii:5.4E-4):0.00819):0.01225):0.01015,(((T\_morbirosei:0.01616,(T\_sp\_NML\_06:0.04599,T\_ptyseos:0.02727):0.01669):0.05484,(((P\_allii:0.00814,P\_ananatis:0.00395):0.01216,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01165,(P\_brenneri:5.5E-4,(P\_conspicua:5.4E-4,((P\_anthophila:0.00402,(P\_agglomerans:0.00407,(P\_vagans:0.0,P\_sp\_aB:0.0):5.5E-4):5.4E-4):0.00411,P\_deleyi:0.004):5.4E-4):0.00407):0.03768):5.4E-4):0.00401,(E\_billingiae:0.01193,(E\_pyrifoliae:0.01598,E\_tasmaniensis:5.4E-4):5.3E-4):0.03729):0.00433):0.0017,P\_septica:0.01406):0.00419);  
[786] tree 't786'=[&R]  
(P\_agglomerans:0.02883,(P\_vagans:0.01153,P\_sp\_aB:0.02893):0.01768,(P\_deleyi:0.04046,(P\_anthophila:0.01753,((P\_septica:0.13961,(((P\_dispersa:0.08423,((P\_sp\_At-9b:0.02276,P\_cypripedii:0.00899):0.03533,(P\_rodasii:0.18292,P\_rwandensis:0.02755):0.02606):0.00932):0.01026,(P\_sp\_GM01:0.02903,(P\_eucrina:0.10645,P\_wallisii:0.02225):0.04232):0.0279):0.02287,(E\_billingiae:0.09523,(E\_pyrifoliae:0.07455,E\_tasmaniensis:0.14712):0.11338):0.08966):0.02329,(P\_sp\_A4:0.18238,(T\_ptyseos:0.1586,(T\_morbirosei:0.19201,T\_sp\_NML\_06:0.25554):0.05346):0.10384):0.10865):0.01826):0.02374,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.03549,(P\_allii:0.00859,P\_ananatis:0.02849):0.01903):0.05756,(P\_brenneri:0.00582,P\_conspicua:0.00557):0.02963):6.4E-4):0.01237):0.01181):5.5E-4);  
[787] tree 't787'=[&R]  
(P\_agglomerans:0.00762,P\_vagans:0.01013,(P\_sp\_aB:0.01326,(((T\_morbirosei:0.11771,(T\_sp\_NML\_06:0.21682,T\_ptyseos:0.12233):0.04472):0.18117,(E\_billingiae:0.07524,(E\_pyrifoliae:0.0572,E\_tasmaniensis:0.05263):0.12229):0.08879):0.04238,(((P\_s\_indologenes:0.00253,P\_s\_stewartii:5.5E-4):0.04741,(P\_allii:0.0093,P\_ananatis:0.01398):0.02251):0.03353,((P\_sp\_A4:0.14085,((P\_eucrina:0.08083,P\_wallisii:0.0334):0.02703,(P\_dispersa:0.02837,((P\_sp\_At-9b:0.02264,P\_cypripedii:0.01945):0.0297,(P\_sp\_GM01:0.03552,(P\_rodasii:0.01144,P\_rwandensis:0.01714):0.00996):0.0107):0.01036):0.01051):0.03355):0.01502,P\_septica:0.06864):0.02055):0.00964):0.03575,(P\_brenneri:0.00757,P\_conspicua:0.0027):0.01627):0.02149,(P\_deleyi:0.02441,P\_anthophila:0.0144):0.00745):0.0036):0.00243);  
[788] tree 't788'=[&R]  
(P\_eucrina:0.13407,((P\_allii:0.02614,P\_ananatis:0.0044):0.04712,((P\_deleyi:0.03349,P\_anthophila:0.00995):0.00477,((P\_s\_indologenes:0.00412,P\_s\_stewartii:0.00428):0.04122,((P\_brenneri:0.19635,P\_conspicua:0.00359):0.01807,(P\_agglomera

ns:0.02531,(P\_vagans:0.00414,P\_sp\_aB:0.00412):0.01769):0.00871):0.01915):0.01064):0.00676):0.01004,(((P\_sp\_At-9b:0.03267,P\_cyprapedii:0.02362):0.02365,(P\_sp\_GM01:0.02442,(P\_wallisii:0.02455,P\_dispersa:0.03564):0.02709):0.00546,(P\_rodasii:0.00739,P\_rwandensis:0.01474):0.01526):0.02558):0.02489,((E\_billingiae:0.06806,(E\_pyrifoliae:0.04543,E\_tasmaniensis:0.04491):0.06563):0.02161,(P\_sp\_A4:0.09934,(P\_septica:0.07202,(T\_morbirosei:0.10963,(T\_sp\_NML\_06:0.2819,T\_ptyseos:0.11525):0.05077):0.03868):0.02741):0.01515):0.0168):0.01352);

[789] tree 't789'=[&R] ((P\_septica:0.1182,(P\_eucrina:0.15541,(P\_dispersa:0.05976,(P\_wallisii:0.03881,((P\_sp\_At-9b:0.03661,P\_cyprapedii:0.00774):0.03016,(P\_sp\_GM01:0.05031,(P\_rodasii:0.01947,P\_rwandensis:0.02612):0.01002):0.01027):0.0224):0.01315):0.02367):0.02571):0.01922,(P\_sp\_A4:0.16434,((P\_brenneri:0.02784,P\_conspicua:0.03263):0.01677,((P\_agglomerans:0.01034,(P\_sp\_aB:0.03265,P\_vagans:0.01109):0.01709):0.0131,(P\_anthophila:0.05325,P\_deleyi:0.05632):0.00673):0.0438):0.05811):0.02327,(((T\_ptyseos:0.10815,(T\_morbirosei:0.20382,T\_sp\_NML\_06:0.18797):0.0358):0.19244,(E\_billingiae:0.15789,(E\_pyrifoliae:0.08083,E\_tasmaniensis:0.06506):0.14297):0.07058):0.03007,((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00199):0.05738,(P\_allii:0.02593,P\_ananatis:0.05033):0.02757):0.07926):0.01522);

[790] tree 't790'=[&R] ((P\_eucrina:5.3E-4,((P\_allii:0.0,P\_ananatis:0.0,P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.3E-4,(T\_morbirosei:0.02931,(T\_sp\_NML\_06:0.08313,T\_ptyseos:0.09745):0.02005):0.31285):0.08304):0.04872,((P\_wallisii:0.0,P\_dispersa:0.0,P\_sp\_GM01:0.0):5.4E-4,(P\_brenneri:5.4E-4,(P\_sp\_A4:0.02568,(P\_conspicua:0.02296,((P\_sp\_aB:0.02642,((P\_vagans:0.02388,P\_deleyi:5.4E-4):0.07309,P\_agglomerans:5.4E-4):0.02237):0.02676,((E\_pyrifoliae:0.02869,(E\_billingiae:0.18722,E\_tasmaniensis:0.0171):0.03053):0.14164,P\_anthophilina:0.02499):5.4E-4):0.05381):0.05272):0.02534):0.02421):0.0242,(P\_septica:0.02424,(P\_cyprapedii:0.0,P\_rwandensis:0.0,P\_sp\_At-9b:0.0,P\_rodasii:0.0):5.4E-4):5.4E-4);

[791] tree 't791'=[&R] (P\_sp\_GM01:0.04713,(P\_rwandensis:0.02132,P\_rodasii:0.00514):0.02075,(((P\_wallisii:0.02743,P\_eucrina:0.01538):0.01261,(P\_dispersa:0.05589,(((T\_morbirosei:0.20791,(T\_sp\_NML\_06:0.29782,T\_ptyseos:0.13759):0.02477):0.34659,(((P\_s\_indologenes:5.4E-4,P\_s\_stewartii:0.02219):0.03676,(P\_allii:0.04407,P\_ananatis:0.05508):0.01456):0.0864,(P\_septica:0.04894,(P\_deleyi:0.06862,((P\_brenneri:0.03825,P\_conspicua:0.02994):0.02779,((P\_sp\_aB:0.04233,P\_vagans:0.01854):0.01203,(P\_agglomerans:5.4E-4,P\_anthophila:0.08557):0.01091):0.02287):0.00664):0.08017):0.02281):0.03621):0.05966,((E\_billingiae:0.10253,(E\_pyrifoliae:0.03161,E\_tasmaniensis:0.047):0.15801):0.06586,P\_sp\_A4:0.2063):0.03105):0.04768,(P\_sp\_At-9b:0.03309,P\_cyprapedii:0.05235):0.03758):0.03282):0.00414):0.00786);

[792] tree 't792'=[&R] (P\_deleyi:0.02806,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.04847,(P\_allii:0.01578,P\_ananatis:0.01905):0.01914):0.08015,(P\_septica:0.07662,((P\_sp\_At-9b:0.05216,P\_cyprapedii:0.02975):0.01338,((T\_morbirosei:0.08272,(T\_ptyseos:0.12392,T\_sp\_NML\_06:0.0783):0.08377):0.17703,(((E\_pyrifoliae:0.03341,E\_tasmaniensis:0.03562):0.11719,E\_billingiae:0.124):0.04021,P\_sp\_A4:0.17655):0.02613):0.01585):0.02154,((P\_sp\_GM01:0.0527,((P\_wallisii:0.03982,P\_dispersa:0.02365):0.00373,P\_eucrina:0.10477):0.01776):0.00878,(P\_rodasii:0.02941,P\_rwandensis:0.01795):0.01425):0.03828):0.06759):0.04197):0.033,(P\_conspicua:0.01667,P\_brenner

i:0.0192):0.01237):0.00762,(P\_anthophila:0.02841,(P\_agglomerans:0.01377,(P\_sp\_aB:0.02427,P\_vagans:5.4E-4):0.01004):0.00574):5.5E-4);

[793] tree 't793'=[&R] ((P\_septica:0.06931,(P\_sp\_At-9b:0.03691,P\_cyprapedii:0.03582):0.02153):0.02132,(((P\_wallisii:0.04764,P\_dispersa:0.03806):0.01155,(P\_sp\_GM01:0.02799,(P\_rodasii:0.01115,P\_rwandensis:0.01131):0.02231):0.01308):0.02221,P\_eucrina:0.16339):0.02551):0.03158,(((P\_ananatis:0.01704,(P\_allii:0.02515,(P\_s\_indologenes:0.00375,P\_s\_stewartii:5.5E-4):0.04628):0.00806):0.09645,((P\_brenneri:0.01876,P\_conspicua:0.0148):0.03676,((P\_agglomerans:0.02475,(P\_vagans:0.01505,P\_sp\_aB:0.01043):0.01041):0.00755,(P\_anthophila:0.02139,P\_deleyi:0.04254):0.01157):0.03709):0.02873):0.02842,(T\_sp\_NML\_06:0.16001,(T\_morbirosei:0.16303,T\_ptyseos:0.15254):0.04613):0.25949):0.02716,(P\_sp\_A4:0.19602,(E\_billingiae:0.11286,(E\_pyriifoliae:0.0488,E\_tasmaniensis:0.0137):0.15836):0.12226):0.0088);

[794] tree 't794'=[&R] ((P\_sp\_At-9b:0.00844,P\_cyprapedii:0.00439):0.00435,(P\_eucrina:0.13054,(P\_wallisii:0.03746,(((E\_billingiae:0.07241,(E\_pyriifoliae:0.03395,E\_tasmaniensis:0.05947):0.09088):0.08187,((T\_morbirosei:0.04935,(T\_ptyseos:0.06997,T\_sp\_NML\_06:0.06723):0.02854):0.1631,P\_sp\_A4:0.08724):0.01886):0.01676,(P\_septica:0.05641,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.03132,(P\_allii:5.3E-4,P\_ananatis:0.03244):0.01355):0.12605,((P\_brenneri:0.00853,P\_conspicua:5.4E-4):0.00611,(P\_anthophila:0.02587,(P\_deleyi:5.4E-4,(P\_sp\_aB:0.01287,(P\_agglomerans:5.5E-4,P\_vagans:0.00427):5.5E-4):0.0083):0.00447):0.01203):0.03081):0.02172):0.02347):0.02751):0.00714):0.00412,(P\_dispersa:0.00885,(P\_rodasii:0.03474,(P\_sp\_GM01:0.02647,P\_rwandensis:0.02107):0.00426):0.00458):0.00417);

[795] tree 't795'=[&R] ((P\_deleyi:0.0032,P\_anthophila:0.0052):0.00505,(P\_sp\_aB:0.00176,P\_vagans:0.00322):0.00167,(P\_agglomerans:0.0027,((P\_brenneri:0.00229,P\_conspicua:0.0027):0.00376,((P\_ananatis:5.3E-4,(P\_allii:0.00852,(P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00168):0.00663):0.00173):0.02163,(((T\_sp\_NML\_06:0.0236,(T\_morbirosei:0.0258,T\_ptyseos:0.02349):0.0081):0.02815,(E\_billingiae:0.03106,(E\_pyriifoliae:0.01034,E\_tasmaniensis:0.00677):0.02415):0.02375):0.01674,(P\_septica:0.03785,((P\_eucrina:0.02032,((P\_sp\_At-9b:0.00346,P\_cyprapedii:0.00675):0.01567,(P\_wallisii:0.04953,P\_dispersa:0.00446):0.00737):0.00799):0.00813,(P\_sp\_A4:0.0447,(P\_rodasii:0.00909,P\_rwandensis:0.01308):0.015,P\_sp\_GM01:0.01827):0.00506):0.00597):0.00715):0.00776):0.01198):0.00351):0.00885):0.00245);

[796] tree 't796'=[&R] ((P\_rodasii:0.02969,(P\_sp\_GM01:0.04911,(P\_septica:0.03625,(((T\_ptyseos:0.06762,(T\_sp\_NML\_06:0.12206,T\_morbirosei:0.04896):0.04876):0.1297,P\_sp\_A4:0.08404):0.04266,((E\_billingiae:0.05295,(E\_pyriifoliae:0.0767,E\_tasmaniensis:0.07299):0.11096):0.08473,(P\_allii:0.0033,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.06432,P\_ananatis:0.01283):0.00397):0.06037):0.00767):0.01725,((P\_brenneri:5.5E-4,P\_conspicua:0.00321):0.01979,(P\_anthophila:0.01136,(P\_agglomerans:0.01398,(P\_sp\_aB:0.00324,(P\_vagans:5.4E-4,P\_deleyi:0.02303):0.00326):0.01277):0.00597):0.02935):0.01533):0.00912):0.0143):0.00634):0.00983,P\_rwandensis:0.01999,(((P\_sp\_At-9b:0.0224,P\_cyprapedii:0.01824):0.00925,P\_eucrina:0.0784):0.00329,(P\_dispersa:0.02399,P\_wallisii:0.03571):0.00783):0.00785);

[797] tree 't797'=[&R] ((P\_rwandensis:0.03016,P\_rodasii:0.03039):0.00968,(P\_sp\_GM01:0.0498,((P\_wallisii:0.06256,P\_eucrina:0.02002):0.00967,

(P\_cyprapedii:0.05489,P\_dispersa:0.03698):0.00816):0.0207):5.4E-4,(((E\_billingiae:0.10437,(E\_pyriifoliae:0.06072,E\_tasmaniensis:0.06517):0.08496):0.07101,((T\_sp\_NML\_06:0.30827,(T\_morbirosei:0.18708,T\_ptyseos:0.12968):0.03972):0.08893,(P\_sp\_A4:0.13588,(P\_s\_indologenes:5.5E-4,((P\_brenneri:5.5E-4,(P\_septica:0.0719,(P\_conspicua:0.02846,(P\_anthophila:0.03864,(P\_deleyi:5.4E-4,(P\_agglomerans:5.5E-4,(P\_vagans:0.00947,P\_sp\_aB:0.00944):5.5E-4):0.00947):0.00974):0.01891):5.4E-4):0.01012):0.08793,(P\_allii:0.01212,P\_ananatis:0.01712):0.02754):0.01118,P\_s\_stewartii:5.4E-4):0.00926):0.05371):0.05025):0.04709):0.04673,P\_sp\_At-9b:0.02861):0.04323);

[798] tree 't798'=[&R] (P\_rwandensis:0.00649,(P\_dispersa:0.05782,((P\_cyprapedii:0.04882,P\_sp\_At-9b:0.03365):0.01285,((P\_sp\_A4:0.13749,P\_eucrinea:0.09462):0.02376,((T\_morbirosei:0.13117,(T\_sp\_NML\_06:0.19176,T\_ptyseos:0.0768):0.06183):0.17133,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.04832,(P\_allii:0.01761,P\_ananatis:0.01225):0.01249):0.06213,((P\_agglomerans:0.01105,((P\_sp\_aB:0.02388,P\_deleyi:0.02959):0.00495,P\_vagans:5.4E-4):0.00582,P\_anthophila:0.03544):5.5E-4):0.02253,(P\_brenneri:0.03348,P\_conspicua:0.00972):0.01805):0.03939):0.05784,(P\_septica:0.1922,(E\_billingiae:0.06688,(E\_pyriifoliae:0.03348,E\_tasmaniensis:0.07093):0.12474):0.06012):0.0567):6.1E-4):0.01627):0.01316):0.02202):0.02309,(P\_wallisii:0.04035,(P\_sp\_GM01:0.03449,P\_rodasii:0.00582):0.01249):0.00486);

[799] tree 't799'=[&R] (P\_dispersa:0.0502,P\_cyprapedii:0.017,(P\_sp\_At-9b:0.01848,((P\_eucrinea:0.0485,P\_wallisii:0.01052):0.02343,((P\_rodasii:0.0118,P\_rwandensis:5.3E-4):0.01208,(P\_sp\_GM01:0.02297,(((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00617):0.0438,(P\_allii:0.00989,P\_ananatis:0.01589):0.00995):0.04181,((P\_conspicua:0.03121,P\_brenneri:0.01017):0.00951,(P\_deleyi:0.0365,(P\_anthophila:0.01843,(P\_agglomerans:0.00605,(P\_vagans:0.01828,P\_sp\_aB:5.4E-4):0.00608):0.01145):0.00209):0.01065):0.00681):0.00317,((T\_sp\_NML\_06:0.10439,(T\_ptyseos:0.11679,T\_morbirosei:0.05814):0.02765):0.07656,(P\_sp\_A4:0.10571,(E\_billingiae:0.09088,(E\_pyriifoliae:0.01831,E\_tasmaniensis:0.02644):0.05448):0.02371):0.01449):0.03182):0.0162,P\_septica:0.02733):0.03557):0.0136):0.00565):0.00618):0.00262);

[800] tree 't800'=[&R] (((P\_cyprapedii:0.0261,((T\_morbirosei:0.05015,(T\_ptyseos:0.10884,T\_sp\_NML\_06:0.11253):0.04877):0.08837,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01965,(P\_allii:5.4E-4,P\_ananatis:0.05714):0.06539):0.14169,P\_deleyi:5.4E-4):0.05454,P\_conspicua:0.05552):5.4E-4):5.5E-4,P\_brenneri:5.5E-4):0.02686):5.3E-4,(P\_sp\_At-9b:0.0,P\_sp\_GM01:0.0,P\_rwandensis:0.0,P\_rodasii:0.0):5.5E-4):5.4E-4,(P\_dispersa:5.4E-4,(E\_billingiae:0.14953,(E\_pyriifoliae:0.02831,E\_tasmaniensis:5.5E-4):0.02733):0.09315):0.02628,(P\_septica:0.05319,((P\_agglomerans:0.0,P\_vagans:0.0):5.4E-4,(P\_eucrinea:0.05329,(P\_anthophila:0.0265,P\_sp\_aB:5.3E-4):5.5E-4):0.02643):0.01445,(P\_wallisii:5.5E-4,P\_sp\_A4:0.06454):0.01567):0.02247):5.5E-4);

[801] tree 't801'=[&R] (P\_sp\_aB:0.01366,P\_vagans:0.01375,((P\_deleyi:5.5E-4,(P\_anthophila:0.02765,P\_agglomerans:5.5E-4):0.00671):5.5E-4,(((E\_billingiae:0.07513,(E\_tasmaniensis:0.07195,E\_pyriifoliae:0.07115):0.10063):0.11086,((P\_allii:0.04159,(P\_ananatis:0.02824,(P\_s\_indologenes:5.3E-4,P\_s\_stewartii:0.02729):0.02314):0.02502):0.0514,(P\_sp\_A4:0.18459,(P\_septica:0.04274,((P\_cyprapedii:0.06263,P\_sp\_At-9b:0.02668):0.01741,((P\_dispersa:0.01551,((P\_rodasii:0.01305,P\_rwandensis:0.02264):0.02835,P\_eucrinea:0.13164):0.0316



8):0.01513,(P\_wallisii:0.06956,P\_sp\_GM01:0.05765):0.00889):0.04119):0.04616,(T\_ptyseos:0.13882,(T\_morbirosei:0.18557  
,T\_sp\_NML\_06:0.25924):0.04446):0.20992):0.02771):0.01733):0.03793):0.01014):0.02511,(P\_brenneri:0.02104,P\_conspicua:  
0.01331):0.014):0.01713):0.00674);  
[802] tree 't802'=[&R]  
(((E\_billingiae:0.07852,(E\_pyrifoliae:0.07017,E\_tasmaniensis:0.00575):0.10289):0.09718,((T\_morbirosei:0.09739,(T\_sp\_  
NML\_06:0.30632,T\_ptyseos:0.13583):0.07008):0.32298,P\_sp\_A4:0.11514):0.06287):0.02117,((P\_sp\_At-  
9b:0.05968,P\_cyprapedii:0.02049):0.01814,(P\_eucrinea:0.0801,((P\_sp\_GM01:0.02294,(P\_rodasii:0.01395,P\_rwandensis:0.013  
93):0.01239):0.02022,(P\_dispersa:0.06822,P\_wallisii:0.02649):0.02102):0.01424):0.02527):0.0215,(((P\_deleyi:0.30499,(  
P\_anthophila:5.4E-4,(P\_vagans:5.5E-4,(P\_agglomerans:0.00904,P\_sp\_aB:5.4E-  
4):0.00457):0.01358):0.01425):0.02575,(P\_brenneri:0.01812,P\_conspicua:0.02846):0.01871):0.01863,(P\_septica:0.04576,(  
(P\_s\_indologenes:5.4E-  
4,P\_s\_stewartii:0.01383):0.03404,(P\_allii:0.01406,P\_ananatis:0.00427):0.03134):0.10892):0.00548):0.03575);  
[803] tree 't803'=[&R] ((P\_rodasii:0.0524,P\_rwandensis:0.05181):0.04046,(P\_sp\_GM01:0.06323,(P\_sp\_At-  
9b:0.04973,P\_cyprapedii:0.07231):0.06412):0.02578,((P\_wallisii:0.08494,(P\_dispersa:0.04831,(P\_eucrinea:0.17497,(((T\_s  
p\_NML\_06:0.13236,(T\_ptyseos:0.18543,T\_morbirosei:0.43847):0.16852):0.47996,(E\_pyrifoliae:0.12814,E\_tasmaniensis:0.0  
3747):0.30335,(E\_billingiae:0.44095,P\_sp\_A4:0.26485):0.09238):0.05583):0.06378,(P\_septica:0.18938,(P\_deleyi:0.09435,  
(P\_anthophila:0.06885,(P\_vagans:0.07126,P\_sp\_aB:0.03599):0.03335):0.02275,(P\_agglomerans:0.08197,(P\_brenneri:0.0402  
5,P\_conspicua:0.04468):0.04636):0.00961):0.0359):0.2117):0.06765):0.0424):0.09788):0.02287):0.02499,((P\_s\_indologene  
s:5.5E-4,P\_s\_stewartii:0.00574):0.09339,(P\_allii:0.07506,P\_ananatis:0.03699):0.03284):0.07861):0.01965);  
[804] tree 't804'=[&R] ((P\_sp\_At-9b:5.4E-4,(P\_dispersa:0.00689,(P\_sp\_GM01:0.01392,P\_wallisii:5.5E-4):5.4E-  
4):0.00345):0.00321,((P\_rodasii:0.00346,P\_rwandensis:5.5E-  
4):0.01043,((P\_septica:0.01437,(E\_billingiae:0.023,(E\_pyrifoliae:0.00503,E\_tasmaniensis:0.00529):0.00892):0.02272):0  
.00201,P\_eucrinea:0.01221):0.00305):0.00345,((P\_sp\_A4:0.01741,((T\_sp\_NML\_06:0.02178,(T\_ptyseos:0.02784,T\_morbirosei:0  
.0308):0.00456):0.08584,(((P\_agglomerans:0.0,P\_vagans:0.0,P\_sp\_aB:0.0):0.00345,(P\_deleyi:0.00345,P\_anthophila:5.5E-  
4):0.00344):0.00348,((P\_brenneri:0.0,P\_conspicua:0.0):5.5E-  
4,(P\_allii:0.00341,(P\_ananatis:0.0,P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.5E-  
4):0.02071):0.00343):0.01087):0.00334):0.00686,P\_cyprapedii:5.5E-4):5.4E-4);  
[805] tree 't805'=[&R] (P\_brenneri:5.5E-4,P\_conspicua:0.0055,(P\_anthophila:0.01117,(P\_vagans:5.5E-  
4,(((P\_agglomerans:0.0283,P\_sp\_aB:0.01714):0.00539,((P\_allii:0.0,P\_ananatis:0.0):5.5E-  
4,(P\_deleyi:0.01697,(P\_s\_stewartii:0.00554,P\_s\_indologenes:5.5E-4):5.4E-4):0.0056):0.01673):5.5E-  
4,(P\_eucrinea:0.04585,((E\_billingiae:0.0482,(E\_pyrifoliae:0.01212,E\_tasmaniensis:0.03476):0.02586):0.0886,(((P\_sp\_A4:  
0.06894,(P\_septica:0.12033,(T\_ptyseos:0.0398,(T\_sp\_NML\_06:0.08851,T\_morbirosei:0.07095):0.03431):0.08218):0.02339):5  
.3E-4,((P\_dispersa:0.0,P\_wallisii:0.0):0.02853,(P\_sp\_GM01:0.00563,(P\_sp\_At-  
9b:0.02147,P\_cyprapedii:0.02108):0.01348):0.00552):0.01148):0.00551,(P\_rwandensis:0.00505,P\_rodasii:0.04118):0.02242  
) :0.00721):0.02194):0.01251):0.00547):0.00508):5.4E-4);  
[806] tree 't806'=[&R] (P\_agglomerans:5.5E-4,(P\_deleyi:0.06281,(P\_anthophila:0.03007,(P\_brenneri:5.4E-  
4,(P\_conspicua:0.01469,(((P\_sp\_A4:0.11162,((P\_sp\_At-  
9b:0.0,P\_cyprapedii:0.0):0.0265,(P\_sp\_GM01:0.01418,(((P\_dispersa:0.0,P\_wallisii:0.0):0.01777,P\_eucrinea:0.04084):0.01  
445,(P\_rodasii:0.01429,P\_rwandensis:5.3E-

4):0.01628):0.041):0.03274):0.0331):0.02975,(((T\_ptyseos:0.01026,(T\_morbirosei:0.17573,T\_sp\_NML\_06:0.09279):0.09994):0.35901,(E\_tasmaniensis:5.5E-4),(E\_pyrifoliae:0.03267,E\_billingiae:0.09906):0.01618):0.33955):0.004,P\_septica:0.06837):0.02998):0.01181,((P\_allii:0.01469,P\_ananatis:5.3E-4):0.02939,(P\_s\_stewartii:0.01429,P\_s\_indologenes:5.5E-4):5.3E-4):0.04323):0.04543):0.03009):0.04532):5.4E-4):5.5E-4,(P\_sp\_aB:0.01501,P\_vagans:0.01483):5.5E-4);

[807] tree 't807'=[&R]  
(P\_deleyi:0.01093,P\_sp\_aB:0.01668,(P\_vagans:0.01059,(P\_agglomerans:0.01055,(P\_anthophila:5.0E-4,(((T\_morbirosei:0.11079,(T\_ptyseos:0.09758,T\_sp\_NML\_06:0.1329):0.05546):0.11259,(E\_billingiae:0.14522,(E\_pyrifoliae:0.02175,E\_tasmaniensis:0.06737):0.02621):0.08174):0.07034,(P\_brenneri:0.04052,P\_conspicua:0.05149):0.02722,((P\_sp\_A4:0.08373,((P\_sp\_At-9b:0.02227,((P\_sp\_GM01:0.02191,(P\_eucrina:0.07771,(P\_wallisii:0.01496,(P\_dispersa:0.03116,(P\_rodasii:0.01703,P\_rwandensis:0.01606):0.01686):0.00853):0.02452):0.03175):0.0342,P\_cyprapedii:0.01474):0.0141):0.06588,P\_septica:0.1037):0.01813):0.02427,((P\_s\_indologenes:0.00516,P\_s\_stewartii:5.5E-4):0.04243,(P\_allii:0.04871,P\_ananatis:0.00756):0.03116):0.04089):0.03426):0.03549):0.01313):0.01096):0.01109):5.5E-4);

[808] tree 't808'=[&R]  
(P\_agglomerans:0.01742,P\_vagans:0.00576,(P\_sp\_aB:0.01757,(P\_anthophila:0.00582,(P\_deleyi:0.02375,((P\_conspicua:0.00573,P\_brenneri:0.00573):0.01152,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.05673,(P\_allii:0.00453,P\_ananatis:0.06271):0.03966):0.05354,(P\_septica:0.11922,(((P\_dispersa:0.02722,P\_wallisii:0.04406):0.01518,((P\_cyprapedii:0.05039,P\_sp\_At-9b:0.03631):0.04305,((P\_rodasii:0.02912,P\_rwandensis:0.00576):0.01835,P\_sp\_GM01:0.10459):0.00643):0.01663):0.02028,P\_eucrina:0.03922):0.06891,(P\_sp\_A4:0.17628,((T\_morbirosei:0.11159,(T\_ptyseos:0.05122,T\_sp\_NML\_06:0.07519):0.032):0.31321,(E\_billingiae:0.11507,(E\_pyrifoliae:0.10992,E\_tasmaniensis:0.04551):0.15543):0.25347):0.09256):0.00737):0.03654):0.0154):0.01774):0.01796):0.00538):0.01755):5.5E-4);

[809] tree 't809'=[&R] (P\_eucrina:0.0741,P\_dispersa:0.03301,(((P\_sp\_GM01:0.01597,((P\_sp\_At-9b:0.0209,P\_cyprapedii:0.02223):0.0328,(P\_rodasii:0.01443,P\_rwandensis:0.01507):0.00918):0.0071):0.01538,((E\_billingiae:0.04906,(E\_pyrifoliae:0.05117,E\_tasmaniensis:0.02717):0.10381):0.15614,(((T\_ptyseos:0.09074,(T\_sp\_NML\_06:0.11142,T\_morbirosei:0.0583):0.02261):0.15544,P\_sp\_A4:0.03795):0.04668,(P\_septica:0.0769,(((P\_s\_indologenes:0.00322,P\_s\_stewartii:0.00982):0.0283,(P\_allii:0.00949,P\_ananatis:5.4E-4):0.01588):0.0334,((P\_brenneri:0.01289,P\_conspicua:0.01076):0.02257,(P\_deleyi:0.02816,(P\_anthophila:0.01605,(P\_agglomerans:0.00631,(P\_vagans:0.01474,P\_sp\_aB:0.01266):0.00466):0.00317):0.00405):0.01912):0.02104):0.06125):0.02872):0.01398):0.03287):0.00283,P\_wallisii:0.02274):0.00395);

[810] tree 't810'=[&R]  
(P\_eucrina:0.08311,(P\_wallisii:0.03485,P\_dispersa:0.02457):0.01203):0.01667,(P\_rodasii:0.01739,P\_rwandensis:0.02377):0.0235,(((P\_sp\_At-9b:0.05042,P\_cyprapedii:0.04022):0.03253,(P\_septica:0.07975,(P\_sp\_A4:0.10264,(((T\_morbirosei:0.13319,(T\_ptyseos:0.12026,T\_sp\_NML\_06:0.0927):0.06578):0.25602,(E\_billingiae:0.09661,(E\_pyrifoliae:0.0515,E\_tasmaniensis:0.03689):0.07319):0.1136):0.04269,(((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00124):0.01922,(P\_allii:0.01773,P\_ananatis:0.01201):0.02096):0.09202,((P\_brenneri:0.00523,P\_conspi

cua:0.01514):0.02756,((P\_agglomerans:0.01718,(P\_vagans:0.01526,P\_sp\_aB:0.0185):0.01084):0.00912,(P\_deleyi:0.02694,P\_anthophila:0.02576):0.00587):0.02714):0.04437):0.01103):0.01089):0.00805):0.03067):0.01785,P\_sp\_GM01:0.04729):0.00924);

[811] tree 't811'=[&R]  
(P\_vagans:0.01175,(P\_anthophila:0.01616,P\_deleyi:0.01045):0.00662,(P\_sp\_aB:0.0015,(P\_agglomerans:0.00742,(((P\_septica:0.05836,(((P\_sp\_GM01:0.04733,(P\_rodasii:0.00917,P\_rwandensis:0.00551):0.01235):0.01269,(P\_dispersa:0.03035,P\_wallisii:0.01807):0.00873):0.00552,(P\_sp\_At-9b:0.02229,P\_cyprapedii:0.02115):0.03626):0.0115,P\_eucrina:0.05797):0.02646):0.01999,((P\_sp\_A4:0.09825,((T\_morbirosei:0.03494,(T\_sp\_NML\_06:0.08303,T\_ptyseos:0.0703):0.03997):0.13113,(E\_billingiae:0.09778,(E\_pyriifoliae:0.03504,E\_tasmaniensis:0.03124):0.07676):0.04339):0.01637):0.01893,((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00264):0.02128,(P\_allii:0.00772,P\_ananatis:0.00283):0.01835):0.05279):0.0073):0.02477,(P\_brenneri:0.01194,P\_conspicua:0.01232):0.01507):0.01763):0.00302):0.00919);

[812] tree 't812'=[&R]  
(P\_agglomerans:0.00606,P\_anthophila:0.01213,(((P\_sp\_A4:0.09468,((P\_septica:0.15886,((T\_ptyseos:0.14908,(T\_sp\_NML\_06:0.32256,T\_morbirosei:0.18071):0.08449):0.16727,(E\_billingiae:0.16349,(E\_pyriifoliae:0.07387,E\_tasmaniensis:0.0383):0.10014):0.03498):0.05337):0.02796,(((P\_rodasii:0.03112,P\_rwandensis:6.2E-4):0.02967,(P\_eucrina:0.06009,(P\_dispersa:0.06759,P\_wallisii:0.00836):0.02373):0.03795):0.02618,(P\_sp\_GM01:0.04356,(P\_sp\_At-9b:0.02337,P\_cyprapedii:0.00771):0.05239):0.01146):0.03327):0.05722):0.04723,(P\_ananatis:0.02745,(P\_allii:0.00968,(P\_s\_indologenes:0.00607,P\_s\_stewartii:5.5E-4):0.00982):0.01098):0.02368):0.03012,(P\_brenneri:0.01992,P\_conspicua:0.01748):0.01725):0.03218,(P\_vagans:0.01178,(P\_sp\_aB:0.02329,P\_deleyi:0.0353):0.00967):5.5E-4):5.5E-4);

[813] tree 't813'=[&R]  
(P\_agglomerans:0.00904,P\_deleyi:0.00448,(P\_sp\_aB:0.00448,((P\_brenneri:0.00898,P\_conspicua:0.00909):0.00903,(P\_vagans:0.00887,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.02009,(P\_ananatis:0.01629,P\_allii:0.01109):0.01311):0.0593,(((P\_sp\_At-9b:0.02296,P\_cyprapedii:0.00484):0.03151,((P\_rodasii:0.01765,P\_rwandensis:0.01765):0.02112,(P\_sp\_GM01:0.01353,(P\_eucrina:0.04259,(P\_dispersa:0.01328,P\_wallisii:0.03376):0.00988):0.01408):0.00805):0.04003):0.03163,(((E\_pyriifoliae:0.08867,E\_tasmaniensis:0.04956):0.13534,(E\_billingiae:0.06274,(T\_morbirosei:1.37031,(T\_ptyseos:0.14313,T\_sp\_NML\_06:0.22372):0.346):0.21632):0.02822):0.05497,(P\_sp\_A4:0.15513,P\_septica:0.06319):0.03541):0.02015):0.11594):0.01615,P\_anthophila:5.4E-4):0.00867):5.4E-4):5.4E-4):5.5E-4);

[814] tree 't814'=[&R]  
(P\_sp\_GM01:0.0307,P\_rodasii:0.01362,(P\_rwandensis:0.01799,((P\_sp\_At-9b:0.00973,P\_cyprapedii:0.01206):0.02787,((P\_eucrina:0.05844,(((T\_sp\_NML\_06:0.0902,(T\_ptyseos:0.09759,T\_morbirosei:0.12702):0.03506):0.27385,P\_sp\_A4:0.08228):0.03502,((E\_billingiae:0.07222,(E\_pyriifoliae:0.01974,E\_tasmaniensis:0.0213):0.06729):0.14662,(P\_septica:0.04519,(((P\_s\_indologenes:0.00141,P\_s\_stewartii:0.00142):0.03477,(P\_allii:0.0102,P\_ananatis:0.00916):0.01074):0.05166,(P\_anthophila:0.01326,((P\_brenneri:0.00573,P\_conspicua:0.00582):0.01047,(P\_deleyi:0.02922,(P\_vagans:0.01151,(P\_sp\_aB:0.01279,P\_agglomerans:0.00744):0.00429):0.00183):0.00466):0.00615):0.0344):0.02402):0.03596):0.02345):0.02863):0.01035,(P\_dispersa:0.03017,P\_wallisii:0.02449):0.00562):0.01518):0.01659):0.00505);

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[815] tree 't815'=[&R]
(((E_billingiae:0.04544,(P_sp_A4:0.03841,(E_pyriifoliae:0.02731,E_tasmaniensis:0.01337):0.02522):0.00958):0.00493,(P_sp_GM01:0.01425,(P_dispersa:0.00473,P_wallisii:0.00955):0.00483):0.00773):0.00644,(P_eucrina:0.03914,P_septica:0.01268):0.01187):5.4E-4,(P_sp_At-9b:5.4E-4,P_cypripedii:0.01431):0.00456,((P_rwandensis:0.00483,((P_allii:0.01431,P_ananatis:5.5E-4):0.01215,((P_s_indologenes:0.0,P_s_stewartii:0.0):0.02908,(T_morbirosei:0.0385,(T_ptyseos:0.03306,T_sp_NML_06:0.06312):0.02664):0.08128):0.02097):0.0178,((P_anthophila:5.5E-4,(P_conspicua:0.00471,P_brenneri:5.4E-4):0.00468):0.00468,((P_vagans:0.00467,(P_sp_aB:0.0,P_agglomerans:0.0):5.4E-4):0.0049,P_deleyi:0.16551):0.00458):0.0191):0.00478):0.00478,P_rodasii:0.00945):0.00429);
[816] tree 't816'=[&R]
(P_wallisii:0.07025,((P_rodasii:0.03152,P_rwandensis:0.01642):0.03015,(P_dispersa:0.05584,P_sp_GM01:0.02865):0.02144):0.01557,((P_eucrina:0.16095,((P_septica:0.11706,((P_s_indologenes:5.4E-4,P_s_stewartii:0.01178):0.06676,(P_allii:0.05492,P_ananatis:0.02812):0.02943):0.0603,((P_brenneri:0.03061,P_conspicua:0.04189):0.04678,(P_deleyi:0.01884,(P_anthophila:0.02317,(P_vagans:0.0077,(P_agglomerans:0.00785,P_sp_aB:0.02752):0.00361):0.00774):0.02271):0.05206):0.05049):0.02859):0.06777,(P_sp_A4:0.09735,((T_morbirosei:0.20617,(T_sp_NML_06:0.35569,T_ptyseos:0.14318):0.09394):0.26431,(E_billingiae:0.18571,(E_pyriifoliae:0.01753,E_tasmaniensis:0.0747):0.13964):0.16507):0.07347):0.08119):0.05421):0.03334,(P_sp_At-9b:0.07327,P_cypripedii:0.05197):0.04148):0.01434);
[817] tree 't817'=[&R]
(P_dispersa:0.00631,(P_wallisii:0.048,(P_rodasii:0.02327,P_rwandensis:0.02298):0.02536):0.01171,((P_sp_GM01:0.04038,(P_sp_At-9b:0.01669,P_cypripedii:0.02347):0.01994):0.01087,(P_eucrina:0.1291,(P_septica:0.0883,((P_sp_A4:0.08808,((T_ptyseos:0.5338,(T_morbirosei:0.44041,T_sp_NML_06:0.47481):0.55289):0.15517,(E_billingiae:0.12247,(E_pyriifoliae:0.05549,E_tasmaniensis:0.03153):0.09726):0.13333):0.08277):0.05701,((P_s_indologenes:5.4E-4,P_s_stewartii:0.00384):0.01639,(P_allii:0.01902,P_ananatis:0.00845):0.01601):0.08422,((P_brenneri:0.0104,P_conspicua:0.02729):0.02947,(P_anthophila:0.02952,(P_agglomerans:0.01503,(P_sp_aB:0.01642,(P_vagans:0.01558,P_deleyi:0.00877):0.00361):0.00509):0.00344):0.01038):0.02972):0.01086):0.02386):0.01722):0.01154):0.01025);
[818] tree 't818'=[&R]
(P_sp_GM01:0.09537,((P_rodasii:0.04403,P_rwandensis:0.03829):0.04494,(P_cypripedii:0.09016,P_sp_At-9b:0.04857):0.04766):0.02059,(P_dispersa:0.06623,P_wallisii:0.06957):0.01711):0.01809,(P_eucrina:0.16329,(P_sp_A4:0.14755,((P_s_indologenes:0.07359,(P_allii:0.05889,P_ananatis:0.06969):0.03975):0.0894,((P_brenneri:0.02246,P_conspicua:0.06528):0.06049,(P_anthophila:0.08977,(P_agglomerans:0.0458,(P_vagans:0.02445,P_sp_aB:0.04251):0.02648):0.03825):0.01281):0.01736,P_deleyi:0.05678):0.06781):0.07159,(E_billingiae:0.2018,((P_s_stewartii:1.0575,(T_morbirosei:0.3843,(T_ptyseos:0.26015,T_sp_NML_06:0.37219):0.08299):0.18817):0.17241,(E_pyriifoliae:0.03766,E_tasmaniensis:0.0985):0.20215):0.08569):0.12782,P_septica:0.15706):0.05956):0.01024):0.07609):0.01766);
[819] tree 't819'=[&R] (P_wallisii:5.5E-4,((P_eucrina:0.00972,((P_agglomerans:0.01881,(P_vagans:0.0,P_deleyi:0.0,P_anthophila:0.0,P_brenneri:0.0,P_conspicua:0.0,P_sp_aB:0.0):5.5E-4):0.01933,((P_s_indologenes:0.0,P_s_stewartii:0.0):0.02959,(P_allii:0.00937,P_ananatis:0.00958):0.00925):0.00945):0.00979):0.00978,(P_dispersa:5.4E-4,P_rwandensis:0.01903):0.00961):0.00934,(P_sp_GM01:5.5E-
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4,(P\_rodasii:0.00946,(P\_cyprapedii:5.4E-4,(P\_sp\_At-  
9b:0.00921,((E\_billingiae:0.03742,(T\_morbirosei:0.02472,(T\_sp\_NML\_06:0.15575,T\_ptyseos:0.03684):0.04726):0.04174,(E  
\_pyrifoliae:0.0287,E\_tasmaniensis:5.4E-  
4):0.05309):0.01202):0.03493,(P\_sp\_A4:0.04676,P\_septica:0.03274):0.02873):0.00647):0.01452):0.01902):5.3E-  
4):0.00946);  
[820] tree 't820'=[&R]  
((P\_sp\_GM01:0.01057,(P\_rodasii:0.00251,P\_rwandensis:0.00178):0.00708):0.00512,((((((P\_sp\_aB:0.01014,P\_vagans:0.0014  
4):0.00288,(P\_agglomerans:0.00872,(P\_deleyi:0.00289,P\_anthophila:0.00144):0.00142):5.5E-  
4):0.00722,(P\_brenneri:0.00287,P\_conspicua:0.00434):5.5E-  
4):0.00593,(P\_allii:0.00433,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00143,P\_ananatis:0.00144):0.00144):0.00287):0  
.00694,(P\_septica:0.00843,(E\_billingiae:0.02027,(E\_pyrifoliae:0.01439,E\_tasmaniensis:0.00693):0.02026):0.01182):0.00  
673):0.00332,((T\_morbirosei:0.01267,(T\_sp\_NML\_06:0.03743,T\_ptyseos:0.01874):0.00947):0.05853,P\_sp\_A4:0.01925):0.0062  
):0.00583,(P\_sp\_At-  
9b:0.00143,P\_cyprapedii:0.00286):0.00228):0.00406,((P\_dispersa:0.00719,P\_wallisii:0.00574):0.00148,P\_eucrina:0.01152  
):0.00316);  
[821] tree 't821'=[&R]  
((P\_eucrina:0.11067,P\_wallisii:0.04038):0.02868,(P\_sp\_GM01:0.0467,(P\_rodasii:0.01115,P\_rwandensis:0.02228):0.00816):  
0.01217,((P\_sp\_At-  
9b:0.04155,P\_cyprapedii:0.03207):0.03287,(P\_dispersa:0.00717,(P\_septica:0.05082,(((P\_ananatis:0.04823,(P\_allii:0.020  
08,(P\_s\_indologenes:0.00516,P\_s\_stewartii:5.4E-  
4):0.12161):0.01661):0.15187,((P\_brenneri:0.00566,P\_conspicua:0.02786):0.04443,((P\_vagans:0.02408,P\_deleyi:0.06708):  
0.00908,(P\_agglomerans:0.02211,P\_sp\_aB:0.01138):0.01394,P\_anthophila:0.0528):0.00153):0.03679):0.01504):0.01268,(P  
\_sp\_A4:0.15216,((T\_sp\_NML\_06:0.17986,(T\_morbirosei:0.25362,T\_ptyseos:0.21564):0.11066):0.30908,(E\_billingiae:0.14068,  
(E\_pyrifoliae:0.0629,E\_tasmaniensis:0.11735):0.09443):0.04437):0.07718):0.04689):0.06042):0.04302):0.02589):6.4E-4);  
[822] tree 't822'=[&R]  
((P\_sp\_GM01:0.08458,(P\_rwandensis:0.07618,P\_rodasii:0.08802):0.02478):0.01952,(P\_dispersa:0.09525,P\_wallisii:0.10773  
):0.03042,((P\_sp\_At-  
9b:0.06279,P\_cyprapedii:0.04393):0.08473,(P\_eucrina:0.23536,((P\_septica:0.15695,((P\_ananatis:0.07745,(P\_allii:0.0395  
2,(P\_s\_indologenes:5.5E-  
4,P\_s\_stewartii:0.00219):0.12736):0.00692):0.10054,((P\_brenneri:0.048,P\_conspicua:0.05891):0.02143,(((P\_sp\_aB:0.025  
94,P\_vagans:0.03069):0.00549,P\_deleyi:0.09438):0.00558,P\_agglomerans:0.02555):0.01678,P\_anthophila:0.05514):0.05971)  
:0.10601):0.04669):0.05505,(P\_sp\_A4:0.22636,((T\_morbirosei:0.20329,(T\_sp\_NML\_06:0.26294,T\_ptyseos:0.16011):0.06324):  
0.23528,(E\_billingiae:0.19974,(E\_pyrifoliae:0.05857,E\_tasmaniensis:0.0756):0.19807):0.06483):0.04546):0.05907):0.068  
79):0.02496):0.03212);  
[823] tree 't823'=[&R] (P\_anthophila:0.01795,((P\_sp\_A4:0.06353,(P\_septica:0.01769,(((P\_sp\_At-  
9b:0.01225,(P\_dispersa:0.04358,(P\_sp\_GM01:0.03069,P\_wallisii:0.01863):0.0062):5.4E-  
4):0.0062,P\_cyprapedii:0.0183):0.00584,((P\_rodasii:0.01861,P\_rwandensis:0.02327):0.01422,(P\_eucrina:0.03111,(T\_morbi  
rosei:0.03523,(T\_ptyseos:0.01997,T\_sp\_NML\_06:0.05406):0.0281):0.14378):0.04088):5.4E-  
4):0.01433,(E\_billingiae:0.07454,(E\_pyrifoliae:0.03302,E\_tasmaniensis:0.02198):0.04239):0.04936):0.005):5.4E-

4):0.00606,(P\_ananatis:0.00597,((P\_s\_stewartii:0.0,P\_s\_indologenes:0.0):0.01758,P\_allii:0.01154):5.3E-4):0.00599):0.00593,(((P\_vagans:0.0,P\_deleyi:0.0):0.00601,(P\_agglomerans:0.0,P\_sp\_aB:0.0):5.5E-4):0.00592,(P\_brenneri:0.01191,P\_conspicua:5.4E-4):0.00607):0.00588);

[824] tree 't824'=[&R] ((T\_morbirosei:0.0,P\_sp\_A4:0.0):5.5E-4,(P\_rwandensis:0.0,P\_rodasii:0.0,P\_agglomerans:0.0,P\_sp\_At-9b:0.0,P\_vagans:0.0,P\_allii:0.0,P\_ananatis:0.0,P\_anthophila:0.0,P\_cyprapedii:0.0,P\_dispersa:0.0,P\_eucrina:0.0,P\_sp\_GM01:0.0,P\_sp\_aB:0.0,P\_s\_indologenes:0.0,P\_s\_stewartii:0.0,E\_billingiae:0.0,P\_brenneri:0.0,P\_conspicua:0.0,P\_wallisii:0.0,E\_pyriifoliae:0.0,E\_tasmaniensis:0.0,P\_deleyi:0.0,P\_septica:0.0):0.00879,(T\_ptyseos:0.0,T\_sp\_NML\_06:0.0):0.01764);

[825] tree 't825'=[&R] (((P\_septica:0.05319,P\_eucrina:0.04075):5.4E-4,((P\_allii:5.5E-4,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01052,P\_ananatis:5.4E-4):0.0211):0.0709,(P\_agglomerans:0.0,P\_vagans:0.0,P\_sp\_aB:0.0):0.0106,(P\_anthophila:0.02095,(P\_deleyi:0.0,P\_brenneri:0.0,P\_conspicua:0.0):5.4E-4):0.00992):0.05458):0.01951):0.01031,(((T\_morbirosei:0.10801,T\_sp\_NML\_06:0.06161):0.01797,T\_ptyseos:0.08708):0.0258,(E\_billingiae:0.10778,(E\_pyriifoliae:0.01588,E\_tasmaniensis:0.04627):0.11031):0.06062):0.03503,(P\_cyprapedii:5.3E-4,(P\_sp\_At-9b:0.00995,P\_sp\_A4:0.11132):5.4E-4):0.02076):5.5E-4,(P\_wallisii:0.01019,(P\_dispersa:5.5E-4,(P\_sp\_GM01:0.02051,(P\_rwandensis:0.04124,P\_rodasii:5.4E-4):0.02011):0.03193):0.00987):0.0206);

[826] tree 't826'=[&R] ((P\_brenneri:0.00906,P\_conspicua:0.00375):0.00343,(P\_anthophila:0.01428,((P\_sp\_At-9b:0.01706,P\_cyprapedii:0.0101):0.03235,(T\_morbirosei:0.08886,(T\_ptyseos:0.04275,T\_sp\_NML\_06:0.05862):0.05661):0.11795,(E\_billingiae:0.04955,(E\_pyriifoliae:0.02717,E\_tasmaniensis:0.01912):0.0406):0.0505):0.03737):0.01599,(P\_sp\_A4:0.0551,(P\_eucrina:0.04968,(P\_septica:0.04665,P\_dispersa:0.01543):0.00512,((P\_wallisii:0.02325,P\_sp\_GM01:0.00976):5.3E-4,(P\_rodasii:5.4E-4,P\_rwandensis:0.0298):0.00633):0.01687):0.01807):0.01865):0.01729):0.03745):0.01069):0.00732,(P\_sp\_aB:0.01876,(P\_deleyi:0.00626,P\_vagans:0.00643):0.00506):0.00786,(((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00316):0.01551,(P\_allii:0.01536,P\_ananatis:0.00383):0.00621):0.02314,P\_agglomerans:9.5E-4):0.0059);

[827] tree 't827'=[&R] (((((P\_rodasii:0.0036,P\_rwandensis:0.01474):0.02025,(P\_dispersa:0.00761,P\_wallisii:0.03292):0.00914):0.00532,(P\_sp\_At-9b:0.0183,(P\_sp\_GM01:0.04336,P\_cyprapedii:0.01297):0.00414):0.01913):0.00581,(P\_septica:0.01645,(P\_eucrina:0.05701,(P\_ananatis:0.00393,((P\_s\_indologenes:0.00385,P\_s\_stewartii:5.5E-4):0.0155,P\_allii:0.00628):0.01054):0.02846):0.02101):0.01363):0.00438,(P\_deleyi:0.02252,((P\_brenneri:0.00773,P\_conspicua:5.4E-4):0.00829,(P\_anthophila:0.00779,(P\_sp\_aB:0.00784,(P\_vagans:0.008,P\_agglomerans:0.00394):0.0039):0.00387):0.00861):0.00465):0.02085,(((T\_morbirosei:0.03902,(T\_sp\_NML\_06:0.06807,T\_ptyseos:0.03824):0.10015):0.07975,(E\_billingiae:0.03823,(E\_pyriifoliae:0.01301,E\_tasmaniensis:0.04468):0.03553):0.05125):0.02386,P\_sp\_A4:0.02526):0.00425);

[828] tree 't828'=[&R] ((P\_sp\_At-9b:0.00722,P\_cyprapedii:0.01462):0.02515,(P\_septica:0.02135,(((T\_morbirosei:0.05383,(T\_ptyseos:0.03887,T\_sp\_NML\_06:0.05412):0.02959):0.0713,(E\_billingiae:0.05995,(E\_pyriifoliae:0.01565,E\_tasmaniensis:0.0086):0.05062):0.05796):0.02206

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, (P_sp_A4:0.05376, ((P_allii:5.4E-4, (P_ananatis:0.00475, (P_s_indologenes:0.00234, P_s_stewartii:0.00473):0.00706):0.01418):0.0222, ((P_brenneri:0.00472, P_conspicua:0.00229):0.00865, (P_anthophila:0.006, (P_deleyi:0.02294, (P_sp_aB:0.0171, (P_agglomerans:0.00711, P_vagans:0.01646):0.00159):0.01076):0.00546):0.0135):0.01584):0.01918):0.00493):0.01276):0.01197):0.01983, (P_sp_GM01:0.01989, (P_rodasii:0.01465, P_rwandensis:0.01609):0.00508):0.00318, (P_wallisii:0.01093, (P_eucrina:0.0415, P_dispersa:0.00562):0.00724):0.00732);
[829] tree 't829'=[&R]
(P_rodasii:0.03851, (P_rwandensis:0.03677, P_eucrina:0.06711):0.01184, (P_wallisii:0.01511, (P_dispersa:0.01561, (P_sp_GM01:0.0322, ((P_sp_At-9b:0.03617, P_cypripedii:0.01387):0.0171, (P_sp_A4:0.16997, ((P_septica:0.07063, ((P_brenneri:0.00724, P_conspicua:0.02165):0.00801, ((P_vagans:0.03058, (P_agglomerans:0.00328, P_sp_aB:0.01084):0.02451):0.0056, (P_anthophila:0.03199, P_deleyi:0.05718):0.0018):0.00654):0.06171, ((P_s_indologenes:0.0, P_s_stewartii:0.0):0.01881, (P_allii:0.01933, P_ananatis:0.01817):0.01419):0.03399):0.02832):0.01402, ((T_sp_NML_06:0.2277, (T_morbirosei:0.09015, T_ptyseos:0.09417):0.06834):0.2268, (E_billingiae:0.09464, (E_pyriifoliae:0.02922, E_tasmaniensis:0.07921):0.07307):0.05224):0.04647):0.01721):0.05005):0.03632):0.01824):0.01145):5.9E-4);
[830] tree 't830'=[&R] ((T_morbirosei:0.0, T_ptyseos:0.0, T_sp_NML_06:0.0, P_septica:0.0, P_eucrina:0.0, P_sp_At-9b:0.0, P_cypripedii:0.0, P_dispersa:0.0, P_sp_GM01:0.0, P_rwandensis:0.0):5.5E-4, (E_billingiae:0.07823, P_wallisii:0.07852):5.5E-4, ((P_sp_A4:0.07765, (E_pyriifoliae:0.0, E_tasmaniensis:0.0):5.5E-4):0.07835, (P_rodasii:0.24683, (P_s_indologenes:0.0, P_s_stewartii:0.0, P_allii:0.0, P_ananatis:0.0, P_brenneri:0.0, P_conspicua:0.0, P_deleyi:0.0, P_anthophila:0.0, P_agglomerans:0.0, P_vagans:0.0, P_sp_aB:0.0):5.5E-4):0.07367):5.3E-4);
[831] tree 't831'=[&R]
(((P_sp_GM01:0.02562, (P_rodasii:0.02521, P_rwandensis:0.01403):0.01196):0.0126, (P_eucrina:0.05219, P_dispersa:0.01905):0.02953):0.00687, (P_sp_At-9b:0.02978, P_cypripedii:0.009):0.00754, (P_wallisii:0.0274, ((E_billingiae:0.07423, (E_pyriifoliae:0.08383, E_tasmaniensis:0.06276):0.07182):0.08384, ((T_sp_NML_06:0.08479, (T_morbirosei:0.08043, T_ptyseos:0.08953):0.03046):0.09151, P_sp_A4:0.07167):0.02433):0.02315, (P_septica:0.06166, (((P_vagans:0.02105, (P_anthophila:0.02819, P_sp_aB:0.01421):5.5E-4):0.01017, P_deleyi:0.02147):5.8E-4, P_agglomerans:0.00966):0.0256, (P_brenneri:0.00375, P_conspicua:0.04348):0.02433):0.02333, (P_ananatis:0.02335, (P_allii:0.02896, (P_s_indologenes:5.3E-4, P_s_stewartii:0.00693):0.03944):0.01111):0.05167):0.01546):5.3E-4):0.02121):0.01468);
[832] tree 't832'=[&R]
(P_rwandensis:0.00496, ((P_eucrina:0.04534, ((P_s_indologenes:0.0, P_s_stewartii:0.0):0.02108, (P_allii:5.3E-4, P_ananatis:0.00957):0.04046):0.02631, ((P_brenneri:0.01761, (P_conspicua:0.01539, ((P_deleyi:0.00461, P_vagans:0.01501):5.5E-4, ((P_anthophila:0.0253, P_sp_aB:0.01493):5.5E-4, P_agglomerans:0.00992):5.5E-4):0.01503):0.00881):0.02997, ((T_morbirosei:0.0712, (T_ptyseos:0.0174, T_sp_NML_06:0.05734):0.0212):0.07515, (E_billingiae:0.03328, (E_pyriifoliae:0.04497, E_tasmaniensis:0.02385):0.02928):0.04278):0.02333):0.01606, (P_septica:0.06521, P_sp_A4:0.03025):0.02839):0.0053):0.03729):0.01713, (P_dispersa:0.0098, P_wallisii:5.4E-4):5.4E-4):0.00949, ((P_cypripedii:0.01353, P_sp_At-9b:0.01759):0.01338, (P_rodasii:5.5E-4, P_sp_GM01:0.00487):5.4E-4):0.00464);
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[833] tree 't833'=[&R] (((P\_sp\_At-9b:0.0,P\_dispersa:0.0):5.5E-4,(T\_morbirosei:0.00587,(T\_ptyseos:0.0,T\_sp\_NML\_06:0.0):0.00591):0.00877):0.00293,(P\_wallisii:0.0,P\_eucrina:0.0,P\_septica:0.0):0.00289,(P\_sp\_GM01:5.5E-4,((P\_cyprapedii:0.05954,((E\_pyrifoliae:0.0,E\_tasmaniensis:0.0):5.4E-4,((P\_vagans:0.0,P\_anthophila:0.0,P\_agglomerans:0.0,P\_deleyi:0.0,P\_sp\_aB:0.0):0.00293,(P\_brenneri:0.0,P\_conspicua:0.0):5.5E-4):0.00585):0.00293,(E\_billingiae:0.00881,(P\_rodasii:0.0,P\_rwandensis:0.0):5.3E-4):0.00293):0.00112):0.00189,((P\_s\_stewartii:0.0,P\_s\_indologenes:0.0,P\_allii:0.0,P\_ananatis:0.0):0.00879,P\_sp\_A4:0.00877):5.5E-4):5.5E-4):5.4E-4);

[834] tree 't834'=[&R] ((E\_pyrifoliae:0.0216,E\_tasmaniensis:5.5E-4):0.03285,(((P\_dispersa:0.0,P\_eucrina:0.0,P\_wallisii:0.0):5.4E-4,(E\_billingiae:0.01082,(P\_rwandensis:0.01077,(P\_agglomerans:0.0,P\_vagans:0.0,P\_deleyi:0.0,P\_allii:0.0,P\_ananatis:0.0,P\_anthophila:0.0,P\_brenneri:0.0,P\_conspicua:0.0,P\_cyprapedii:0.0,P\_rodasii:0.0,P\_sp\_GM01:0.0,P\_sp\_aB:0.0,P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.5E-4):0.0108):5.4E-4):0.01081,P\_septica:5.4E-4):5.4E-4,(P\_sp\_At-9b:5.4E-4,(P\_sp\_A4:0.02603,(T\_morbirosei:5.5E-4,(T\_ptyseos:5.4E-4,T\_sp\_NML\_06:0.02135):0.03239):0.03908):0.03248):0.01048);

[835] tree 't835'=[&R] (((P\_sp\_A4:0.06912,P\_septica:0.016):0.01439,(((P\_brenneri:0.00212,P\_conspicua:0.00438):0.01162,(P\_anthophila:0.00609,(P\_deleyi:0.01224,(P\_agglomerans:0.00576,(P\_vagans:0.00571,P\_sp\_aB:0.00714):0.00217):0.00575):0.00351):0.01056):0.01781,((P\_eucrina:0.01907,((P\_sp\_GM01:0.01787,(P\_rodasii:0.12532,P\_rwandensis:0.00886):0.00918):0.01498,(P\_wallisii:0.03006,P\_dispersa:0.01434):0.00408):0.00911):0.03429,(P\_sp\_At-9b:0.01424,P\_cyprapedii:0.02022):0.01465):0.00673):0.00934):0.01078,(((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00645):0.01249,(P\_allii:0.00245,P\_ananatis:0.01752):0.00981):0.02569,E\_billingiae:0.05569):0.0088,(T\_sp\_NML\_06:0.03533,(T\_morbirosei:0.04552,T\_ptyseos:0.0369):0.01813):0.06244,(E\_pyrifoliae:0.02592,E\_tasmaniensis:0.0114):0.04656):0.01417);

[836] tree 't836'=[&R] ((P\_wallisii:0.07694,(((P\_septica:0.222,(((T\_sp\_NML\_06:0.30869,(T\_morbirosei:0.23516,T\_ptyseos:0.14091):0.05732):0.08396,((E\_billingiae:0.23056,(E\_pyrifoliae:0.06602,E\_tasmaniensis:0.14378):0.19342):0.16638,P\_sp\_A4:0.17607):0.0531):0.05055,(((P\_s\_indologenes:0.00625,P\_s\_stewartii:0.0119):0.04635,(P\_ananatis:0.05262,P\_allii:0.06649):0.03439):0.10144,((P\_anthophila:0.10992,(P\_deleyi:0.08006,(P\_vagans:0.05555,(P\_sp\_aB:0.06002,P\_agglomerans:0.01723):5.4E-4):0.01748):0.02299):0.07016,(P\_brenneri:0.08984,P\_conspicua:0.0567):0.04075):0.07233):0.04335):0.04553):0.05348,P\_eucrina:0.11878):0.06823,(P\_sp\_At-9b:0.07883,P\_cyprapedii:0.08576):0.08647,P\_dispersa:0.11153):0.01659):0.02751):0.048,P\_rodasii:0.09315,(P\_rwandensis:0.05893,P\_sp\_GM01:0.10629):0.01179);

[837] tree 't837'=[&R] (((E\_billingiae:0.04804,(E\_pyrifoliae:0.02435,E\_tasmaniensis:0.02603):0.0426):0.04027,(T\_morbirosei:0.02806,(T\_sp\_NML\_06:0.08869,T\_ptyseos:0.0539):0.02083):0.02798):0.01848,(((P\_s\_stewartii:0.00395,P\_s\_indologenes:5.5E-4):0.01405,(P\_allii:0.00396,P\_ananatis:5.5E-4):0.00681):0.01184,(P\_deleyi:0.00461,((P\_brenneri:0.00794,P\_conspicua:0.00793):0.00405,(P\_sp\_aB:0.00282,((P\_agglomerans:0.0,P\_vagans:0.0):0.0039,P\_anthophila:0.02411):0.00215):0.00695):0.01565):0.0158):0.00946,(((P\_dispersa:0.00396,(P\_rwandensis:0.01243,(P\_rodasii:0.0152,P\_sp\_GM01:0.03284):0.01716):0.01557,P\_wallisii:0.00396):0.00394):5.4E-



4,(P\_septica:0.02946,P\_eucrina:0.02076):0.01974):0.01423,(P\_sp\_At-9b:0.00615,P\_cyprapedii:0.01414):0.02532):0.009,P\_sp\_A4:0.07841):0.00618);  
[838] tree 't838'=[&R] ((P\_sp\_At-9b:5.5E-4,((P\_allii:0.0,P\_ananatis:0.0):0.01746,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01735):0.0178):0.01794,(P\_dispersa:5.4E-4,((P\_rodasii:0.0,P\_rwandensis:0.0,P\_sp\_GM01:0.0):0.01771,P\_wallisii:5.5E-4):0.01772):0.01872,(P\_cyprapedii:5.4E-4,((E\_billingiae:0.06256,((T\_ptyseos:0.04623,(T\_sp\_NML\_06:0.1326,T\_morbirosei:0.03982):0.02439):0.17487,(E\_pyriifoliae:0.03718,E\_tasmaniensis:0.01864):0.04368):0.03324):0.05627,((P\_sp\_A4:0.02898,(P\_septica:0.03281,((P\_agglomerans:0.0,P\_vagans:0.0,P\_sp\_aB:0.0):5.5E-4,(P\_deleyi:0.0,P\_anthophila:0.0):0.01717):0.03538,(P\_brenneri:0.0,P\_conspicua:0.0):5.4E-4):0.00613):0.01924):0.03675,P\_eucrina:0.02929):0.02439):0.01856):5.5E-4);  
[839] tree 't839'=[&R] (((P\_sp\_A4:0.10877,P\_dispersa:0.02797):0.01218,(P\_eucrina:0.04085,(T\_sp\_NML\_06:0.06465,(T\_ptyseos:0.08748,T\_morbirosei:0.07435):0.02705):0.1205):0.02346):0.01289,P\_wallisii:0.02402):0.01561,(P\_sp\_GM01:0.04056,(P\_rodasii:0.02051,P\_rwandensis:0.02122):0.01065):0.00585,(((P\_s\_indologenes:0.00375,P\_s\_stewartii:0.00793):0.02033,(P\_allii:0.01503,P\_ananatis:0.01391):0.03002):0.01464,((P\_brenneri:0.02314,(((P\_deleyi:0.02874,P\_anthophila:0.02419):0.00652,(P\_agglomerans:0.00767,P\_vagans:0.00403):0.00388):5.4E-4,P\_sp\_aB:0.01213):0.00708,P\_conspicua:0.0146):0.00399):0.0269,P\_septica:0.09524):0.02782):0.02341,((P\_sp\_At-9b:0.00866,P\_cyprapedii:0.03364):0.03656,(E\_billingiae:0.03566,(E\_pyriifoliae:0.03949,E\_tasmaniensis:0.04241):0.1069):0.08994):0.01178):0.01263);  
[840] tree 't840'=[&R] ((P\_sp\_GM01:0.0293,P\_rwandensis:0.18678):0.03393,(P\_dispersa:0.0,P\_wallisii:0.0):0.03128,(((P\_allii:5.4E-4,(((P\_sp\_aB:5.4E-4,(P\_anthophila:5.5E-4,P\_agglomerans:0.03179):5.4E-4,(P\_vagans:5.4E-4,P\_deleyi:0.03102):0.03082):0.03135):0.03108,(P\_conspicua:0.03668,P\_brenneri:0.03155):0.03391):0.06455,P\_septica:0.03036):0.03028,(P\_ananatis:5.4E-4,(P\_sp\_A4:0.1293,(P\_s\_indologenes:0.03053,P\_s\_stewartii:5.5E-4):0.09476):0.05215):0.06265):5.4E-4):0.03152,((T\_ptyseos:0.08157,(T\_morbirosei:0.04421,((E\_billingiae:0.06953,(E\_pyriifoliae:0.10346,E\_tasmaniensis:0.07811):0.17425):0.20194,T\_sp\_NML\_06:5.3E-4):0.10646):0.07823):0.15511,P\_eucrina:0.05135):0.01175):0.03243,(P\_sp\_At-9b:0.03103,P\_rodasii:0.06664):0.03227):5.4E-4,P\_cyprapedii:5.5E-4):5.5E-4);  
[841] tree 't841'=[&R] ((P\_agglomerans:0.00678,P\_vagans:0.00717):0.01393,(P\_brenneri:0.00913,P\_conspicua:0.00907):0.02269,(P\_anthophila:0.04759,(P\_sp\_aB:0.0143,(P\_deleyi:0.01461,((P\_septica:0.19739,((T\_morbirosei:0.12902,(T\_ptyseos:0.06145,T\_sp\_NML\_06:0.09769):0.05896):0.12981,(E\_billingiae:0.1624,(E\_pyriifoliae:0.04402,E\_tasmaniensis:0.04625):0.17734):0.14283):0.11676,(P\_sp\_A4:0.14434,((P\_rodasii:0.02679,P\_rwandensis:0.04393):0.0383,(P\_wallisii:0.05238,(P\_sp\_GM01:0.06014,(P\_eucrina:0.08528,P\_dispersa:0.04074):0.02343):0.01907):0.01865):0.03637,(P\_sp\_At-9b:0.00894,P\_cyprapedii:0.02765):0.05537):0.07161):0.04164):0.03756):0.0724,(P\_allii:0.01592,((P\_s\_indologenes:0.00431,P\_s\_stewartii:0.00443):0.03018,P\_ananatis:0.02019):0.01318):0.03478):0.04753):0.01103):0.00686):0.00759);  
[842] tree 't842'=[&R] (P\_wallisii:0.01409,((P\_rodasii:0.02126,P\_rwandensis:5.4E-4):0.00529,(P\_sp\_GM01:5.4E-4,(P\_cyprapedii:0.01066,P\_sp\_At-

9b:0.01064):0.00782):0.00239):0.00211,(P\_dispersa:0.00507,(P\_eucrina:0.04922,(((T\_morbirosei:0.02561,(T\_sp\_NML\_06:0.06108,T\_ptyseos:0.02672):0.0141):0.06897,(E\_billingiae:0.05081,(E\_pyriifoliae:0.01938,E\_tasmaniensis:0.01265):0.0156):0.04243):0.034,(P\_brenneri:5.4E-4,(P\_conspicua:0.00518,(((P\_deleyi:0.00232,P\_anthophila:0.00523):5.5E-4,P\_vagans:5.5E-4):0.00258,(P\_agglomerans:0.00258,P\_sp\_aB:5.5E-4):5.3E-4):0.0131,(P\_allii:0.00447,((P\_s\_stewartii:0.00257,P\_s\_indologenes:5.5E-4):0.01052,P\_ananatis:5.4E-4):5.4E-4):0.02138):5.4E-4):0.00255):0.02611):0.01362,(P\_sp\_A4:0.03582,P\_septica:0.03738):0.01029):0.01012):0.00122):0.0049);

[843] tree 't843'=[&R] (((P\_allii:0.0,P\_ananatis:0.0):0.00989,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.3E-4):0.01745,((P\_conspicua:5.4E-4,((P\_vagans:0.00484,P\_agglomerans:5.5E-4):5.4E-4,(P\_sp\_aB:0.00964,(P\_anthophila:5.5E-4,P\_deleyi:0.0097):5.5E-4):0.00484):0.01954):0.0048,P\_brenneri:5.3E-4):0.02786):0.00847,(P\_septica:0.03985,(P\_sp\_A4:0.04636,(T\_sp\_NML\_06:0.01665,(T\_morbirosei:0.03129,T\_ptyseos:0.04197):0.01583):0.0786):0.02177):0.01712,(((E\_pyriifoliae:0.01416,E\_tasmaniensis:0.02017):0.05184,(P\_cyprapedii:0.00488,(P\_sp\_At-9b:0.00502,E\_billingiae:0.05092):0.00479):5.3E-4):0.0092,(P\_sp\_GM01:0.00488,((P\_eucrina:0.03988,(P\_dispersa:0.02108,P\_wallisii:0.01092):0.00774):0.00612,(P\_rwandensis:0.03541,P\_rodasii:0.00515):0.0095):0.00488):0.00492):0.00581);

[844] tree 't844'=[&R] (P\_agglomerans:0.00199,P\_vagans:0.00792,(P\_sp\_aB:0.00937,((P\_septica:0.08124,(((T\_sp\_NML\_06:0.09369,(T\_morbirosei:0.06969,T\_ptyseos:0.05299):0.02227):0.12911,(E\_billingiae:0.12492,(E\_pyriifoliae:0.04663,E\_tasmaniensis:0.01667):0.08912):0.11518):0.01599,(P\_sp\_A4:0.06789,(P\_eucrina:0.06115,(P\_wallisii:0.03083,(P\_dispersa:0.01648,((P\_sp\_At-9b:0.01588,P\_cyprapedii:0.01522):0.03101,(P\_sp\_GM01:0.03246,(P\_rodasii:0.02226,P\_rwandensis:0.01067):0.01099):0.01143):0.0111):0.00904):0.02261):0.02174):0.01723):0.00883):0.03578,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.02569,(P\_allii:0.01391,P\_ananatis:0.01986):0.01017):0.02247,(P\_brenneri:0.00212,P\_conspicua:0.01606):0.0099):0.00574):0.02692,(P\_deleyi:0.02924,P\_anthophila:0.0134):0.00731):0.00301):5.5E-4);

[845] tree 't845'=[&R] (P\_sp\_A4:0.07191,((P\_allii:0.0,P\_ananatis:0.0):0.03876,(P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00955):5.5E-4):0.03117,((P\_septica:0.0357,((P\_sp\_At-9b:0.02441,P\_cyprapedii:0.02814):0.03208,((P\_anthophila:5.4E-4,(P\_brenneri:5.4E-4,P\_conspicua:0.01918):0.01951):0.00933,(P\_vagans:0.00947,(P\_deleyi:0.00963,(P\_sp\_aB:0.0,P\_agglomerans:0.0):5.5E-4):5.4E-4):0.01018):0.04676):0.04067):0.02407,((E\_pyriifoliae:0.08733,((E\_billingiae:0.14152,(T\_sp\_NML\_06:0.0864,(T\_morbirosei:0.06301,T\_ptyseos:0.06418):0.02326):0.09456):0.00375,E\_tasmaniensis:0.08732):0.01851):0.03288,(P\_eucrina:0.01287,(P\_wallisii:5.5E-4,(P\_sp\_GM01:0.02963,(P\_dispersa:5.4E-4,(P\_rodasii:0.0,P\_rwandensis:0.0):0.01921):0.00965):0.00946):0.02588):0.01048):0.01006):0.00846);

[846] tree 't846'=[&R] (((P\_vagans:0.00957,P\_agglomerans:0.05793):0.00903,P\_deleyi:0.04556):5.4E-4,P\_anthophila:0.01879,((P\_brenneri:0.03832,P\_conspicua:0.00546):0.02763,(((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00613):0.05074,(P\_allii:0.0371,P\_ananatis:5.4E-4):0.0476):0.0587,(P\_sp\_A4:0.18865,(P\_septica:0.13125,((P\_eucrina:0.13131,((P\_rodasii:0.01904,(P\_sp\_GM01:0.03249,P\_rwandensis:0.03807):0.00638):0.01151,((P\_sp\_At-9b:0.00721,P\_cyprapedii:0.05773):0.05781,(P\_dispersa:0.01798,P\_wallisii:0.03116):0.00737):0.00692):0.02959):0.04186,((T\_morbirosei:0.19775,(T\_ptyseos:0.11813,T\_sp\_NML\_06:0.23262):0.08681):0.19405,(E\_billingiae:0.131,(E\_pyriifoliae:0.

05843,E\_tasmaniensis:0.10162):0.12156):0.06539):0.0526):0.05659):0.02706):0.03586):0.08143,P\_sp\_aB:0.03565):0.01443):0.00599);

[847] tree 't847'=[&R]  
(((P\_brenneri:0.02413,P\_conspicua:0.01173):0.03791,(P\_agglomerans:0.01041,(P\_deleyi:0.07252,(P\_vagans:0.02327,(P\_anthophila:0.03644,P\_sp\_aB:0.01143):0.01164):5.4E-4):0.02433):0.01204):0.03627,(P\_ananatis:0.01163,(P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.01122):0.06246):5.4E-4):0.0235,(P\_sp\_At-9b:0.03094,P\_cypripedii:0.01545):0.03503):0.01451,(((P\_wallisii:0.044,P\_allii:0.09102):0.09232,(P\_dispersa:0.03626,(P\_sp\_GM01:0.03463,(P\_rodasii:5.5E-4,P\_rwandensis:0.01156):0.01167):0.03609):5.5E-4):0.03652,((T\_sp\_NML\_06:0.10619,(T\_morbirosei:0.07045,T\_ptyseos:0.08701):0.11567):0.12781,(E\_billingiae:0.12944,(E\_tasmaniensis:0.06772,E\_pyrifoliae:0.07781):0.06994):0.02744):0.05853):0.00773,(P\_septica:0.06565,(P\_sp\_A4:0.14028,P\_eucrina:0.0153):0.0495):0.01204);

[848] tree 't848'=[&R] ((P\_cypripedii:0.02073,(P\_sp\_At-9b:0.04015,(T\_ptyseos:0.19409,(T\_sp\_NML\_06:0.33134,T\_morbirosei:0.14996):0.22173):0.59328):0.00633):0.04877,(P\_septica:0.1064,((E\_billingiae:0.17794,(E\_pyrifoliae:0.05438,E\_tasmaniensis:0.07041):0.14664):0.10623,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.04438,(P\_allii:0.00713,P\_ananatis:0.01939):0.0177):0.1154,((P\_brenneri:5.4E-4,P\_conspicua:0.01311):0.01963,(P\_anthophila:0.03901,(P\_deleyi:0.01457,(P\_agglomerans:0.03309,(P\_vagans:0.01364,P\_sp\_aB:0.033):0.00783):0.0187):0.04213):0.04968):0.01489):0.05661):0.02597):0.03129,(P\_sp\_A4:0.21073,(((P\_rwandensis:0.01314,P\_sp\_GM01:0.04434):0.00655,((P\_wallisii:0.00593,P\_eucrina:0.12183):0.00664,P\_dispersa:0.01942):0.0253):0.00704,P\_rodasii:0.03862):0.02332):0.00934);

[849] tree 't849'=[&R] ((P\_wallisii:0.0,P\_dispersa:0.0):5.5E-4,(P\_sp\_At-9b:0.0,P\_cypripedii:0.0):0.01996):0.0196,(P\_eucrina:5.4E-4,(P\_allii:0.19798,P\_sp\_GM01:5.5E-4):0.01955):0.01958,(P\_septica:0.01984,((P\_rwandensis:5.4E-4,(P\_sp\_A4:0.02479,((P\_ananatis:0.01889,((P\_deleyi:5.5E-4,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01957):0.0196,((P\_brenneri:0.0,P\_anthophila:0.0,P\_conspicua:0.0,P\_vagans:0.0):5.5E-4,(P\_agglomerans:5.3E-4,P\_sp\_aB:0.01955):0.01936):5.5E-4):0.0203):0.02583,((T\_morbirosei:0.04218,(T\_ptyseos:0.04281,T\_sp\_NML\_06:0.01697):5.3E-4):0.08398,(E\_billingiae:0.04283,(E\_pyrifoliae:0.04052,E\_tasmaniensis:0.0198):0.02249):0.0657):5.5E-4):0.01948):0.03825):0.01972,P\_rodasii:5.4E-4):0.02042):5.5E-4);

[850] tree 't850'=[&R]  
(P\_agglomerans:0.01695,(((P\_brenneri:0.02047,P\_conspicua:0.01924):0.01498,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.02846,(P\_allii:0.02715,P\_ananatis:0.01026):0.02354):0.07002,(P\_septica:0.08664,(((E\_billingiae:0.13902,(E\_pyrifoliae:0.04118,E\_tasmaniensis:0.07549):0.05611):0.09045,(T\_morbirosei:0.12352,(T\_sp\_NML\_06:0.2082,T\_ptyseos:0.13723):0.05576):0.14186):0.03543,(P\_sp\_A4:0.1988,((P\_sp\_At-9b:0.02346,P\_cypripedii:0.02587):0.04695,((P\_wallisii:0.0628,(P\_dispersa:0.05413,P\_eucrina:0.08717):0.02372):0.01428,(P\_sp\_GM01:0.03538,(P\_rodasii:0.05235,P\_rwandensis:0.02162):0.00859):0.0166):0.03272):0.07165):0.01473):0.0529):0.02507):0.0195):0.03377,P\_vagans:0.01139):0.00537,((P\_deleyi:0.1701,P\_anthophila:0.03007):0.01223,P\_sp\_aB:0.00849):0.0272);

[851] tree 't851'=[&R] ((P\_cypripedii:0.0224,P\_sp\_At-9b:0.00976):0.01498,(P\_sp\_GM01:0.02299,(P\_rodasii:0.00463,P\_rwandensis:0.01393):0.00505):0.00474,((P\_dispersa:0.0186

2,P\_wallisii:0.03325):0.01859,(P\_eucrina:0.05654,(((E\_billingiae:0.09457,(E\_pyriifoliae:0.06972,E\_tasmaniensis:0.04494):0.05398):0.06715,(T\_ptyseos:0.03754,(T\_morbirosei:0.05898,T\_sp\_NML\_06:0.08345):0.01963):0.05661):0.03368,(((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00451):0.01783,(P\_ananatis:0.01496,P\_allii:0.009):0.01761):0.0361,(((P\_vagans:0.00458,(P\_agglomerans:5.3E-4,P\_sp\_aB:0.01818):0.00444):0.00909,P\_anthophila:0.01835):0.00547,(P\_deleyi:0.0284,(P\_brenneri:0.02328,P\_conspicua:0.00629):0.02212):0.00322):0.01393):0.0215,(P\_sp\_A4:0.09692,P\_septica:0.07887):0.03441):0.01885):0.00474):0.01882):5.4E-4);

[852] tree 't852'=[&R]  
((P\_eucrina:0.12958,(((P\_brenneri:0.02436,P\_conspicua:0.0204):0.02088,(P\_deleyi:0.06603,(P\_sp\_aB:0.01873,P\_vagans:0.02518):5.4E-4,(P\_agglomerans:0.00623,P\_anthophila:0.03208):0.00627):0.01961):0.06254):0.07644,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.3E-4,(P\_allii:0.00605,P\_ananatis:0.02505):0.01228):0.02359):0.05667,((P\_sp\_A4:0.19207,P\_septica:0.08921):0.02883,(T\_sp\_NML\_06:0.19679,(T\_morbirosei:0.13362,T\_ptyseos:0.07632):0.05469):0.41537):0.01052):0.03446,(E\_billingiae:0.08432,(E\_tasmaniensis:0.17166,E\_pyriifoliae:0.18688):0.13885):0.12398):0.02273):0.03444,(P\_sp\_At-9b:0.01652,P\_cyprapedii:0.00778):0.00414,(P\_dispersa:0.01869,(P\_wallisii:0.03183,(P\_sp\_GM01:0.03065,(P\_rwandensis:0.01329,P\_rodasii:0.01781):0.01199):0.00717):0.01213):0.01409);

[853] tree 't853'=[&R]  
(P\_vagans:0.01777,P\_sp\_aB:0.01038,(P\_agglomerans:0.01181,(((P\_brenneri:0.00603,P\_conspicua:0.00147):0.01179,(P\_allii:0.00781,(P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.0075):0.03154,P\_ananatis:0.00299):0.01455):0.05985,(P\_septica:0.0655,(((T\_morbirosei:0.06838,(T\_ptyseos:0.05163,T\_sp\_NML\_06:0.0413):0.02756):0.14786,(E\_billingiae:0.07768,(E\_pyriifoliae:0.01995,E\_tasmaniensis:0.03476):0.04872):0.09541):0.06438,(P\_sp\_A4:0.09435,((P\_sp\_At-9b:0.0124,P\_cyprapedii:0.01711):0.03227,(P\_sp\_GM01:0.02039,(P\_rodasii:0.08071,P\_rwandensis:0.01807):0.00775):0.0418,(P\_dispersa:0.02032,(P\_eucrina:0.04518,P\_wallisii:0.01918):0.00633):0.0152):0.01162):0.03307):0.01365):0.02583):0.0592):0.0182):0.00895,(P\_anthophila:0.04394,P\_deleyi:0.0344):0.00362):0.00759):6.7E-4);

[854] tree 't854'=[&R]  
(P\_agglomerans:0.01048,P\_sp\_aB:0.00541,((P\_anthophila:0.01381,(((P\_s\_indologenes:0.00156,P\_s\_stewartii:0.00315):0.01995,(P\_allii:0.00932,P\_ananatis:5.4E-4):0.0111):0.02277,(P\_septica:0.03471,(P\_sp\_At-9b:0.02681,P\_cyprapedii:0.01263):0.01735,(((T\_morbirosei:0.05196,(T\_ptyseos:0.05168,T\_sp\_NML\_06:0.0486):0.03549):0.0874,(E\_billingiae:0.05994,(E\_pyriifoliae:0.01855,E\_tasmaniensis:0.01917):0.05809):0.06138):0.02111,(P\_sp\_A4:0.0415,(P\_sp\_GM01:0.03419,(P\_rodasii:0.0095,P\_rwandensis:0.00153):0.01646):0.01804,(P\_wallisii:0.02201,(P\_dispersa:0.02516,P\_eucrina:0.0263):0.00614):0.00794):0.0076):0.01245):0.01364):0.02122):0.02351):0.01489,(P\_brenneri:0.00663,P\_conspicua:0.00929):0.00543):0.00918):0.00792,(P\_deleyi:0.01983,P\_vagans:0.0049):0.00449):0.00371);

[855] tree 't855'=[&R] (P\_dispersa:0.04526,P\_wallisii:0.02685,(P\_eucrina:0.09515,(((P\_sp\_At-9b:0.03241,P\_cyprapedii:0.03037):0.07086,(((T\_morbirosei:0.10285,(T\_sp\_NML\_06:0.18448,T\_ptyseos:0.09056):0.04195):0.23408,(E\_billingiae:0.1806,(E\_pyriifoliae:0.05452,E\_tasmaniensis:0.07393):0.08636):0.12897):0.04635,(P\_sp\_A4:0.16335,(P\_septica:0.10019,(((P\_s\_indologenes:5.4E-

4,P\_s\_stewartii:0.00256):0.04593,(P\_allii:0.01093,P\_ananatis:0.01909):0.00665):0.07702,((P\_brenneri:0.02076,P\_conspicua:0.02379):0.05339,(P\_anthophila:0.04179,(P\_deleyi:0.06487,(P\_sp\_aB:0.01049,(P\_agglomerans:0.01509,P\_vagans:0.01471):0.00639):0.03666):0.01342):0.071):0.02735):0.03174):0.03222):0.01962):0.04774):0.0197,(P\_sp\_GM01:0.04868,(P\_rodasii:0.034,P\_rwandensis:0.03029):0.01612):0.02564):0.02631):0.00759);

[856] tree 't856'=[&R] (((P\_sp\_A4:0.08022,(P\_sp\_At-9b:0.0562,P\_cyprapedii:0.00515):0.01485):0.01229,(P\_sp\_GM01:0.04631,(P\_rodasii:0.01563,P\_rwandensis:0.00767):0.01709):0.01082):0.00987,(E\_billingiae:0.07927,(E\_pyriifoliae:0.01555,E\_tasmaniensis:0.05602):0.07209):0.07235,(((T\_morbirosei:0.08371,(T\_ptyseos:0.04197,T\_sp\_NML\_06:0.0478):0.03564):0.1171,(P\_eucrina:0.02937,(P\_dispersa:0.01637,P\_wallisii:0.03046):0.02584):0.02392):0.01455,(P\_septica:0.06079,((P\_allii:0.01336,(P\_ananatis:0.00664,(P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00606):0.02732):0.0092):0.02096,(P\_anthophila:0.0166,((P\_deleyi:0.01149,(P\_agglomerans:0.01202,(P\_sp\_aB:0.00278,(P\_brenneri:0.02181,P\_conspicua:5.5E-4):0.02568):0.0229):0.00781):0.00269,P\_vagans:0.00968):0.02551):0.0361):0.02459):0.02088):0.01183);

[857] tree 't857'=[&R] ((P\_wallisii:0.02439,(P\_eucrina:0.11715,(((P\_septica:0.09437,((P\_brenneri:0.01908,(((P\_vagans:5.5E-4,P\_anthophila:0.02623):0.00648,(P\_deleyi:0.04156,P\_sp\_aB:0.00649):5.4E-4):0.00647,P\_agglomerans:5.5E-4):0.04778,((P\_s\_indologenes:5.3E-4,P\_s\_stewartii:0.00642):0.0204,(P\_allii:0.01379,P\_ananatis:0.02543):0.00653):0.12759):0.02174):0.00653,P\_conspicua:0.00735):0.07369):0.02412,(E\_billingiae:0.15335,((T\_ptyseos:0.08509,(T\_morbirosei:0.11604,T\_sp\_NML\_06:0.12024):0.01598):0.27622,(E\_pyriifoliae:0.12066,E\_tasmaniensis:0.11156):0.14707):0.05534):0.08242):0.04333,P\_sp\_A4:0.24846):0.01208):0.03411):0.02279,(P\_rwandensis:0.01411,(P\_rodasii:0.0232,P\_sp\_GM01:0.03411):0.03671):0.02716,(P\_dispersa:0.04095,(P\_sp\_At-9b:0.03439,P\_cyprapedii:0.02033):0.06132):0.01003);

[858] tree 't858'=[&R] (P\_eucrina:0.00773,P\_wallisii:0.00486,(P\_dispersa:0.01237,((P\_sp\_GM01:5.4E-4,(((T\_morbirosei:0.02788,(T\_ptyseos:0.018,T\_sp\_NML\_06:5.5E-4):0.01733):0.062,(P\_sp\_A4:0.03577,(P\_septica:0.02355,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.5E-4,((P\_agglomerans:0.0,P\_deleyi:0.0,P\_anthophila:0.0):5.4E-4,(P\_vagans:0.0,P\_allii:0.0,P\_ananatis:0.0,P\_brenneri:0.0,P\_conspicua:0.0,P\_sp\_aB:0.0):0.00615):0.00608):0.01326,(E\_billingiae:0.03705,(E\_pyriifoliae:0.02446,E\_tasmaniensis:0.03152):5.4E-4):0.03198):0.01132):0.01809):0.00525):0.0262,(P\_sp\_At-9b:0.00604,P\_cyprapedii:0.00607):5.5E-4):0.01815):0.01805,(P\_rwandensis:0.01828,P\_rodasii:5.5E-4):0.00614):0.006):0.00554);

[859] tree 't859'=[&R] (P\_anthophila:0.02122,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.05077,(P\_allii:0.02104,P\_ananatis:5.5E-4):0.02414):0.1,(T\_ptyseos:0.19875,(T\_morbirosei:0.12117,T\_sp\_NML\_06:0.07509):0.0526):0.10908):0.02938,(((P\_eucrina:0.1253,((P\_rwandensis:0.00954,((P\_rodasii:5.5E-4,P\_dispersa:0.07155):5.5E-4,(P\_sp\_GM01:0.0215,P\_wallisii:0.02233):0.01002):0.01566):0.01391,(P\_cyprapedii:0.11117,P\_sp\_At-9b:0.08503):0.01217):0.05203):0.06046,(E\_billingiae:0.07029,(P\_sp\_A4:0.12803,P\_septica:0.07815):0.0627):0.00797):0.04933,(E\_pyriifoliae:0.02559,E\_tasmaniensis:0.07564):0.11649):0.00229):0.01925,((P\_agglomerans:5.4E-4,(P\_brenneri:0.01993,P\_conspicua:0.01232):0.04374):0.02075,(P\_deleyi:0.04338,(P\_sp\_aB:0.01024,P\_vagans:0.01073):0.01078):0.01076):0.02113);

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[860] tree 't860'=[&R]
(P_agglomerans:0.02338,P_vagans:0.02306,(P_anthophila:0.04237,(((P_septica:0.17927,(((E_billingiae:0.18697,(E_pyri-
foliae:0.07477,E_tasmaniensis:0.05765):0.14996):0.29284,((T_sp_NML_06:0.16878,(T_morbirosei:0.20191,T_ptyseos:0.16412
):0.05981):0.32459,P_sp_A4:0.21509):0.03528):0.07555,(P_sp_At-
9b:0.03634,P_cyprapedii:0.03898):0.02286,(P_wallisii:0.05417,(P_sp_GM01:0.03398,(P_rodasii:0.02672,P_rwandensis:0.0
1195):0.03147):0.01914):0.00715,(P_dispersa:0.05432,P_eucrina:0.12982):0.01436):0.04003):0.05294):0.07594):0.06145,(
P_allii:0.02143,(P_ananatis:0.01086,(P_s_indologenes:5.5E-
4,P_s_stewartii:0.00499):0.04099):0.01118):0.07747):0.02675,(P_conspicua:0.02398,P_brenneri:0.01927):0.01019):0.0264
5,(P_deleyi:0.03637,P_sp_aB:0.01518):0.01053):0.00277):5.4E-4);
[861] tree 't861'=[&R] (((P_brenneri:0.00873,P_conspicua:0.01109):0.02015,(P_deleyi:0.02029,(P_anthophila:5.3E-
4,(P_agglomerans:5.5E-4,(P_vagans:0.0,P_sp_aB:0.0):0.00679):0.00674):5.5E-
4):0.01609):0.03841,(P_s_indologenes:5.4E-
4,P_s_stewartii:0.0064):0.03419,(P_allii:0.0061,P_ananatis:0.01368):0.00761):0.01413):0.0119,(P_wallisii:0.04278,P_d
ispersa:0.03241):0.00902):0.01511,(((P_rwandensis:0.01853,P_sp_At-
9b:0.01759):0.00773,P_sp_GM01:0.00989):0.00954,(P_rodasii:0.02337,P_cyprapedii:0.01721):0.00679):0.00974,(P_eucrina:
0.03737,(P_sp_A4:0.05125,(((E_pyrifoliae:0.02841,E_tasmaniensis:0.03575):0.06673,(E_billingiae:0.01729,(T_morbirosei
:0.05294,(T_ptyseos:0.05365,T_sp_NML_06:0.05181):0.05643):0.14891):0.01226):0.05073,P_septica:0.02476):0.01277):0.03
803):0.01213);
[862] tree 't862'=[&R]
(P_sp_GM01:0.01469,P_wallisii:0.00289,(P_rodasii:0.00311,(P_rwandensis:0.01116,(((E_pyrifoliae:0.03266,E_tasmaniensi
s:0.01877):0.03042,(P_sp_At-
9b:0.00733,(P_sp_A4:0.07386,P_cyprapedii:0.01972):0.00873):0.00618):0.00322,((P_septica:0.01778,(((P_agglomerans:5.4
E-
4,(P_brenneri:0.00291,P_conspicua:0.00295):0.00884):0.00298,(P_anthophila:0.00294,(P_vagans:0.00292,(P_deleyi:0.0057
8,P_sp_aB:0.01472):0.00295):0.0059):0.00578):0.00301,((P_s_stewartii:0.00292,(P_s_indologenes:5.4E-
4,(P_ananatis:0.00294,P_allii:0.00587):0.0029):0.0029):0.0173,(E_billingiae:0.02471,(T_sp_NML_06:0.02303,(T_morbiros
ei:0.04704,T_ptyseos:0.04271):0.02204):0.08082):0.0244):0.00657):0.00899):0.0116,(P_eucrina:0.02672,P_dispersa:5.3E-
4):0.00614):0.0091):0.00308):0.00359):0.00266);
[863] tree 't863'=[&R]
(P_vagans:0.00783,P_agglomerans:0.0158,(P_sp_aB:0.02366,(P_deleyi:0.03622,(P_anthophila:0.03627,(((P_brenneri:0.00752
,P_conspicua:0.01683):0.0167,((P_septica:0.10746,(((P_sp_At-
9b:0.0496,P_cyprapedii:0.05665):0.0695,(P_rodasii:0.02767,P_rwandensis:0.0569):5.5E-
4,P_eucrina:0.26477):0.01769):0.02666,(P_sp_GM01:0.05627,(P_wallisii:0.07536,P_dispersa:0.05668):0.01706):0.00266):0
.22482,((E_billingiae:0.16826,(E_pyrifoliae:0.09521,E_tasmaniensis:0.03015):0.18923):0.39866,(T_ptyseos:0.11725,(T_s
p_NML_06:0.36914,T_morbirosei:0.16693):0.12646):0.33265):0.09848):0.06345):0.05664,(P_sp_A4:0.18524,(P_allii:5.4E-
4,(P_ananatis:0.03358,(P_s_indologenes:5.4E-
4,P_s_stewartii:0.0162):0.04223):0.01607):0.12684):0.01049):0.04765):0.03033):0.02234):0.0147):5.4E-4);
[864] tree 't864'=[&R] ((P_deleyi:0.01883,(P_sp_aB:0.01274,(P_agglomerans:0.01592,P_vagans:0.01024):5.4E-
4):0.00802):0.00661,(P_brenneri:0.00417,P_conspicua:0.02965):0.01716,(P_anthophila:0.01984,(((P_s_indologenes:0.0,P_
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s\_stewartii:0.0):0.05375,(P\_allii:0.00884,P\_ananatis:0.03491):0.0237):0.05198,(P\_septica:0.0622,(((P\_sp\_At-9b:0.04363,P\_cyprapedii:0.04294):0.0322,((P\_sp\_GM01:0.0613,(P\_rodasii:0.05313,P\_rwandensis:0.04124):0.02511):0.01021,((P\_eucrina:0.13188,P\_wallisii:0.04049):0.00983,P\_dispersa:0.02865):0.02381):0.02869):0.07125,(P\_sp\_A4:0.16907,((T\_morbirosei:0.15025,(T\_sp\_NML\_06:0.20416,T\_ptyseos:0.11233):0.06336):0.25372,(E\_billingiae:0.14963,(E\_tasmaniensis:0.12424,E\_pyriifoliae:0.06697):0.1082):0.15616):0.0664):0.03729):0.02846):0.04718):0.02677):0.00548);

[865] tree 't865'=[&R] ((P\_sp\_aB:0.01402,P\_agglomerans:0.00698):0.00675,(P\_conspicua:0.03452,P\_vagans:5.4E-4):0.00676,((P\_deleyi:0.01866,(P\_septica:0.06828,(((T\_morbirosei:0.00843,(T\_sp\_NML\_06:0.11501,T\_ptyseos:0.00417):0.06362):0.11794,(P\_sp\_A4:0.05408,(E\_billingiae:0.04287,(E\_tasmaniensis:0.09279,E\_pyriifoliae:0.06097):0.02967):0.09789):0.04787):0.02668,(P\_sp\_GM01:0.01627,((P\_eucrina:0.06783,(P\_dispersa:0.03513,P\_wallisii:5.4E-4):0.01673):0.04362,(P\_rwandensis:0.00446,(P\_rodasii:0.0229,(P\_sp\_At-9b:5.5E-4,P\_cyprapedii:0.01375):0.01977):0.01364):0.02316):0.01404):0.03227):0.01776):0.0243):0.00244,((P\_anthophila:0.01388,P\_brenneri:0.00681):0.01355,((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.01361):0.02877,(P\_allii:0.01368,P\_ananatis:0.00678):0.00645):0.01406):5.3E-4):5.3E-4);

[866] tree 't866'=[&R] ((P\_sp\_At-9b:0.00992,P\_cyprapedii:0.01007):0.02071,((P\_septica:0.05781,(E\_billingiae:0.01644,(E\_pyriifoliae:0.02064,E\_tasmaniensis:0.06563):0.09372):0.05935):0.03396,((P\_rodasii:0.03204,P\_sp\_GM01:0.02054):0.00472,(P\_rwandensis:0.03076,(P\_dispersa:0.03563,P\_wallisii:0.0051):0.01505):0.00523):0.0118):0.01029):0.00602,((P\_ananatis:0.02616,(P\_allii:0.00403,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.03725):0.01039):0.02003,((P\_eucrina:0.19245,P\_sp\_A4:0.09187):0.02179,(T\_ptyseos:0.15211,(T\_sp\_NML\_06:0.12422,T\_morbirosei:0.19388):0.03123):0.13769):0.02408):0.01514,((P\_brenneri:0.02524,((P\_vagans:0.00997,P\_agglomerans:0.00497):5.5E-4,(P\_sp\_aB:0.0148,(P\_deleyi:0.02069,P\_anthophila:0.02956):0.01082):5.4E-4):0.03138):0.0056,P\_conspicua:0.15158):0.00822);

[867] tree 't867'=[&R] (P\_cyprapedii:0.04971,(P\_sp\_At-9b:5.5E-4,(P\_wallisii:0.09197,(P\_rodasii:0.01561,P\_rwandensis:5.5E-4):0.0325):0.01147):0.01648,((P\_eucrina:0.04385,((P\_sp\_A4:0.05802,((P\_brenneri:0.01199,P\_conspicua:0.00364):0.01893,((P\_sp\_aB:0.01606,(P\_anthophila:0.02391,P\_vagans:0.00397):0.00784):0.00413,(P\_agglomerans:0.00357,P\_deleyi:0.03265):0.00398):0.01675):0.02983,P\_septica:0.03613):0.0206):0.00745,((P\_allii:0.00437,((P\_s\_indologenes:0.00376,P\_s\_stewartii:0.00404):0.03608,P\_ananatis:0.00789):0.00755):0.02784,((T\_morbirosei:0.08178,(T\_sp\_NML\_06:0.10162,T\_ptyseos:0.06785):0.03461):0.15578,(E\_billingiae:0.11046,(E\_pyriifoliae:0.03285,E\_tasmaniensis:0.00653):0.05113):0.07889):0.02676):0.0144):0.02416):0.01267,(P\_dispersa:0.03988,P\_sp\_GM01:0.02496):5.5E-4):0.00973);

[868] tree 't868'=[&R] ((P\_anthophila:0.16225,((P\_sp\_A4:0.35409,((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.01253):0.15313,(P\_allii:0.12001,P\_ananatis:0.07035):0.01745):0.0741,((P\_sp\_GM01:0.16541,(P\_dispersa:0.06207,(P\_wallisii:0.11232,(P\_rodasii:0.01626,P\_rwandensis:0.04921):0.08832):0.0596):5.5E-4):0.09746,((P\_eucrina:0.26415,E\_billingiae:0.24841):0.06673,((T\_morbirosei:0.36765,(T\_sp\_NML\_06:0.36336,T\_ptyseos:0.25352):0.16369):0.46284,(E\_pyriifoliae:0.17038,E\_tasmaniensis:0.20446):0.05511):0.13259):0.063):0.03674):0.03915):0.03486,(P\_brenneri:0.0393,P\_conspicua:0.05297):0.03537):0.02608,(P\_septica:0.08223,(P\_sp\_At-9b:0.063,P\_cyprapedii:0.0359):0.132):0.04974):5.4E-4):0.01393,P\_agglomerans:0.01334,((P\_sp\_aB:0.0277,P\_vagans:0.02799):0.01245,P\_deleyi:0.09956):5.4E-4);

[869] tree 't869'=[&R] (((P\_sp\_aB:0.01963,P\_vagans:0.01725):0.03319,(P\_agglomerans:0.02319,P\_deleyi:0.01429):0.0097):0.01526,(P\_conspicua:

0.05635,(P\_septica:0.14192,P\_brenneri:0.01673):0.03605):5.4E-4):0.05304,((E\_tasmaniensis:0.06212,(E\_pyrifoliae:0.05325,E\_billingiae:0.09349):6.1E-4):0.12206,((P\_sp\_At-9b:0.01729,P\_cypripedii:0.0191):0.02991,((P\_wallisii:0.03818,((P\_rodasii:0.03655,P\_sp\_GM01:0.01866):5.5E-4,P\_rwandensis:0.04596):0.01803):0.00896,(P\_dispersa:0.00904,P\_eucrina:0.15895):0.00975):0.02842):0.03439):0.06,((P\_anthophila:0.03675,(P\_sp\_A4:0.06753,(T\_sp\_NML\_06:0.12591,(T\_morbirosei:0.10986,T\_ptyseos:0.06837):0.03469):0.05313):0.03008):0.02422,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01309,(P\_allii:0.0358,P\_ananatis:0.04243):0.03069):0.10751):0.0161);

[870] tree 't870'=[&R] (((P\_ananatis:0.0146,(P\_allii:0.00995,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.02531):5.5E-4):0.04419,(((P\_wallisii:0.01031,(P\_rwandensis:0.00519,(P\_rodasii:0.00443,P\_sp\_GM01:0.02126):5.3E-4):0.01003):0.0168,(P\_eucrina:0.04,(P\_sp\_At-9b:0.012,P\_cypripedii:0.00886):0.02326):0.01205):5.4E-4,(P\_dispersa:0.01658,((T\_sp\_NML\_06:0.19466,(T\_morbirosei:0.07576,T\_ptyseos:0.10804):0.02522):0.14324,(E\_billingiae:0.07383,(E\_pyrifoliae:5.4E-4,E\_tasmaniensis:0.02611):0.05756):0.05595):0.01174):0.01647):0.03482,(P\_sp\_A4:0.0639,P\_septica:0.0346):0.01546):0.01941):0.02336,(P\_sp\_aB:0.0196,(P\_vagans:5.5E-4,P\_anthophila:0.00984):5.4E-4):0.00464,(P\_deleyi:0.01475,(P\_agglomerans:5.4E-4,(P\_conspicua:0.06391,P\_brenneri:0.01618):0.00992):0.00483):5.4E-4);

[871] tree 't871'=[&R] (P\_sp\_GM01:0.04391,P\_rodasii:0.01398,((P\_eucrina:0.02485,(P\_sp\_At-9b:0.00502,(((P\_sp\_A4:0.10533,(E\_billingiae:0.0379,(E\_pyrifoliae:0.05451,E\_tasmaniensis:0.00531):0.04243):0.04559):0.01192,((T\_sp\_NML\_06:0.08032,(T\_ptyseos:0.0595,T\_morbirosei:0.01738):0.00346):0.08122,(P\_septica:0.03553,((P\_ananatis:5.5E-4,(P\_allii:5.3E-4,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.02979):0.00489):0.01523,((P\_brenneri:0.0,P\_conspicua:0.0):0.01469,((P\_agglomerans:0.0,P\_vagans:0.0,P\_deleyi:0.0,P\_sp\_aB:0.0):0.00978,P\_anthophila:5.5E-4):0.00489):0.00963):0.01024):0.02832):0.01623):0.01078,P\_cypripedii:5.3E-4):0.01443):0.01989):0.00455,(P\_wallisii:0.0048,(P\_rwandensis:0.02425,P\_dispersa:0.00483):0.00477):5.3E-4):0.00554);

[872] tree 't872'=[&R] (P\_agglomerans:0.01853,(P\_vagans:0.01386,P\_sp\_aB:0.0066):0.00299,(P\_deleyi:0.01182,(((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00288):0.02388,(P\_allii:0.02268,P\_ananatis:0.00988):0.0136):0.08476,(P\_septica:0.05713,(P\_sp\_A4:0.11842,(((T\_morbirosei:0.08271,(T\_ptyseos:0.09097,T\_sp\_NML\_06:0.14867):0.10679):0.25526,(E\_billingiae:0.08786,(E\_pyrifoliae:0.08558,E\_tasmaniensis:0.07373):0.06164):0.12173):0.03579,(P\_eucrina:0.10209,(P\_wallisii:0.03468,(P\_dispersa:0.01421,(P\_sp\_GM01:0.02426,(P\_rodasii:0.01714,P\_rwandensis:0.02388):0.00849):0.01575):0.00734):0.00848):0.01953):0.02208,(P\_sp\_At-9b:0.01366,P\_cypripedii:0.01716):0.01877):0.01877):0.01852):0.01809):0.01817,((P\_brenneri:0.00761,P\_conspicua:0.00423):0.02173,P\_anthophila:0.02609):0.00639):0.00676):0.00784);

[873] tree 't873'=[&R] (((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01067,(P\_allii:0.0,P\_ananatis:0.0):5.5E-4):0.01063,(P\_anthophila:5.5E-4,((P\_sp\_aB:0.0107,((P\_sp\_At-9b:0.03925,(P\_septica:0.06408,(P\_cypripedii:0.03388,((E\_billingiae:0.0396,(E\_pyrifoliae:0.06227,E\_tasmaniensis:0.01095):0.03632):0.10007,((T\_morbirosei:0.1124,(T\_ptyseos:5.4E-4,T\_sp\_NML\_06:0.03321):0.02787):0.47968,P\_sp\_A4:0.03299):0.0374):0.03377):5.4E-4):0.01432):0.03136,((P\_dispersa:0.02191,(P\_rodasii:0.06945,P\_rwandensis:5.4E-4):0.02366):0.00748,(P\_wallisii:5.4E-



4,P\_sp\_GM01:0.04544):0.01453):0.01114):0.02223):5.4E-4,(P\_eucrina:0.04323,P\_deleyi:0.0107):5.3E-4):0.01078):0.01061):5.4E-4,P\_vagans:0.01061,(P\_agglomerans:5.5E-4,(P\_conspicua:0.01061,P\_brenneri:0.0106):5.5E-4):5.5E-4);

[874] tree 't874'=[&R]  
(P\_agglomerans:0.00392,P\_sp\_aB:0.0039,((P\_anthophila:0.01213,P\_deleyi:0.02468):0.00772,(((P\_brenneri:0.00782,P\_conspicua:0.00791):0.01856,(((P\_s\_indologenes:0.00395,P\_s\_stewartii:5.4E-4):0.01624,(P\_allii:0.00796,P\_ananatis:0.01578):0.00826):0.02373,(P\_septica:0.03304,((P\_sp\_A4:0.08807,((E\_pyrifoliae:0.03075,E\_tasmaniensis:0.01203):0.01194,(E\_billingiae:0.0381,(T\_morbirosei:0.09099,(T\_sp\_NML\_06:0.17346,T\_ptyseos:0.05153):0.04923):0.11127):0.02634):0.0155):0.02438,(P\_wallisii:0.26531,(((P\_sp\_GM01:0.01515,(P\_rodasii:0.01303,(P\_cyprapedii:0.03154,P\_sp\_At-9b:5.3E-4):0.01861):0.01137):0.00912,(P\_rwandensis:0.01985,P\_eucrina:0.02444):0.00735):5.5E-4,P\_dispersa:0.016):0.00847):0.00155):0.0213):0.00406):0.00764):0.01797,P\_vagans:0.00108):0.00684):5.4E-4);

[875] tree 't875'=[&R] ((P\_dispersa:5.5E-4,(P\_eucrina:0.0,P\_wallisii:0.0):0.02563):0.02592,P\_rodasii:0.02561,(P\_rwandensis:0.01259,((T\_morbirosei:0.16222,(T\_ptyseos:0.15262,T\_sp\_NML\_06:0.15504):0.17393):0.64138,(((P\_cyprapedii:0.0131,P\_sp\_At-9b:5.5E-4):0.01593,(((P\_deleyi:5.4E-4,(P\_conspicua:5.4E-4,((P\_agglomerans:0.0,P\_vagans:0.0,P\_anthophila:0.0,P\_sp\_aB:0.0):0.01314,P\_brenneri:5.3E-4):0.01317):0.02617):0.04349,((P\_allii:0.0,P\_ananatis:0.0):0.01364,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.02641):0.02392):0.03082,P\_septica:0.07812):0.01507):0.02772,(P\_sp\_A4:0.21966,(E\_billingiae:0.1922,(E\_pyrifoliae:0.03406,E\_tasmaniensis:0.04932):0.21262):0.20407):0.07791):5.1E-4,P\_sp\_GM01:0.03892):0.00918):0.01441):5.4E-4);

[876] tree 't876'=[&R]  
(P\_vagans:0.00892,(P\_sp\_aB:0.01127,(P\_anthophila:0.01312,P\_deleyi:0.01298):0.00442):0.00192,(P\_agglomerans:0.00358,(((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00347):0.01409,(P\_ananatis:0.01158,P\_allii:0.01284):0.01434):0.02949,((P\_sp\_A4:0.06235,((T\_morbirosei:0.0657,(T\_ptyseos:0.05234,T\_sp\_NML\_06:0.0661):0.04224):0.07931,(E\_billingiae:0.08401,(E\_pyrifoliae:0.01838,E\_tasmaniensis:0.02164):0.04913):0.04111):0.05264):0.01483,(((P\_sp\_At-9b:0.01597,P\_cyprapedii:0.0082):0.01829,(P\_dispersa:0.02869,((P\_sp\_GM01:0.02805,(P\_rodasii:0.01792,P\_rwandensis:0.0156):0.01376):0.00649,(P\_eucrina:0.05479,P\_wallisii:0.01122):0.00828):0.00644):0.01427):0.01617,P\_septica:0.04165):0.00986):0.01567):0.00653,P\_conspicua:0.00352):0.00177,P\_brenneri:0.00352):0.0125):0.00283);

[877] tree 't877'=[&R] (P\_wallisii:5.4E-4,((P\_eucrina:0.01248,(P\_septica:0.02733,(P\_sp\_A4:0.08833,((P\_sp\_At-9b:0.01287,((T\_sp\_NML\_06:0.01631,(T\_morbirosei:0.0569,T\_ptyseos:0.02987):0.05459):0.07577,(E\_pyrifoliae:0.02185,(E\_billingiae:0.02945,E\_tasmaniensis:0.0336):0.00867):0.03539):0.03611):0.00614,P\_cyprapedii:0.01254):0.01528):0.01266):0.01085):5.3E-4,P\_dispersa:0.00626):0.01254,(((P\_sp\_GM01:0.03791,P\_rodasii:0.00691):0.00616,(P\_rwandensis:5.4E-4,(P\_allii:0.01258,(P\_ananatis:0.0,P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.4E-4):0.02554):0.00681):0.01843,((P\_brenneri:0.0,P\_conspicua:0.0):0.00705,(P\_sp\_aB:0.0211,(P\_deleyi:5.5E-4,(P\_agglomerans:0.00623,(P\_anthophila:0.01254,P\_vagans:5.5E-4):5.4E-4):0.00647):0.02439):0.01323):0.0317):5.3E-4);

[878] tree 't878'=[&R]  
(P\_eucrina:0.23232,(P\_sp\_GM01:0.0575,(P\_rodasii:0.03227,P\_rwandensis:0.0851):0.04962):0.01744,(((P\_wallisii:0.02039,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.1103,(P\_allii:0.02039,P\_ananatis:0.0156):0.08673):0.15524,((E\_billingia

e:0.06052,(E\_pyrifoliae:0.08691,E\_tasmaniensis:0.03376):0.10034):0.25421,(T\_morbirosei:0.07597,(T\_sp\_NML\_06:0.19162,T\_ptyseos:0.15872):0.09421):0.21113):0.06108):0.07325,((P\_vagans:0.00758,((P\_agglomerans:0.03203,(P\_conspicua:0.01277,P\_brenneri:0.01279):0.03238):0.03159,P\_sp\_aB:5.4E-4):0.0102,(P\_deleyi:0.04691,P\_anthophila:0.02697):0.02637):5.5E-4):0.13361,P\_septica:0.06033):0.06776):0.01342):0.03737,(P\_sp\_A4:0.21364,(P\_sp\_At-9b:0.01458,P\_cyprapedii:0.04367):0.03253):0.05583):0.00845,P\_dispersa:0.01538):0.02202);  
[879] tree 't879'=[&R]  
((P\_dispersa:0.00598,(P\_eucrina:0.05451,P\_wallisii:0.015):0.01643):0.00755,(P\_rodasii:0.01163,P\_rwandensis:0.01404):0.01524,((P\_sp\_At-9b:0.0051,P\_cyprapedii:0.01122):0.02084,(P\_sp\_A4:0.07439,((P\_septica:0.05439,((P\_ananatis:0.01335,(P\_allii:0.00255,(P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00267):0.02457):5.5E-4):0.03404,((P\_brenneri:0.0027,P\_conspicua:0.00538):0.00297,((P\_vagans:0.0026,(P\_agglomerans:0.00532,P\_sp\_aB:0.00267):0.00271):0.00824,(P\_anthophila:0.01083,P\_deleyi:0.0081):0.00527):0.01679):0.04532):0.02229):0.03079,((T\_morbirosei:0.04894,(T\_sp\_NML\_06:0.0859,T\_ptyseos:0.02367):0.01567):0.07732,(E\_billingiae:0.03021,(E\_pyrifoliae:0.02795,E\_tasmaniensis:0.04091):0.06003):0.06518):0.01567):0.01351):0.01147):0.01177,P\_sp\_GM01:0.02738):0.00466);  
[880] tree 't880'=[&R] (((P\_sp\_A4:0.07718,(((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00123):0.01542,(P\_allii:0.01047,P\_ananatis:0.00469):0.00677):0.02886,((P\_anthophila:0.01802,(P\_deleyi:0.01632,(P\_vagans:5.5E-4,(P\_agglomerans:0.01011,P\_sp\_aB:0.00102):0.00246):0.01397):0.00947):0.01723,(P\_brenneri:0.00637,P\_conspicua:0.00831):0.01356):0.01214):0.01363,(P\_septica:0.02967,((E\_billingiae:0.07151,(E\_pyrifoliae:0.0376,E\_tasmaniensis:0.01951):0.05353):0.10744,(T\_morbirosei:0.07373,(T\_sp\_NML\_06:0.082,T\_ptyseos:0.05895):0.02341):0.0631):0.04383):0.0055):0.01998):0.01673,P\_eucrina:0.03388):0.01012,P\_wallisii:0.01781,((P\_sp\_At-9b:0.0107,P\_cyprapedii:0.01841):0.01602,(P\_sp\_GM01:0.01286,(P\_rwandensis:0.01143,P\_rodasii:0.01015):5.6E-4):0.01554):0.0071,P\_dispersa:0.01445):0.00371);  
[881] tree 't881'=[&R] (P\_dispersa:0.00793,((P\_sp\_At-9b:0.00898,P\_cyprapedii:0.00872):0.02789,(((E\_billingiae:0.02922,(E\_pyrifoliae:0.01089,E\_tasmaniensis:0.01284):0.0226):0.02113,(P\_sp\_A4:0.04792,(T\_morbirosei:0.02283,(T\_ptyseos:0.02863,T\_sp\_NML\_06:0.01679):0.02432):0.03716):0.01504):0.00792,((P\_anthophila:0.00397,((P\_s\_indologenes:0.00195,P\_s\_stewartii:0.00194):0.02337,(P\_ananatis:0.00536,P\_allii:0.00451):0.00794):0.0122):0.00431,(P\_brenneri:5.4E-4,((P\_agglomerans:0.0,P\_conspicua:0.0):0.00387,(P\_sp\_aB:5.3E-4,(P\_vagans:0.00387,P\_deleyi:5.3E-4):0.00388):0.00391):0.00778):0.00389):0.00854):0.01271):0.00464,(P\_septica:0.00786,((P\_rodasii:0.00524,P\_rwandensis:0.0087):0.0039,(P\_eucrina:0.01585,(P\_sp\_GM01:0.00888,P\_wallisii:0.00883):0.00862):0.00644):0.00458):0.00389);  
[882] tree 't882'=[&R] (((P\_sp\_At-9b:0.0,P\_cyprapedii:0.0):0.01666,((T\_sp\_NML\_06:0.08131,(T\_morbirosei:0.05576,T\_ptyseos:0.03297):0.08854):0.11944,(((P\_sp\_aB:5.5E-4,P\_deleyi:0.05149):0.01607,P\_agglomerans:5.3E-4):0.03216,P\_anthophila:0.01584):5.3E-4,P\_vagans:5.4E-4):0.03283,((P\_brenneri:0.0,P\_conspicua:0.0):5.5E-4,((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.01549):0.05098,(P\_allii:0.01558,P\_ananatis:5.5E-4):0.01419):0.06935):0.01646):0.01601):0.00202):0.01681,(P\_septica:0.03364,(P\_eucrina:0.0851,(E\_billingiae:0.04929,(E\_pyrifoliae:0.02651,E\_tasmaniensis:0.02474):0.06449):0.05309):5.5E-4):0.01716):5.5E-

4,(P\_dispersa:0.01245,(P\_sp\_GM01:0.01647,P\_rodasii:0.02357):0.02634):0.02287,((P\_sp\_A4:0.11179,P\_rwandensis:0.03139):0.01843,P\_wallisii:0.01715):5.5E-4);

[883] tree 't883'=[&R]  
(P\_vagans:0.01698,P\_sp\_aB:0.02485,(P\_anthophila:0.025,(P\_deleyi:0.01668,(P\_agglomerans:0.01686,((((P\_sp\_At-9b:0.05097,P\_cyprapedii:0.05649):0.0259,(P\_eucrina:0.17531,((P\_sp\_GM01:0.05101,P\_wallisii:0.00739):0.03103,(P\_dispersa:0.0163,(P\_rodasii:0.05078,P\_rwandensis:0.03667):0.0335):0.01037):0.01243):0.03925):0.05408,((P\_sp\_A4:0.06444,(T\_morbirosei:0.13009,(T\_ptyseos:0.11618,T\_sp\_NML\_06:0.1336):0.09678):0.25054):0.07445,(E\_billingiae:0.08535,(E\_pyriifoliae:0.05649,E\_tasmaniensis:0.03977):0.06151):0.05492):0.04297):0.04474,(P\_septica:0.05965,((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00823):0.00904,(P\_ananatis:0.00908,P\_allii:0.02457):0.01618):0.05243):0.02841):0.03341,(P\_brenneri:5.4E-4,P\_conspicua:0.00813):0.00518):0.01187):0.00812):0.01679):0.00807);

[884] tree 't884'=[&R]  
(P\_anthophila:0.02348,(P\_deleyi:0.02311,(P\_sp\_aB:0.03523,P\_vagans:0.0055):0.00614):0.01139,(P\_agglomerans:0.01712,(P\_conspicua:0.01906,(P\_brenneri:0.00966,((E\_billingiae:0.09673,(E\_pyriifoliae:0.01342,E\_tasmaniensis:0.02268):0.05123):0.07644,((T\_ptyseos:0.08691,(T\_morbirosei:0.10409,T\_sp\_NML\_06:0.05899):0.04586):0.07546,(P\_sp\_A4:0.1486,(P\_eucrina:0.06764,((P\_wallisii:0.02215,(P\_rodasii:0.09536,P\_dispersa:0.02948):0.00337):0.00612,((P\_sp\_At-9b:0.0236,P\_cyprapedii:0.01842):0.09441,P\_rwandensis:0.01357):0.01408,P\_sp\_GM01:0.0455):0.00566):0.02695):0.05786):0.0535):0.04538,P\_septica:0.03165):0.0132):0.09711,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00582,(P\_allii:0.00773,P\_ananatis:0.01571):0.01249):0.02697):0.02155):0.02149):0.01651):5.4E-4);

[885] tree 't885'=[&R]  
((((T\_sp\_NML\_06:0.05047,(T\_morbirosei:0.08806,T\_ptyseos:0.05026):0.03461):0.06676,(E\_billingiae:0.09591,(E\_pyriifoliae:0.03963,E\_tasmaniensis:0.02977):0.02073):0.05041):0.03841,(P\_sp\_A4:0.08702,P\_septica:0.03413):0.00974):0.02347,((P\_eucrina:0.03067,(P\_dispersa:0.03732,P\_wallisii:0.02906):0.01752):0.02517,(P\_rodasii:0.09418,(P\_sp\_GM01:0.04339,P\_rwandensis:0.04118):0.01212):0.02362):0.01836,(P\_sp\_At-9b:0.01423,P\_cyprapedii:0.02385):5.5E-4):0.02768):0.0092,((P\_allii:0.01451,P\_ananatis:0.00968):0.01623,(P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00471):0.01834):0.0251,((P\_conspicua:0.0583,P\_brenneri:0.01465):0.02443,((P\_agglomerans:0.01451,(P\_deleyi:0.02578,(P\_anthophila:0.0249,P\_sp\_aB:0.00377):0.01041):0.00958):0.0048,P\_vagans:0.01006):0.00585):0.01612);

[886] tree 't886'=[&R] ((P\_brenneri:0.01487,(P\_conspicua:0.22433,(P\_deleyi:0.0585,(((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00722):0.04767,(P\_allii:0.02172,P\_ananatis:0.03656):0.01965):0.06575,(((E\_billingiae:0.12392,(E\_pyriifoliae:0.15147,E\_tasmaniensis:0.03887):0.11356):0.20614,(P\_eucrina:0.0834,((P\_wallisii:0.04203,(P\_dispersa:0.01716,P\_sp\_GM01:0.08877):0.02413):0.01056,(P\_cyprapedii:0.04863,P\_sp\_At-9b:0.0318):0.01972):0.00987,(P\_rwandensis:0.02735,P\_rodasii:0.03333):0.02869):0.01967):0.01986):0.02645,((T\_sp\_NML\_06:0.81262,(T\_morbirosei:0.18242,T\_ptyseos:0.30682):0.12572):0.2649,P\_sp\_A4:0.12175):0.05995):0.02628,P\_septica:0.14778):0.02733):0.01356):0.0211):0.00377):0.01428,P\_vagans:0.01462,((P\_anthophila:0.05254,P\_sp\_aB:0.01899):0.01839,P\_agglomerans:0.01462):5.5E-4);

[887] tree 't887'=[&R]  
(P\_agglomerans:0.00536,((P\_conspicua:0.04261,P\_brenneri:0.01229):0.03054,((P\_septica:0.11921,((P\_sp\_A4:0.20674,(T\_morbirosei:0.1751,(T\_ptyseos:0.16579,T\_sp\_NML\_06:0.22363):0.14987):0.23723):0.06775,(P\_eucrina:0.14361,((P\_dispersa:0.01779,P\_wallisii:0.03926):0.00974,(P\_sp\_GM01:0.02477,((P\_sp\_At-9b:0.02613,P\_cyprapedii:0.02563):0.02856,(P\_rwandensis:0.07421,P\_rodasii:0.02387):0.01233):0.02223):0.0145):0.03468)

:0.04403):0.03491):0.04802,((E\_billingiae:0.11172,(E\_pyrifoliae:0.09287,E\_tasmaniensis:0.04125):0.13442):0.14392,((P\_s\_indologenes:0.00514,P\_s\_stewartii:5.4E-4):0.05173,(P\_allii:0.0076,P\_ananatis:0.01907):0.00611):0.02547):0.01989):0.01696):0.01334,P\_vagans:5.5E-4):0.00496,(P\_sp\_aB:0.01466,(P\_anthophila:0.06047,P\_deleyi:0.03452):0.01662):0.00677);

[888] tree 't888'=[&R] (P\_wallisii:0.03101,(P\_eucrina:0.04374,(((P\_brenneri:5.4E-4,((P\_agglomerans:0.01284,(P\_sp\_aB:0.01216,P\_vagans:5.4E-4):0.00608):0.00588,(P\_deleyi:0.02451,P\_anthophila:5.5E-4):0.00627):0.00637,((P\_allii:0.01205,P\_ananatis:5.5E-4):0.02411,(P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00606):5.4E-4):0.03277):0.01775):0.01155,P\_conspicua:0.00683):0.01447,(P\_sp\_A4:0.10461,(P\_septica:0.02372,(T\_ptyseos:0.06031,(T\_sp\_NML\_06:0.09086,T\_morbirosei:0.071):0.00824):0.27943):5.5E-4):0.01574):0.02198,(E\_billingiae:0.00354,(E\_pyrifoliae:0.0639,E\_tasmaniensis:0.00501):0.0685):0.04217):0.01108):5.4E-4,(P\_dispersa:0.00583,(P\_sp\_GM01:0.03153,(P\_rodasii:0.01197,((P\_sp\_At-9b:0.0,P\_cypripedii:0.0):0.02478,P\_rwandensis:5.4E-4):0.00649):0.01248):0.00605):5.4E-4);

[889] tree 't889'=[&R] (P\_dispersa:0.02004,((P\_rodasii:0.01134,P\_rwandensis:0.01943):0.00774,(P\_wallisii:0.0362,P\_sp\_GM01:0.0162):0.00756):0.00814,((P\_cypripedii:0.03031,P\_sp\_At-9b:0.03022):0.01561,(((P\_septica:0.03464,((P\_s\_indologenes:0.00744,P\_s\_stewartii:5.5E-4):0.0362,(P\_allii:0.01219,P\_ananatis:0.01608):0.01824):0.03194,((P\_deleyi:0.00884,((P\_agglomerans:0.00371,P\_vagans:0.01136):5.5E-4,(P\_sp\_aB:0.01133,P\_anthophila:0.03104):0.00373):0.01389):0.0082,(P\_conspicua:0.01284,P\_brenneri:0.01465):0.01605):0.02018):0.0307):0.02929,(P\_sp\_A4:0.05182,(T\_morbirosei:0.03749,(T\_ptyseos:0.07293,T\_sp\_NML\_06:0.06596):0.01922):0.16247):0.03537):0.00655,((E\_billingiae:0.09595,(E\_pyrifoliae:0.03543,E\_tasmaniensis:5.4E-4):0.07462):0.04471,P\_eucrina:0.02225):0.04516):0.01191):0.0124);

[890] tree 't890'=[&R] ((P\_eucrina:0.02385,(P\_wallisii:0.01649,P\_dispersa:0.02356):0.01716):0.01083,(P\_sp\_GM01:0.03711,(P\_rodasii:0.02647,P\_rwandensis:0.0255):0.01088):0.00631,(((P\_sp\_A4:0.07756,(((P\_brenneri:0.01087,P\_conspicua:0.00353):0.01252,(P\_agglomerans:0.00909,(P\_vagans:0.01375,P\_sp\_aB:5.5E-4):0.00892):0.00768):0.00478,(P\_anthophila:0.033,P\_deleyi:0.01791):0.00434):0.04739,((P\_s\_indologenes:0.00678,P\_s\_stewartii:0.00346):0.02262,(P\_allii:0.01808,P\_ananatis:0.01047):0.01702):0.01727):0.03223,((T\_morbirosei:0.0516,(T\_ptyseos:0.03192,T\_sp\_NML\_06:0.07545):0.03792):0.10278,(P\_septica:0.04574,(E\_billingiae:0.05369,(E\_pyrifoliae:0.02207,E\_tasmaniensis:0.01778):0.07341):0.06472):0.01616):0.02275):0.00414):0.03586,(P\_sp\_At-9b:0.00775,P\_cypripedii:0.01811):0.01059):0.01187);

[891] tree 't891'=[&R] (P\_sp\_aB:0.04643,(P\_anthophila:0.07225,P\_agglomerans:0.02327):0.01513,(P\_vagans:0.04235,(P\_deleyi:0.03802,((P\_septica:0.11664,(((P\_sp\_GM01:0.15541,(P\_rwandensis:0.13067,P\_rodasii:0.08162):0.03623):0.01686,(P\_dispersa:0.10232,(P\_eucrina:0.13593,P\_wallisii:0.07404):0.02507):0.03372):0.0837,P\_cypripedii:0.0843):0.01386,P\_sp\_At-9b:0.06643):0.13029,(P\_sp\_A4:0.13424,(T\_ptyseos:0.11604,(T\_morbirosei:0.15795,T\_sp\_NML\_06:0.1702):0.0503):0.28112,(E\_billingiae:0.15187,(E\_pyrifoliae:0.12608,E\_tasmaniensis:0.07317):0.20588):0.15026):0.07774):0.04885):0.04462):0.0534,((P\_ananatis:0.01757,(P\_s\_indologenes:0.00563,P\_s\_stewartii:5.5E-

4):0.07522,P\_allii:0.06092):0.02595):0.14539,(P\_brenneri:0.12839,P\_conspicua:0.05412):0.0199):0.03303):0.05607):0.01103):0.00854);

[892] tree 't892'=[&R]  
(P\_dispersa:0.01941,P\_wallisii:0.00655,(P\_eucrina:0.03083,((P\_sp\_A4:0.09034,(P\_septica:0.01421,((P\_deleyi:0.02092,((P\_agglomerans:5.5E-4,(P\_anthophila:0.00754,(P\_brenneri:0.00631,P\_conspicua:5.5E-4):0.02546):0.0189):0.06615,(P\_vagans:0.00634,P\_sp\_aB:5.4E-4):5.5E-4):0.00576):0.03332,((T\_sp\_NML\_06:0.06522,(T\_morbirosei:0.13412,T\_ptyseos:0.09061):0.05224):0.14951,(E\_billingiae:0.06332,(E\_pyrifoliae:0.03695,E\_tasmaniensis:0.06126):0.1107):0.04927):0.02745,(P\_cyprapedii:0.06189,(P\_sp\_At-9b:0.03737,(P\_s\_stewartii:0.00607,P\_s\_indologenes:5.4E-4):0.00891,(P\_allii:0.01866,P\_ananatis:0.00382):0.00583):0.08912):0.02153):0.02837):0.03146):0.0114):0.0229):0.02052,(P\_sp\_GM01:0.05977,(P\_rwandensis:0.0191,P\_rodasii:5.3E-4):0.01304):0.00646):0.00937):0.0045);

[893] tree 't893'=[&R]  
(P\_ananatis:0.0,P\_s\_stewartii:0.0,P\_s\_indologenes:0.0,P\_allii:0.0):0.02451,((E\_billingiae:0.02412,(E\_pyrifoliae:5.5E-4,E\_tasmaniensis:0.012):0.03728):0.02647,(P\_brenneri:0.01197,(P\_conspicua:5.5E-4,(P\_agglomerans:0.01201,(P\_anthophila:0.0,P\_vagans:0.0,P\_sp\_aB:0.0,P\_deleyi:0.0):0.01212):5.5E-4):5.3E-4):0.01197):0.0122):0.01201,(P\_sp\_A4:0.06268,((T\_morbirosei:0.0,T\_sp\_NML\_06:0.0):0.01221,T\_ptyseos:5.4E-4):0.06417):0.02471,((P\_rodasii:5.4E-4,((P\_eucrina:0.01212,(P\_wallisii:5.5E-4,(P\_dispersa:0.0121,P\_sp\_GM01:0.01276):0.01221):5.4E-4):0.01209,P\_rwandensis:5.4E-4):0.01219):0.02469,(P\_septica:0.03683,(P\_cyprapedii:0.01237,P\_sp\_At-9b:0.0122):0.0117):0.02513):0.01205);

[894] tree 't894'=[&R] ((P\_sp\_A4:0.11025,(P\_cyprapedii:0.02244,P\_sp\_At-9b:0.01537):0.0342,(P\_septica:0.08936,((T\_sp\_NML\_06:0.13648,(T\_morbirosei:0.12075,T\_ptyseos:0.18008):0.06692):0.24587,((P\_sp\_aB:5.5E-4,(P\_anthophila:0.03209,((P\_deleyi:0.02452,P\_vagans:5.4E-4):0.00598,(P\_agglomerans:0.00802,(P\_brenneri:5.4E-4,P\_conspicua:0.02325):0.02365):0.00334):0.01433):0.00765):0.06191,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00991,(P\_allii:0.0,P\_ananatis:0.0):0.0225):0.0705):0.00832):0.03349,(E\_billingiae:0.1012,(E\_pyrifoliae:0.03116,E\_tasmaniensis:0.0247):0.06028):0.02064):0.02007):0.01419):0.00866):0.00927,((P\_rodasii:0.02235,P\_rwandensis:0.01166):0.03978,P\_eucrina:0.07504):5.5E-4,((P\_wallisii:0.04923,P\_sp\_GM01:0.02193):0.03408,P\_dispersa:5.4E-4):0.0077);

[895] tree 't895'=[&R]  
(P\_septica:0.01895,((E\_billingiae:0.01807,(E\_pyrifoliae:0.03262,E\_tasmaniensis:0.00888):0.03813):0.06934,(P\_sp\_A4:0.05744,(T\_morbirosei:0.05995,(T\_sp\_NML\_06:0.09991,T\_ptyseos:0.0607):0.01533):0.05038):0.04857):0.02647,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00801,(P\_allii:0.00991,P\_ananatis:0.00795):0.01773):0.02425,(P\_agglomerans:0.0044,P\_anthophila:5.5E-4):0.00438,(P\_conspicua:0.00889,(P\_vagans:0.0,P\_brenneri:0.0,P\_sp\_aB:0.0,P\_deleyi:0.0):5.0E-4):5.5E-4):0.01344):0.01001):0.01294):0.00485,(P\_eucrina:0.03556,(P\_sp\_At-9b:0.01371,P\_cyprapedii:0.00432):0.0076):0.00789,(P\_dispersa:0.02292,(P\_wallisii:0.02001,(P\_rwandensis:0.02271,(P\_sp\_GM01:0.00477,P\_rodasii:0.02214):0.00905):0.0052):0.00427):0.00923);

[896] tree 't896'=[&R] ((P\_eucrina:0.01151,(P\_sp\_GM01:5.4E-4,((P\_rwandensis:0.0,P\_rodasii:0.0):0.00575,(P\_septica:0.02297,((P\_deleyi:0.0,P\_vagans:0.0):5.4E-4,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0,P\_allii:0.0,P\_ananatis:0.0):0.00571,(E\_billingiae:0.00231,(E\_tasmaniensis:0.00589,(E\_pyrifoliae:0.01221,(T\_morbirosei:5.4E-4,(T\_ptyseos:5.4E-

4,T\_sp\_NML\_06:0.03495):0.01708):0.06711):0.00507):0.00965):0.01685):0.00576,(P\_brenneri:0.0,P\_conspicua:0.0,P\_anthophila:0.0):5.5E-4):0.00571):0.00543,(P\_sp\_aB:0.0,P\_agglomerans:0.0):5.4E-4):0.00564):0.00578):0.00571):0.00568):5.3E-4,(P\_sp\_At-9b:0.0,P\_wallisii:0.0,P\_dispersa:0.0):5.5E-4,(P\_cyprapedii:0.00567,P\_sp\_A4:0.01718):5.5E-4);

[897] tree 't897'=[&R] ((E\_billingiae:5.3E-4,(E\_pyriifoliae:0.0,E\_tasmaniensis:0.0):0.01192):0.06153,(P\_cyprapedii:0.11271,P\_sp\_At-9b:0.02299):0.05514):0.02953,((P\_agglomerans:0.0,P\_vagans:0.0,P\_deleyi:0.0,P\_allii:0.0,P\_ananatis:0.0,P\_anthophila:0.0,P\_brenneri:0.0,P\_conspicua:0.0,P\_sp\_aB:0.0,P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.02431,(P\_septica:0.0,T\_morbirosei:0.0,T\_ptyseos:0.0,T\_sp\_NML\_06:0.0):0.0119):0.01092,(P\_wallisii:5.5E-4,((P\_rodasii:0.0,P\_rwandensis:0.0,P\_sp\_GM01:0.0):5.3E-4,(P\_eucrina:0.02468,(P\_dispersa:0.02988,P\_sp\_A4:0.0251):0.01914):0.01114):0.02383):0.01291);

[898] tree 't898'=[&R] ((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00243):0.01082,(P\_allii:0.00501,P\_ananatis:0.0023):0.00979):0.01844,((P\_brenneri:0.00406,P\_conspicua:0.00322):0.0112,(P\_sp\_aB:0.01061,(P\_agglomerans:0.0062,P\_vagans:0.00583):0.00794):0.00969):0.00647,(P\_deleyi:0.01277,((P\_septica:0.03858,(P\_cyprapedii:0.03597,P\_sp\_At-9b:0.00339):0.00897):0.00458,(E\_billingiae:0.05988,(E\_pyriifoliae:0.04314,E\_tasmaniensis:0.00698):0.02493):0.03136,(P\_sp\_A4:0.03193,(T\_morbirosei:0.02893,(T\_ptyseos:0.01646,T\_sp\_NML\_06:0.02554):0.02264):0.03322):0.02039):0.01286):0.01429,(P\_anthophila:0.01803,((P\_wallisii:0.0137,(P\_dispersa:0.00253,P\_eucrina:0.0249):0.00569):0.00358,(P\_rwandensis:0.00755,(P\_rodasii:0.01219,P\_sp\_GM01:0.00496):0.00209):0.01303):0.01381):0.00897):5.4E-4):0.00308);

[899] tree 't899'=[&R] ((P\_wallisii:0.02723,(((P\_sp\_A4:0.15816,((E\_pyriifoliae:0.04132,E\_tasmaniensis:0.04591):0.11412,(E\_billingiae:0.13368,(T\_morbirosei:0.10602,(T\_sp\_NML\_06:0.10766,T\_ptyseos:0.10972):0.07101):0.17832):0.04753):0.08431):0.03345,((P\_anthophila:0.04202,((P\_vagans:0.01676,(P\_agglomerans:0.00842,P\_sp\_aB:0.0167):5.5E-4):0.00805,(P\_deleyi:0.03478,(P\_brenneri:0.02065,P\_conspicua:0.00435):0.06604):0.00569):0.02403):0.05875,(P\_ananatis:0.02032,(P\_allii:0.0269,(P\_s\_indologenes:0.0041,P\_s\_stewartii:5.4E-4):0.07581):0.01041):0.07927):0.0482):0.03266,P\_septica:0.20383):0.01407,(P\_dispersa:0.02131,P\_eucrina:0.11578):0.01023):0.00748):0.02515,P\_sp\_GM01:0.02978,((P\_sp\_At-9b:0.01413,P\_cyprapedii:0.02022):0.03876,(P\_rodasii:0.06074,P\_rwandensis:0.02143):5.5E-4):0.01127);

[900] tree 't900'=[&R] (P\_vagans:0.01951,(P\_deleyi:0.02893,P\_anthophila:0.03402):0.02208,(P\_agglomerans:0.04091,(P\_sp\_aB:0.02242,((P\_brenneri:0.03448,P\_conspicua:0.0146):0.02749,((P\_ananatis:0.00538,(P\_allii:0.00897,(P\_s\_indologenes:0.00788,P\_s\_stewartii:0.00133):0.0655):0.01986):0.04173,(P\_septica:0.10046,((T\_morbirosei:0.11302,(T\_ptyseos:0.08914,T\_sp\_NML\_06:0.12894):0.04731):0.17534,(P\_sp\_A4:0.13906,(E\_billingiae:0.15554,(E\_pyriifoliae:0.03542,E\_tasmaniensis:0.02205):0.07273):0.08678):0.02628):0.03219,((P\_sp\_At-9b:0.01897,P\_cyprapedii:0.07534):0.03782,(P\_eucrina:0.09936,(P\_sp\_GM01:0.0471,((P\_rodasii:0.02545,P\_rwandensis:0.03487):0.02081,(P\_wallisii:0.0456,P\_dispersa:0.06683):0.01088):0.01382):0.0202):0.01428):0.04889):0.02715):0.01373):0.04702):0.02666):0.01532):0.01595);

[901] tree 't901'=[&R] ((P\_sp\_A4:0.14648,(((E\_billingiae:0.05711,(E\_pyriifoliae:0.02827,E\_tasmaniensis:0.03095):0.02219):0.08936,(T\_morbirosei:0.09998,(T\_sp\_NML\_06:0.13128,T\_ptyseos:0.11715):0.07124):0.12755):0.07376,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.

0):0.0101,(P\_ananatis:0.03581,P\_allii:0.01683):0.01907):0.02373,(P\_septica:0.02618,((P\_anthophila:0.01448,(P\_deleyi:0.00451,(P\_sp\_aB:0.00458,(P\_agglomerans:0.01274,P\_vagans:0.00797):0.00588):0.02242):0.0182):0.0343,(P\_brenneri:0.01366,P\_conspicua:0.00984):0.0219):0.01157):0.00903):0.03986):0.02294):0.02,P\_sp\_At-9b:0.02485,(P\_cyprapedii:0.00788,((P\_eucrina:0.06097,P\_wallisii:0.01565):0.01292,(P\_sp\_GM01:0.00673,(P\_rwandensis:0.01816,(P\_dispersa:0.05566,P\_rodasii:0.00433):0.00459):0.01564):0.01554):0.01463):0.01161);

[902] tree 't902'=[&R] (P\_sp\_A4:0.06288,P\_septica:0.05387,(((P\_brenneri:5.4E-4,((P\_conspicua:0.0,P\_sp\_aB:0.0):5.4E-4,(P\_deleyi:0.0,P\_agglomerans:0.0,P\_anthophila:0.0,P\_vagans:0.0):0.01201):0.01178):0.06264,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.4E-4,(P\_allii:5.5E-4,P\_ananatis:0.02422):0.01209):0.02625):0.01925,(((E\_tasmaniensis:0.01419,(E\_billingiae:0.06334,E\_pyrifoliae:0.06276):0.01212):0.04728,(T\_sp\_NML\_06:0.08982,(T\_morbirosei:0.03341,T\_ptyseos:0.02924):0.07481):0.06509):0.07136,(P\_dispersa:0.02362,((P\_eucrina:0.07524,P\_rodasii:0.04975):0.01211,(P\_cyprapedii:0.01184,(P\_sp\_At-9b:0.0,P\_sp\_GM01:0.0,P\_rwandensis:0.0,P\_wallisii:0.0):5.4E-4):5.5E-4):0.01216):0.01562):0.01433):0.01337);

[903] tree 't903'=[&R] (((((E\_billingiae:0.07157,(E\_pyrifoliae:0.06048,E\_tasmaniensis:0.00288):0.02925):0.07635,((P\_sp\_A4:0.07923,(P\_septica:0.02086,(T\_ptyseos:0.01236,(T\_sp\_NML\_06:0.01232,T\_morbirosei:5.5E-4):5.5E-4):0.12006):0.02558):0.01587,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01198,(P\_allii:0.01233,P\_ananatis:0.01224):5.5E-4):0.03646,((P\_agglomerans:0.0,P\_vagans:0.0,P\_deleyi:0.0,P\_anthophila:0.0,P\_conspicua:0.0,P\_sp\_aB:0.0):5.3E-4,P\_brenneri:0.01198):0.01465):0.04844):0.04309):5.5E-4,(P\_sp\_At-9b:0.02678,P\_cyprapedii:0.02438):0.02505):0.01291,(P\_rodasii:0.01196,P\_rwandensis:5.4E-4):0.03656):5.5E-4,P\_wallisii:5.4E-4,((P\_dispersa:0.05087,P\_eucrina:5.3E-4):0.0121,P\_sp\_GM01:0.01205):5.4E-4);

[904] tree 't904'=[&R] (P\_wallisii:0.08791,P\_rwandensis:0.03408,(P\_rodasii:0.02567,(((P\_sp\_At-9b:0.03085,P\_cyprapedii:0.02082):0.02086,((P\_septica:0.08853,(((P\_allii:0.0152,P\_ananatis:0.02507):0.02456,(P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00815):8.7E-4):0.08449,((P\_deleyi:0.01644,(P\_sp\_aB:0.00808,(P\_anthophila:0.0081,(P\_agglomerans:0.00808,P\_vagans:0.00826):0.00809):0.0082):0.00814):0.03446,(P\_brenneri:0.01773,P\_conspicua:0.02446):0.05892):0.01414):0.06053):0.03857,(P\_sp\_A4:0.27393,((T\_morbirosei:0.15375,(T\_sp\_NML\_06:0.24221,T\_ptyseos:0.05992):0.03915):0.47813,(E\_billingiae:0.09471,(E\_pyrifoliae:0.10086,E\_tasmaniensis:0.03114):0.23096):0.2271):0.02185):0.05613):0.03739):0.03717,(P\_sp\_GM01:0.06829,(P\_eucrin a:0.07754,P\_dispersa:0.01179):0.0453):0.0391):0.01773):0.00796);

[905] tree 't905'=[&R] (((E\_billingiae:0.12018,(E\_pyrifoliae:0.02432,E\_tasmaniensis:0.04248):0.10214):0.15655,P\_rodasii:0.01414):0.00881,(((T\_ptyseos:0.02554,(T\_sp\_NML\_06:0.0905,T\_morbirosei:0.07606):0.02707):0.3163,(((P\_conspicua:0.01686,(P\_brenneri:0.01756,((P\_vagans:0.01533,(P\_sp\_aB:0.02333,P\_anthophila:0.01544):0.00764):5.4E-4,(P\_agglomerans:5.4E-4,P\_deleyi:0.03124):0.00757):0.03926):0.01455):0.01546,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.06716,(P\_allii:0.02399,P\_ananatis:0.00703):0.02435):0.05664):0.04327,((P\_eucrina:0.0804,(P\_dispersa:0.00747,P\_wallisii:0.03122):0.02606):0.01876,(P\_sp\_A4:0.12598,P\_septica:0.06105):0.05304):0.02432):0.02049):0.02669,P\_sp\_GM01:0.02331):0.00808,((P\_sp\_At-9b:0.02464,P\_rwandensis:0.03117):0.00765,P\_cyprapedii:0.07298):0.00767);

[906] tree 't906'=[&R] (((P\_allii:0.00106,((P\_s\_indologenes:0.00281,P\_s\_stewartii:0.00561):0.06741,P\_ananatis:0.01612):0.01289):0.06025,((P\_brenneri:0.01929,P\_conspicua:0.01969):0.00841,(P\_anthophila:0.02939,(P\_deleyi:0.0369,(P\_agglomerans:0.03167,(P\_vaga

ns:0.00639,P\_sp\_aB:0.02168):0.00417):5.3E-4):0.01273):0.05168):0.01811):0.02602,((P\_sp\_At-  
9b:0.03471,P\_cyprapedii:0.02732):0.02503,(((P\_sp\_GM01:0.02799,(P\_rodasii:0.02402,P\_rwandensis:0.02396):0.01942):0.01  
676,P\_dispersa:0.03127):0.00698,(P\_wallisii:0.05872,P\_eucrina:0.11648):0.01278):0.04618):0.03315,(P\_septica:0.11105,  
(T\_ptyseos:0.1134,(T\_sp\_NML\_06:0.1393,T\_morbirosei:0.10783):0.02574):0.14497,(P\_sp\_A4:0.19399,(E\_billingiae:0.06511  
,(E\_pyrifoliae:0.04392,E\_tasmaniensis:0.04805):0.08231):0.11581):0.04689):0.01595):0.01566);  
[907] tree 't907'=[&R] (((P\_deleyi:0.00598,(((P\_s\_indologenes:5.5E-  
4,P\_s\_stewartii:0.00245):0.01235,(P\_allii:0.01565,P\_ananatis:0.00878):0.01401):0.04674,(P\_septica:0.03847,(((E\_bill  
ingiae:0.04306,(E\_pyrifoliae:0.03961,E\_tasmaniensis:0.02198):0.06435):0.03284,((T\_morbirosei:0.08451,(T\_ptyseos:0.040  
57,T\_sp\_NML\_06:0.0444):0.05821):0.11074,P\_sp\_A4:0.07783):0.03593):0.02394,((P\_cyprapedii:0.02796,P\_sp\_At-  
9b:0.01208):0.00643,((P\_sp\_GM01:0.01283,(P\_rodasii:0.01302,P\_rwandensis:0.01682):0.0169):0.0105,((P\_wallisii:0.02737  
,P\_dispersa:0.0016):0.00754,P\_eucrina:0.05259):0.01045):0.01382):0.0159):0.0128):0.01716):0.03159):0.01459,P\_vagans:  
5.3E-4):0.0046,P\_agglomerans:0.00485,(((P\_conspicua:0.0098,P\_brenneri:0.00248):0.01488,P\_anthophila:5.5E-  
4):0.00481,P\_sp\_aB:0.00243):5.5E-4);  
[908] tree 't908'=[&R]  
(P\_eucrina:0.0234,P\_wallisii:0.01743,((P\_rwandensis:0.01154,((P\_septica:0.00579,(((P\_s\_indologenes:5.5E-  
4,P\_s\_stewartii:0.0057):0.01135,(P\_allii:0.01141,P\_ananatis:5.5E-4):5.4E-4):0.01172,((P\_sp\_A4:0.04998,(P\_sp\_At-  
9b:0.00545,P\_cyprapedii:0.00608):0.02309):0.01205,((P\_brenneri:0.01245,P\_conspicua:0.00461):0.02324,(((T\_sp\_NML\_06:0  
.12701,(T\_morbirosei:0.09181,T\_ptyseos:0.07465):0.01832):0.1383,(E\_billingiae:0.03536,(E\_pyrifoliae:0.04933,E\_tasman  
iensis:0.03816):0.07728):0.01754):0.0284,(((P\_vagans:0.00586,P\_anthophila:0.01177):0.01186,P\_deleyi:0.00582):0.00588  
,(P\_agglomerans:0.0,P\_sp\_aB:0.0):0.00578):0.01081):0.0056):0.01883):0.00566):0.0114):0.01172,P\_dispersa:0.01158):5.5  
E-4):0.00578,(P\_rodasii:0.00571,P\_sp\_GM01:5.5E-4):0.01155):5.4E-4);  
[909] tree 't909'=[&R] ((P\_sp\_aB:0.01076,(P\_agglomerans:0.01154,(P\_brenneri:5.5E-  
4,P\_conspicua:0.00616):0.01613):0.00449):0.00733,(P\_deleyi:0.00833,P\_vagans:0.00619):0.00556,(P\_anthophila:0.00832,(  
(P\_s\_indologenes:0.00146,P\_s\_stewartii:0.00263):0.02716,(P\_allii:0.12464,P\_ananatis:0.01129):0.01313):0.04027,(P\_se  
ptica:0.04086,(((P\_sp\_GM01:0.01908,(P\_rodasii:0.00773,P\_rwandensis:0.01108):0.01947):0.01282,(P\_sp\_At-  
9b:0.01313,P\_cyprapedii:0.01704):0.03605):0.01428,(P\_eucrina:0.02774,P\_wallisii:0.01329):0.00572):0.0034,P\_dispersa:  
0.01083):0.02138,(P\_sp\_A4:0.05947,((T\_morbirosei:0.05393,(T\_ptyseos:0.0526,T\_sp\_NML\_06:0.05516):0.02719):0.09168,(E  
billingiae:0.06688,(E\_pyrifoliae:0.02913,E\_tasmaniensis:0.02116):0.05335):0.01576):0.03378):0.01826):0.02216):0.0141  
5):0.02222):0.00276);  
[910] tree 't910'=[&R]  
(P\_vagans:0.0147,P\_agglomerans:0.01425,(P\_anthophila:0.03608,((P\_deleyi:0.02418,P\_sp\_aB:0.01427):0.00881,(P\_brenneri  
:0.00722,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.05129,(P\_allii:0.04381,P\_ananatis:0.01768):0.01169):0.04013,(P  
\_septica:0.06681,((E\_billingiae:0.06264,(E\_pyrifoliae:0.03171,E\_tasmaniensis:0.05836):0.13563):0.10708,((P\_sp\_A4:0.0  
9919,(T\_morbirosei:0.06181,(T\_sp\_NML\_06:0.03879,T\_ptyseos:0.06296):0.02919):0.11303):0.02831,((P\_sp\_At-9b:5.5E-  
4,P\_cyprapedii:0.00958):0.04019,(P\_eucrina:0.10529,((P\_sp\_GM01:0.03006,(P\_rodasii:0.03515,P\_rwandensis:5.4E-  
4):0.04071):0.01408,(P\_dispersa:0.02437,P\_wallisii:0.04696):0.00578):0.01616):0.00707):0.02031):0.02354):0.00721):0.  
01583):0.01246,P\_conspicua:0.00476):0.01191):0.01857):0.00673):5.5E-4);  
[911] tree 't911'=[&R]  
(P\_rodasii:0.02276,((P\_dispersa:0.00735,(P\_wallisii:0.06511,P\_sp\_GM01:0.01429):0.00779):0.00735,P\_eucrina:0.02952):5



.3E-4,(((P\_sp\_At-9b:0.0145,P\_cyprapedii:5.4E-4):0.02953,(P\_septica:0.06739,(((E\_pyrifoliae:0.0479,E\_tasmaniensis:0.03017):0.09011,(E\_billingiae:0.13802,(P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00723):0.03046,(P\_allii:0.00736,P\_ananatis:5.3E-4):0.04065):0.03047):0.01874):0.00551,(P\_sp\_A4:0.07383,(T\_morbirosei:0.02361,(T\_sp\_NML\_06:0.04672,T\_ptyseos:0.04068):0.04927):0.12536):0.02256):0.0386,P\_anthophila:0.00723):0.00733,(((P\_brenneri:0.00717,P\_conspicua:5.5E-4):0.02082,(P\_vagans:5.5E-4,P\_deleyi:0.00718):0.00867):0.00658,(P\_agglomerans:0.00719,P\_sp\_aB:0.0072):5.4E-4):0.0198):0.02008):5.4E-4,P\_rwandensis:0.01457):0.00727);

[912] tree 't912'=[&R]  
(P\_eucrina:0.08007,(P\_sp\_GM01:0.0233,(P\_rodasii:0.01649,P\_rwandensis:0.00271):0.0239):0.00896):0.0053,(P\_dispersa:0.03124,(((T\_morbirosei:0.04982,(T\_ptyseos:0.03368,T\_sp\_NML\_06:0.04088):0.05673):0.09926,(E\_billingiae:0.05204,(E\_pyrifoliae:0.03697,E\_tasmaniensis:0.01668):0.08416):0.07984):0.03174,(P\_sp\_A4:0.09373,(P\_septica:0.05395,(((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00255):0.01471,(P\_allii:0.00823,P\_ananatis:0.02157):0.00949):0.0276,(P\_brenneri:0.01833,P\_conspicua:0.01148):0.0147,(P\_sp\_aB:5.4E-4,(P\_anthophila:0.00769,(P\_deleyi:0.02106,(P\_vagans:0.01028,P\_agglomerans:0.00249):0.00256):5.4E-4):0.00752):0.0179):0.01272):0.02):0.01543):0.01557):0.01972):5.4E-4,(P\_wallisii:0.0395,(P\_sp\_At-9b:0.00902,P\_cyprapedii:0.02223):0.01194):0.00511);

[913] tree 't913'=[&R] ((P\_anthophila:0.01323,(P\_brenneri:0.00436,P\_conspicua:5.5E-4):0.00437,(P\_deleyi:0.00444,(P\_septica:0.12722,(((P\_sp\_At-9b:0.06075,(P\_sp\_A4:0.0855,(E\_billingiae:0.06538,(E\_pyrifoliae:0.04258,E\_tasmaniensis:0.06079):0.05773):0.11907,(T\_morbirosei:0.13991,(T\_sp\_NML\_06:0.1538,T\_ptyseos:0.10063):0.05077):0.10323):0.05792):5.1E-4):0.01001,(P\_cyprapedii:0.04665,(P\_dispersa:0.04002,(P\_rwandensis:0.03634,(P\_rodasii:0.03575,P\_wallisii:0.05159):5.5E-4):0.01912):0.01318,P\_sp\_GM01:0.02753):0.00962):0.02253):0.01823,(P\_eucrina:0.14116,(((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00431):0.01857,(P\_allii:0.0202,P\_ananatis:0.01949):0.00899):5.4E-4):0.03034):0.01664):0.02023):0.00435):0.00886):0.00443,P\_agglomerans:0.00438,(P\_sp\_aB:0.00882,P\_vagans:0.00877):5.5E-4);

[914] tree 't914'=[&R]  
(P\_septica:0.11515,(((T\_sp\_NML\_06:0.1352,(T\_ptyseos:0.19095,T\_morbirosei:0.10961):0.05679):0.15063,(E\_billingiae:0.12043,(E\_pyrifoliae:0.05125,E\_tasmaniensis:0.03575):0.13236):0.08775):0.04661,(((P\_s\_indologenes:0.00623,P\_s\_stewartii:5.5E-4):0.0518,(P\_allii:0.02441,P\_ananatis:0.00729):0.03163):0.08586,(P\_brenneri:0.00993,P\_conspicua:0.02382):0.01859,(P\_anthophila:0.04806,(P\_sp\_aB:0.01306,(P\_deleyi:0.05465,(P\_agglomerans:0.00895,P\_vagans:0.01508):0.0031):0.01078):0.00447):0.01837):0.03345):0.01861,(((P\_rodasii:0.02435,P\_rwandensis:0.03406):0.0179,(P\_sp\_GM01:0.02881,(((P\_dispersa:0.0385,P\_wallisii:0.06275):0.01561,P\_eucrina:0.1626):0.03943):0.02136):0.02379,(P\_sp\_At-9b:0.03412,P\_cyprapedii:0.05558):0.04242):0.07341,P\_sp\_A4:0.12591):0.0349):0.03581);

[915] tree 't915'=[&R] (P\_eucrina:5.5E-4,(((P\_sp\_GM01:0.03129,P\_wallisii:5.5E-4):0.00614,(((P\_sp\_At-9b:0.03145,P\_cyprapedii:5.5E-4):0.0124,P\_dispersa:0.00616):5.3E-4):0.00618,(((P\_deleyi:0.00614,(P\_brenneri:0.0,P\_conspicua:0.0,P\_agglomerans:0.0,P\_vagans:0.0,P\_anthophila:0.0):0.00617,P\_sp\_aB:5.5E-4):0.00617):0.00624,(((P\_rodasii:0.00613,P\_rwandensis:5.5E-

4):0.0062,P\_septica:0.03143):0.00609):0.00628,(P\_sp\_A4:0.01221,((P\_ananatis:5.4E-4,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.0062):5.5E-4,(P\_allii:5.4E-4,(T\_sp\_NML\_06:0.02618,(T\_ptyseos:0.01987,T\_morbirosei:0.04002):0.00632):0.06776,(E\_pyrifoliae:0.0088,(E\_billingiae:0.01747,E\_tasmaniensis:0.02713):0.01149):0.03436):0.01057):0.01201):0.01258):0.00647):0.00617);

[916] tree 't916'=[&R]

((((T\_morbirosei:0.0436,(T\_ptyseos:0.03616,T\_sp\_NML\_06:0.08337):0.03902):0.12491,(E\_billingiae:0.08976,(E\_pyrifoliae:0.02546,E\_tasmaniensis:0.04466):0.10229):0.04892):0.06453,(P\_sp\_A4:0.06877,P\_septica:0.06456):0.01586):0.01004,(P\_s\_p\_At-9b:0.01755,(P\_sp\_GM01:0.02808,((P\_dispersa:0.01226,P\_wallisii:0.01682):0.01107,(P\_rodasii:0.01883,P\_rwandensis:0.01644):0.03782):0.00685):0.01093,P\_cyprapedii:0.01759):0.00734):0.00666,((P\_eucrinea:0.05565,(P\_allii:0.02405,(P\_ananatis:0.00349,(P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00347):0.0035):0.00426):0.06086):0.0175,(P\_brenneri:0.04152,((P\_vagans:0.00338,P\_sp\_aB:0.00686):0.00319,(P\_agglomerans:5.3E-4,(P\_conspicua:0.01708,(P\_deleyi:0.01859,P\_anthophila:0.01089):0.00969):0.00611):5.4E-4):0.02342):0.02645):0.00694);

[917] tree 't917'=[&R]

((((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01887,(P\_allii:0.00463,P\_ananatis:0.00482):0.00545):0.0119,(((P\_sp\_A4:0.02329,(E\_billingiae:0.03733,(E\_pyrifoliae:0.0044,E\_tasmaniensis:0.03941):0.03614):0.06495):0.01738,(P\_septica:0.02278,(T\_morbirosei:0.01855,(T\_ptyseos:0.05419,T\_sp\_NML\_06:0.05018):0.01853):0.09263):0.00633):0.0205,((P\_agglomerans:5.3E-4,(P\_brenneri:0.0,P\_conspicua:0.0):0.00472,P\_anthophila:0.00475):5.4E-4):5.4E-4,(P\_vagans:0.0,P\_sp\_aB:0.0):5.5E-4,P\_deleyi:0.00476):0.00471):0.0142):0.0053,(P\_sp\_GM01:0.01759,((P\_sp\_At-9b:0.02436,P\_cyprapedii:0.00456):0.01231,(P\_rodasii:0.01872,P\_rwandensis:5.4E-4):0.00476,((P\_wallisii:0.03434,P\_dispersa:5.5E-4):0.0047,P\_eucrinea:0.02905):0.00456):0.00344):0.01158):0.01097);

[918] tree 't918'=[&R]

((P\_rwandensis:0.01536,P\_rodasii:0.01752):0.00243,(P\_dispersa:0.0101,P\_wallisii:0.02795):0.00674,(P\_sp\_GM01:0.02218,((P\_septica:0.0208,((T\_morbirosei:0.02642,(T\_sp\_NML\_06:0.0332,T\_ptyseos:0.02097):0.03198):0.06971,(E\_billingiae:0.04541,(E\_pyrifoliae:0.03977,E\_tasmaniensis:0.03035):0.02442):0.02813):0.01188):0.01353,(P\_sp\_A4:0.03147,((P\_eucrinea:0.02372,(P\_sp\_At-9b:0.00355,P\_cyprapedii:0.00724):0.01148):0.00698,((P\_ananatis:0.01086,(P\_allii:0.0043,(P\_s\_indologenes:0.00214,P\_s\_stewartii:0.00219):0.01539):5.5E-4):0.00615,(P\_brenneri:0.01338,(P\_deleyi:0.01591,((P\_sp\_aB:0.00872,(P\_conspicua:0.01071,(P\_anthophila:0.0178,P\_agglomerans:0.00518):0.00123):0.0047):5.4E-4,P\_vagans:0.00616):0.00907):0.00812):0.00656):0.00686):0.00508):0.00286):0.0078):0.00376);

[919] tree 't919'=[&R]

(P\_sp\_aB:0.00291,(P\_deleyi:0.01237,P\_vagans:0.003):0.00599,((P\_anthophila:0.00896,P\_agglomerans:5.5E-4):0.003,(((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00302):0.00895,(P\_allii:0.00749,P\_ananatis:0.01572):0.01158):0.02455,(P\_conspicua:0.02482,P\_brenneri:0.00486):0.00372):5.5E-4,(P\_sp\_A4:0.0583,((E\_billingiae:0.04611,(E\_pyrifoliae:0.07884,E\_tasmaniensis:0.01601):0.0581):0.07683,(T\_morbirosei:0.02533,(T\_sp\_NML\_06:0.04264,T\_ptyseos:0.02384):0.01712):0.0432):0.0091):0.02924,((P\_cyprapedii:0.01224,P\_sp\_At-

9b:0.00596):0.0063,(P\_sp\_GM01:0.02614,((P\_eucrina:0.02609,(P\_rodasii:0.02496,P\_rwandensis:0.00971):0.01835):0.00686,(P\_dispersa:0.02194,(P\_wallisii:0.01348,P\_septica:0.03482):0.00171):0.00424):0.00926):0.00827):0.00648):0.00852):0.00912):5.5E-4);

[920] tree 't920'=[&R] ((P\_eucrina:0.10397,(P\_wallisii:0.11057,P\_dispersa:0.05863):0.02927):0.01372,((P\_sp\_At-9b:0.03266,(P\_septica:0.06605,(((E\_billingiae:0.14408,(E\_pyriifoliae:0.05775,E\_tasmaniensis:0.12189):0.12225):0.03234,((T\_sp\_NML\_06:0.18979,(T\_morbirosei:0.10576,T\_ptyseos:0.09506):0.03474):0.1033,(P\_brenneri:0.05729,(P\_anthophila:0.03876,(P\_agglomerans:0.01252,P\_conspicua:0.04656):0.01273,(P\_deleyi:0.04831,(P\_sp\_aB:0.03424,P\_vagans:0.03041):0.00741):0.01081):0.01791):0.02396):0.03803):0.00686):0.01671,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.03872,(P\_allii:0.06193,P\_ananatis:0.02135):0.04793):0.06421):0.02161):0.04419,P\_sp\_A4:0.14531):0.04942):0.01773,P\_cyprapedii:0.03756):0.02503,(P\_sp\_GM01:0.07888,(P\_rodasii:0.07641,P\_rwandensis:0.06767):0.02515):0.00485);

[921] tree 't921'=[&R] ((P\_vagans:0.00478,(P\_agglomerans:0.00239,P\_sp\_aB:5.5E-4):5.3E-4):0.0024,(P\_brenneri:0.00483,P\_conspicua:0.00222):5.3E-4,(P\_deleyi:5.5E-4,(P\_anthophila:5.5E-4,(P\_septica:0.03461,(P\_sp\_GM01:5.4E-4,((P\_sp\_At-9b:5.5E-4,P\_cyprapedii:0.00241):0.00491,(P\_eucrina:0.01951,(P\_wallisii:0.00243,(P\_rodasii:0.03552,(((P\_s\_stewartii:0.00724,P\_s\_indologenes:5.5E-4):0.00477,(P\_allii:0.00239,P\_ananatis:5.4E-4):0.00479):0.00246,(P\_sp\_A4:0.01469,P\_rwandensis:0.00754):0.00476):0.00179,(T\_morbirosei:0.02165,((E\_billingiae:0.01676,(E\_pyriifoliae:0.01736,E\_tasmaniensis:0.01486):0.02833):0.03256,(T\_ptyseos:0.01704,T\_sp\_NML\_06:0.01947):0.02058):0.00891):0.02062):0.0059):0.002):0.00485):0.0024,P\_dispersa:5.5E-4):0.00242):0.00926):0.00742):0.00483):0.00239):0.00239);

[922] tree 't922'=[&R] (((P\_deleyi:0.02473,(P\_agglomerans:0.0,P\_vagans:0.0,P\_sp\_aB:0.0):5.4E-4):0.01228,P\_anthophila:5.5E-4):5.5E-4,(P\_rodasii:0.0374,(P\_septica:0.03729,(P\_rwandensis:5.4E-4,(P\_eucrina:0.03018,((T\_sp\_NML\_06:5.4E-4,(T\_ptyseos:0.03778,T\_morbirosei:0.08004):0.04):0.2872,(E\_billingiae:0.05706,(E\_tasmaniensis:0.1021,E\_pyriifoliae:0.04432):0.06661):0.16439):0.14658):0.02145):0.02664,(P\_sp\_GM01:5.3E-4,(P\_dispersa:0.01248,(P\_sp\_A4:0.0515,(P\_sp\_At-9b:0.01265,P\_cyprapedii:0.01245):0.02518):0.02531):0.012):0.0244):5.4E-4):0.01209):0.0252):0.01214,(P\_allii:5.4E-4,(P\_ananatis:5.3E-4,(P\_s\_stewartii:0.03738,P\_s\_indologenes:5.5E-4):0.03725):0.01257):0.05134,((P\_brenneri:0.0,P\_conspicua:0.0):5.4E-4,P\_wallisii:0.03737):5.4E-4);

[923] tree 't923'=[&R] (P\_sp\_GM01:0.07294,(P\_rodasii:0.06773,P\_rwandensis:0.04799):0.02543,((P\_eucrina:0.24087,(((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00288):0.08867,(P\_allii:0.00829,P\_ananatis:0.06447):0.06477):0.10163,(P\_septica:0.14341,(P\_brenneri:0.03142,P\_conspicua:0.05288):0.01404,(P\_deleyi:0.06603,(P\_sp\_aB:0.04915,(P\_vagans:0.03102,(P\_agglomerans:0.01874,P\_anthophila:0.06186):0.01108):0.00611):0.01016):0.03256):0.04191):0.03066):0.03522,(P\_sp\_A4:0.22376,((T\_sp\_NML\_06:0.26681,(T\_morbirosei:0.21747,T\_ptyseos:0.20825):0.067):0.23732,(E\_billingiae:0.29349,(E\_pyriifoliae:0.15132,E\_tasmaniensis:0.0864):0.11281):0.07595):0.1195):0.07593):0.04614):0.07206,((P\_sp\_At-9b:0.05787,P\_cyprapedii:0.0216):0.06995,(P\_wallisii:0.11534,P\_dispersa:0.08399):0.02485):0.01705):0.00745);

[924] tree 't924'=[&R] (P\_dispersa:0.00558,(P\_wallisii:0.02211,(P\_eucrina:0.04672,((P\_sp\_A4:0.19393,(T\_morbirosei:0.03711,(T\_ptyseos:0.07029,T\_sp\_NML\_06:0.07089):0.05647):0.16843):0.07148,((P\_septica:0.04486,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.02067,(P\_allii:0.00952,P\_ananatis:0.00478):0.02876):0.08047,(P\_anthophila:0.0044,((P\_vagans:0.00473,((P\_sp\_aB:0.01425,P

\_agglomerans:5.5E-4):0.0095,P\_deleyi:0.00473):5.5E-4):0.01081,(P\_brenneri:5.4E-4,P\_conspicua:0.024):0.00836):0.00511):0.00589):0.0157):0.01528,(E\_billingiae:0.06516,(E\_pyrifoliae:0.05423,E\_tasmaniensis:0.08932):0.15323):0.10703):0.00657):0.02097):0.01564):0.01086,((P\_sp\_At-9b:0.02639,P\_cyprapedii:0.01886):0.02905,(P\_rodasii:0.02606,P\_rwandensis:0.00387):0.05063,P\_sp\_GM01:0.00537):0.02466):0.00932);

[925] tree 't925'=[&R] (((P\_cyprapedii:0.04498,P\_sp\_At-9b:0.01375):0.01561,P\_sp\_GM01:0.02892):5.4E-4,P\_rwandensis:5.5E-4,(((P\_dispersa:0.01466,(E\_billingiae:5.4E-4,((P\_eucrina:5.4E-4,((P\_sp\_aB:0.0,P\_deleyi:0.0,P\_anthophila:0.0):5.5E-4,((P\_vagans:0.0,P\_brenneri:0.0):5.5E-4,(P\_agglomerans:0.0,P\_conspicua:0.0):0.01479):0.01479):0.03021):0.03016,((P\_sp\_A4:0.02925,(P\_allii:5.5E-4,(((T\_sp\_NML\_06:0.02977,(T\_ptyseos:0.01502,T\_morbirosei:0.01522):0.01473):5.4E-4,P\_septica:5.4E-4):0.02963,(P\_s\_stewartii:0.19988,P\_s\_indologenes:5.5E-4):0.02951):5.4E-4,P\_ananatis:5.5E-4):0.01472):5.5E-4):0.03003,(E\_pyrifoliae:0.02885,E\_tasmaniensis:5.5E-4):0.02933):0.02932):5.3E-4):0.01435):5.5E-4,P\_rodasii:0.01438):0.01439,P\_wallisii:0.02978):5.4E-4);

[926] tree 't926'=[&R] (P\_sp\_aB:0.00656,P\_vagans:0.00217,(P\_agglomerans:5.4E-4,(P\_deleyi:0.00661,(P\_anthophila:5.4E-4,(((P\_rodasii:0.00897,(P\_rwandensis:0.00659,P\_sp\_GM01:0.00215):0.00222):0.00596,((P\_eucrina:0.004,(P\_dispersa:0.00469,(((P\_sp\_At-9b:0.00887,P\_cyprapedii:0.01376):0.01195,(P\_sp\_A4:0.01252,(E\_billingiae:0.03256,(E\_pyrifoliae:0.01436,E\_tasmaniensis:0.01882):0.02505):0.03446):0.02342):0.00636,(T\_morbirosei:0.01857,(T\_ptyseos:0.01578,T\_sp\_NML\_06:0.0283):0.01647):0.05096):0.00636,P\_septica:0.0147):0.00736):0.00473):0.00644,P\_wallisii:0.00329):0.01082):0.01594,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00447,(P\_allii:0.00989,P\_ananatis:0.00156):0.00388):0.01412,(P\_conspicua:5.5E-4,P\_brenneri:0.00442):0.01021):0.003):0.00831):0.00653):0.00216):0.00217);

[927] tree 't927'=[&R] ((P\_sp\_At-9b:0.02451,P\_cyprapedii:0.00283):0.01678,((T\_morbirosei:0.00928,(T\_ptyseos:0.00686,T\_sp\_NML\_06:0.00417):0.01717):0.06609,(P\_septica:0.01673,(((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00272):0.00819,(P\_ananatis:5.3E-4,P\_allii:0.00273):0.00276):0.01764,(E\_billingiae:0.01891,(E\_pyrifoliae:0.00574,E\_tasmaniensis:0.0052):0.00369):0.01447):0.04565,P\_sp\_A4:0.0286):0.01735):0.00197):0.00991):0.01115,(P\_wallisii:0.00565,(P\_rwandensis:0.01638,(P\_rodasii:0.01362,(P\_sp\_GM01:0.0071,(P\_anthophila:0.00579,(P\_deleyi:0.00169,((P\_brenneri:0.0,P\_conspicua:0.0):5.5E-4,(P\_vagans:0.00271,(P\_agglomerans:0.00545,P\_sp\_aB:5.5E-4):5.5E-4):0.00544):0.00376):0.00803):0.00834):0.00656):5.4E-4):0.00563):5.3E-4,(P\_dispersa:0.00841,P\_eucrina:0.00827):0.00487);

[928] tree 't928'=[&R] (P\_wallisii:0.02036,P\_sp\_GM01:0.0233,((P\_dispersa:0.03602,(((P\_sp\_A4:0.08529,(((E\_tasmaniensis:0.02326,(E\_billingiae:0.05766,E\_pyrifoliae:0.01647):0.02105):0.79,((P\_s\_indologenes:5.4E-4,P\_s\_stewartii:0.00639):0.02935,(P\_deleyi:0.02937,((P\_allii:0.04338,P\_ananatis:0.02205):0.122,(P\_anthophila:0.04913,(P\_sp\_aB:0.03688,(P\_brenneri:0.01165,P\_eucrina:0.02499):0.03627):0.01831):0.00424):0.01298):0.06344):0.45524):0.4599,(T\_morbirosei:0.09273,(T\_ptyseos:0.10552,T\_sp\_NML\_06:0.12188):0.04342):0.10169):0.09942):0.02634,(P\_septica:0.07693,(P\_conspicua:0.01352,(P\_agglomerans:0.00355,P\_vagans:0.01222):0.02096):0.02337):0.014):0.03475,(P\_sp\_At-9b:0.03209,P\_cyprapedii:0.01402):0.00967):0.03105):0.01228,(P\_rodasii:0.02817,P\_rwandensis:0.02717):0.00448):0.0051);

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[929] tree 't929'=[&R] (P_sp_aB:0.00916,(P_agglomerans:0.0,P_anthophila:0.0):5.5E-4,((P_conspicua:0.0,P_brenneri:0.0):0.00892,(((P_s_stewartii:0.0,P_s_indologenes:0.0):5.4E-4,(P_septica:0.01797,(((P_rwandensis:0.00921,P_rodasii:0.00887):0.01141,(P_eucrina:0.04657,(P_wallisii:0.00867,P_dispersa:0.00883):5.4E-4):0.01831):0.01552,(P_sp_GM01:0.01857,(P_cyprapedii:0.02705,P_sp_At-9b:0.00879):5.5E-4):0.00892):0.00881,((E_billingiae:0.04545,(E_tasmaniensis:0.02464,E_pyriifoliae:0.01109):0.02726):0.02741,(P_sp_A4:0.0625,(T_morbirosei:0.0326,(T_ptyseos:0.04583,T_sp_NML_06:0.02372):0.01938):0.01604):0.00879):0.00929):0.00935):0.01786):0.00886,(P_allii:0.0,P_ananatis:0.0):5.3E-4):0.02676,(P_vagans:0.00876,P_deleyi:5.5E-4):5.3E-4):0.00862):5.4E-4);
[930] tree 't930'=[&R] (((P_sp_At-9b:0.0,P_cyprapedii:0.0):0.01622,((((T_sp_NML_06:0.28019,(T_morbirosei:0.12291,T_ptyseos:0.15071):0.21601):0.55806,(E_billingiae:5.5E-4,(E_pyriifoliae:0.08587,E_tasmaniensis:0.12606):0.15121):0.06075):0.14258,((P_deleyi:0.09203,((P_agglomerans:0.1226,P_sp_aB:5.4E-4):0.04228,(P_s_indologenes:5.5E-4,P_s_stewartii:0.01474):0.04833,(P_allii:0.06051,P_ananatis:0.0755):0.02044):0.10513):0.02706):0.01307,(P_anthophila:0.06998,P_vagans:0.02252):0.03422):0.06606):0.03904,(P_brenneri:5.5E-4,P_conspicua:0.03026):5.4E-4):0.01774,((P_septica:0.31212,P_eucrina:0.09959):0.17147,P_sp_A4:0.26631):0.08206):0.02829):0.03073,(P_sp_GM01:5.4E-4,(P_wallisii:0.04538,P_dispersa:5.5E-4):0.01529):0.01476,(P_rodasii:0.03128,P_rwandensis:0.03102):5.4E-4);
[931] tree 't931'=[&R] (((P_eucrina:0.00237,((E_billingiae:0.0,E_pyriifoliae:0.0,E_tasmaniensis:0.0):0.00433,((T_morbirosei:0.0,T_ptyseos:0.0):0.00334,T_sp_NML_06:0.00337):0.01977):0.01008):0.00767,(P_cyprapedii:5.4E-4,((P_vagans:0.0,P_sp_aB:0.0):5.4E-4,(P_anthophila:0.00333,P_deleyi:5.4E-4):0.00412,P_agglomerans:0.00313):0.00267):0.01004,(P_wallisii:0.0,P_s_indologenes:0.0,P_conspicua:0.0,P_brenneri:0.0,P_allii:0.0,P_ananatis:0.0,P_dispersa:0.0,P_septica:0.0,P_sp_GM01:0.0,P_s_stewartii:0.0):0.00322):5.4E-4):0.00334):5.4E-4,P_rodasii:0.00332,(P_sp_A4:0.00334,(P_sp_At-9b:0.0,P_rwandensis:0.0):5.5E-4):5.5E-4);
[932] tree 't932'=[&R] (((P_s_indologenes:5.1E-4,P_s_stewartii:0.01136):0.02934,(P_allii:0.00745,P_ananatis:0.04543):0.0733):0.13043,((P_anthophila:0.09867,((P_vagans:0.08062,((P_deleyi:0.09939,P_sp_aB:0.01781):0.0209,(P_brenneri:0.04416,P_conspicua:5.3E-4):0.09503):0.01778):0.0272,P_agglomerans:0.04474):0.04401):0.04756,(((T_ptyseos:0.21481,(T_sp_NML_06:0.25473,T_morbirosei:0.15428):0.03985):0.17432,(E_billingiae:0.16009,(E_pyriifoliae:0.0675,E_tasmaniensis:0.08636):0.0808):0.11034):0.07509,(P_sp_A4:0.21047,P_septica:0.10362):0.07255):0.03744):0.03602):0.06982,P_wallisii:0.09914,((P_rwandensis:0.07898,(P_sp_GM01:0.11601,(P_sp_At-9b:0.03773,P_cyprapedii:0.06216):0.05975):0.01437):0.03089,((P_dispersa:0.06802,P_eucrina:0.24013):0.01145,P_rodasii:0.0797):0.01877):0.02844);
[933] tree 't933'=[&R] (P_vagans:0.01466,P_agglomerans:5.5E-4,(P_sp_aB:5.3E-4,(P_deleyi:0.00686,((P_brenneri:0.0129,P_conspicua:0.01177):0.01466,((((P_wallisii:0.00658,(P_sp_GM01:0.01333,(P_dispersa:0.01599,(P_rwandensis:0.02163,P_rodasii:0.01121):0.00699):0.01281):0.01588):0.0249,(P_sp_At-9b:0.01987,P_cyprapedii:0.01983):0.00385,((T_morbirosei:0.09115,(T_ptyseos:0.03791,T_sp_NML_06:0.13214):0.09207):0.30306,P_sp_A4:0.06842):0.11041):0.01602):0.01662,P_eucrina:0.07604):0.02574,(P_septica:0.08568,(E_billingiae:0.12165,(E_pyriifoliae:0.0353,E_tasmaniensis:0.04032):0.18755):0.08232):0.02118):0.04417,((P_s_indologenes:0.0,P_s_stewartii:
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0.0):0.04148,(P\_allii:0.00918,P\_ananatis:0.01058):0.03158):0.02142):0.02587,P\_anthophila:0.00802):0.01219):0.00534):0.00787):0.00486);

[934] tree 't934'=[&R] (P\_vagans:0.00689,P\_agglomerans:5.5E-4,(P\_sp\_aB:0.0023,(P\_deleyi:0.00901,(P\_anthophila:0.01375,(((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00232):0.01479,(P\_allii:0.00794,P\_ananatis:0.00142):0.00889):0.02269,(P\_sp\_A4:0.05948,(P\_septica:0.04397,(((T\_ptyseos:0.03629,(T\_sp\_NML\_06:0.03612,T\_morbirosei:0.05245):0.02015):0.0711,(E\_billingiae:0.06883,(E\_pyri foliae:0.0384,E\_tasmaniensis:0.04324):0.05475):0.05681):0.01558,((P\_sp\_At-9b:0.00941,P\_cyprapedii:0.00699):0.00475,(P\_sp\_GM01:0.01649,(P\_wallisii:0.00457,((P\_dispersa:0.00876,(P\_rodasii:0.01411,P\_rwandensis:0.00458):0.01921):0.00603,P\_eucrina:0.04141):0.00244):0.00712):0.01435):0.03306):0.01638):0.02012):0.02922):0.03383,(P\_brenneri:0.00231,P\_conspicua:0.00697):5.4E-4):0.01658):0.00462):5.0E-4):0.00229);

[935] tree 't935'=[&R] (((T\_morbirosei:0.01319,(T\_sp\_NML\_06:0.03145,T\_ptyseos:0.00448):0.00503):0.02778,P\_ananatis:0.00472):0.00434,(P\_s\_in dologenes:0.0,P\_s\_stewartii:0.0):0.01354,((P\_septica:0.02719,((P\_sp\_At-9b:0.00881,P\_cyprapedii:0.01413):0.01392,(((P\_brenneri:5.5E-4,P\_conspicua:0.0045):0.0089,(P\_anthophila:0.00436,((P\_vagans:5.4E-4,(P\_agglomerans:0.00445,P\_sp\_aB:5.3E-4):0.00888):0.00896,P\_deleyi:0.01322):0.00444):0.00916):0.01389,(P\_sp\_A4:0.00913,((P\_eucrina:0.01347,(P\_dispersa:0.01355,P\_wallisii:0.00452):5.5E-4):0.01397,((E\_billingiae:0.05589,(E\_tasmaniensis:0.00445,E\_pyri foliae:5.3E-4):0.05566):0.04262,(P\_sp\_GM01:0.02336,(P\_rodasii:5.4E-4,P\_rwandensis:0.009):0.00525):0.0142):0.01371):0.00894):0.00895):0.00933):0.00453):0.00914,P\_allii:0.01357):5.5E-4);

[936] tree 't936'=[&R] ((P\_sp\_GM01:0.01157,(P\_rodasii:0.01166,P\_rwandensis:0.01165):0.00583):0.00659,(P\_dispersa:0.01903,(P\_wallisii:0.24019,P\_eucrina:0.11109):5.0E-4):0.01216,((P\_sp\_At-9b:0.00602,P\_cyprapedii:0.01121):0.04884,(((P\_septica:0.04741,((T\_morbirosei:0.12985,(T\_sp\_NML\_06:0.21384,T\_ptyseos:0.08654):0.11156):0.24725,(E\_billingiae:0.14166,(E\_pyri foliae:0.1081,E\_tasmaniensis:0.08612):0.16886):0.10033):0.13465):0.01963,((P\_allii:0.00912,((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00581):0.03599,P\_ananatis:5.4E-4):0.00232):0.06796,(P\_conspicua:5.5E-4,(P\_brenneri:0.03432,((P\_agglomerans:0.00579,(P\_vagans:0.02332,P\_sp\_aB:0.01044):0.01263):0.01184,(P\_anthophila:0.02292,P\_deleyi:0.01182):0.00554):0.02903):0.00653):0.03487):0.04379):0.03187,P\_sp\_A4:0.17142):0.04515):0.01383);

[937] tree 't937'=[&R] (((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0,P\_deleyi:0.0):5.5E-4,(P\_allii:0.0066,P\_ananatis:0.00674):0.00675):0.00664,(P\_anthophila:0.00656,P\_conspicua:5.5E-4):0.00658,((P\_agglomerans:0.0,P\_vagans:0.0,P\_sp\_aB:0.0):5.4E-4,(((P\_cyprapedii:5.5E-4,(P\_sp\_At-9b:5.5E-4,(P\_septica:0.01975,P\_sp\_A4:0.01476):0.02038):0.01327):0.01897,(((T\_sp\_NML\_06:0.02491,(T\_morbirosei:0.03739,T\_ptys eos:0.02003):0.01725):0.046,(E\_billingiae:0.0135,(E\_pyri foliae:0.00671,E\_tasmaniensis:0.0067):5.4E-4):0.03399):5.5E-4,P\_sp\_GM01:0.0138):0.00669,(P\_rodasii:5.4E-4,((P\_wallisii:0.00661,(P\_eucrina:5.5E-4,P\_dispersa:0.02017):0.00662):5.4E-4,P\_rwandensis:5.4E-4):0.00665):0.00711):0.01766):0.02429,P\_brenneri:5.3E-4):0.00667):5.4E-4);

[938] tree 't938'=[&R] (((T\_morbirosei:0.02902,(T\_ptyseos:0.01976,T\_sp\_NML\_06:0.02431):0.00763):0.0149,((P\_s\_indologenes:0.0,P\_s\_stewartii:

0.0):0.00775,(P\_ananatis:0.00388,P\_allii:0.01183):5.5E-4):0.00797):0.00784,P\_cypripedii:5.5E-4,(((P\_brenneri:0.01147,(P\_anthophila:0.00748,((P\_deleyi:0.17932,(P\_sp\_aB:0.00636,P\_agglomerans:0.00567):0.00926):5.6E-4,P\_vagans:0.00561):0.01409):0.02121,P\_conspicua:0.0053):0.00296):0.00946,((P\_septica:0.01183,(P\_rwandensis:0.00787,(P\_sp\_GM01:0.02012,((P\_sp\_A4:0.03348,(E\_billingiae:0.03239,(E\_pyrifoliae:0.02046,E\_tasmaniensis:0.01136):0.01625):0.03494):0.01767,P\_rodasii:0.00539):0.0062):0.00806):0.00367):5.5E-4,(P\_wallisii:0.008,(P\_eucrina:0.02954,P\_dispersa:0.00805):0.00788):0.01206):0.00527):0.00268,P\_sp\_At-9b:0.01188):5.5E-4);

[939] tree 't939'=[&R]

(P\_eucrina:0.04935,(((E\_pyrifoliae:0.01247,E\_tasmaniensis:0.03806):0.07237,(E\_billingiae:0.04211,(T\_morbirosei:0.01632,(T\_sp\_NML\_06:0.08447,T\_ptyseos:0.03859):0.04358):0.11969):0.01997):0.01347,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.02931,(P\_allii:0.00892,P\_ananatis:0.00425):0.01161):0.0315,(((P\_agglomerans:0.0139,P\_sp\_aB:5.4E-4):0.01564,(P\_anthophila:0.00426,(P\_vagans:0.0043,P\_deleyi:0.00863):5.5E-4):0.00145):0.01033,(P\_brenneri:0.01818,P\_conspicua:0.02133):0.01364):0.0133):0.02131):0.03579,((P\_rwandensis:0.03053,((P\_dispersa:0.02298,(P\_sp\_At-9b:0.00464,P\_cypripedii:0.00879):0.02995):0.01162,(P\_sp\_A4:0.02304,(P\_sp\_GM01:0.0254,(P\_septica:0.04573,P\_wallisii:0.01753):0.00219):0.00893):0.01033):0.01157):5.4E-4,P\_rodasii:0.01058):0.00926);

[940] tree 't940'=[&R]

(P\_sp\_GM01:0.06848,(P\_rwandensis:0.02442,P\_rodasii:0.01604):5.4E-4,(((P\_wallisii:0.01189,P\_eucrina:0.04728):0.01777,(P\_dispersa:0.01041,(((P\_septica:0.02977,(((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00822):0.05907,(P\_ananatis:0.03888,P\_allii:0.03913):0.02166):0.10531,((P\_deleyi:0.05938,(P\_agglomerans:0.00818,(P\_sp\_aB:0.0,P\_vagans:0.0):5.4E-4):5.5E-4):0.02424,(P\_conspicua:0.01651,(P\_anthophila:0.05062,P\_brenneri:0.00761):0.00847):5.1E-4):0.05152):0.02913):0.05316,(P\_sp\_A4:0.06039,(T\_morbirosei:0.12234,(T\_ptyseos:0.20366,T\_sp\_NML\_06:0.25012):0.07318):0.55696):0.08101):0.02268,((E\_billingiae:0.09088,(E\_pyrifoliae:0.08702,E\_tasmaniensis:0.07867):0.06432):0.18767,(P\_sp\_At-9b:0.00865,P\_cypripedii:0.01676):0.05191):0.02047):0.04561):0.02452):0.01416);

[941] tree 't941'=[&R]

(P\_sp\_GM01:0.05612,(P\_wallisii:0.05601,(P\_rodasii:0.0232,P\_rwandensis:0.03898):0.01998):0.00737,(((P\_dispersa:0.06675,(((P\_sp\_A4:0.68921,(T\_sp\_NML\_06:0.25784,(T\_ptyseos:0.23952,T\_morbirosei:0.18429):0.03606):0.04534):0.18916,(E\_billingiae:0.14465,(E\_pyrifoliae:0.09738,E\_tasmaniensis:0.08906):0.10294):0.05869):0.07269,(((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00595):0.03357,(P\_ananatis:0.03594,P\_allii:0.01457):0.01383):0.06355,(P\_septica:0.13047,((P\_brenneri:0.01042,P\_conspicua:0.00202):0.02111,(P\_anthophila:0.03358,(P\_deleyi:0.0448,(P\_vagans:0.01202,(P\_sp\_aB:0.01715,P\_agglomerans:0.01186):5.4E-4):0.00572):0.01516):0.01565):0.04131):0.02496):0.02215):0.08077):0.03058,(P\_sp\_At-9b:0.01898,P\_cypripedii:0.02246):0.03545):0.00302,P\_eucrina:0.0984):0.01026);

[942] tree 't942'=[&R]

(P\_rodasii:0.0403,P\_rwandensis:0.03002,((P\_wallisii:0.04009,P\_dispersa:0.05253):0.01934,((P\_eucrina:0.14134,((P\_septica:0.13365,(((P\_s\_indologenes:0.00843,P\_s\_stewartii:0.00556):0.06036,(P\_allii:0.04498,P\_ananatis:0.04001):0.02402):0.06218,((P\_brenneri:0.01763,P\_conspicua:0.03939):0.02393,(P\_anthophila:0.03169,(P\_deleyi:0.04562,(P\_vagans:0.0257,(P\_agglomerans:0.01445,P\_sp\_aB:0.02613):0.00727):0.01834):0.01913):0.01303):0.03641):0.05429):0.01984,(P\_sp\_A4:0.36037,(T\_ptyseos:0.17752,(T\_morbirosei:0.13362,T\_sp\_NML\_06:0.21321):0.03446):0.16482):0.08522):0.01123,(E\_billingiae:0.

08886,(E\_pyrifoliae:0.06924,E\_tasmaniensis:0.09591):0.08886):0.08474):0.04851):0.03562,(P\_sp\_GM01:0.03128,(P\_sp\_At-9b:0.04062,P\_cyprapedii:0.0263):0.02212):0.02409):0.0086):0.01241);

[943] tree 't943'=[&R] (((P\_sp\_At-9b:0.05119,P\_cyprapedii:0.02478):0.02299,(E\_billingiae:0.10641,(E\_pyrifoliae:0.1508,E\_tasmaniensis:0.09394):0.18912):0.13475,(P\_sp\_A4:0.90492,(T\_ptyseos:0.36534,(T\_sp\_NML\_06:0.52332,T\_morbirosei:0.25364):0.04152):0.20195):0.26592,(P\_septica:0.22752,((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00719):0.05586,(P\_allii:0.03602,P\_ananatis:0.01173):0.04191):0.07061,((P\_brenneri:0.03245,P\_conspicua:0.01261):0.02402,(P\_deleyi:0.18678,(P\_anthophila:0.04878,(P\_agglomerans:0.01355,(P\_vagans:0.02758,P\_sp\_aB:8.4E-4):0.00742):0.00758):0.00655):0.02708):0.03734):0.06482):0.03347):0.02658):0.09125):0.04707,(P\_sp\_GM01:0.07764,(P\_rwandensis:0.05963,P\_rodasii:0.06382):0.01586):0.02276):0.02138,P\_dispersa:0.03733,(P\_eucrina:0.27683,P\_wallisii:0.06638):0.01656);

[944] tree 't944'=[&R] (((P\_agglomerans:5.4E-4,P\_anthophila:0.03274):0.0281,P\_vagans:5.5E-4):0.00924,((P\_brenneri:0.00503,P\_conspicua:0.01341):0.01175,(P\_septica:0.10739,((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00456):0.00926,(P\_ananatis:0.0185,P\_allii:0.01347):0.00522):0.0181,(P\_wallisii:0.02959,((P\_rodasii:0.01386,(P\_sp\_GM01:0.00699,P\_rwandensis:0.01406):0.00611):0.02037,(P\_cyprapedii:0.00463,(P\_sp\_At-9b:5.4E-4,P\_sp\_A4:0.1076):0.00917):0.02415):0.01152,(E\_billingiae:0.05883,(E\_pyrifoliae:0.04063,E\_tasmaniensis:0.03635):0.05855):0.058,(T\_morbirosei:0.05248,(T\_sp\_NML\_06:0.0747,T\_ptyseos:0.05734):0.0224):0.01823):0.02939):0.01263):0.01045,(P\_eucrina:0.07852,P\_dispersa:0.02424):0.01739):0.03961):0.02902):0.00569):0.01292,(P\_deleyi:0.03264,P\_sp\_aB:0.00466):0.00424);

[945] tree 't945'=[&R] ((P\_septica:0.06872,((P\_brenneri:0.01464,P\_conspicua:0.00768):0.01043,(P\_anthophila:0.01808,(P\_vagans:0.02167,P\_agglomerans:0.00787):0.01213,(P\_sp\_aB:0.02224,P\_deleyi:0.06057):0.00574):0.01624):0.03432):0.02239,((P\_s\_indologenes:0.00254,P\_s\_stewartii:5.5E-4):0.0673,(P\_allii:0.01654,P\_ananatis:0.06404):0.02316):0.05495):0.01777):0.01498,P\_sp\_A4:0.11348,((P\_dispersa:0.05367,(P\_wallisii:0.03629,(P\_rodasii:0.01275,(P\_rwandensis:0.04159,P\_sp\_GM01:0.06327):0.01001):0.01647):0.00431):0.00427,(P\_sp\_At-9b:0.126,P\_cyprapedii:0.04106):0.03886):0.00986,(P\_eucrina:0.08495,((T\_morbirosei:0.06995,(T\_ptyseos:0.07326,T\_sp\_NML\_06:0.09257):0.06013):0.17898,(E\_billingiae:0.13652,(E\_pyrifoliae:0.08399,E\_tasmaniensis:0.03703):0.06821):0.06179):0.02749):0.029):0.00571);

[946] tree 't946'=[&R] (P\_septica:0.07167,(P\_sp\_GM01:0.00883,(P\_wallisii:0.01745,(P\_eucrina:0.04428,P\_dispersa:5.5E-4):0.00865):0.01751):5.5E-4,(((T\_morbirosei:0.07841,(T\_sp\_NML\_06:0.2575,T\_ptyseos:0.08666):0.04595):0.21426,(E\_billingiae:0.03397,(E\_pyrifoliae:0.01371,E\_tasmaniensis:0.02267):0.0742):0.08974):0.03147,((P\_anthophila:0.01656,(P\_agglomerans:0.0,P\_vagans:0.0,P\_brenneri:0.0,P\_conspicua:0.0):0.00271):0.00633,(P\_sp\_aB:5.5E-4,P\_deleyi:0.00863):5.4E-4):0.03459,(P\_allii:0.04284,(P\_ananatis:0.00391,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01491):0.00962):0.02169):0.04285):0.01076,((P\_sp\_A4:0.02428,(P\_cyprapedii:0.03029,P\_sp\_At-9b:0.02378):0.03587):0.01994,(P\_rodasii:5.4E-4,P\_rwandensis:0.00871):0.03567):0.00888):0.00882);

[947] tree 't947'=[&R] (P\_sp\_GM01:0.01245,(P\_sp\_At-9b:0.01118,P\_cyprapedii:0.01107):0.02864,(P\_dispersa:0.02792,(((P\_sp\_A4:0.06189,P\_septica:0.06324):0.02116,((P\_s\_



indologenes:5.5E-  
4,P\_s\_stewartii:0.00549):0.02711,(P\_allii:0.01483,P\_ananatis:0.01337):0.0266):0.07074,(P\_brenneri:0.01237,(P\_conspicua:0.008,(P\_vagans:0.00572,(P\_deleyi:0.00142,(P\_anthophila:0.02299,(P\_agglomerans:0.00563,P\_sp\_aB:0.00571):0.00567):0.00465):0.01085):0.02245):0.00385):0.05799):0.01499):0.0127,((T\_morbirosei:0.1148,(T\_ptyseos:0.08834,T\_sp\_NML\_06:0.10118):0.09277):0.40125,(E\_billingiae:0.15663,(E\_pyriifoliae:0.07549,E\_tasmaniensis:0.04936):0.07307):0.08233):0.06452):0.02592,(P\_wallisii:0.02281,P\_eucrina:0.13517):0.00994):0.02653,(P\_rodasii:5.4E-4,P\_rwandensis:0.02797):0.01852):0.00403):0.01043);  
[948] tree 't948'=[&R] (((P\_sp\_At-9b:0.01816,P\_cyripedii:0.02126):0.0252,((P\_septica:0.0448,((P\_allii:0.01872,(P\_ananatis:5.4E-4,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00963):0.00584):0.04649,(((P\_vagans:0.0,P\_sp\_aB:0.0,P\_agglomerans:0.0):5.5E-4,(P\_conspicua:0.0,P\_brenneri:0.0):0.0048):0.0048,P\_anthophila:5.5E-4):5.5E-4,P\_deleyi:0.00473):0.01356):0.02507):0.03229,(P\_sp\_A4:0.14882,((E\_billingiae:0.05483,(E\_pyriifoliae:0.07246,E\_tasmaniensis:0.0478):0.05859):0.03822,(T\_sp\_NML\_06:0.1365,(T\_morbirosei:0.07748,T\_ptyseos:0.10526):0.0573):0.16417):0.0188):0.00473):0.02835):0.01399,(P\_rodasii:0.00833,P\_rwandensis:0.00808):0.01056,((P\_wallisii:0.01194,P\_dispersa:0.01731):0.02403,(P\_eucrina:0.03824,P\_sp\_GM01:0.01949):0.00813):0.00574);  
[949] tree 't949'=[&R] (((P\_anthophila:0.0344,(P\_agglomerans:0.02121,(P\_vagans:0.02934,(P\_deleyi:0.05246,P\_sp\_aB:0.00388):0.02037):0.00226):0.00811):0.0589,(P\_conspicua:0.09197,P\_brenneri:5.5E-4):0.02107):0.04836,((P\_ananatis:0.08449,(P\_allii:0.04462,(P\_s\_indologenes:0.00347,P\_s\_stewartii:0.00958):0.07469):0.02161):0.12922,P\_septica:0.14454):0.0382):0.02448,(P\_sp\_A4:0.25156,((P\_sp\_At-9b:0.03571,P\_cyripedii:0.04249):0.03661,((P\_dispersa:0.06115,(P\_wallisii:0.00308,P\_eucrina:0.23486):0.02951):0.02958,(P\_sp\_GM01:0.07065,(P\_rodasii:0.02469,P\_rwandensis:0.02172):0.02283):0.0212):0.01808):0.0239):0.0276,(E\_billingiae:0.1142,((T\_morbirosei:0.19581,(T\_ptyseos:0.12846,T\_sp\_NML\_06:0.1137):0.05942):0.40715,(E\_pyriifoliae:0.17706,E\_tasmaniensis:0.12818):0.10055):0.04789):0.04895);  
[950] tree 't950'=[&R] (P\_sp\_aB:0.01705,(P\_deleyi:5.4E-4,(P\_anthophila:0.02239,((P\_septica:0.10155,(P\_sp\_A4:0.11173,(((T\_morbirosei:0.12527,(T\_sp\_NML\_06:0.1621,T\_ptyseos:0.12312):0.10404):0.33516,(E\_billingiae:0.08582,(E\_pyriifoliae:0.08296,E\_tasmaniensis:0.04996):0.16159):0.16858):0.04315,(P\_eucrina:0.17601,((P\_rodasii:0.03747,(P\_sp\_GM01:0.04138,((P\_cyripedii:0.02343,P\_sp\_At-9b:0.01145):0.03591,P\_rwandensis:0.01173):5.5E-4):0.00926):0.01851,(P\_wallisii:0.04846,P\_dispersa:0.02249):0.01683):0.00162):0.02474):0.03702):0.03709):0.03646,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.0262,(P\_ananatis:0.03689,P\_allii:0.02823):0.01702):0.04379):0.01227,(P\_conspicua:0.02447,P\_brenneri:0.01578):0.01433):0.03059):5.4E-4):0.00562,(P\_vagans:0.00562,P\_agglomerans:5.5E-4):5.5E-4);  
[951] tree 't951'=[&R] ((P\_wallisii:0.06192,P\_dispersa:6.5E-4):0.0178,(P\_septica:0.14629,((P\_sp\_A4:0.09584,((T\_sp\_NML\_06:0.09132,(T\_morbirosei:0.23544,T\_ptyseos:0.16863):0.10891):0.4491,(E\_billingiae:0.12114,(E\_tasmaniensis:0.16618,E\_pyriifoliae:0.16895):0.12781):0.06516):0.07172):0.03716,((P\_deleyi:0.05159,(P\_agglomerans:0.01141,(P\_vagans:0.00787,(P\_sp\_aB:0.01996,P\_anthophila:0.0419):0.00853):0.02985):0.02529):0.04455,(P\_brenneri:0.01094,(((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00947):0.04804,(P\_allii:0.05378,P\_ananatis:0.01613):0.04615):0.10817,P\_conspicua:0.01822):5.5E-

4):0.02981):0.03072):0.04164):0.02115,((P\_sp\_GM01:0.02082,(P\_rwandensis:0.04057,P\_rodasii:0.03636):0.02176):0.04012,(P\_sp\_At-9b:0.05135,(P\_eucrinea:0.2144,P\_cyprapedii:0.02294):0.02986):0.04113):6.6E-4);

[952] tree 't952'=[&R]  
(P\_anthophila:0.02633,(P\_conspicua:0.0,P\_brenneri:0.0):0.00861,(((P\_sp\_aB:0.01717,P\_agglomerans:0.00449):0.01235,(P\_deleyi:0.01292,P\_vagans:5.4E-4):5.4E-4):0.01738,(P\_septica:0.04477,(((P\_rwandensis:0.04001,(P\_sp\_At-9b:0.01628,(P\_cyprapedii:0.04455,P\_rodasii:0.00472):0.01434):0.007):0.0101,(P\_sp\_GM01:0.03179,(P\_eucrinea:0.02004,(P\_dispersa:5.4E-4,P\_wallisii:0.00871):0.0149):0.01879):0.01172):0.02937,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01347,(P\_allii:0.01725,P\_ananatis:0.0046):0.02612):0.05871,(E\_billingiae:0.05068,(E\_pyriifoliae:0.0234,E\_tasmaniensis:0.04029):0.09478):0.07864,(P\_sp\_A4:0.07212,(T\_ptyseos:0.06001,(T\_morbirosei:0.10459,T\_sp\_NML\_06:0.05316):0.02544):0.03436):0.02644):0.0091):0.01917):0.00406):0.00496):0.00844);

[953] tree 't953'=[&R]  
(P\_vagans:0.00467,P\_anthophila:0.00155,(P\_deleyi:0.00622,((P\_conspicua:0.00175,(P\_brenneri:5.5E-4,((P\_allii:0.00317,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00781,P\_ananatis:0.00156):0.00145):0.01382,((P\_septica:0.01997,P\_sp\_A4:0.0253):0.0129,(((P\_sp\_At-9b:0.00164,P\_cyprapedii:0.01391):0.01,((P\_dispersa:0.00949,P\_wallisii:0.0047):0.0027,((P\_sp\_GM01:0.00947,(P\_rodasii:0.00401,P\_rwandensis:0.00264):0.00583):0.00479,P\_eucrinea:0.01094):0.00194):0.00945):0.00957,((T\_ptyseos:0.01243,(T\_morbirosei:0.03275,T\_sp\_NML\_06:0.01438):0.01072):0.03718,(E\_billingiae:0.0264,(E\_pyriifoliae:0.01458,E\_tasmaniensis:0.00967):0.01506):0.03387):0.0211):0.01384):0.01206):0.01298):0.00442):0.00331,(P\_sp\_aB:0.00595,P\_agglomerans:0.00184):0.00156):0.00284):5.5E-4);

[954] tree 't954'=[&R] (((P\_brenneri:5.5E-4,((P\_allii:0.0,P\_vagans:0.0,P\_sp\_aB:0.0):0.00701,P\_agglomerans:5.3E-4):0.00597,(P\_conspicua:5.5E-4,(P\_anthophila:0.00696,P\_deleyi:5.5E-4):0.00694):0.01015):0.00487):0.00693,((P\_rodasii:0.0,P\_rwandensis:0.0,P\_sp\_GM01:0.0):0.00687,P\_wallisii:5.4E-4):0.00696):5.5E-4,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00695,(P\_ananatis:5.5E-4,((E\_pyriifoliae:0.0,E\_tasmaniensis:0.0):0.03505,E\_billingiae:5.4E-4):0.00709,(P\_sp\_A4:0.00657,(P\_eucrinea:0.00662,(P\_dispersa:0.02045,((T\_sp\_NML\_06:5.5E-4,(T\_morbirosei:0.02079,T\_ptyseos:5.4E-4):0.0068):0.03459,(P\_sp\_At-9b:5.5E-4,(P\_cyprapedii:0.00692,P\_septica:5.4E-4):0.0066):0.0068):5.3E-4):0.02828):0.01436):0.00743):5.5E-4):5.4E-4);

[955] tree 't955'=[&R] ((P\_rodasii:0.01475,P\_rwandensis:0.01116):0.01345,(P\_sp\_GM01:0.00652,(P\_sp\_At-9b:0.01743,P\_cyprapedii:0.00722):0.02135):0.01087,(((P\_septica:0.04527,((T\_morbirosei:0.06974,(T\_ptyseos:0.03651,T\_sp\_NML\_06:0.07997):0.06464):0.11904,(E\_billingiae:0.08014,(E\_pyriifoliae:0.0387,E\_tasmaniensis:0.04704):0.06078):0.04283):0.02775,(((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00178):0.02417,(P\_allii:0.01766,P\_ananatis:0.0099):0.01561):0.03598,((P\_brenneri:0.00798,P\_conspicua:0.00666):0.01716,((P\_vagans:0.00753,(P\_anthophila:0.03063,P\_deleyi:0.01294):0.01318):0.00366,(P\_sp\_aB:0.01652,P\_agglomerans:0.00185):0.00168):0.01483):0.02555):0.01857):0.0085):0.02676,(P\_sp\_A4:0.07897,P\_eucrinea:0.06443):0.00907):0.00996,(P\_wallisii:0.01996,P\_dispersa:0.02034):0.00743):0.00549);

[956] tree 't956'=[&R]  
(T\_morbirosei:0.0,T\_ptyseos:0.0,T\_sp\_NML\_06:0.0):0.00705,(E\_pyriifoliae:0.0,E\_billingiae:0.0,E\_tasmaniensis:0.0,P\_agglomerans:0.0,P\_vagans:0.0,P\_deleyi:0.0,P\_anthophila:0.0,P\_brenneri:0.0,P\_conspicua:0.0,P\_sp\_A4:0.0,P\_sp\_aB:0.0,P\_se

ptica:0.0,P\_cyprapedii:0.0,P\_dispersa:0.0,P\_wallisii:0.0,P\_sp\_At-  
9b:0.0,P\_rodasii:0.0,P\_rwandensis:0.0,P\_sp\_GM01:0.0,P\_allii:0.0,P\_ananatis:0.0,P\_s\_indologenes:0.0,P\_s\_stewartii:0.0  
,P\_eucrina:0.0):0.00705);  
[957] tree 't957'=[&R] (P\_vagans:5.5E-4,(P\_sp\_aB:0.01334,(P\_deleyi:0.02734,P\_anthophila:5.5E-4):0.02009):5.5E-  
4,(P\_agglomerans:5.5E-4,(P\_conspicua:5.5E-  
4,(P\_brenneri:0.00669,(P\_septica:0.13684,((P\_allii:0.00745,((P\_s\_indologenes:5.5E-  
4,P\_s\_stewartii:0.00661):0.05808,P\_ananatis:0.02805):0.00548):0.0154,((E\_billingiae:0.05085,(E\_pyriifoliae:0.08018,E\_  
tasmaniensis:0.0632):0.12679):0.08152,((P\_sp\_A4:0.22502,(P\_eucrina:0.22624,(T\_morbirosei:0.14012,(T\_ptyseos:0.09003,  
T\_sp\_NML\_06:0.13454):0.07257):0.1275):0.04893):0.08097,(((P\_rodasii:0.05373,(P\_dispersa:0.02847,(P\_sp\_GM01:0.01761,(  
P\_rwandensis:0.0476,P\_wallisii:0.06767):0.02779):0.0095):0.0091):0.04895,P\_cyprapedii:5.3E-4):0.0284,P\_sp\_At-  
9b:0.01863):0.02242):0.04034):0.03502):0.00678):0.03445):0.01335):0.02011):0.00665);  
[958] tree 't958'=[&R] (P\_sp\_A4:0.10551,E\_billingiae:0.09212,(((P\_s\_indologenes:5.4E-  
4,P\_s\_stewartii:0.01759):0.04234,(P\_conspicua:0.03021,(P\_brenneri:0.02968,(P\_deleyi:0.04877,(P\_anthophila:0.05183,(  
P\_vagans:5.5E-4,(P\_agglomerans:0.00858,P\_sp\_aB:5.5E-  
4):0.00877):0.0075):0.01295):0.02336):0.01067):0.0728,(P\_allii:0.04617,P\_ananatis:0.00947):0.02148):0.03479):0.04855  
,(P\_septica:0.08881,(T\_sp\_NML\_06:0.13678,(T\_morbirosei:0.15943,T\_ptyseos:0.0382):0.04043):0.08246):0.0201):0.02066,((  
(((P\_sp\_At-  
9b:0.02603,P\_cyprapedii:0.01307):0.02741,P\_sp\_GM01:0.05661):0.00909,(P\_rodasii:0.02829,P\_rwandensis:0.0447):0.02364)  
:6.2E-  
4,P\_dispersa:0.07998):0.01882,(P\_eucrina:0.12091,P\_wallisii:0.02717):0.0192):0.02634,(E\_pyriifoliae:0.05781,E\_tasmani  
ensis:0.07654):0.17559):0.02535):0.02891);  
[959] tree 't959'=[&R] ((P\_sp\_At-9b:0.01695,P\_cyprapedii:5.3E-  
4):0.01391,((P\_septica:0.09278,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.06398,(P\_allii:0.0557,P\_ananatis:0.02797)  
:0.03356):0.17686,(((P\_deleyi:0.01261,P\_anthophila:0.00411):0.00414,(P\_agglomerans:0.00827,(P\_vagans:0.0,P\_sp\_aB:0.0  
):5.5E-4):5.5E-  
4):0.03614,(P\_brenneri:0.01112,P\_conspicua:0.01407):0.00738):0.02167):0.02076):0.03094,(((T\_morbirosei:0.1386,(T\_sp\_  
NML\_06:0.37904,T\_ptyseos:0.09729):0.10341):0.51329,(E\_billingiae:0.04957,(E\_pyriifoliae:0.04804,E\_tasmaniensis:0.0645  
6):0.07425):0.05263):0.08798,P\_sp\_A4:0.05626):0.02387):0.10788):0.0215,(P\_sp\_GM01:0.00404,P\_rodasii:0.01255):0.00426  
,(P\_rwandensis:0.02537,(P\_dispersa:5.4E-4,(P\_wallisii:0.02936,P\_eucrina:0.09716):0.02328):0.00427):0.00843);  
[960] tree 't960'=[&R]  
(P\_dispersa:0.00519,(P\_eucrina:0.02167,((P\_cyprapedii:0.02133,(E\_billingiae:0.05072,(E\_pyriifoliae:0.02741,E\_tasmanie  
nsis:0.02641):0.0358):0.05171):0.01769,(P\_sp\_At-9b:5.5E-  
4,((T\_morbirosei:0.05001,(T\_ptyseos:0.04843,T\_sp\_NML\_06:0.00526):0.00633):0.11329,(((P\_ananatis:0.00988,(P\_allii:0.  
01549,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.0598):0.01449):0.05843,((P\_brenneri:0.00513,P\_conspicua:5.5E-  
4):0.00504,(P\_deleyi:0.02079,(P\_anthophila:0.00482,(P\_vagans:5.3E-  
4,(P\_agglomerans:0.01004,P\_sp\_aB:0.01588):0.00576):5.4E-  
4):0.01599):0.00595):0.03998):0.01309,P\_septica:0.07023):0.0203,P\_sp\_A4:0.17544):0.01974):0.02849):5.3E-  
4):0.03141):5.5E-  
4,((P\_sp\_GM01:0.03293,(P\_rodasii:0.01548,P\_rwandensis:0.00516):0.00691):0.02067,P\_wallisii:0.01072):0.00999);

[961] tree 't961'=[&R] ((P\_allii:0.0,P\_ananatis:0.0,P\_brenneri:0.0,P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.5E-4,(((P\_vagans:0.0,P\_anthophila:0.0,P\_conspicua:0.0):5.5E-4,(P\_agglomerans:0.0,P\_deleyi:0.0,P\_sp\_aB:0.0):5.5E-4,P\_sp\_GM01:0.02306):0.01159):0.02342,(T\_sp\_NML\_06:0.0235,(T\_morbirosei:0.0,T\_ptyseos:0.0):5.4E-4):0.02362):5.4E-4,(P\_eucrina:0.01175,((P\_sp\_At-9b:0.0,P\_cyprapedii:0.0,P\_dispersa:0.0,P\_rodasii:0.0,P\_rwandensis:0.0,P\_septica:0.0,P\_sp\_A4:0.0,P\_wallisii:0.0):5.4E-4,((E\_pyriifoliae:0.0,E\_tasmaniensis:0.0):0.01193,E\_billingiae:0.01179):0.01179):0.01166):5.4E-4);

[962] tree 't962'=[&R] (P\_dispersa:0.00404,(P\_septica:0.01995,(P\_sp\_At-9b:0.005,P\_cyprapedii:0.00924):0.00826):5.5E-4,(((P\_rwandensis:5.4E-4,(P\_rodasii:0.01503,(P\_wallisii:0.00561,P\_eucrina:0.03018):5.5E-4):0.00512):0.00296,P\_sp\_GM01:0.01045):0.00577,(((E\_billingiae:0.00782,(E\_pyriifoliae:0.01629,E\_tasmaniensis:0.02667):0.04507):0.02364,(P\_sp\_A4:0.07113,(T\_morbirosei:0.02415,(T\_sp\_NML\_06:0.04538,T\_ptyseos:0.02057):0.02343):0.03775):0.01817):0.01781,(((P\_conspicua:0.00266,(P\_deleyi:0.00773,(P\_anthophila:0.00258,(P\_agglomerans:0.0,P\_sp\_aB:0.0):0.0052,P\_vagans:5.5E-4):0.00259):5.5E-4):0.00518):5.4E-4,P\_brenneri:0.00222):0.0098,(P\_allii:0.04618,((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00256):0.01565,P\_ananatis:0.00525):0.00255):0.0373):0.00172):0.01129):8.4E-4);

[963] tree 't963'=[&R] (P\_sp\_aB:0.03017,(P\_brenneri:0.00608,(P\_deleyi:0.02025,P\_anthophila:0.01656):0.0113):0.00481,(P\_vagans:0.00474,(P\_conspicua:0.01925,(P\_agglomerans:5.3E-4,((P\_allii:0.01747,(P\_ananatis:0.02455,(P\_s\_indologenes:0.00477,P\_s\_stewartii:5.5E-4):0.00477):0.01742):0.03595,((P\_septica:0.02902,P\_sp\_A4:0.037):0.02144,((P\_sp\_At-9b:0.01444,P\_cyprapedii:0.01468):0.01434,(((P\_rodasii:0.00949,P\_rwandensis:0.00493):0.01819,P\_sp\_GM01:0.03814):0.0066,((P\_dispersa:0.00222,(P\_eucrina:0.07232,((T\_morbirosei:0.11317,(T\_ptyseos:0.11479,T\_sp\_NML\_06:0.07065):0.03287):0.12723,(E\_billingiae:0.03281,(E\_pyriifoliae:0.05394,E\_tasmaniensis:0.02611):0.05834):0.10661):0.02082):0.01734):0.02676,P\_wallisii:5.4E-4):0.00939):5.5E-4):0.04135):0.02492):0.01923):0.00471):0.00322):5.5E-4);

[964] tree 't964'=[&R] (P\_sp\_At-9b:0.05424,P\_wallisii:0.0384,((P\_dispersa:0.04362,((P\_rwandensis:0.03147,(P\_sp\_GM01:0.08817,P\_rodasii:0.08045):0.01258):0.02467,(((P\_allii:0.00558,((P\_s\_indologenes:0.00553,P\_s\_stewartii:5.4E-4):0.03971,P\_ananatis:0.02667):0.01749):0.07444,(P\_anthophila:0.03203,((P\_brenneri:0.0105,P\_conspicua:0.01741):0.03439,(P\_agglomerans:5.4E-4,(P\_vagans:0.00547,(P\_sp\_aB:0.00542,P\_deleyi:0.02241):5.4E-4):0.00543):0.00646):0.01393):0.02362):0.03886,(P\_septica:0.08148,(P\_sp\_A4:0.17766,((T\_morbirosei:0.09702,(T\_ptyseos:0.09165,T\_sp\_NML\_06:0.10062):0.05518):0.17992,(E\_billingiae:0.10479,(E\_pyriifoliae:0.03803,E\_tasmaniensis:0.05798):0.15012):0.13079):0.03712):0.04912):0.0182):0.09136,P\_eucrina:0.04582):0.00688):0.00468):0.00823,P\_cyprapedii:0.05338):0.0074);

[965] tree 't965'=[&R] ((P\_rodasii:0.01507,P\_sp\_GM01:0.00579):0.00781,(P\_wallisii:5.4E-4,(P\_dispersa:0.00338,(P\_eucrina:0.02034,(((E\_billingiae:0.0451,(E\_pyriifoliae:0.02098,E\_tasmaniensis:0.02695):0.03423):0.05871,((T\_morbirosei:0.04585,(T\_sp\_NML\_06:0.05615,T\_ptyseos:0.05133):0.03565):0.08632,P\_sp\_A4:0.06144):0.01094):0.01013,(P\_septica:0.03468,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.0061,(P\_allii:0.00296,P\_ananatis:5.5E-4):0.00282):0.02492,((P\_conspicua:0.0873,P\_brenneri:5.4E-4):0.00879,(P\_agglomerans:0.00293,(P\_sp\_aB:0.00588,(P\_anthophila:5.5E-4,(P\_vagans:0.00293,P\_deleyi:0.00295):0.00287):0.0029):0.00588):5.3E-

4):0.00569):0.01126):0.01027):0.01694):0.01245):0.00547):0.007,(P\_rwandensis:0.00988,(P\_cyprapedii:0.00588,P\_sp\_At-9b:0.00587):0.0078):0.00298);

[966] tree 't966'=[&R] (P\_sp\_GM01:5.4E-4,(P\_dispersa:5.4E-4,(P\_eucrina:0.0245,P\_wallisii:0.01587):0.01596):0.00791,(((P\_agglomerans:0.0,P\_vagans:0.0,P\_deleyi:0.0,P\_anthophila:0.0,P\_sp\_aB:0.0):0.00765,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.5E-4,(P\_allii:0.00756,P\_ananatis:5.5E-4):0.01549):0.05668,(P\_brenneri:5.5E-4,(P\_septica:0.01576,P\_conspicua:0.00779):5.4E-4):5.5E-4):0.00802):0.01549,((E\_billingiae:0.04445,(E\_pyriifoliae:0.09203,E\_tasmaniensis:0.02822):0.08069):0.05249,(P\_sp\_A4:0.0857,(T\_morbirosei:0.0668,(T\_sp\_NML\_06:0.10045,T\_ptyseos:0.10599):0.03341):0.06517):0.03351):0.02268):0.03537,((P\_sp\_At-9b:0.01563,P\_cyprapedii:5.5E-4):0.03026,(P\_rwandensis:0.0468,P\_rodasii:0.0176):0.00798):0.01717):5.4E-4);

[967] tree 't967'=[&R] (((P\_sp\_GM01:5.4E-4,(P\_rodasii:0.00472,P\_rwandensis:0.00474):0.00483):0.0138,((P\_wallisii:0.03369,P\_dispersa:0.00869):0.00585,(P\_cyprapedii:0.01975,P\_sp\_At-9b:0.02894):0.0099):0.01035):0.01913,((T\_morbirosei:0.02301,(T\_ptyseos:0.0271,T\_sp\_NML\_06:0.04124):0.0271):0.13974,P\_eucrina:0.06205):0.01425,(P\_septica:0.02692,(P\_sp\_A4:0.07987,((E\_billingiae:0.03093,(E\_pyriifoliae:0.03162,E\_tasmaniensis:0.02886):0.04376):0.10831,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.02395,(P\_allii:0.01909,P\_ananatis:0.00947):5.5E-4):0.02481,((P\_deleyi:0.01915,(P\_anthophila:0.01426,(P\_vagans:0.0,P\_agglomerans:0.0,P\_sp\_aB:0.0):5.5E-4):5.5E-4):0.03239,(P\_brenneri:0.00955,P\_conspicua:0.01089):0.00969):0.0095):0.0326):0.01093):0.0045):0.02812);

[968] tree 't968'=[&R] (((P\_brenneri:0.0,P\_conspicua:0.0):5.5E-4,(((P\_agglomerans:0.0,P\_vagans:0.0):0.00756,P\_sp\_aB:5.5E-4):0.0085,(P\_anthophila:0.01545,P\_deleyi:0.008):0.00658):0.03069):0.00762,(P\_dispersa:0.01539,(P\_eucrina:0.03084,(P\_sp\_GM01:0.00693,((P\_rwandensis:0.01494,P\_rodasii:5.3E-4):0.00814,P\_wallisii:0.00746):5.5E-4):0.01547):5.4E-4):0.01424):0.02345,(((P\_s\_stewartii:0.00754,P\_s\_indologenes:5.5E-4):0.00748,(P\_ananatis:5.5E-4,P\_allii:0.02277):5.3E-4):0.00745,((E\_billingiae:0.03043,(E\_pyriifoliae:0.03886,E\_tasmaniensis:5.5E-4):0.03071):0.02779,T\_morbirosei:0.16927):0.00355):5.4E-4,((T\_ptyseos:0.04301,T\_sp\_NML\_06:0.04466):0.05485,(P\_sp\_A4:0.082,(P\_septica:0.01706,(P\_sp\_At-9b:0.00567,P\_cyprapedii:0.00357):0.0271):0.00876):0.0105):0.00625);

[969] tree 't969'=[&R] (P\_rwandensis:0.01357,(P\_rodasii:0.05066,P\_sp\_GM01:0.00564):0.00851,(((P\_sp\_At-9b:5.4E-4,P\_cyprapedii:0.02012):0.02067,(P\_sp\_A4:0.12223,(P\_septica:0.00672,(((P\_agglomerans:0.0,P\_vagans:0.0):5.5E-4,(P\_conspicua:0.00673,P\_anthophila:0.00669):5.5E-4):5.5E-4,(P\_sp\_aB:0.01357,P\_deleyi:5.4E-4):0.01343):0.01343,(P\_brenneri:0.00628,((T\_ptyseos:0.0391,(T\_sp\_NML\_06:0.09291,T\_morbirosei:0.07835):0.06286):0.2386,P\_eucrina:0.01843):0.03194,((E\_billingiae:0.07466,(E\_pyriifoliae:0.05598,E\_tasmaniensis:0.05538):0.08226):0.0434,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.4E-4,(P\_allii:5.2E-4,P\_ananatis:0.00677):0.0135):0.04226):5.3E-4):0.00759):5.5E-4):0.00692):0.00639):0.00816):0.00644,(P\_dispersa:5.4E-4,P\_wallisii:0.0068):5.4E-4):0.00692);

[970] tree 't970'=[&R] (((((P\_ananatis:0.00685,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01938,P\_allii:0.01419):0.00541):0.03288,((P\_brenneri:0.00884,P\_conspicua:0.01366):0.00804,(P\_anthophila:0.01329,(P\_deleyi:0.00769,(P\_vagans:0.00193,(P\_agglomerans:0.0,P\_sp\_aB:0.0):5.5E-4):0.00196):0.00227):0.0105):0.01741):0.01439,(P\_septica:0.02769,(P\_sp\_A4:0.06433,((T\_morbirosei:0.04611,(T\_ptyseos:0.08615,T\_sp\_NML\_06:0.06791):0.0273):0.11633,(E\_billingiae:0.04833,(E\_pyriifoliae:0.02447,E\_tasmaniensis:0.02337):0.0

486):0.08553):0.02955):0.02478):0.01322):0.02857,(P\_sp\_At-9b:0.00247,P\_cyprapedii:0.01605):0.01218):0.01504,(P\_eucrinea:0.04879,P\_sp\_GM01:0.01054):0.00196,((P\_dispersa:0.00906,P\_rwandensis:0.01357):0.00672,(P\_rodasii:0.00889,P\_wallisii:0.02467):0.00137):0.00396);

[971] tree 't971'=[&R] ((P\_agglomerans:0.006,(P\_brenneri:0.0059,P\_conspicua:5.3E-4):0.00573):0.01757,(P\_sp\_aB:0.01758,P\_vagans:0.006):0.01157,(P\_anthophila:5.5E-4,(P\_deleyi:0.03016,((P\_allii:0.0055,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01804,P\_ananatis:5.4E-4):5.5E-4):0.02237,(P\_septica:0.0705,((P\_sp\_A4:0.0337,(T\_morbirosei:0.06185,(T\_ptyseos:0.05103,T\_sp\_NML\_06:0.08922):0.08538):0.09608):0.02921,((P\_dispersa:0.01835,(P\_eucrinea:0.04325,P\_wallisii:0.00591):5.4E-4):0.00597,(P\_rodasii:0.0059,(P\_sp\_GM01:0.02482,((P\_sp\_At-9b:0.01227,P\_cyprapedii:5.5E-4):0.0442,P\_rwandensis:0.00598):5.5E-4):0.01234):0.03124):0.0069,(E\_billingiae:0.03516,(E\_pyrifoliae:0.03345,E\_tasmaniensis:0.00848):0.09641):0.06713):0.00825):0.01932):0.03107):0.01342):0.00803):5.5E-4);

[972] tree 't972'=[&R] (((P\_brenneri:0.0035,P\_conspicua:0.03878):0.01721,(((P\_s\_indologenes:0.00265,P\_s\_stewartii:5.5E-4):0.04121,(P\_ananatis:0.03043,P\_allii:0.01796):0.01148):0.04352,((P\_sp\_A4:0.16218,((E\_pyrifoliae:0.06503,E\_tasmaniensis:0.05613):0.11392,(E\_billingiae:0.12698,(T\_sp\_NML\_06:0.11901,(T\_morbirosei:0.08451,T\_ptyseos:0.06107):0.05516):0.17616):0.01736):0.03599):0.03895,(P\_septica:0.08238,(((P\_rodasii:0.04344,P\_dispersa:0.0401):0.00602,P\_sp\_GM01:0.03791):0.00961,((P\_rwandensis:0.035,P\_wallisii:0.03976):0.00748,P\_eucrinea:0.10257):0.01526):0.00943,(P\_sp\_At-9b:0.01636,P\_cyprapedii:0.01402):0.0382):0.04562):0.00416):0.04586):0.00944):0.01748,P\_agglomerans:0.02221,(P\_anthophila:0.02208,(P\_vagans:0.01915,(P\_sp\_aB:0.02516,P\_deleyi:0.0281):0.00288):5.5E-4):0.00489);

[973] tree 't973'=[&R] (P\_rodasii:0.03794,P\_rwandensis:0.02313,(P\_sp\_GM01:0.01154,((P\_sp\_At-9b:0.01408,P\_cyprapedii:0.00929):0.02759,(((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00463):0.03212,(P\_allii:0.02393,P\_ananatis:5.5E-4):0.01063):0.02908,(P\_septica:0.06117,(T\_morbirosei:0.06436,(T\_sp\_NML\_06:0.10226,T\_ptyseos:0.07766):0.04332):0.17428):0.01981):0.00484,((P\_sp\_aB:5.5E-4,((P\_deleyi:0.02536,(P\_anthophila:0.01861,P\_vagans:0.00169):0.00801):0.00455,(P\_agglomerans:0.00904,(P\_brenneri:0.01428,P\_conspicua:5.4E-4):0.02411):0.00484):0.00949):0.05813,(P\_sp\_A4:0.05485,(E\_billingiae:0.07284,(E\_pyrifoliae:0.04346,E\_tasmaniensis:0.04767):0.05609):0.09714):0.02924):0.01162):0.04728,(P\_eucrinea:0.10343,(P\_wallisii:0.045,P\_dispersa:0.01516):0.01387):5.3E-4):0.00637):0.00976):0.00406);

[974] tree 't974'=[&R] (P\_brenneri:0.00905,P\_conspicua:0.00799,(((P\_s\_indologenes:0.0058,P\_s\_stewartii:0.00978):0.00268,(P\_allii:0.0093,P\_ananatis:0.00843):0.00205):0.01514,(((E\_pyrifoliae:0.02352,E\_tasmaniensis:0.04339):0.06124,E\_billingiae:0.02886):0.01425,(((P\_eucrinea:0.03479,(P\_sp\_At-9b:0.00824,P\_cyprapedii:0.01652):0.01016,((P\_sp\_GM01:0.00791,(P\_rwandensis:0.01342,P\_rodasii:0.00377):0.00885):0.00362,(P\_wallisii:0.00651,P\_dispersa:0.02983):0.00432):0.01404):0.00606):0.02864,(P\_sp\_A4:0.04616,P\_septica:5.4E-4):0.01667):0.01463,(T\_morbirosei:0.04147,(T\_sp\_NML\_06:0.02998,T\_ptyseos:0.01371):0.03489):0.0214):5.5E-4):0.00914):0.01223,((P\_deleyi:0.01008,(P\_vagans:0.00742,(P\_sp\_aB:0.00404,P\_agglomerans:0.00942):0.0067):0.00942):0.00326,P\_anthophila:5.4E-4):0.0065):0.00862);

[975] tree 't975'=[&R]  
(P\_anthophila:0.00126,((P\_brenneri:0.0,P\_conspicua:0.0):0.01103,(((P\_sp\_A4:0.1025,P\_septica:0.06021):0.01061,((E\_billingiae:0.11114,(E\_pyriifoliae:0.06959,E\_tasmaniensis:0.03568):0.08619):0.02192,((P\_sp\_At-9b:0.00337,P\_cyprapedii:0.01972):0.02233,((P\_sp\_GM01:0.03167,P\_rwandensis:0.00727):0.00769,(P\_rodasii:0.00746,P\_wallisii:0.02452):0.00354):0.00785):0.00936,(P\_dispersa:0.02302,P\_eucrina:0.04085):0.0127):0.01937):0.01275):0.01471,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.02341,(P\_allii:0.00428,P\_ananatis:0.02655):0.01038):0.04318,(T\_morbirosei:0.04032,(T\_sp\_NML\_06:0.06701,T\_ptyseos:0.04528):0.02739):0.07677):0.02277):0.01911):0.01248,(P\_sp\_aB:0.01743,(P\_agglomerans:0.00726,(P\_deleyi:0.0113,P\_vagans:0.00371):5.4E-4):0.0028):0.00498);  
[976] tree 't976'=[&R] (P\_sp\_GM01:0.03376,((P\_rwandensis:0.0194,P\_rodasii:0.01149):0.02062,(P\_sp\_At-9b:0.00996,P\_cyprapedii:0.00871):0.0143):0.00667,(P\_dispersa:0.01506,(P\_wallisii:0.01108,(P\_eucrina:0.047,(((P\_ananatis:5.4E-4,(P\_allii:0.00285,(P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00235):0.02148):0.01878):0.03167,((P\_brenneri:0.00235,P\_conspicua:5.4E-4):0.007,((P\_vagans:5.4E-4,(P\_sp\_aB:0.012,P\_agglomerans:0.00749):0.00467):0.00496,(P\_anthophila:0.01672,P\_deleyi:0.01253):0.00235):0.01408):0.02805):0.03229,(P\_sp\_A4:0.10848,(P\_septica:0.04181,((E\_billingiae:0.05326,(E\_pyriifoliae:0.05597,E\_tasmaniensis:0.02734):0.05759):0.09661,(T\_morbirosei:0.094,(T\_ptyseos:0.06617,T\_sp\_NML\_06:0.08458):0.02578):0.06238):0.02611):0.005):0.00706):0.02264):0.00777):0.0075):0.0024);  
[977] tree 't977'=[&R] ((P\_sp\_aB:0.01075,(P\_vagans:0.00811,P\_agglomerans:5.5E-4):0.00285):0.00951,(P\_deleyi:0.0088,(P\_brenneri:0.01458,P\_conspicua:0.01018):0.02189):0.01262,(P\_anthophila:0.02506,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00509,(P\_allii:0.00825,P\_ananatis:0.01092):0.01747):0.04353,((P\_dispersa:0.0397,(P\_eucrina:0.05472,(P\_wallisii:0.03352,(P\_rwandensis:0.04688,P\_rodasii:0.02871):0.01292):0.006):0.01374):0.04893,(((P\_sp\_A4:0.06726,P\_sp\_GM01:0.10841):0.11867,(P\_septica:1.05032,((P\_sp\_At-9b:0.03543,P\_cyprapedii:0.03584):0.0822,(E\_billingiae:0.0499,(E\_pyriifoliae:0.02427,E\_tasmaniensis:0.01219):0.05009):0.06992):0.17942):0.05071):0.11814,(T\_morbirosei:0.11994,(T\_ptyseos:0.0563,T\_sp\_NML\_06:0.05665):0.02135):0.05233):0.02923):0.02136):0.02604):0.01258);  
[978] tree 't978'=[&R] ((P\_wallisii:0.02698,(P\_sp\_GM01:0.01755,((P\_sp\_At-9b:0.01466,P\_cyprapedii:0.00968):0.0179,(P\_rodasii:0.0179,P\_rwandensis:0.01656):0.01697):0.00445):5.4E-4):0.02857,(((E\_pyriifoliae:0.035,E\_tasmaniensis:0.01964):0.08061,(P\_septica:0.04429,((P\_brenneri:0.00959,P\_conspicua:5.4E-4):0.02661,((P\_agglomerans:0.00475,(P\_vagans:0.0,P\_sp\_aB:0.0):0.00476):5.3E-4,(P\_deleyi:0.02794,P\_anthophila:0.03132):0.00838):0.00735):0.01715,(P\_sp\_A4:0.05716,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01814,(P\_allii:0.00341,P\_ananatis:0.0098):5.4E-4):0.01747):0.01698):0.04635):0.01972):0.00616,(E\_billingiae:0.07317,(T\_ptyseos:0.01758,(T\_morbirosei:0.06805,T\_sp\_NML\_06:0.02078):0.01341):0.12632):0.03871):0.01556,(P\_dispersa:0.04449,P\_eucrina:0.02775):0.00618);  
[979] tree 't979'=[&R] (((T\_sp\_NML\_06:0.01454,(T\_morbirosei:0.00188,T\_ptyseos:0.01328):0.00497):0.0436,(P\_sp\_At-9b:0.0,P\_cyprapedii:0.0):5.5E-4):0.00685,P\_eucrina:5.4E-4):0.0069,P\_dispersa:0.00704,(((P\_rodasii:0.12842,(P\_rwandensis:5.5E-4,(E\_billingiae:0.01388,(E\_pyriifoliae:0.01404,E\_tasmaniensis:5.5E-4):0.00721):0.01433):0.0033):0.00369,(P\_wallisii:5.5E-4,(P\_sp\_GM01:0.0069,P\_septica:0.01388):5.4E-4):5.4E-4):5.5E-4,(P\_sp\_A4:0.07051,((P\_brenneri:0.0,P\_vagans:0.0,P\_deleyi:0.0,P\_agglomerans:0.0,P\_sp\_aB:0.0,P\_anthophila:0.0,P\_consp

icua:0.0):0.00697,((P\_s\_indologenes:0.0,P\_allii:0.0,P\_ananatis:0.0):5.5E-4,P\_s\_stewartii:0.00696):5.5E-4):0.01384):0.0148):0.00676);

[980] tree 't980'=[&R] (((T\_morbirosei:5.5E-4,(T\_sp\_NML\_06:0.09058,T\_ptyseos:5.3E-4):0.02935):0.19708,((E\_billingiae:0.16894,(P\_eucrina:0.12248,(E\_pyrifoliae:0.0286,E\_tasmaniensis:0.164):0.30112):0.07904):0.13677,P\_wallisii:5.4E-4):0.05402):0.01251,(((P\_septica:0.0,P\_dispersa:0.0):5.3E-4,(((P\_conspicua:0.04894,(P\_anthophila:0.03009,(P\_vagans:0.0,P\_deleyi:0.0):5.5E-4):0.01759):0.04197,(P\_brenneri:1.95667,P\_rodasii:0.05926):0.15727):0.01374,(P\_agglomerans:0.0,P\_sp\_aB:0.0):5.4E-4):0.06222,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.02841,(P\_ananatis:0.0,P\_allii:0.0):0.02992):0.03284):0.02986):0.03191):5.5E-4,P\_rwandensis:5.5E-4,((P\_sp\_GM01:0.02841,P\_sp\_A4:0.09192):5.4E-4,(P\_sp\_At-9b:0.0,P\_cyprapedii:0.0):0.02848):5.4E-4);

[981] tree 't981'=[&R] (P\_sp\_GM01:0.03516,(P\_rodasii:0.0755,P\_rwandensis:0.01487):5.5E-4,(P\_sp\_A4:0.02115,(P\_wallisii:0.02262,(((T\_morbirosei:0.0126,(T\_ptyseos:0.0431,T\_sp\_NML\_06:0.04131):0.06717):0.08205,P\_dispersa:0.00982):5.5E-4,P\_septica:0.03486):5.4E-4,(((P\_deleyi:0.03055,P\_vagans:5.5E-4):5.4E-4,(P\_agglomerans:0.00665,P\_sp\_aB:5.4E-4):0.00334,P\_anthophila:0.01002):0.00958):0.02154,(P\_brenneri:0.00639,P\_conspicua:0.01179):0.00634):0.02588,(P\_ananatis:0.00688,((P\_s\_indologenes:0.00329,P\_s\_stewartii:5.5E-4):0.02766,P\_allii:0.01132):0.00247):0.01178):0.02716,((P\_cyprapedii:0.00686,P\_sp\_At-9b:0.01348):5.4E-4,(E\_billingiae:0.03901,(E\_pyrifoliae:0.01643,E\_tasmaniensis:0.01174):0.02256):0.01751):0.00603):0.00367):0.00666,P\_eucrina:0.0104):0.00421):0.00345):0.0076);

[982] tree 't982'=[&R] ((P\_rodasii:0.02308,P\_rwandensis:0.01624):0.00392,(P\_sp\_GM01:0.01592,(P\_cyprapedii:0.03388,P\_sp\_At-9b:0.00833):0.01882):0.00607,(P\_wallisii:0.04151,(((T\_sp\_NML\_06:0.06307,(T\_morbirosei:0.05756,T\_ptyseos:0.07528):0.03772):0.13912,(E\_billingiae:0.08706,(E\_pyrifoliae:0.04169,E\_tasmaniensis:0.03997):0.10909):0.07475):0.05447,(((P\_brenneri:0.0062,P\_conspicua:0.03265):0.01887,(P\_anthophila:0.01484,((P\_sp\_aB:0.015,(P\_agglomerans:0.00692,P\_deleyi:0.06243):5.5E-4):0.00719,P\_vagans:0.01744):5.4E-4):0.02046):0.01746,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.0468,(P\_allii:0.01606,P\_ananatis:0.01992):0.01792):0.05727):0.01509,P\_septica:0.03907):0.02217,P\_sp\_A4:0.07833):0.0295):0.02438,(P\_eucrina:0.08227,P\_dispersa:0.03618):0.01399):0.01308):0.01815);

[983] tree 't983'=[&R] ((P\_brenneri:5.4E-4,P\_conspicua:0.02077):0.02081,(P\_anthophila:0.01049,((P\_sp\_A4:0.03753,((P\_wallisii:0.01018,(P\_sp\_At-9b:0.00521,P\_cyprapedii:0.00521):0.00719):0.00876,((P\_sp\_GM01:0.01898,(P\_eucrina:0.07718,P\_dispersa:5.4E-4):0.02372):0.01139,(P\_rodasii:0.00579,P\_rwandensis:0.00471):0.03695):0.00672):0.01118):0.00543,(P\_septica:0.02795,((E\_pyrifoliae:0.01386,E\_tasmaniensis:0.00717):0.02618,(E\_billingiae:0.06553,(T\_morbirosei:0.01252,(T\_sp\_NML\_06:0.05996,T\_ptyseos:0.03546):6.9E-4):0.06668):0.01608):0.0255,(P\_allii:0.01031,((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00508):0.01617,P\_ananatis:5.5E-4):0.00513):0.01053):5.5E-4):0.01013):0.02276):0.0049):5.4E-4,P\_vagans:5.5E-4,((P\_sp\_aB:0.01523,P\_deleyi:0.00458):6.6E-4,P\_agglomerans:0.0051):5.0E-4);

[984] tree 't984'=[&R] (((P\_sp\_GM01:0.0,P\_wallisii:0.0):5.4E-4,(P\_sp\_A4:0.03081,(P\_rodasii:0.0,P\_rwandensis:0.0):5.4E-4):0.01815):0.00599,P\_eucrina:0.01806):5.5E-4,(P\_allii:0.0,P\_ananatis:0.0,P\_s\_indologenes:0.0):5.5E-4,((P\_sp\_At-



9b:0.01184,P\_cyprapedii:0.00109):0.01735,(((P\_agglomerans:0.0,P\_vagans:0.0,P\_anthophila:0.0,P\_sp\_aB:0.0):0.00598,P\_deleyi:5.5E-4):0.01214,((P\_brenneri:0.0,P\_conspicua:0.0):5.4E-4,(P\_dispersa:5.3E-4,((E\_pyrifoliae:0.0,E\_tasmaniensis:0.0):0.02995,E\_billingiae:0.03439):0.01647,((T\_morbirosei:0.00824,(T\_ptyseos:0.01,T\_sp\_NML\_06:0.00817):0.01187):0.02264,P\_septica:5.4E-4):0.00617):0.00592):0.00603):5.4E-4):0.00605):5.5E-4,P\_s\_stewartii:0.00601):5.5E-4);  
[985] tree 't985'=[&R]  
(P\_agglomerans:0.0118,(P\_sp\_aB:0.02354,P\_vagans:0.00387):0.00775,(P\_deleyi:0.01493,(P\_anthophila:0.00622,((P\_brenneri:0.02037,P\_conspicua:5.4E-4):0.02432,(P\_septica:0.06646,(((P\_sp\_At-9b:0.01573,P\_cyprapedii:0.02382):0.01676,(P\_dispersa:0.0448,(P\_sp\_GM01:0.03096,(P\_rodasii:0.01898,P\_rwandensis:0.02184):0.01341):0.01976,(P\_eucrina:0.04005,P\_wallisii:0.02037):0.00646):0.01333):0.01281):0.04792,((E\_billingiae:0.06096,(E\_pyrifoliae:0.05587,E\_tasmaniensis:0.036):0.06258):0.04433,(P\_sp\_A4:0.08463,(T\_morbirosei:0.08461,(T\_ptyseos:0.04352,T\_sp\_NML\_06:0.06582):0.04365):0.14613):0.02745):0.01748):0.00896,((P\_s\_indologenes:0.00441,P\_s\_stewartii:0.00721):0.05271,(P\_allii:0.02763,P\_ananatis:0.00797):0.01584):0.06682):0.00918):0.0203):0.01018):0.01105):0.0028);  
[986] tree 't986'=[&R]  
(P\_sp\_aB:0.0215,P\_vagans:0.0098,(P\_agglomerans:0.0103,(P\_anthophila:0.02936,(P\_deleyi:0.02815,(((P\_allii:0.0084,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.0363,P\_ananatis:0.01124):0.00975):0.18253,(P\_septica:0.12763,(P\_sp\_A4:0.3606,((T\_sp\_NML\_06:0.17951,(T\_morbirosei:0.2484,T\_ptyseos:0.16358):0.08286):0.60434,(E\_billingiae:0.12415,(E\_pyrifoliae:0.06633,E\_tasmaniensis:0.05377):0.25667):0.17105):0.09537,(P\_sp\_At-9b:0.02871,P\_cyprapedii:0.02754):0.06825,(P\_sp\_GM01:0.04857,(P\_rodasii:0.01578,P\_rwandensis:0.01719):0.04536):0.03842,(P\_dispersa:0.0179,(P\_eucrina:0.12573,P\_wallisii:0.03066):0.01368):0.01039):0.0331):0.05514):0.02447):0.0209):0.03834):0.03904,(P\_brenneri:0.02765,P\_conspicua:0.02121):0.01315):0.02984):0.01601):0.01732):0.00499);  
[987] tree 't987'=[&R]  
(P\_sp\_aB:0.04022,P\_agglomerans:0.0056,(P\_vagans:0.02141,(P\_deleyi:0.06032,(P\_anthophila:0.02042,(((P\_s\_indologenes:0.00511,P\_s\_stewartii:5.3E-4):0.07285,(P\_allii:0.06288,P\_ananatis:0.07447):0.07017):0.07881,(P\_septica:0.14294,(P\_sp\_A4:0.22504,(((P\_sp\_At-9b:0.06122,P\_cyprapedii:0.04395):0.05515,(P\_sp\_GM01:0.08305,(P\_rodasii:0.00365,P\_rwandensis:0.04188):0.09069):0.01369,(P\_wallisii:0.07375,(P\_dispersa:0.13532,P\_eucrina:0.06797):0.02912):0.01909):0.04267):0.09668,((T\_morbirosei:0.17551,(T\_sp\_NML\_06:0.36746,T\_ptyseos:0.23136):0.09269):0.44998,(E\_billingiae:0.23364,(E\_pyrifoliae:0.06766,E\_tasmaniensis:0.16604):0.14378):0.18522):0.06458):0.04741):0.02774):0.03499):0.06708,(P\_brenneri:0.01325,P\_conspicua:0.03894):0.02374):0.0507):0.00646):0.01189):0.00636);  
[988] tree 't988'=[&R] (((P\_sp\_At-9b:0.03316,P\_cyprapedii:0.01897):0.06428,(P\_sp\_A4:0.06526,((E\_billingiae:0.13457,(E\_pyrifoliae:0.07477,E\_tasmaniensis:0.05538):0.09475):0.09601,(T\_sp\_NML\_06:0.09071,(T\_morbirosei:0.05673,T\_ptyseos:0.11793):0.0652):0.04577):0.07899):0.02406):0.01902,(((P\_agglomerans:0.0,P\_deleyi:0.0):0.00549,(((P\_brenneri:0.0,P\_conspicua:0.0):0.01678,(P\_anthophila:0.01112,P\_vagans:0.00553):0.00559):0.00561,P\_sp\_aB:0.00552):5.5E-4):0.02527,(P\_septica:0.01644,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01479,(P\_ananatis:0.04679,P\_allii:0.00758):0.00826):0.02892):0.01066):0.02774,(P\_sp\_GM01:0.04025,(P\_eucrina:0.06193,(P\_dispersa:0.00616,P\_wallisii:0.01071):0.01843):0.01649,(P\_rodasii:0.01092,P\_rwandensis:0.02332):0.01921):0.01334):0.01034);

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[989] tree 't989'=[&R]
(((P_sp_A4:0.1016,((P_deleyi:0.0336,(P_vagans:0.00922,(P_sp_aB:0.02349,(P_anthophila:0.01885,P_agglomerans:0.00939):0.00456):5.5E-4):5.4E-4):0.02573,(P_conspicua:0.05365,P_brenneri:0.02082):0.01187):0.0423):0.00602,((P_septica:0.0665,((P_s_indologenes:0.0,P_s_stewartii:0.0):0.04329,(P_allii:0.01022,P_ananatis:0.02652):0.01011):0.03735):0.02398,(E_billingiae:0.06389,(E_pyrifoliae:0.03625,E_tasmaniensis:0.05621):0.04916):0.04967):5.4E-4):0.03088,(P_sp_At-9b:0.00467,P_cypripedii:0.00465):0.01443):0.0242,(P_rodasii:0.0188,P_rwandensis:0.00497):0.00476,((P_dispersa:0.02419,P_sp_GM01:0.02444):0.0141,((P_eucrina:0.06445,(T_morbirosei:0.08114,(T_ptyseos:0.09512,T_sp_NML_06:0.06282):0.03162):0.19322):0.04347,P_wallisii:0.00885):0.01009):5.5E-4);
[990] tree 't990'=[&R]
(((((((P_s_indologenes:0.0,P_s_stewartii:0.0):0.01795,(P_allii:0.02963,P_ananatis:0.03522):0.01551):0.08232,((T_morbirosei:0.13502,(T_ptyseos:0.03858,T_sp_NML_06:0.06951):0.10192):0.34584,(E_billingiae:0.10279,(E_pyrifoliae:0.10896,E_tasmaniensis:5.4E-4):0.16602):0.09082):0.0437):0.022,(P_septica:0.04484,((P_rwandensis:0.01251,(P_wallisii:0.07057,(P_dispersa:0.06018,P_eucrina:0.1752):0.01424):0.05332):0.01057,(P_rodasii:0.02423,P_sp_GM01:0.08382):0.01176):0.04395,(P_sp_At-9b:0.02316,P_cypripedii:0.03572):0.04207):0.02968):0.02718):0.0487,P_conspicua:0.02254):5.3E-4,P_brenneri:5.5E-4):0.01698,P_sp_A4:0.14545):0.01845,(P_agglomerans:5.5E-4,P_vagans:0.02228):5.4E-4,((P_deleyi:0.06124,P_anthophila:0.01056):0.01232,P_sp_aB:0.05856):0.01071);
[991] tree 't991'=[&R] ((P_conspicua:0.02524,P_brenneri:5.4E-4):0.04001,((P_allii:0.01672,((P_s_indologenes:5.5E-4,P_s_stewartii:0.01282):0.06771,P_ananatis:5.5E-4):0.00826):0.10504,(P_septica:0.08333,((E_billingiae:0.14306,(E_pyrifoliae:0.10965,E_tasmaniensis:0.14943):0.11439):0.23596,((T_morbirosei:0.08041,(T_ptyseos:0.10136,T_sp_NML_06:0.12551):0.07876):0.19115,(P_sp_A4:0.2455,((P_sp_At-9b:0.07942,P_cypripedii:0.07769):0.04885,(P_eucrina:0.15132,(P_dispersa:0.0848,(P_wallisii:0.05215,(P_sp_GM01:0.02688,(P_rodasii:0.01386,P_rwandensis:0.01012):0.04928):0.03206):0.01445):0.02274):0.0503):0.08661):0.04889):0.06916):0.01817):0.05497):0.06147):0.02446,(P_deleyi:0.02549,P_anthophila:0.05122):0.01279,((P_agglomerans:0.03974,P_sp_aB:0.0523):0.01096,P_vagans:5.5E-4):0.01245);
[992] tree 't992'=[&R] ((P_deleyi:0.01041,P_agglomerans:0.0084):0.00204,P_sp_aB:0.00205):5.5E-4,P_anthophila:0.00608,(P_vagans:0.01004,((P_ananatis:0.00499,(P_allii:0.01853,(P_s_indologenes:5.5E-4,P_s_stewartii:0.00206):0.02234):0.00925):0.05501,(((P_wallisii:0.01625,(P_dispersa:0.01568,P_sp_GM01:0.02382):0.01222):0.0073,(P_rwandensis:0.02312,P_rodasii:0.00748):0.00573,P_eucrina:0.06738):0.00533):0.02704,(P_sp_At-9b:0.0139,P_cypripedii:0.01475):0.00487):0.02218,((P_sp_A4:0.06465,P_septica:0.06362):0.01293,((T_morbirosei:0.06136,(T_sp_NML_06:0.06302,T_ptyseos:0.05195):0.02524):0.11751,(E_billingiae:0.06833,(E_pyrifoliae:0.00975,E_tasmaniensis:0.00688):0.03854):0.05515):0.03469):0.00496):0.02066):0.01609,(P_brenneri:0.02101,P_conspicua:0.01704):0.00597):0.00672):0.00433);
[993] tree 't993'=[&R]
(P_sp_GM01:0.01349,(((P_eucrina:0.13651,(P_septica:0.0947,(P_sp_A4:0.3362,(((P_s_indologenes:0.0,P_s_stewartii:0.0):0.02084,(P_ananatis:0.0288,P_allii:0.02066):0.00971):0.06802,((P_brenneri:0.0,P_conspicua:0.0):0.02705,(P_anthophil a:0.05158,(P_deleyi:5.5E-4,(P_sp_aB:0.08225,(P_agglomerans:0.0,P_vagans:0.0):5.5E-4):0.0097):0.04348):0.02548):0.06272):0.04709,((T_sp_NML_06:0.33066,(T_morbirosei:0.12081,T_ptyseos:0.13051):0.13311
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):0.16622,(E\_billingiae:0.22528,(E\_pyriifoliae:0.09224,E\_tasmaniensis:0.05206):0.10551):0.14207):0.12149):0.1089):6.4  
E-4):0.03376):0.02047,P\_dispersa:0.02039):0.01061,P\_wallisii:0.03035):0.04544,((P\_sp\_At-  
9b:0.02695,P\_cyprapedii:0.02761):0.0276,(P\_rodasii:0.09723,P\_rwandensis:0.03463):0.02224):0.03052);  
[994] tree 't994'=[&R]  
(((P\_brenneri:0.01146,P\_conspicua:0.01064):0.01552,((P\_allii:0.01288,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.0150  
5,P\_ananatis:0.01562):0.00967):0.05806,(P\_septica:0.06004,((E\_billingiae:0.10251,(E\_pyriifoliae:0.05189,E\_tasmaniensi  
s:0.03322):0.12319):0.18851,(((P\_sp\_At-  
9b:0.01688,P\_cyprapedii:0.01503):0.01468,(P\_dispersa:0.01934,((P\_sp\_GM01:0.03282,(P\_rodasii:0.02216,P\_rwandensis:0.0  
0799):0.01737):0.01987,(P\_eucrinea:0.08002,P\_wallisii:0.02411):0.01046):0.00911):0.03112):0.05737,(P\_sp\_A4:0.10023,(T  
\_sp\_NML\_06:0.08215,(T\_morbirosei:0.12439,T\_ptyseos:0.09023):0.03205):0.10271):0.04702):0.02088):0.02158):0.02179):0.  
02802):0.03508,(P\_agglomerans:0.00359,(P\_vagans:0.0,P\_sp\_aB:0.0):0.00724):0.00367,(P\_deleyi:0.00722,P\_anthophila:0.0  
0359):0.00361);  
[995] tree 't995'=[&R] (P\_sp\_aB:0.00873,P\_vagans:0.01348,(P\_agglomerans:0.00936,(((P\_brenneri:5.4E-  
4,P\_conspicua:0.01082):0.01645,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.0314,(P\_allii:0.00651,P\_ananatis:0.00205)  
:0.01031):0.09222,(((T\_sp\_NML\_06:0.06881,(T\_morbirosei:0.06186,T\_ptyseos:0.0564):0.02021):0.10603,(E\_billingiae:0.0  
4635,(E\_pyriifoliae:0.04488,E\_tasmaniensis:0.03207):0.06954):0.08635):0.05782,(P\_sp\_A4:0.10129,(P\_sp\_At-  
9b:0.02046,P\_cyprapedii:0.01049):0.03163,(P\_eucrinea:0.06918,((P\_sp\_GM01:0.01969,P\_wallisii:0.02662):0.00756,(P\_rodas  
ii:0.01773,(P\_dispersa:0.0294,P\_rwandensis:0.01289):0.01139):0.01535):0.00458):0.04682):0.02928):0.01028):0.02278,P  
septica:0.04263):0.01379):0.03742):0.02502,(P\_deleyi:0.03531,P\_anthophila:0.02782):0.00977):0.00602):0.00764);  
[996] tree 't996'=[&R] ((P\_sp\_At-  
9b:0.00683,P\_cyprapedii:0.00658):0.00894,(((E\_billingiae:0.0512,(E\_pyriifoliae:0.05024,E\_tasmaniensis:0.02495):0.0233  
8):0.10411,((P\_septica:0.03808,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00442,(P\_ananatis:0.00445,P\_allii:5.5E-  
4):5.4E-4):0.03667,(((P\_anthophila:0.0,P\_vagans:0.0):5.4E-4,(P\_agglomerans:0.00902,(P\_deleyi:5.5E-  
4,P\_sp\_aB:0.00445):0.00446):0.0045):0.00449,(P\_brenneri:0.00939,P\_conspicua:0.09365):0.00422):7.7E-  
4):0.02798):0.01453,(P\_sp\_A4:0.03682,(T\_morbirosei:0.04409,(T\_sp\_NML\_06:0.06333,T\_ptyseos:0.02603):0.02022):0.08616)  
:0.01302):0.04009):0.00831,(P\_eucrinea:0.05151,P\_dispersa:0.01076):0.03101):0.00998,(P\_sp\_GM01:0.03222,(P\_wallisii:0.  
01487,(P\_rodasii:0.01886,P\_rwandensis:0.01315):0.01759):0.00935):0.00719);  
[997] tree 't997'=[&R] (P\_eucrinea:0.02544,(P\_sp\_GM01:0.00832,P\_wallisii:5.5E-  
4):0.00793,(P\_dispersa:0.00847,((P\_sp\_At-9b:0.01702,P\_cyprapedii:5.4E-  
4):0.01694,((P\_rwandensis:0.01689,P\_rodasii:0.01696):0.01705,(((P\_anthophila:0.0083,(P\_vagans:0.00838,P\_deleyi:0.00  
834):5.5E-4):0.008,(P\_agglomerans:0.00823,P\_sp\_aB:5.5E-4):5.3E-  
4):0.02538,(P\_brenneri:0.01686,P\_conspicua:0.01668):5.5E-4):0.02482,(((P\_s\_indologenes:0.01679,P\_s\_stewartii:5.4E-  
4):0.03783,(P\_ananatis:0.00865,P\_allii:0.02569):0.00474):0.04489,(P\_sp\_A4:0.12425,((T\_morbirosei:0.05225,(T\_ptyseos:  
0.11646,T\_sp\_NML\_06:0.03932):0.04865):0.24374,(E\_billingiae:0.13334,(E\_pyriifoliae:0.03922,E\_tasmaniensis:0.06563):0.  
15777):0.0892):0.05918):0.03877):0.02605,P\_septica:0.02584):0.00813):0.0085):5.5E-4):0.00798):5.4E-4);  
[998] tree 't998'=[&R]  
(P\_sp\_A4:0.12883,(((P\_dispersa:0.01041,(P\_eucrinea:0.08365,P\_wallisii:0.01784):0.00755):0.01291,(P\_sp\_GM01:0.03992,(P  
\_rodasii:0.03,P\_rwandensis:0.03347):0.02839):0.02582):0.08911,(P\_ananatis:0.00398,(P\_allii:0.01746,(P\_s\_indologenes:  
0.0,P\_s\_stewartii:0.0):0.02775):0.01405):0.06614):0.03245,((P\_septica:0.0581,(P\_sp\_At-

9b:0.02465,P\_cyripedii:0.03627):0.03737):0.00695,(((P\_brenneri:0.00296,P\_conspicua:0.01281):0.02318,(P\_vagans:0.00319,(P\_sp\_aB:0.00806,(P\_anthophila:0.01624,P\_deleyi:0.03067):0.01519):0.01599,P\_agglomerans:0.00391):0.00581):0.02236):0.03209,((T\_morbirosei:0.1027,(T\_ptyseos:0.14842,T\_sp\_NML\_06:0.10392):0.04048):0.14915,(E\_billingiae:0.11338,(E\_pyrifoliae:0.02248,E\_tasmaniensis:0.03653):0.11979):0.08823):0.03335):0.00894):0.0082);

[999] tree 't999'=[&R]  
(P\_eucrina:0.0268,P\_septica:0.03863,(((P\_wallisii:0.01329,(P\_sp\_GM01:0.01512,(P\_rodasii:0.01546,P\_rwandensis:0.02186):0.02032):0.00758):0.01241,(P\_sp\_At-9b:0.01025,P\_cyripedii:0.01827):0.02281,(((P\_sp\_A4:0.04964,(T\_morbirosei:0.06689,(T\_sp\_NML\_06:0.09902,T\_ptyseos:0.07666):0.03608):0.12305):0.03385,((E\_billingiae:0.05581,(E\_pyrifoliae:0.03963,E\_tasmaniensis:0.06654):0.04262):0.09251,(P\_allii:0.00772,(P\_ananatis:0.01177,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.5E-4):0.00471):0.0315):0.01089):0.01008,((P\_anthophila:5.3E-4,(P\_deleyi:0.00799,(P\_agglomerans:0.0041,(P\_vagans:5.4E-4,P\_sp\_aB:0.00806):0.00399):5.5E-4):0.00774):0.01583,(P\_brenneri:5.5E-4,P\_conspicua:0.00793):0.0048):0.02475):0.02511):0.01248):0.00999,P\_dispersa:5.4E-4):0.00966);

[1000] tree 't1000'=[&R] (P\_sp\_At-9b:0.00403,P\_cyripedii:5.5E-4,(P\_dispersa:0.00385,((P\_rodasii:5.4E-4,(P\_sp\_GM01:0.0124,P\_rwandensis:5.4E-4):0.00402):0.00429,(P\_wallisii:0.00274,(P\_eucrina:0.0367,(((E\_billingiae:0.04526,(E\_pyrifoliae:0.02954,E\_tasmaniensis:0.04339):0.03159):0.02958,(P\_sp\_A4:0.20099,(T\_sp\_NML\_06:0.02295,(T\_morbirosei:0.0159,T\_ptyseos:0.00463):0.01484):0.05875):0.00326):0.01251,(P\_septica:0.02582,((P\_sp\_aB:0.01094,((P\_allii:0.0,P\_ananatis:0.0):0.00907,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00746):0.02441):0.00539,((P\_anthophila:0.0,P\_brenneri:0.0):5.5E-4,((P\_agglomerans:0.0,P\_vagans:0.0,P\_deleyi:0.0):0.00408,P\_conspicua:0.00408):5.4E-4):5.4E-4):0.00419):0.00776):0.01036):0.00415):0.00535):0.00411):5.3E-4);

[1001] tree 't1001'=[&R] ((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00626,(P\_allii:0.01289,P\_ananatis:5.5E-4):0.01334):0.01378,(((P\_sp\_A4:0.07673,((T\_sp\_NML\_06:0.01627,(T\_ptyseos:0.02162,T\_morbirosei:0.06651):0.01457):0.09701,(E\_billingiae:0.12768,(E\_pyrifoliae:0.02901,E\_tasmaniensis:0.02987):0.09839):0.03449):0.0541):0.0294,(((P\_wallisii:0.02075,(P\_dispersa:0.02087,(P\_rodasii:0.00678,P\_rwandensis:5.5E-4):0.01375):5.4E-4):0.01292,(P\_sp\_At-9b:0.02163,P\_cyripedii:0.02892):0.00634):0.01724,P\_sp\_GM01:0.05071):0.01961):0.00628,P\_septica:0.04788):0.01087,(P\_vagans:0.00638,((P\_deleyi:0.02112,(P\_anthophila:0.01364,P\_eucrina:0.02204):0.01393):0.01369,(P\_conspicua:0.01896,P\_brenneri:0.01173):0.01051,(P\_sp\_aB:0.00683,P\_agglomerans:5.4E-4):5.3E-4):0.01397):5.5E-4):0.02048);

[1002] tree 't1002'=[&R]  
(P\_sp\_GM01:0.0095,(P\_rodasii:0.0,P\_rwandensis:0.0):0.00954):0.0102,P\_cyripedii:0.01909,((P\_dispersa:0.0,P\_sp\_At-9b:0.0):5.5E-4,(((P\_sp\_A4:0.04217,((E\_billingiae:0.01614,(E\_pyrifoliae:0.01716,E\_tasmaniensis:0.01347):0.02469):0.26409,(T\_morbirosei:0.02148,(T\_ptyseos:0.03978,T\_sp\_NML\_06:0.02884):0.02744):0.13195):0.04685):0.02631,(((P\_brenneri:0.0,P\_agglomerans:0.0,P\_deleyi:0.0,P\_anthophila:0.0,P\_conspicua:0.0,P\_vagans:0.0):0.00952,P\_sp\_aB:5.5E-4):0.0112,((P\_allii:5.3E-4,(P\_ananatis:0.00928,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.4E-4):0.01895):0.01935,P\_septica:0.00968):0.00783):0.01997):0.00766,(P\_eucrina:0.00951,P\_wallisii:5.5E-4):0.00137):0.00938):5.5E-4);

[1003] tree 't1003'=[&R] (P\_sp\_GM01:0.01394,(P\_wallisii:0.01024,P\_dispersa:5.4E-4):0.00652,((P\_rodasii:0.01213,(P\_sp\_At-9b:0.00505,P\_cyripedii:5.5E-

4):0.02001):0.00824,(P\_rwandensis:0.00533,(((P\_allii:0.00507,P\_ananatis:5.5E-4):0.02606,(P\_s\_indologenes:0.00979,P\_s\_stewartii:5.5E-4):0.02049):0.02899,(((E\_billingiae:0.05959,(T\_morbirosei:0.07428,(T\_sp\_NML\_06:0.05432,T\_ptyseos:0.034):0.01934):0.1997):0.02509,((E\_pyriifoliae:0.00973,E\_tasmaniensis:0.03467):0.03909,P\_sp\_A4:0.09063):0.01073):0.03312,(P\_septica:0.05669,(P\_eucrina:0.06192,(((P\_vagans:0.00513,(P\_sp\_aB:0.0149,(P\_deleyi:0.01001,P\_anthophila:5.5E-4):5.3E-4):0.005):0.00473,P\_agglomerans:0.0208):0.00504,P\_brenneri:0.00994):5.4E-4,P\_conspicua:0.00485):0.02463):0.00674):0.0159):0.00881):0.01915):0.00636):0.00514);

[1004] tree 't1004'=[&R] ((P\_sp\_aB:0.01675,P\_vagans:0.00856):0.00839,(P\_agglomerans:5.5E-4,P\_deleyi:0.06034):0.00832,(P\_anthophila:0.02555,((P\_septica:0.17832,(((P\_s\_indologenes:0.00823,P\_s\_stewartii:5.5E-4):0.04286,(P\_allii:0.02066,P\_ananatis:0.00469):0.03199):0.14707,(((P\_eucrina:0.31743,P\_sp\_A4:0.25032):0.07397,((E\_billingiae:0.20604,(E\_pyriifoliae:0.08866,E\_tasmaniensis:0.03043):0.03998):0.29894,(T\_morbirosei:0.05806,(T\_ptyseos:0.0612,T\_sp\_NML\_06:0.06939):0.05474):0.22342):0.05253):0.06685,(P\_sp\_GM01:0.05821,((P\_sp\_At-9b:0.02811,P\_cyprapedii:0.02476):0.04736,(P\_rwandensis:0.07029,P\_rodasii:0.03799):0.02789):0.03731,(P\_wallisii:0.07533,P\_dispersa:0.08466):0.02063):0.02429):0.06744):0.04968):0.03831):0.07401,(P\_brenneri:0.03027,P\_conspicua:0.03029):0.01646):0.00614):0.02132);

[1005] tree 't1005'=[&R] (P\_anthophila:0.02591,(P\_brenneri:0.01382,P\_conspicua:0.0098):0.01877,(((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00386):0.01233,(P\_allii:0.01596,P\_ananatis:0.01716):0.01363):0.01561,(P\_septica:0.05349,(((E\_pyriifoliae:0.08144,E\_tasmaniensis:0.02863):0.11759,(E\_billingiae:0.03912,(T\_sp\_NML\_06:0.08946,(T\_morbirosei:0.0853,T\_ptyseos:0.11109):0.07091):0.15598):0.02082):0.06579,((P\_cyprapedii:0.00563,((P\_dispersa:0.02087,(P\_wallisii:0.00775,(P\_sp\_GM01:0.02806,(P\_rodasii:0.01887,P\_rwandensis:0.00659):0.00559):0.00424):0.00765):0.02981,P\_sp\_At-9b:0.0219):0.0039):0.01196,(P\_eucrina:0.05277,P\_sp\_A4:0.08572):0.02197):0.00738):0.01246):0.01351):0.02063,(P\_deleyi:0.02236,(P\_agglomerans:0.0128,(P\_sp\_aB:0.03479,P\_vagans:0.00909):0.00578):0.00834):0.00685):0.00753);

[1006] tree 't1006'=[&R] (((((P\_s\_indologenes:0.0026,P\_s\_stewartii:0.00255):0.02343,(P\_allii:0.00921,P\_ananatis:0.01622):0.00789):0.03916,(P\_septica:0.03963,(P\_sp\_A4:0.04806,((T\_sp\_NML\_06:0.07553,(T\_morbirosei:0.05625,T\_ptyseos:0.05329):0.02459):0.10501,(E\_billingiae:0.08088,(E\_pyriifoliae:0.03696,E\_tasmaniensis:0.0271):0.05058):0.04633):0.01841,(P\_sp\_At-9b:0.01306,P\_cyprapedii:0.00906):0.01712,(P\_sp\_GM01:0.02253,(P\_rodasii:0.02165,P\_rwandensis:0.01721):0.01147):0.01217,(P\_eucrina:0.04974,(P\_dispersa:0.02895,P\_wallisii:0.02433):0.00732):0.011):0.01113):0.02057):0.00703):0.01668):0.01934):0.02353,(P\_brenneri:0.00475,P\_conspicua:0.01274):0.00594):0.01606,(P\_vagans:0.00794,(P\_sp\_aB:0.01176,P\_agglomerans:0.00389):0.00468):0.004,(P\_anthophila:0.02383,P\_deleyi:0.0238):0.00446);

[1007] tree 't1007'=[&R] ((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.03581,((P\_allii:0.01265,P\_ananatis:0.02148):0.01812,(((P\_brenneri:0.00957,P\_conspicua:0.00972):0.01657,(P\_deleyi:0.03471,((P\_sp\_aB:0.01002,P\_agglomerans:0.00441):0.00499,(P\_vagans:0.01471,P\_anthophila:0.03073):0.00426):0.00543):0.02334):0.03391,(((E\_billingiae:0.08514,(E\_pyriifoliae:0.02442,E\_tasmaniensis:0.0494):0.04315):0.10534,(P\_sp\_A4:0.07138,(T\_ptyseos:0.04414,(T\_morbirosei:0.09774,T\_sp\_NML\_06:0.06631):0.03173):0.1125):0.01335):0.02885,((P\_dispersa:0.01479,(P\_wallisii:0.01134,(P\_rodasii:0.00792,(P\_sp\_GM01:0.02978,P\_rwandensis:0.00618):5.4E-4):0.00977):0.00778):0.02609,(P\_cyprapedii:0.03908,P\_sp\_At-9b:0.01042):0.00999):0.01562):0.02009):0.00946):0.01106,(P\_eucrina:0.05728,P\_septica:0.03739):0.01439);

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[1008] tree 't1008'=[&R] ((P_sp_GM01:5.4E-4,(((P_eucrina:0.17317,(T_ptyseos:0.12309,(T_sp_NML_06:0.2709,T_morbirosei:0.14516):0.11649):0.20366):5.4E-4,(E_billingiae:5.4E-4,(E_tasmaniensis:0.06423,E_pyrifoliae:0.01868):0.02116):5.4E-4):0.04099,P_sp_A4:0.17891):0.00984):0.02125,(P_rodasii:0.01103,P_ananatis:0.03759):0.0176,((((P_s_indologenes:0.0,P_s_stewartii:0.0):0.02059,((P_dispersa:0.0211,P_wallisii:5.5E-4):0.01349,((P_sp_At-9b:0.0,P_cyprapedii:0.0):5.4E-4,((P_conspicua:0.0,P_brenneri:0.0):5.5E-4,((P_deleyi:0.0,P_vagans:0.0):0.02026,(P_agglomerans:0.0,P_anthophila:0.0,P_sp_aB:0.0):5.5E-4):0.04185):0.04178):0.0099):0.01825):5.3E-4,P_septica:5.4E-4):0.02113,P_rwandensis:0.04265):5.4E-4,P_allii:0.02125):5.4E-4);
[1009] tree 't1009'=[&R] (P_sp_aB:0.04618,P_vagans:0.03138,(P_agglomerans:0.02617,((((P_s_indologenes:0.00243,P_s_stewartii:0.01414):0.0869,(P_allii:0.04406,P_ananatis:0.05441):0.03827):0.1342,((P_sp_A4:0.38808,P_septica:0.17794):0.08883,((P_eucrina:0.30305,(P_dispersa:0.06898,((P_sp_At-9b:0.07133,P_cyprapedii:0.06425):0.06774,(P_wallisii:0.14957,(P_sp_GM01:0.06257,(P_rodasii:0.02691,P_rwandensis:0.04772):0.01834):0.01742):0.01455):0.03065):0.04897):0.08412,((T_morbirosei:0.4151,(T_ptyseos:0.23088,T_sp_NML_06:0.32285):0.07869):0.36343,(E_billingiae:0.13067,(E_pyrifoliae:0.1287,E_tasmaniensis:0.15626):0.20347):0.17932):0.0914):0.06209):0.09471):0.05099,(P_brenneri:0.05251,P_conspicua:0.04785):0.04523):0.05404,(P_anthophila:0.07745,P_deleyi:0.06983):0.02524):0.00997):0.00768);
[1010] tree 't1010'=[&R] ((P_anthophila:0.00739,(((P_s_indologenes:0.00304,P_s_stewartii:5.5E-4):0.05085,(P_allii:0.01369,P_ananatis:0.01778):0.00614):0.03036,((P_brenneri:0.01151,P_conspicua:0.0257):0.03413,(P_septica:0.05323,((E_billingiae:0.10056,(E_tasmaniensis:0.08325,E_pyrifoliae:0.07806):0.0351):0.0771,(P_sp_A4:0.1307,(T_morbirosei:0.10929,(T_ptyseos:0.15178,T_sp_NML_06:0.14915):0.02527):0.09988):0.05569):0.03673,(P_eucrina:0.09953,(P_sp_GM01:0.04942,((P_dispersa:0.02232,P_wallisii:0.04651):0.00769,((P_rodasii:0.01934,P_rwandensis:0.02326):0.01873,(P_sp_At-9b:0.02418,P_cyprapedii:0.0305):0.01907):0.00869):0.00913):0.01287):0.02494):0.01659):0.03161):0.01562):0.00992):0.01777,P_vagans:5.4E-4,(P_sp_aB:0.02193,(P_deleyi:0.04952,P_agglomerans:0.00887):0.00403):0.00606);
[1011] tree 't1011'=[&R] ((P_sp_A4:0.16156,P_eucrina:0.07443):0.02097,P_dispersa:0.02534,((P_wallisii:0.035,(P_sp_GM01:0.06158,(P_rodasii:0.04938,P_rwandensis:0.01096):0.01194):0.01066):0.01227,((((T_sp_NML_06:0.14871,(T_morbirosei:5.4E-4,T_ptyseos:0.096):0.06959):0.09519,(E_billingiae:0.08637,(E_pyrifoliae:0.07221,E_tasmaniensis:0.02784):0.19667):0.10586):0.05274,((P_sp_At-9b:0.02308,P_cyprapedii:0.02374):0.02524,(P_septica:0.03545,(P_deleyi:0.01188,((P_agglomerans:0.0,P_vagans:0.0,P_sp_aB:0.0):5.4E-4,(P_anthophila:0.04358,(P_conspicua:0.02312,P_brenneri:0.01131):0.02289):0.00623):0.02328):0.02278):0.01217):5.4E-4):0.03328,((P_s_indologenes:0.01142,P_s_stewartii:5.5E-4):0.05853,(P_allii:5.5E-4,P_ananatis:0.01119):5.5E-4):0.03787):0.03572):0.01165);
[1012] tree 't1012'=[&R] ((P_vagans:0.02148,P_sp_aB:0.00729):0.00725,(P_deleyi:0.01048,P_anthophila:0.01448):0.00391,(P_agglomerans:0.00693,((P_s_indologenes:0.00352,P_s_stewartii:0.00347):0.00897,(P_allii:0.01431,P_ananatis:0.0107):0.00517):0.01668,((P_c
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yprapedii:5.5E-4,(P\_sp\_At-9b:0.01958,((P\_wallisii:0.01428,((P\_eucrina:0.03284,(P\_rodasii:0.02629,P\_rwandensis:0.01423):0.00745):0.00931,P\_dispersa:0.02102):0.00771):0.00743,P\_sp\_GM01:0.02512):0.01385):0.00568):0.0206,((E\_pyriifoliae:0.01507,E\_tasmaniensis:0.03593):0.06082,((P\_sp\_A4:0.03709,(E\_billingiae:0.07737,(T\_morbirosei:0.03057,(T\_ptyseos:0.02991,T\_sp\_NML\_06:0.02485):0.01424):0.01642):0.0336):0.53398,P\_septica:0.03025):0.00996):0.01939):0.01473):0.02169,(P\_brenneri:0.01764,P\_conspicua:0.01068):0.01053):0.00732):0.01061);

[1013] tree 't1013'=[&R] ((P\_sp\_At-9b:0.07051,P\_cyprapedii:0.02392):0.04668,(P\_septica:0.07103,(P\_sp\_A4:0.09869,((E\_billingiae:0.06605,(E\_pyriifoliae:0.04352,E\_tasmaniensis:0.05569):0.08546):0.10692,((T\_morbirosei:0.09226,(T\_sp\_NML\_06:0.1024,T\_ptyseos:0.08175):0.03245):0.28993,((P\_allii:0.01715,(P\_ananatis:5.5E-4,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01549):0.01119):0.06146,(((P\_agglomerans:0.00905,((P\_vagans:0.00203,P\_deleyi:0.02181):0.00354,P\_sp\_aB:0.01869):5.1E-4):0.00294,P\_anthophila:0.00608):0.02505,(P\_brenneri:0.00317,P\_conspicua:0.01847):0.00959):0.02662):0.04111):0.02968):0.01483):0.01059):0.03828):0.04562,(P\_wallisii:0.01414,(P\_eucrina:0.06601,P\_dispersa:0.0214):0.01522):0.00912,(P\_sp\_GM01:0.04939,(P\_rodasii:0.00627,P\_rwandensis:0.00891):0.01084):0.01005);

[1014] tree 't1014'=[&R] ((P\_rodasii:5.5E-4,P\_rwandensis:0.00645):0.02625,(P\_sp\_GM01:5.4E-4,(P\_eucrina:0.04673,(P\_septica:0.0334,((E\_billingiae:0.07543,(E\_pyriifoliae:0.04882,E\_tasmaniensis:0.02395):0.04892):0.07832,(T\_ptyseos:0.05525,(T\_sp\_NML\_06:0.1164,T\_morbirosei:0.02098):0.01891):0.01954):0.01926,(P\_sp\_A4:0.13169,(((P\_deleyi:0.00664,(P\_agglomerans:5.5E-4,(P\_sp\_aB:0.02648,P\_vagans:5.5E-4):0.01325):0.00657):5.4E-4,P\_anthophila:0.02751):0.01909,(P\_brenneri:5.5E-4,P\_conspicua:0.00656):0.00843):0.03385,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.035,(P\_allii:5.4E-4,P\_ananatis:0.00647):0.0062):0.02069):0.00287):0.01826):0.01394):0.02011):0.01511):5.3E-4,(P\_sp\_At-9b:0.0065,(P\_cyprapedii:0.01309,(P\_wallisii:0.02685,P\_dispersa:0.00644):0.02046):5.4E-4):0.01302);

[1015] tree 't1015'=[&R] ((P\_brenneri:5.5E-4,P\_conspicua:0.01882):0.01874,(P\_anthophila:0.01915,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00957,(P\_allii:0.02893,P\_ananatis:5.4E-4):0.0194):0.02438,(P\_septica:0.08985,((P\_sp\_A4:0.17206,((T\_morbirosei:0.05828,(T\_sp\_NML\_06:0.10157,T\_ptyseos:0.08768):0.02307):0.2112,(E\_billingiae:0.07017,(E\_pyriifoliae:0.07206,E\_tasmaniensis:0.05816):0.09257):0.02506):0.02646):0.01336,((P\_sp\_At-9b:5.4E-4,P\_cyprapedii:0.03743):0.04218,(P\_wallisii:0.01323,(P\_eucrina:0.09928,(P\_dispersa:0.04274,(P\_sp\_GM01:0.02821,(P\_rodasii:0.01888,P\_rwandensis:0.00934):5.3E-4):0.01618):0.02443):0.01312):0.04611):0.065):0.0223):0.03183):0.06221,P\_deleyi:5.5E-4):0.00938):0.0094,(P\_vagans:5.5E-4,(P\_sp\_aB:0.01849,P\_agglomerans:0.01858):5.5E-4):5.4E-4);

[1016] tree 't1016'=[&R] ((P\_dispersa:0.0,P\_wallisii:0.0):0.01712,((P\_sp\_A4:0.0,P\_s\_indologenes:0.0,P\_allii:0.0,P\_ananatis:0.0,P\_septica:0.0,P\_rwandensis:0.0,P\_sp\_GM01:0.0,P\_rodasii:0.0):5.5E-4,P\_s\_stewartii:0.01715):5.5E-4):0.01708,(P\_deleyi:0.0151,(P\_brenneri:0.0,P\_conspicua:0.0,P\_anthophila:0.0,P\_vagans:0.0,P\_agglomerans:0.0,P\_sp\_aB:0.0):0.01152):0.00808,((P\_sp\_At-9b:0.0,P\_cyprapedii:0.0):5.5E-4,((T\_ptyseos:0.01961,(T\_morbirosei:5.4E-

4,T\_sp\_NML\_06:0.07647):0.01607):0.06924,(E\_billingiae:0.01779,(E\_tasmaniensis:5.4E-4,(E\_pyrifoliae:0.00338,P\_eucrinea:1.1498):0.04923):0.03544):0.03455):5.4E-4):5.4E-4);

[1017] tree 't1017'=[&R] (((P\_vagans:0.00434,P\_deleyi:0.02917):0.00482,P\_sp\_aB:5.5E-4):0.00223,P\_agglomerans:0.00229,(P\_anthophila:0.02723,(((P\_ananatis:0.02623,P\_allii:0.01222):0.00933,((P\_s\_indologenes:0.00222,P\_s\_stewartii:0.00693):0.03161,(P\_septica:0.04746,((P\_eucrinea:0.07512,((P\_sp\_GM01:0.02543,(P\_sp\_At-9b:0.02649,P\_cyprapedii:0.02554):0.01641):0.01036,(P\_dispersa:0.01263,(P\_wallisii:0.03174,(P\_rodasii:0.01594,P\_rwandensis:0.02073):0.01661):0.01027):0.00577):0.01295):0.02969,(E\_billingiae:0.05449,(E\_pyrifoliae:0.03149,E\_tasmaniensis:0.02727):0.05605):0.06543,(P\_sp\_A4:0.1277,(T\_morbirosei:0.11052,(T\_ptyseos:0.12001,T\_sp\_NML\_06:0.14235):0.04616):0.12273):0.04082):0.01737):0.02136):0.02483):0.00625):0.02041,(P\_brenneri:0.01011,P\_conspicua:0.01816):0.00467):0.00693):0.00562);

[1018] tree 't1018'=[&R] (P\_sp\_At-9b:5.5E-4,((P\_eucrinea:0.02166,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00447,(P\_ananatis:0.01742,P\_allii:0.01756):0.01347):0.05495,((P\_agglomerans:0.0,P\_sp\_aB:0.0):0.0172,((P\_conspicua:0.03455,P\_brenneri:5.5E-4):0.01722,P\_vagans:5.5E-4):5.5E-4):0.01072,(P\_deleyi:0.01764,P\_anthophila:5.5E-4):0.01042):0.03114):0.0807,(E\_billingiae:0.06165,(P\_septica:0.05894,P\_sp\_A4:0.12374):0.03946):0.0341):5.5E-4,((E\_pyrifoliae:0.07638,E\_tasmaniensis:5.3E-4):0.07769,(T\_morbirosei:0.12614,(T\_ptyseos:0.18385,T\_sp\_NML\_06:0.07988):0.00934):0.08603):0.03872):0.05699):0.06998,(P\_cyprapedii:0.01735):5.3E-4,(P\_sp\_GM01:0.03569,(P\_wallisii:0.03541,(P\_rodasii:0.01746,(P\_dispersa:0.05509,P\_rwandensis:0.01732):5.3E-4):0.01743):5.4E-4):0.01748);

[1019] tree 't1019'=[&R] (P\_deleyi:0.00888,(P\_anthophila:0.0122,(((P\_sp\_At-9b:0.01129,((P\_wallisii:0.01356,(P\_eucrinea:0.05303,P\_dispersa:0.03219):0.01422):5.4E-4,((P\_rwandensis:5.5E-4,P\_sp\_GM01:0.02776):0.02319,P\_rodasii:0.0045):0.01349):0.03144):0.00484,P\_cyprapedii:0.01817):0.02574,(E\_billingiae:0.07449,(E\_pyrifoliae:0.04309,E\_tasmaniensis:0.04598):0.0768):0.04405):0.00814,((T\_morbirosei:0.06768,(T\_sp\_NML\_06:0.09373,T\_ptyseos:0.04585):0.05094):0.12161,(P\_sp\_A4:0.06281,P\_septica:0.03037):0.01929):5.4E-4):0.03472):0.006,(P\_brenneri:0.01341,((P\_conspicua:0.00888,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.03614,(P\_ananatis:0.01804,P\_allii:0.00951):0.00646):0.00757):0.00914,(P\_agglomerans:0.02255,(P\_vagans:0.0136,P\_sp\_aB:5.5E-4):0.00451):5.3E-4):0.00413):0.00449);

[1020] tree 't1020'=[&R] (P\_sp\_aB:0.01352,P\_deleyi:0.01512,(P\_agglomerans:0.00525,(P\_vagans:0.01013,(P\_anthophila:0.01541,(((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00197):0.03496,(P\_allii:0.03701,P\_ananatis:0.02226):0.00974):0.06693,(P\_septica:0.06568,((P\_sp\_At-9b:0.02234,P\_cyprapedii:0.02353):0.00899,(P\_sp\_GM01:0.03251,(P\_rodasii:0.01202,P\_rwandensis:0.01522):0.00712):0.0143,(P\_dispersa:0.01001,(P\_wallisii:0.01276,P\_eucrinea:0.07708):0.01768):0.00755):0.01498):0.0409,(P\_sp\_A4:0.13725,((T\_morbirosei:0.07874,(T\_ptyseos:0.07719,T\_sp\_NML\_06:0.1017):0.04834):0.12766,(E\_billingiae:0.07914,(E\_pyrifoliae:0.04156,E\_tasmaniensis:0.05736):0.0973):0.05166):0.02451):0.02234):0.03248):0.02156):0.02711,(P\_brenneri:0.00865,P\_conspicua:0.02624):0.01433):0.02518):9.3E-4):0.00484):0.00602);



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[1021] tree 't1021'=[&R]
((P_rodasii:0.01672,P_rwandensis:0.00597):0.00639,(P_dispersa:0.01505,((P_cypripedii:0.01648,(P_sp_At-
9b:0.00602,(P_sp_A4:0.07198,(T_ptyseos:0.0541,(T_morbirosei:0.08949,T_sp_NML_06:0.03587):0.03258):0.1412):0.01622):0.
.01078):0.02844,(((P_s_indologenes:0.00542,P_s_stewartii:0.00541):0.0053,(P_ananatis:0.01661,P_allii:0.01082):0.005
5):0.0687,(E_billingiae:0.09015,(E_pyriifoliae:0.02148,E_tasmaniensis:0.02289):0.08677):0.05211):0.02688,((((P_deley
i:0.03904,P_vagans:5.4E-4):5.4E-
4,(P_sp_aB:0.01121,(P_brenneri:0.01093,P_conspicua:0.00569):0.01637):0.01103):0.00949,P_agglomerans:0.03334):0.00124
,P_anthophila:0.00569):0.05,P_septica:0.04793):0.01008):0.00603):0.00676):0.00625,(P_eucrina:0.04807,(P_wallisii:0.0
1711,P_sp_GM01:0.02709):0.00949):0.01295);
[1022] tree 't1022'=[&R]
((((((T_morbirosei:0.05885,(T_ptyseos:0.05751,T_sp_NML_06:0.03687):0.07211):0.1122,(P_sp_A4:0.10536,(E_billingiae:0.
12227,(E_pyriifoliae:0.07989,E_tasmaniensis:0.10485):0.08356):0.0292):0.05052):0.03348,(P_eucrina:0.11685,((P_walli
sii:0.03919,P_sp_GM01:0.07781):0.0095,(P_rodasii:0.04358,P_rwandensis:0.01648):0.0342,P_dispersa:0.01609):0.01245):
0.01281,(P_sp_At-
9b:0.01631,P_cypripedii:0.01099):0.02129):0.0254):0.03823,P_septica:0.08303):0.02591):0.03905,(P_conspicua:0.03128,(
P_brenneri:0.00583,((P_s_indologenes:5.5E-4,P_s_stewartii:0.00538):0.01331,(P_allii:5.3E-
4,P_ananatis:0.01633):0.01023):0.07264):5.9E-
4):0.01851):0.03036,P_vagans:0.01102):0.00472,P_sp_aB:0.01566,((P_deleyi:0.02637,P_anthophila:0.01379):0.00304,P_agg
lomerans:0.01576):5.1E-4);
[1023] tree 't1023'=[&R]
(((P_ananatis:0.00978,((P_s_indologenes:0.0,P_s_stewartii:0.0):0.01395,P_allii:0.01845):0.00503):0.01848,(P_conspicu
a:0.01025,((P_septica:0.02562,((P_sp_A4:0.05257,((E_billingiae:0.02846,(E_pyriifoliae:0.01523,E_tasmaniensis:0.04316)
:0.04325):0.06861,(T_morbirosei:0.05714,(T_ptyseos:0.02451,T_sp_NML_06:0.0259):0.03138):0.04506):0.01002):0.0271,(P_
dispersa:0.01511,((P_sp_At-
9b:0.01851,P_cypripedii:0.00303):0.00648,(P_rodasii:0.01465,P_rwandensis:0.01213):0.00721,(P_eucrina:0.05388,P_sp_G
M01:0.00657):0.00378):0.01428):5.5E-
4,P_wallisii:0.0119):0.00396):0.01299):0.02495):0.01781,P_brenneri:0.01497):0.00241):0.00991):0.01984,(P_vagans:0.00
606,P_sp_aB:5.5E-4):0.00297,(P_agglomerans:0.00608,(P_deleyi:0.00304,P_anthophila:0.00302):0.00304):5.3E-4);
[1024] tree 't1024'=[&R]
(P_vagans:0.00835,(P_sp_aB:0.00723,P_agglomerans:0.00293):0.00389,(P_deleyi:0.01522,(P_anthophila:0.01256,((P_brenne
ri:0.00237,P_conspicua:0.01078):0.01756,((P_s_stewartii:0.00858,(P_allii:0.01025,P_ananatis:0.01099):0.00502):0.0330
7,(P_septica:0.04638,((P_sp_At-
9b:0.0121,P_cypripedii:0.0148):0.02656,(((P_sp_GM01:0.02134,(P_rodasii:0.02161,P_rwandensis:0.01151):0.01824):0.0135
5,P_wallisii:0.19374):0.00391,(P_dispersa:0.02533,P_eucrina:0.05203):0.00661):0.03482):0.024,((E_billingiae:0.08022,
(E_pyriifoliae:0.04691,E_tasmaniensis:0.02357):0.04568):0.0758,(P_sp_A4:0.08942,(P_s_indologenes:1.0231,(T_morbirosei
:0.07843,(T_ptyseos:0.09044,T_sp_NML_06:0.06659):0.02422):0.01907):0.06436):0.01966):0.01485):0.02612):0.02072):0.02
382):0.00894):0.00815):0.00735);
[1025] tree 't1025'=[&R]
(P_vagans:0.00965,P_sp_aB:0.00481,(P_agglomerans:0.00888,((P_brenneri:0.0,P_conspicua:0.0):0.02346,(P_anthophila:0.
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01478,P\_deleyi:0.01938):0.00906):0.00622,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.03158,(P\_allii:0.01763,P\_ananatis:0.01564):0.01642):0.03518,(P\_septica:0.07605,(((P\_dispersa:0.01919,((P\_wallisii:0.01507,(P\_sp\_GM01:0.00588,(P\_rwandensis:0.0431,P\_rodasii:5.4E-4):0.01789):0.02936):0.0136,(P\_sp\_At-9b:0.00456,P\_cyprapedii:0.00956):0.01915):0.00467):0.00472,(P\_eucrina:0.0587,(T\_morbirosei:0.10973,(T\_ptyseos:0.05179,T\_sp\_NML\_06:0.08088):0.03729):0.23065):5.4E-4):0.01308,(P\_sp\_A4:0.24729,(E\_billingiae:0.04633,(E\_pyriifoliae:0.02518,E\_tasmaniensis:0.03307):0.1015):0.05254):0.06193):0.01725):0.02677):0.02328):0.00441):0.00552);

[1026] tree 't1026'=[&R] (((T\_sp\_NML\_06:5.4E-4,(T\_morbirosei:0.01583,T\_ptyseos:0.00531):0.01604):0.03274,(((P\_rodasii:0.08911,P\_wallisii:0.03226):0.05965,(P\_sp\_At-9b:5.5E-4,(P\_cyprapedii:0.00522,P\_dispersa:5.5E-4):0.00521):0.00521):5.4E-4,P\_eucrina:5.4E-4):5.5E-4):0.0048,P\_rwandensis:0.01047,(((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00519):0.00528,(((P\_anthophila:0.0,P\_sp\_aB:0.0,P\_agglomerans:0.0,P\_vagans:0.0):5.4E-4,(P\_sp\_GM01:0.00506,(E\_billingiae:5.4E-4,(E\_pyriifoliae:0.0,E\_tasmaniensis:0.0):0.01037):0.00531):0.00547):0.00524,(P\_septica:0.0,P\_deleyi:0.0,P\_ananatis:0.0):5.5E-4,(P\_allii:0.00519,(P\_brenneri:0.0,P\_conspicua:0.0):0.00519):5.4E-4):5.5E-4):0.00517):0.02113,P\_sp\_A4:0.0105):5.5E-4);

[1027] tree 't1027'=[&R] ((P\_sp\_aB:0.0199,P\_vagans:0.0098):0.00526,(P\_agglomerans:0.01029,(((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.0049):0.03946,(P\_allii:0.01169,P\_ananatis:0.01679):0.01235):0.03134,(((P\_septica:0.06425,(P\_wallisii:0.03178,(P\_eucrina:0.06972,(P\_dispersa:0.03041,(P\_sp\_GM01:0.03615,(P\_rodasii:0.03243,P\_rwandensis:0.02311):0.01033):0.0176):0.00613):0.01132):0.01432,(P\_sp\_At-9b:0.01595,P\_cyprapedii:0.00833):0.0273):0.02865):0.01192,(T\_morbirosei:0.05505,(T\_sp\_NML\_06:0.07115,T\_ptyseos:0.06022):0.0259):0.10989,(E\_billingiae:0.07628,(E\_pyriifoliae:0.03414,E\_tasmaniensis:0.01913):0.08402):0.07598):0.03719):0.01411,P\_sp\_A4:0.09807):0.01961):0.02929,(P\_brenneri:0.00425,P\_conspicua:0.01951):0.01533):0.01431):0.00331,(P\_deleyi:0.03014,P\_anthophila:0.02617):0.01078);

[1028] tree 't1028'=[&R] (((P\_allii:0.01622,(P\_rwandensis:5.4E-4,(P\_sp\_At-9b:0.01613,P\_cyprapedii:5.5E-4):0.01616):5.4E-4):0.01562,(P\_sp\_A4:0.15806,P\_septica:0.03062):0.02187):5.5E-4,(P\_agglomerans:0.0,P\_vagans:0.0,P\_deleyi:0.0,P\_anthophila:0.0,P\_sp\_aB:0.0):0.01621,(((P\_rodasii:0.01623,(((P\_eucrina:5.5E-4,(E\_billingiae:0.04759,(E\_tasmaniensis:0.08833,E\_pyriifoliae:0.10488):0.03414):0.06624):0.01659,P\_wallisii:0.01648):5.5E-4,P\_sp\_GM01:5.5E-4):0.01636,(T\_morbirosei:0.03939,(T\_sp\_NML\_06:0.08726,T\_ptyseos:0.13514):0.09424):0.27532):5.5E-4):5.4E-4,(P\_dispersa:0.0,P\_ananatis:0.0,P\_brenneri:0.0,P\_conspicua:0.0,P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.5E-4):5.4E-4);

[1029] tree 't1029'=[&R] (P\_rodasii:0.02368,P\_rwandensis:0.06736,((P\_sp\_At-9b:0.03998,P\_cyprapedii:0.03316):0.03165,(P\_wallisii:0.08225,P\_dispersa:0.03023):0.01067,(((T\_morbirosei:0.16407,(T\_sp\_NML\_06:0.0913,T\_ptyseos:0.14594):0.01728):0.08196,(E\_billingiae:0.14868,(E\_pyriifoliae:0.0741,E\_tasmaniensis:0.112):0.03269):0.04229):0.0453,(((P\_brenneri:0.009,P\_conspicua:0.00964):0.03045,(P\_allii:0.05813,P\_ananatis:0.00886):0.01694,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.03414,P\_septica:0.12386):0.01922):0.04289):0.01328,(P\_deleyi:0.01329,(P\_anthophila:0.03237,(P\_vagans:0.01866,(P\_agglomerans:0.0285,P\_sp\_aB:0.01962):0.00181):0.00495):0.00964):0.0093

9):0.0825):0.02203,((P\_sp\_A4:0.08993,P\_sp\_GM01:0.04696):0.03236,P\_eucrina:0.08886):5.4E-4):0.02531):0.02238):0.02334);

[1030] tree 't1030'=[&R] ((P\_brenneri:0.00747,P\_conspicua:0.04755):0.03117,(P\_sp\_A4:0.0552,(P\_eucrina:0.12418,((P\_sp\_GM01:0.02209,(P\_rwandensis:0.0323,P\_rodasii:0.01458):0.00982):0.01821,(P\_wallisii:0.03784,((P\_sp\_At-9b:0.01247,P\_cyprapedii:0.02789):0.03947,P\_dispersa:0.02296):0.00316):0.00444):0.00822):0.02077):0.01643):0.00863,(P\_septica:0.0315,(E\_pyriifoliae:0.07153,E\_tasmaniensis:0.05737):0.0412,(E\_billingiae:0.08977,(T\_sp\_NML\_06:0.06855,(T\_ptyseos:0.06569,T\_morbirosei:0.11335):0.03597):0.1077):0.05058):0.05361):0.03,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.02584,(P\_ananatis:0.04371,P\_allii:0.01673):0.03217):0.08301,(P\_anthophila:0.0618,(P\_agglomerans:0.0154,(P\_deleyi:0.03711,(P\_vagans:0.02622,P\_sp\_aB:0.00925):0.01299):0.00566):0.00998):0.01816):0.0069);

[1031] tree 't1031'=[&R] (P\_rodasii:0.0185,(P\_rwandensis:0.00789,(((P\_sp\_A4:0.06658,(P\_sp\_At-9b:0.01516,P\_cyprapedii:0.00817):0.00926):0.00531,((T\_morbirosei:0.02465,(T\_ptyseos:0.03676,T\_sp\_NML\_06:0.01738):0.06759):0.09453,(P\_eucrina:0.0911,(((P\_brenneri:5.3E-4,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00451,(P\_ananatis:0.00473,P\_allii:0.00945):0.00459):0.01435,P\_conspicua:0.00945):0.00456):0.00477,(P\_sp\_aB:0.00468,((P\_vagans:0.00456,P\_deleyi:0.00932):0.0047,(P\_agglomerans:0.00461,P\_anthophila:0.00462):5.4E-4):0.00458):0.01389):0.0083,P\_septica:0.02416):0.00476):0.00475):0.0048):0.01091,(P\_dispersa:0.01236,(E\_billingiae:0.01519,(E\_pyriifoliae:0.06812,E\_tasmaniensis:0.01266):0.03877):0.05861):0.00624):0.00801):0.006,(P\_wallisii:0.0046,P\_sp\_GM01:0.0234):5.5E-4);

[1032] tree 't1032'=[&R] ((P\_sp\_GM01:0.02549,(P\_sp\_At-9b:0.01384,P\_cyprapedii:0.02536):5.4E-4):0.02549,P\_dispersa:0.01245,(((P\_rwandensis:0.01211,(E\_billingiae:0.1216,(E\_tasmaniensis:0.04974,E\_pyriifoliae:0.01203):0.04583):0.01728):0.01262,(P\_eucrina:0.01293,(P\_sp\_A4:0.05551,(P\_septica:0.03713,((T\_ptyseos:0.04436,(T\_morbirosei:0.0353,T\_sp\_NML\_06:0.05268):0.01239):0.15937,((P\_conspicua:0.02257,(P\_brenneri:5.4E-4,(P\_vagans:5.4E-4,((P\_anthophila:0.03531,P\_sp\_aB:5.5E-4):0.01168,(P\_deleyi:0.02331,P\_agglomerans:5.5E-4):5.4E-4):0.01161):0.01179):0.00144):0.05245,(P\_ananatis:0.02585,(P\_allii:0.09274,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.4E-4):0.01246):0.02728):0.01585):0.01442):0.03819):5.5E-4):0.00965):0.01231,(P\_rodasii:0.0,P\_wallisii:0.0):5.4E-4):5.4E-4);

[1033] tree 't1033'=[&R] (P\_eucrina:0.16645,P\_sp\_GM01:0.07844,((P\_dispersa:0.07153,P\_wallisii:0.0754):0.02643,((P\_rodasii:0.04166,P\_rwandensis:0.10264):0.055,((E\_billingiae:0.20278,(E\_pyriifoliae:0.13678,E\_tasmaniensis:0.14084):0.25384):0.23504,(((P\_septica:0.21665,(P\_sp\_A4:0.26269,(T\_ptyseos:0.35021,(T\_morbirosei:0.46514,T\_sp\_NML\_06:0.48093):0.07661):0.61076):0.07338):0.07323,(((P\_brenneri:0.0068,P\_conspicua:0.03173):0.02731,((P\_vagans:5.5E-4,((P\_deleyi:0.03722,P\_anthophila:0.04116):0.01373,P\_sp\_aB:5.4E-4):0.00896):0.00486,P\_agglomerans:0.02819):0.04375):0.07943,((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.01855):0.0585,(P\_allii:0.04448,P\_ananatis:0.02818):0.03875):0.10366):0.07):0.09733,(P\_sp\_At-9b:0.06078,P\_cyprapedii:0.07113):0.06232):0.03582):0.02979):0.02211):0.02608);

[1034] tree 't1034'=[&R] ((P\_sp\_GM01:0.02148,((P\_rodasii:0.01458,P\_rwandensis:5.5E-4):0.00762,P\_sp\_At-9b:0.00696):0.00729):5.4E-4,(P\_dispersa:5.5E-4,(P\_cyprapedii:0.02178,P\_eucrina:5.5E-4):0.00736):0.00723,(P\_wallisii:0.00723,((P\_sp\_A4:0.00987,(P\_septica:0.0187,((P\_allii:5.4E-4,(P\_ananatis:5.4E-

4,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0,P\_deleyi:0.0,P\_sp\_aB:0.0,P\_anthophila:0.0):0.00731):0.00733):5.4E-4,(P\_brenneri:0.0,P\_agglomerans:0.0,P\_vagans:0.0,P\_conspicua:0.0):0.00691):0.00699):0.01289):0.02177,(E\_billingiae:0.0307,(T\_morbirosei:0.05523,(T\_ptyseos:0.01793,T\_sp\_NML\_06:0.035):0.03262):0.07714,(E\_pyriifoliae:0.04226,E\_tasmanien sis:0.01788):0.0445):0.0198):0.01155):0.01554):5.3E-4);

[1035] tree 't1035'=[&R]  
(P\_anthophila:0.0,P\_brenneri:0.0,P\_conspicua:0.0,P\_deleyi:0.0,P\_agglomerans:0.0,P\_sp\_aB:0.0,P\_vagans:0.0):0.00503,P \_s\_stewartii:0.00504,(((P\_septica:0.0,P\_sp\_At-9b:0.0,P\_cyprapedii:0.0,P\_allii:0.0,P\_ananatis:0.0,P\_s\_indologenes:0.0,P\_eucrina:0.0,P\_sp\_GM01:0.0,P\_rodasii:0.0,P\_d ispersa:0.0):5.5E-4),((E\_billingiae:0.0,E\_pyriifoliae:0.0,E\_tasmaniensis:0.0):0.01518,(P\_wallisii:0.08668,(T\_sp\_NML\_06:0.00512,(T\_morbir osei:0.0086,T\_ptyseos:0.00801):0.00853):0.0523):5.4E-4):5.3E-4):5.5E-4,(P\_sp\_A4:0.00503,P\_rwandensis:0.00504):5.5E-4):5.5E-4);

[1036] tree 't1036'=[&R] (P\_septica:0.05495,(P\_brenneri:5.4E-4),((P\_anthophila:0.02404,(P\_deleyi:0.01568,(P\_agglomerans:0.01007,(P\_sp\_aB:0.00512,P\_vagans:0.00515):0.01064):0.0052 1):0.00959):0.02376,P\_conspicua:5.5E-4):0.0051):0.01929,((((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.3E-4),((P\_allii:0.01551,P\_ananatis:5.4E-4):0.01032):0.02221,(P\_dispersa:0.00523,P\_wallisii:0.01031):0.00928):0.00534,(((T\_sp\_NML\_06:0.0475,(T\_morbirosei:0.0 2669,T\_ptyseos:0.03219):0.00977):0.08,(E\_billingiae:0.05486,(E\_pyriifoliae:0.01983,E\_tasmaniensis:0.01864):0.01102):0 .0213):0.02312,(P\_sp\_A4:0.02794,(P\_sp\_GM01:0.02096,(P\_rodasii:0.02657,P\_rwandensis:0.02053):0.02433):0.00891):0.0087 7):0.01102):5.3E-4,(P\_eucrina:0.0173,(P\_sp\_At-9b:0.0,P\_cyprapedii:0.0):0.01429):0.00508):0.01939);

[1037] tree 't1037'=[&R]  
(P\_sp\_A4:0.03132,(P\_eucrina:0.04561,(P\_sp\_GM01:0.02769,(P\_rodasii:0.00701,P\_rwandensis:0.00611):0.00446):0.01571): 0.00559,(P\_dispersa:0.02125,P\_wallisii:0.02449):0.01484,(P\_sp\_At-9b:0.00659,P\_cyprapedii:5.5E-4):0.01161):0.00681):0.00929):0.00637,((((P\_deleyi:0.01827,(P\_agglomerans:0.00446,(P\_vagans:0.00838,P\_sp\_aB:0.00593) :0.00571):0.00288):0.00351,P\_anthophila:0.00277):0.02168,(P\_brenneri:0.01881,P\_conspicua:0.01355):0.00305):0.01674,( P\_allii:0.01019,(P\_s\_indologenes:5.5E-4),P\_s\_stewartii:0.00213):0.02737,P\_ananatis:0.00259):0.00757):0.02415):0.01818,(P\_septica:0.03954,((T\_morbirosei:0.0 329,(T\_sp\_NML\_06:0.03971,T\_ptyseos:0.01695):0.00854):0.04137,(E\_billingiae:0.05583,(E\_pyriifoliae:0.02434,E\_tasmani en sis:0.01025):0.04133):0.02851):0.03069):0.0092);

[1038] tree 't1038'=[&R]  
(P\_vagans:0.0108,(P\_anthophila:0.02458,P\_sp\_aB:0.01221):0.00724,(P\_agglomerans:0.03063,(P\_deleyi:0.03011,(((P\_brenne ri:0.00458,P\_conspicua:0.01356):0.00773,(P\_septica:0.0741,(P\_ananatis:0.02114,((P\_s\_indologenes:0.0,P\_s\_stewartii:0. 0):0.08967,P\_allii:0.02144):0.00606):0.14641):0.02713):0.0259,((E\_billingiae:0.06225,(E\_pyriifoliae:0.04872,E\_tasmani en sis:0.04811):0.02446):0.14599,((((P\_dispersa:0.04206,(P\_sp\_At-9b:0.02946,P\_cyprapedii:0.02718):0.04286):0.01632,(P\_wallisii:0.04525,(P\_rodasii:0.02004,P\_rwandensis:0.01078):0.018 97):0.0105):0.01597,(P\_sp\_GM01:0.03435,P\_eucrina:0.08349):0.02113):0.05752,((T\_morbirosei:0.06686,(T\_sp\_NML\_06:0.111 2,T\_ptyseos:0.03947):0.00975):0.17263,P\_sp\_A4:0.12798):0.04752):0.01596):0.01479):0.01116):5.3E-4):0.00581);

[1039] tree 't1039'=[&R] ((P\_sp\_GM01:0.0313,(P\_sp\_At-9b:0.02588,P\_cyprapedii:0.02416):0.03568,(P\_sp\_A4:0.29019,((E\_billingiae:0.13571,(E\_pyriifoliae:0.07334,E\_tasmaniens

is:0.10855):0.1192):0.08829,(T\_morbirosei:0.20617,(T\_sp\_NML\_06:0.38845,T\_ptyseos:0.11878):0.05218):0.24634):0.02271):0.06409,(P\_septica:0.07532,((P\_deleyi:0.03813,(P\_anthophila:0.06564,(P\_agglomerans:0.00816,(P\_sp\_aB:0.03657,P\_vagans:0.02421):0.00874):0.00749):0.004):0.01662,(((P\_s\_indologenes:0.00751,P\_s\_stewartii:5.4E-4):0.058,(P\_allii:0.03211,P\_ananatis:0.04548):0.02577):0.06577,(P\_brenneri:0.01869,P\_conspicua:0.0265):0.00813):0.03518):0.0168):0.04132):0.0416):0.01937):0.00866,(P\_eucrina:0.07672,P\_wallisii:0.01652):0.01824,((P\_rodasii:0.07724,P\_rwandensis:0.02466):0.01716,P\_dispersa:0.03929):0.00786);

[1040] tree 't1040'=[&R] (P\_wallisii:5.3E-4,(P\_dispersa:0.0286,(P\_sp\_GM01:0.01427,(P\_rodasii:0.02154,P\_rwandensis:0.0071):0.00236):0.00825):0.00786,(P\_eucrina:0.02097,(((T\_morbirosei:0.03924,(T\_ptyseos:0.02913,T\_sp\_NML\_06:0.04197):0.01116):0.0537,(E\_billingiae:0.0534,(E\_pyrifoliae:0.01845,E\_tasmaniensis:0.01069):0.061):0.0519):0.04358,(P\_sp\_A4:0.03836,(P\_septica:0.01891,((P\_deleyi:0.00307,((P\_anthophila:5.5E-4,(P\_agglomerans:5.5E-4,(P\_sp\_aB:0.00353,P\_vagans:5.5E-4):0.00352):0.0035):0.00354,(P\_conspicua:0.0,P\_brenneri:0.0):0.00353):5.5E-4):0.03158,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00124,(P\_allii:0.00704,P\_ananatis:5.4E-4):0.00943):0.01116):0.01042):0.02323):0.01836):0.01348,(P\_sp\_At-9b:5.4E-4,P\_cypripedii:0.01075):0.00683):0.01109):0.00819);

[1041] tree 't1041'=[&R] (P\_conspicua:0.0098,(P\_deleyi:0.01584,(((T\_morbirosei:0.0412,(T\_ptyseos:0.04449,T\_sp\_NML\_06:0.01835):0.02241):0.10378,(E\_billingiae:0.0407,(E\_pyrifoliae:0.00643,E\_tasmaniensis:0.02366):0.01864):0.08265):0.04183,((P\_sp\_At-9b:0.0196,P\_cypripedii:5.5E-4):0.01024,(P\_septica:0.05459,((P\_sp\_GM01:0.0097,(P\_rodasii:0.0094,(P\_wallisii:0.00991,P\_rwandensis:0.01467):0.00957):5.4E-4):7.8E-4,(P\_dispersa:0.00891,(P\_sp\_A4:0.07157,P\_eucrina:0.00308):0.03904):0.00485):0.02214):0.00643):0.0182):0.02432,((P\_s\_indologenes:0.00489,P\_s\_stewartii:0.00495):0.0094,(P\_allii:0.02567,P\_ananatis:0.00987):0.0108):0.01623):0.00545):0.01456,((P\_agglomerans:0.0,P\_sp\_aB:0.0):5.3E-4,(P\_anthophila:0.00902,(P\_brenneri:0.00487,P\_vagans:5.5E-4):0.00284):0.00286):5.5E-4);

[1042] tree 't1042'=[&R] ((P\_sp\_GM01:0.022,(P\_eucrina:0.09708,((P\_sp\_A4:0.28194,(P\_allii:0.04475,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.04257,P\_ananatis:0.05258):0.02452):0.06334):0.03179,(((P\_agglomerans:0.01212,(P\_vagans:0.01495,P\_sp\_aB:0.00547):0.02996):0.01255,(P\_anthophila:0.02626,P\_deleyi:0.05733):0.00732):0.04484,(P\_septica:0.1222,(P\_brenneri:0.0214,P\_conspicua:0.01427):0.02104):0.01689):0.05256,(E\_billingiae:0.09202,((T\_sp\_NML\_06:0.13698,(T\_morbirosei:0.13892,T\_ptyseos:0.08363):0.0794):0.20369,(E\_pyrifoliae:0.06404,E\_tasmaniensis:0.04137):0.02607):0.04313):0.13802):0.01536):0.06637):0.03243):0.00606,(P\_rwandensis:0.04128,(P\_sp\_At-9b:0.03783,P\_cypripedii:0.01534):0.05632):0.03073,((P\_dispersa:0.04152,P\_wallisii:0.04057):0.00403,P\_rodasii:0.72474):0.01373);

[1043] tree 't1043'=[&R] ((P\_sp\_aB:0.00666,(P\_deleyi:0.01052,(P\_conspicua:5.5E-4,(P\_brenneri:0.00765,((P\_septica:0.03366,((P\_sp\_At-9b:0.00411,(((P\_rodasii:0.00701,P\_rwandensis:0.01059):0.0112,(P\_sp\_GM01:0.00534,(P\_wallisii:0.02591,(P\_eucrina:0.03815,P\_dispersa:0.02031):0.01051):0.0079):0.00569):0.01281,P\_cypripedii:0.00894):0.00929):0.03956,(P\_sp\_A4:0.06402,(E\_billingiae:0.03551,((T\_sp\_NML\_06:0.05876,(T\_morbirosei:0.07939,T\_ptyseos:0.05422):0.04055):0.15435,(E\_pyrifoliae:0.0

3633,E\_tasmaniensis:0.02068):0.04918):0.03693):0.03178):0.01495):0.00533):0.01189,(P\_ananatis:0.01238,(P\_allii:0.01048,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01079):0.00678):0.02311):0.00851):0.00581):0.00893):0.00852):5.4E-4,P\_vagans:0.00694,(P\_anthophila:0.01392,P\_agglomerans:0.00346):5.5E-4);

[1044] tree 't1044'=[&R] (((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00432):0.0147,(P\_ananatis:0.0126,P\_allii:0.01991):0.01657):0.06,((P\_agglomerans:5.3E-4,(P\_anthophila:0.01714,(P\_vagans:0.00848,P\_sp\_aB:0.00436):0.00426):5.4E-4):5.5E-4,((P\_conspicua:0.00444,P\_deleyi:0.01331):0.00421,P\_brenneri:0.00881):0.00853):0.02197):0.02731,(P\_sp\_GM01:0.00878,(P\_wallisii:0.03108,(P\_rodasii:0.07607,P\_rwandensis:0.01608):0.00529):0.01113):0.00917,(P\_eucrina:0.07193,(((T\_ptyseos:0.06841,(T\_morbirosei:0.11476,T\_sp\_NML\_06:0.08833):0.04279):0.14823,(E\_billingiae:0.06593,(E\_pyriifoliae:0.05901,E\_tasmaniensis:0.0456):0.03547):0.05932):0.02092,(P\_dispersa:0.0378,(P\_cypripedii:0.02842,P\_sp\_At-9b:0.02798):0.01383):0.00987):0.00887,(P\_sp\_A4:0.10717,P\_septica:0.02809):0.02563):0.01114):5.5E-4);

[1045] tree 't1045'=[&R] (((T\_morbirosei:0.02419,(T\_sp\_NML\_06:0.03017,T\_ptyseos:0.01802):0.02009):0.02132,(E\_billingiae:0.03736,(E\_pyriifoliae:0.01373,E\_tasmaniensis:0.01595):0.04981):0.01757):0.01806,(((P\_sp\_GM01:0.00591,(P\_rodasii:0.00851,P\_rwandensis:0.0289):0.00279):0.01118,(P\_dispersa:0.02872,(P\_eucrina:0.02349,P\_wallisii:0.00302):0.00289):0.0023):0.01018,P\_cypripedii:0.00298):0.00396,P\_sp\_At-9b:0.00754):0.00424,(P\_sp\_A4:0.03743,(((P\_anthophila:0.0148,(P\_deleyi:5.4E-4,(P\_agglomerans:0.00863,(P\_sp\_aB:0.01167,P\_vagans:5.5E-4):5.5E-4):0.01385):0.0119):0.00818,P\_conspicua:5.4E-4):0.00295,P\_brenneri:0.01156):0.00671,((P\_allii:0.01602,(P\_ananatis:0.00578,(P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00282):0.01455):0.0017):0.01315,P\_septica:0.0219):0.01514):0.01881):0.00906);

[1046] tree 't1046'=[&R] (((P\_sp\_aB:0.0144,P\_vagans:0.00729):0.00391,((P\_brenneri:0.00776,P\_conspicua:0.01777):0.03464,P\_anthophila:0.01138):0.01414):0.00362,P\_deleyi:0.00323,(P\_agglomerans:0.00737,(P\_septica:0.1057,((P\_sp\_A4:0.09608,((P\_dispersa:0.02486,((P\_rodasii:0.02863,P\_rwandensis:0.01928):0.0315,P\_eucrina:0.10513):0.01736,(P\_wallisii:0.06796,P\_sp\_GM01:0.0356):0.01149):0.0072):0.03632,(P\_sp\_At-9b:0.02244,P\_cypripedii:0.02679):0.03446):0.05464,(E\_billingiae:0.10922,((T\_morbirosei:0.11162,(T\_ptyseos:0.11469,T\_sp\_NML\_06:0.11407):0.06374):0.126,(E\_pyriifoliae:0.03732,E\_tasmaniensis:0.0376):0.05464):0.03084):0.04368):0.0083):0.01857,P\_s\_stewartii:0.17508):0.00622,(P\_s\_indologenes:0.03795,(P\_allii:0.00141,P\_ananatis:0.04326):0.01453):0.07053):0.02501):0.04979):0.00374);

[1047] tree 't1047'=[&R] ((P\_agglomerans:0.00974,(P\_anthophila:0.00478,(P\_deleyi:0.02632,(P\_sp\_aB:0.01283,(((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00961):0.04146,(P\_allii:0.00555,P\_ananatis:0.01486):0.02138):0.0397,(((P\_wallisii:0.02597,(P\_eucrina:0.12177,P\_dispersa:0.02444):0.01614):0.01401,(P\_sp\_GM01:0.02145,((P\_cypripedii:0.12875,P\_sp\_At-9b:0.02049):0.04044,(P\_rodasii:0.00839,P\_rwandensis:0.02979):0.01519):0.00547):0.01447):0.025,(P\_septica:0.05555,(P\_sp\_A4:0.12079,(E\_billingiae:0.10902,(E\_pyriifoliae:0.07339,E\_tasmaniensis:0.02966):0.08214):0.12875,(T\_morbirosei:0.08971,(T\_ptyseos:0.0535,T\_sp\_NML\_06:0.08161):0.02581):0.05108):0.08501):0.08686):0.01599):0.02244):0.01126):0.00423):0.00985):5.3E-4):0.00488,P\_conspicua:5.5E-4,(P\_brenneri:0.00967,P\_vagans:0.01458):5.5E-4);

[1048] tree 't1048'=[&R] (((((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00688,(P\_ananatis:0.00343,(P\_allii:5.4E-4,P\_septica:0.01727):5.3E-4):0.00331):0.00694,((P\_brenneri:0.0,P\_conspicua:0.0):5.5E-4,(P\_deleyi:0.00933,(P\_vagans:0.00671,(P\_agglomerans:5.3E-

4,P\_sp\_aB:0.00651):0.00341):0.00466):0.01373):0.00351):0.00342,P\_anthophila:0.01043):5.5E-4,P\_sp\_A4:0.02409,(((P\_wallisii:5.5E-4,(P\_dispersa:5.4E-4,(P\_cyprapedii:0.01033,P\_sp\_At-9b:0.00343):0.00341):0.00342):0.00324,(T\_morbirosei:0.01652,(T\_sp\_NML\_06:0.01348,T\_ptyseos:0.00342):0.01128):0.06951,(P\_rodasii:0.00344,(P\_eucrina:0.00348,P\_rwandensis:5.4E-4):0.00344):5.5E-4):0.00315):0.00707,(E\_billingiae:0.0173,(E\_pyriifoliae:0.02206,E\_tasmaniensis:0.00969):0.03663):0.02919):5.4E-4,P\_sp\_GM01:0.02401):0.0104);

[1049] tree 't1049'=[&R]  
(((E\_billingiae:0.06124,(E\_pyriifoliae:0.09577,E\_tasmaniensis:0.08962):0.18751):0.19222,(P\_septica:0.16503,((P\_s\_indologenes:5.1E-4,P\_s\_stewartii:0.00434):0.03273,(P\_allii:0.02707,P\_ananatis:0.00901):0.01747):0.1074,(P\_brenneri:0.01312,(P\_conspicua:0.00898,(P\_anthophila:0.04435,(P\_deleyi:0.03044,(P\_agglomerans:0.00439,(P\_vagans:0.00875,P\_sp\_aB:0.0043):0.00865):0.01808):0.00476):0.02675):0.00437):0.019):0.09024):0.05663):0.0246,(T\_morbirosei:0.21656,(T\_ptyseos:0.14385,T\_sp\_NML\_06:0.09175):0.1056):0.36101,P\_sp\_A4:0.18028):0.0295):0.01933,(P\_sp\_At-9b:0.03012,P\_cyprapedii:0.02804):0.02407):0.02312,(P\_dispersa:0.04649,P\_eucrina:0.07881):0.0076,((P\_rodasii:0.01276,P\_rwandensis:5.4E-4):0.04469,(P\_sp\_GM01:0.04597,P\_wallisii:0.04472):0.00881):0.00354);

[1050] tree 't1050'=[&R] ((P\_rodasii:0.09119,(P\_anthophila:5.4E-4,((P\_brenneri:0.00881,P\_conspicua:5.5E-4):0.0404,((P\_agglomerans:0.00883,P\_sp\_aB:5.5E-4):0.00849,(P\_deleyi:0.01777,P\_vagans:0.0089):5.4E-4):0.0355):0.01669):0.00711):0.02137,(P\_sp\_At-9b:0.00377,(P\_cyprapedii:5.5E-4,(P\_rwandensis:0.01129,P\_sp\_GM01:0.0278):0.02746):0.03294):0.02722,(((E\_billingiae:0.13072,(E\_pyriifoliae:0.0769,E\_tasmaniensis:0.04532):0.20033):0.08215,(P\_wallisii:0.04925,P\_dispersa:0.01815):0.02858):5.4E-4,((P\_eucrina:0.02435,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01608,(P\_allii:0.03697,P\_ananatis:5.4E-4):0.04127):0.0482,(P\_septica:0.10648,(P\_sp\_A4:0.07509,(T\_ptyseos:0.0433,(T\_sp\_NML\_06:0.08819,T\_morbirosei:0.08516):0.00322):0.15909):0.07541):0.03336):0.00972):5.4E-4);

[1051] tree 't1051'=[&R]  
((P\_sp\_A4:0.05061,((T\_morbirosei:0.01962,(T\_sp\_NML\_06:0.02622,T\_ptyseos:0.02491):0.05783):0.0699,(E\_billingiae:0.01934,(E\_pyriifoliae:0.06177,E\_tasmaniensis:0.03785):0.02088):0.04411):0.03939):0.01748,((P\_deleyi:5.3E-4,(P\_agglomerans:0.00785,(P\_vagans:0.0,P\_sp\_aB:0.0):5.5E-4):0.01564):0.01624,((P\_anthophila:0.01595,(P\_brenneri:0.00775,P\_conspicua:5.3E-4):5.4E-4):0.01472,P\_eucrina:0.04302):5.3E-4):0.00832,P\_septica:5.4E-4):0.0074,((P\_s\_stewartii:5.4E-4,(P\_s\_indologenes:5.4E-4,(P\_ananatis:0.00783,P\_allii:0.00789):0.00799):0.00769):0.07171,((P\_sp\_At-9b:0.0,P\_cyprapedii:0.0):0.04067,(P\_sp\_GM01:0.02565,(P\_dispersa:0.03201,(P\_rodasii:0.02546,(P\_wallisii:0.01486,P\_rwandensis:0.01113):0.01196):0.01519):0.01111):0.00837):0.00888):0.00822);

[1052] tree 't1052'=[&R]  
(P\_agglomerans:0.02271,(P\_vagans:0.02632,((P\_deleyi:0.14704,P\_sp\_aB:0.05961):0.04626,P\_anthophila:0.06215):0.00735):0.01916,(((T\_morbirosei:0.11389,(T\_sp\_NML\_06:0.27105,T\_ptyseos:0.20004):0.04585):0.36213,P\_septica:0.12246):0.04184,(P\_sp\_A4:0.17384,(E\_billingiae:0.10727,(E\_pyriifoliae:0.09197,E\_tasmaniensis:0.0534):0.09039):0.1127):0.02208):0.01124,((P\_eucrina:0.30202,P\_dispersa:0.00855):0.01548,((P\_rodasii:0.0289,P\_rwandensis:0.08582):0.04338,((P\_sp\_GM01:0.01975,(P\_sp\_At-9b:0.01622,P\_cyprapedii:0.02183):0.04965):0.0235,P\_wallisii:0.02643):0.00913):0.02125):0.07634):0.04662,((P\_allii:0.

0355,((P\_s\_indologenes:0.00477,P\_s\_stewartii:0.00596):0.08317,P\_ananatis:0.03719):0.00403):0.07097,(P\_conspicua:0.1096,P\_brenneri:0.02615):0.03307):0.00996):0.03078);

[1053] tree 't1053'=[&R] (P\_septica:0.07469,((P\_dispersa:0.02871,(P\_sp\_GM01:0.04167,(P\_rodasii:5.5E-4,P\_rwandensis:0.00956):0.01003):0.02106):0.01656,(P\_eucrina:0.04839,P\_wallisii:0.04037):0.02299):0.07968,(((P\_cypripedii:0.0099,(E\_billingiae:0.067,(P\_sp\_At-9b:5.5E-4,(((P\_deleyi:0.01007,(P\_agglomerans:0.00996,(P\_vagans:0.0,P\_sp\_aB:0.0):0.00974):5.5E-4):0.03,P\_anthophila:0.0102):0.01937,((P\_brenneri:0.0,P\_conspicua:0.0):5.3E-4,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00943,(P\_allii:0.0,P\_ananatis:0.0):0.01975):0.0513):5.4E-4):0.06389):0.0086):0.01043):0.01701,(T\_morbirosei:0.05255,(T\_ptyseos:0.04879,T\_sp\_NML\_06:0.06839):0.05569):0.06006):0.01097,(P\_sp\_A4:0.06218,(E\_pyriifoliae:0.07316,E\_tasmaniensis:0.11186):0.03201):0.07893):0.01491);

[1054] tree 't1054'=[&R] (P\_sp\_GM01:0.01214,(P\_rodasii:0.00306,P\_rwandensis:5.5E-4):0.01265,((P\_wallisii:0.01867,P\_eucrina:0.01258):5.4E-4,(P\_dispersa:0.01307,((P\_sp\_At-9b:0.01083,P\_cypripedii:0.01203):0.01192,((P\_brenneri:0.00632,(P\_conspicua:0.09295,((P\_agglomerans:0.0032,(P\_sp\_aB:0.00909,P\_vagans:0.00362):0.00286):0.0068,(P\_deleyi:0.00709,P\_anthophila:0.01306):0.00814):0.00682):0.00821):0.01669,(P\_allii:5.3E-4,P\_ananatis:0.0062):0.0094,(P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00615):0.00626):0.05613):0.0172,(P\_septica:0.01891,((E\_billingiae:0.04985,(E\_pyriifoliae:0.03796,E\_tasmaniensis:0.01248):0.04544):0.06649,(P\_sp\_A4:0.0903,(T\_morbirosei:0.09572,(T\_ptyseos:0.04268,T\_sp\_NML\_06:0.06647):0.06127):0.17564):0.01052):0.01621):0.01595):0.00616):0.01312):0.00842):0.00942);

[1055] tree 't1055'=[&R] (P\_cypripedii:5.5E-4,((P\_allii:0.50348,P\_ananatis:5.5E-4):0.02017,(((P\_deleyi:0.0,P\_anthophila:0.0,P\_conspicua:0.0):5.5E-4,((P\_agglomerans:0.0,P\_vagans:0.0,P\_sp\_aB:0.0):5.5E-4,(E\_pyriifoliae:0.02092,E\_tasmaniensis:0.03091):0.05349):0.02055):0.02032,(E\_billingiae:0.05265,T\_morbirosei:5.5E-4):0.0103):5.4E-4,(P\_rodasii:0.01032,(P\_sp\_GM01:5.4E-4,(P\_rwandensis:0.02061,(P\_wallisii:5.5E-4,(T\_ptyseos:0.07283,T\_sp\_NML\_06:5.5E-4):0.01019):5.5E-4):0.01022):0.01026):5.3E-4):5.5E-4,(P\_sp\_A4:0.02047,P\_brenneri:5.4E-4):0.01017):0.01022):5.4E-4,((P\_septica:0.01023,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01026):5.3E-4,(P\_eucrina:0.0204,(P\_sp\_At-9b:0.0,P\_dispersa:0.0):0.01014):5.5E-4):5.5E-4);

[1056] tree 't1056'=[&R] (P\_septica:0.04652,(P\_allii:0.01458,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00664,P\_ananatis:0.00595):0.00365):0.06979,(((P\_rwandensis:0.00669,(P\_sp\_GM01:0.02289,P\_dispersa:0.07209):0.02147):0.01994,P\_rodasii:0.02006):0.01356,(P\_wallisii:0.12192,P\_eucrina:0.1073):0.03366,(((T\_sp\_NML\_06:0.0891,(T\_ptyseos:0.10409,T\_morbirosei:0.13586):0.04013):0.2021,P\_sp\_A4:0.10554):0.02888,((E\_billingiae:0.0715,(E\_pyriifoliae:0.03461,E\_tasmaniensis:0.07179):0.07934):0.06538,((P\_brenneri:5.4E-4,P\_conspicua:0.01832):0.00782,(((P\_sp\_aB:0.01187,P\_vagans:0.00608):0.00604,P\_agglomerans:0.02429):5.3E-4,(P\_deleyi:0.03248,P\_anthophila:0.00585):0.00625):0.03437):0.02424):0.0371):0.03786):5.4E-4):0.01273,P\_cypripedii:5.4E-4):0.01087,P\_sp\_At-9b:0.0074):0.02978);

[1057] tree 't1057'=[&R] ((P\_sp\_At-9b:5.4E-4,((T\_ptyseos:0.04289,(T\_sp\_NML\_06:0.08319,T\_morbirosei:0.05779):0.04996):0.21381,P\_cypripedii:0.02321):0.01131,((P\_dispersa:0.03999,(P\_wallisii:0.03873,(P\_rodasii:0.0,P\_rwandensis:0.0):5.4E-



4):0.01817):0.02078,(P\_eucrina:0.07012,P\_sp\_GM01:0.0489):0.00437):0.02547):0.01718):0.03936,(((P\_anthophila:0.09825,(P\_vagans:0.02929,(P\_deleyi:0.03929,P\_sp\_aB:0.05824):0.00972):0.00962,P\_agglomerans:5.4E-4):5.5E-4):0.14106,(P\_brenneri:0.00258,P\_conspicua:0.0628):0.07043):0.08884,(P\_septica:0.06458,(E\_billingiae:0.03585,(E\_pyri foliae:0.03364,E\_tasmaniensis:0.00601):0.08759):0.05082):0.02779):0.00425,(P\_sp\_A4:0.11312,(P\_ananatis:0.02869,(P\_s \_indologenes:0.0,P\_s\_stewartii:0.0):0.04907,P\_allii:0.04003):0.00797):0.09074):0.00998);

[1058] tree 't1058'=[&R]  
(((P\_conspicua:0.02127,(P\_brenneri:0.01468,(P\_allii:0.01928,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.069,P\_ananat is:0.0285):0.01525):0.07999,(P\_septica:0.08287,(((P\_cyprapedii:0.0802,P\_sp\_At- 9b:0.02762):0.03582,(P\_rodasii:0.02163,(P\_sp\_GM01:0.0525,P\_rwandensis:0.04484):0.00944):0.03507,(P\_dispersa:0.02024 , (P\_eucrina:0.04803,P\_wallisii:0.05066):0.0065):6.3E-4):0.02446):0.04093,(T\_sp\_NML\_06:0.43405,(T\_morbirosei:0.08739,T\_ptyseos:0.16562):0.12709):0.07024,(P\_sp\_A4:0.11506 ,(E\_billingiae:0.09693,(E\_pyrifoliae:0.05001,E\_tasmaniensis:0.08669):0.08503):0.06255):0.03527):0.03386):0.02034):0. 01336):0.03409):0.00834):0.02441,(P\_deleyi:0.01977,P\_vagans:0.01037):0.00328):0.0067,P\_agglomerans:0.00514,(P\_anthop hila:0.04154,P\_sp\_aB:0.02912):0.0089);

[1059] tree 't1059'=[&R] (((P\_cyprapedii:0.00637,((((P\_vagans:0.0,P\_deleyi:0.0):5.5E- 4,(P\_sp\_aB:0.00414,P\_agglomerans:5.5E-4):0.00207):0.00208,(P\_anthophila:5.5E- 4,(P\_conspicua:0.00209,P\_brenneri:0.00208):0.00209):0.00208):0.01011,(((E\_billingiae:0.02517,(E\_pyrifoliae:0.00764,E \_tasmaniensis:0.0156):0.01552):0.01424,(T\_morbirosei:0.01212,(T\_sp\_NML\_06:0.04376,T\_ptyseos:0.03795):0.01529):0.042 04,P\_sp\_A4:0.03504):0.00873):0.00285,(P\_septica:0.01255,(P\_s\_indologenes:5.5E- 4,P\_s\_stewartii:0.00206):0.0037,(P\_allii:0.00415,P\_ananatis:0.00207):0.00286):0.01249):0.00409):0.00406):0.00247,P\_s p\_At-9b:0.00416):5.4E-4):0.00208,P\_sp\_GM01:0.00834,(P\_wallisii:5.5E-4,(P\_dispersa:5.5E- 4,(P\_rodasii:0.00207,(P\_eucrina:0.00415,P\_rwandensis:5.5E-4):0.00207):5.5E-4):0.00211):5.3E-4);

[1060] tree 't1060'=[&R]  
((P\_septica:0.00198,((E\_billingiae:0.05527,(E\_pyrifoliae:0.00313,E\_tasmaniensis:0.02442):0.0366):0.0612,(T\_morbirose i:0.05234,(T\_sp\_NML\_06:0.04425,T\_ptyseos:0.00985):0.00553):0.03235):0.02851):0.01544,(P\_brenneri:5.4E- 4,(((P\_conspicua:5.4E-4,(P\_deleyi:0.00336,P\_anthophila:0.00734):0.00724):5.4E- 4,((P\_agglomerans:0.0,P\_sp\_aB:0.0):0.00356,P\_vagans:5.5E- 4):0.00674):0.01368,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00359,(P\_allii:0.00353,P\_ananatis:0.00354):0.00711):0 .0217):5.4E-4):0.01511,(P\_sp\_A4:0.03995,(P\_eucrina:0.02429,(P\_dispersa:0.01381,(((P\_cyprapedii:0.01833,P\_sp\_At- 9b:0.00368):0.00709,P\_rodasii:5.4E- 4):0.00401,(P\_rwandensis:0.0142,P\_sp\_GM01:0.00763):0.00739):0.02123,P\_wallisii:5.4E- 4):0.00801):0.00315):0.0167):0.00567);

[1061] tree 't1061'=[&R] ((P\_sp\_At- 9b:0.02222,P\_cyprapedii:0.01055):0.02414,(P\_rodasii:0.03809,P\_rwandensis:0.02812):0.01167,((((P\_eucrina:0.10478,(P\_s eptica:0.06814,((P\_sp\_A4:0.14913,(E\_billingiae:0.12183,(E\_pyrifoliae:0.0657,E\_tasmaniensis:0.05194):0.06501):0.10667 )):0.04661,(T\_morbirosei:0.18977,(T\_sp\_NML\_06:0.25441,T\_ptyseos:0.09439):0.09705):0.5031,(((P\_s\_indologenes:5.3E- 4,P\_s\_stewartii:0.00454):0.04031,(P\_allii:0.01371,P\_ananatis:5.4E- 4):0.0153):0.06115,(P\_brenneri:0.0,P\_conspicua:0.0):5.4E- 4,(P\_agglomerans:0.00454,(P\_anthophila:0.0233,P\_sp\_aB:0.00462):5.5E-4,(P\_deleyi:0.01396,P\_vagans:0.00461):5.5E-

4):5.5E-  
4):0.00924):0.02479):0.02762):0.01873):0.02272):0.04975):0.01751,P\_dispersa:0.03132):0.00658,P\_sp\_GM01:0.0244):0.010  
39,P\_wallisii:0.20368):0.0069);  
[1062] tree 't1062'=[&R] (P\_dispersa:5.4E-  
4,((P\_wallisii:0.00443,P\_sp\_GM01:0.00805):0.00422,(P\_septica:0.0214,(P\_eucrina:0.00861,((P\_anthophila:0.0042,(P\_dele  
yi:0.00419,(P\_agglomerans:0.00419,(P\_vagans:0.0,P\_sp\_aB:0.0):5.5E-4):5.3E-4):0.00418):0.00851,(P\_brenneri:5.5E-  
4,P\_conspicua:0.00838):0.00419):0.00862):0.00412):5.4E-  
4):0.00389,(((T\_morbirosei:0.0144,(T\_ptyseos:0.02471,T\_sp\_NML\_06:0.01932):0.0078):0.04135,(E\_billingiae:0.02347,(E\_  
pyrifoliae:0.06441,E\_tasmaniensis:0.0307):0.01745):0.04469):0.02394,(P\_sp\_A4:0.01698,((P\_s\_indologenes:0.0,P\_s\_stewa  
rtii:0.0):0.00416,(P\_allii:0.01263,P\_ananatis:5.3E-4):0.01273):0.00862):5.4E-  
4):0.008,(P\_rwandensis:0.00797,P\_rodasii:0.01158):0.00528,(P\_cyprapedii:0.01259,P\_sp\_At-9b:5.4E-  
4):0.00355):0.00557):5.3E-4);  
[1063] tree 't1063'=[&R]  
(P\_wallisii:0.05071,((P\_septica:0.05453,((P\_s\_indologenes:0.00371,P\_s\_stewartii:0.00373):0.01043,(P\_allii:5.5E-  
4,P\_ananatis:0.01065):0.02183):0.02648,((P\_brenneri:0.01734,((P\_deleyi:0.03943,(P\_anthophila:0.02851,P\_agglomerans:0  
.02697):0.01098):5.5E-  
4,(P\_vagans:0.00716,P\_sp\_aB:0.0427):0.00731):0.03409):0.01079,P\_conspicua:0.01464):0.058):0.03223):0.01501,(P\_sp\_GMO  
1:0.03682,((P\_sp\_At-  
9b:0.01627,P\_cyprapedii:0.02392):0.03375,(P\_rodasii:0.03361,P\_rwandensis:0.00444):0.01284):0.0072):0.01435):0.00465,  
(P\_eucrina:0.11534,(P\_sp\_A4:0.09488,((T\_morbirosei:0.05143,(T\_sp\_NML\_06:0.08036,T\_ptyseos:0.04782):0.0463):0.07418,  
(E\_billingiae:0.07244,(E\_pyrifoliae:0.06419,E\_tasmaniensis:0.02908):0.05422):0.0662):0.02576):0.02645):0.01769,P\_dis  
persa:0.04212):0.00967);  
[1064] tree 't1064'=[&R] (((P\_brenneri:0.01714,P\_conspicua:0.01381):0.01981,(((P\_s\_indologenes:5.5E-  
4,P\_s\_stewartii:0.00226):0.03256,(P\_allii:0.01291,P\_ananatis:0.01481):0.02306):0.03605,(((P\_sp\_At-  
9b:0.01594,P\_cyprapedii:0.01933):0.01047,((P\_wallisii:0.03552,(P\_sp\_GM01:0.01849,(P\_rwandensis:0.02473,P\_rodasii:0.0  
2609):0.00803):0.00851):0.01279,(P\_dispersa:0.02703,P\_eucrina:0.08141):0.00698):0.01514):0.02948,P\_sp\_A4:0.10835):0.  
02143,(((T\_morbirosei:0.06635,(T\_sp\_NML\_06:0.08265,T\_ptyseos:0.06555):0.0457):0.13528,(E\_billingiae:0.04927,(E\_pyrif  
oliae:0.02059,E\_tasmaniensis:0.02386):0.04031):0.05237):0.02965,P\_septica:0.06897):0.00849):0.02281):0.02167):0.0188  
6,(P\_agglomerans:0.00944,(P\_sp\_aB:0.0297,P\_vagans:0.01732):0.00575):0.00677,(P\_anthophila:0.01766,P\_deleyi:0.02691):  
0.00785);  
[1065] tree 't1065'=[&R] ((P\_septica:0.13865,((P\_brenneri:0.02194,P\_conspicua:0.00939):0.01278,((P\_agglomerans:5.4E-  
4,(P\_vagans:0.01728,(P\_deleyi:0.04116,(P\_sp\_aB:5.4E-  
4,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.02618,(P\_ananatis:0.02474,P\_allii:0.01818):0.01256):0.05721):0.00989):0  
.0125):0.02353):0.01177,P\_anthophila:0.0514):0.02549):0.04755):0.02804,((P\_sp\_At-  
9b:0.0158,P\_cyprapedii:0.02762):0.06877,(P\_dispersa:0.06405,(P\_eucrina:0.19389,((P\_rodasii:0.02842,(P\_rwandensis:0.1  
4126,P\_sp\_GM01:0.06497):0.00546):0.03576,P\_wallisii:0.06919):0.03194):0.02494):0.0484):0.02199,((E\_billingiae:0.1402  
7,((T\_morbirosei:0.13615,(T\_sp\_NML\_06:0.1828,T\_ptyseos:0.10779):0.0346):0.17996,(E\_pyrifoliae:0.05113,E\_tasmaniensis  
:0.08356):0.102):0.03183):0.05328,P\_sp\_A4:0.12618):0.00691);

[1066] tree 't1066'=[&R]  
(P\_anthophila:0.02025,P\_deleyi:0.01888,((((((P\_s\_indologenes:0.00472,P\_s\_stewartii:0.00336):0.0374,(P\_allii:0.0075,P  
\_ananatis:0.02346):0.02679):0.03866,(P\_septica:0.06352,((P\_sp\_A4:0.10562,(E\_billingiae:0.08271,(E\_pyriifoliae:0.11592  
,E\_tasmaniensis:0.09097):0.09302):0.12633):0.04375,((P\_sp\_GM01:0.04641,(P\_dispersa:0.05277,(P\_rodasii:0.03746,P\_rwa  
ndensis:0.01593):0.01293):0.00992):0.02371,(P\_wallisii:0.17564,P\_eucrina:0.11849):0.00681):0.01338,((T\_sp\_NML\_06:0.0  
9601,(T\_morbirosei:0.09281,T\_ptyseos:0.08834):0.02897):0.30596,(P\_sp\_At-  
9b:0.00951,P\_cypripedii:0.02776):0.01318):0.04798):0.0178):0.02222):0.02589):0.03178,(P\_brenneri:0.00954,P\_conspicua  
:0.02072):0.0216):0.01028,(P\_sp\_aB:0.03054,P\_vagans:0.00537):0.00506):0.0026,P\_agglomerans:0.00324):0.01198);  
[1067] tree 't1067'=[&R] ((P\_wallisii:0.01453,P\_dispersa:0.00899):5.3E-  
4,(P\_sp\_GM01:0.02365,(P\_rwandensis:0.02854,P\_rodasii:0.00471):0.00917):0.00965,(((P\_sp\_A4:0.05689,(((P\_s\_stewartii:0  
.0,P\_s\_indologenes:0.0):0.0045,(P\_ananatis:5.4E-  
4,P\_allii:0.00453):0.00936):0.01901,((P\_septica:0.03607,(P\_deleyi:0.01113,((P\_anthophila:0.00922,P\_agglomerans:5.5E-  
4):5.3E-  
4,(P\_vagans:0.00957,P\_sp\_aB:0.00458):0.00461):0.0074):0.01201):0.00741,(P\_brenneri:0.00927,P\_conspicua:0.02491):0.01  
714):0.00536):0.01567):0.0237,(((T\_morbirosei:0.03745,(T\_ptyseos:0.05074,T\_sp\_NML\_06:0.09937):0.05223):0.10552,(E\_bi  
llingiae:0.06161,(E\_pyriifoliae:0.02548,E\_tasmaniensis:0.02179):0.06676):0.04136):0.04457,P\_eucrina:0.03788):0.00245)  
:0.01467,(P\_sp\_At-9b:0.00454,P\_cypripedii:0.02453):0.00574):0.0035);  
[1068] tree 't1068'=[&R]  
(P\_sp\_GM01:0.047,P\_rwandensis:0.02342,(P\_rodasii:0.03501,((((((P\_vagans:0.03571,((P\_agglomerans:0.0,P\_sp\_aB:0.0):5.4E  
-  
4,(P\_deleyi:0.01133,P\_anthophila:0.01125):0.01144):0.01127):0.03111,(P\_brenneri:0.02837,P\_conspicua:0.04267):0.03546  
) :0.02714,((P\_sp\_At-9b:5.4E-  
4,P\_cypripedii:0.01148):0.02165,(P\_sp\_A4:0.14516,((E\_billingiae:0.06001,(E\_pyriifoliae:5.4E-  
4,E\_tasmaniensis:0.03381):0.09614):0.1154,(T\_morbirosei:0.17713,(T\_sp\_NML\_06:0.44904,T\_ptyseos:0.13875):0.06504):0.1  
0503):0.05788):0.02874):0.02462):0.0133,(P\_septica:0.16603,(P\_eucrina:0.12442,(P\_ananatis:0.04232,(P\_allii:0.0694,(P  
\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.0344):0.01577):0.06487):0.00598):0.02745):5.5E-  
4,(P\_dispersa:0.05993,P\_wallisii:0.01175):0.02363):0.01183):5.4E-4);  
[1069] tree 't1069'=[&R]  
(P\_septica:0.00393,((P\_eucrina:0.01304,((P\_wallisii:0.00854,((E\_pyriifoliae:0.0292,(E\_billingiae:0.0119,E\_tasmaniens  
is:0.00397):0.00323):0.07338,((P\_sp\_GM01:0.00352,(P\_rodasii:0.00799,P\_rwandensis:0.00812):5.5E-  
4):0.0263,(P\_sp\_A4:0.06713,(T\_morbirosei:0.03703,(T\_ptyseos:0.02367,T\_sp\_NML\_06:0.02076):0.00815):0.01007):0.02307):  
0.00797):0.00412):5.4E-4,P\_dispersa:0.00701):0.01629):0.00702,(P\_sp\_At-  
9b:0.00795,P\_cypripedii:0.00397):0.00395):5.5E-4):0.00391,((P\_agglomerans:0.0,P\_sp\_aB:0.0):0.00394,P\_vagans:5.5E-  
4):0.00346,((P\_deleyi:0.0,P\_anthophila:0.0):5.4E-4,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0,P\_ananatis:0.0):5.5E-  
4,(P\_allii:0.00395,(P\_brenneri:0.0,P\_conspicua:0.0):5.5E-4):0.00393):0.00393):5.5E-4);  
[1070] tree 't1070'=[&R] (P\_sp\_A4:0.0172,(P\_deleyi:5.4E-  
4,((P\_conspicua:0.0,P\_vagans:0.0,P\_anthophila:0.0,P\_brenneri:0.0,P\_sp\_aB:0.0):5.5E-  
4,P\_agglomerans:0.00835):0.00827):0.00828,(P\_septica:5.3E-4,(((P\_sp\_GM01:0.02566,P\_cypripedii:5.5E-  
4):0.00842,((P\_rodasii:0.0,P\_rwandensis:0.0,P\_sp\_At-9b:0.0):5.3E-

4,((T\_morbirosei:0.00913,(T\_ptyseos:0.01758,T\_sp\_NML\_06:0.00767):0.00873):0.06326,((P\_dispersa:5.4E-4,(P\_eucrina:0.03357,P\_wallisii:5.4E-4):0.00882):5.4E-4,(E\_billingiae:5.4E-4,(E\_pyriifoliae:0.00644,E\_tasmaniensis:0.04607):0.09747):0.08663):0.01689):5.4E-4):5.5E-4):0.00842,(P\_allii:0.00828,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00831,P\_ananatis:5.5E-4):5.5E-4):0.02515):5.4E-4);

[1071] tree 't1071'=[&R]  
(P\_sp\_aB:0.02823,P\_agglomerans:0.02335,((P\_deleyi:0.06088,P\_anthophila:0.03559):0.0086,(P\_vagans:0.01931,(((P\_allii:0.03175,((P\_s\_indologenes:0.00476,P\_s\_stewartii:0.00238):0.08486,P\_ananatis:0.02249):0.0133):0.0756,(P\_septica:0.10312,((E\_billingiae:0.12762,(E\_pyriifoliae:0.12863,E\_tasmaniensis:0.09489):0.11663):0.09344,((P\_sp\_A4:0.17612,(T\_sp\_NML\_06:0.2801,(T\_ptyseos:0.13717,T\_morbirosei:0.09998):0.06822):0.17017):0.0727,(P\_sp\_At-9b:0.02301,P\_cyprapedii:0.08914):0.05258,((P\_dispersa:0.06814,(P\_sp\_GM01:0.06036,(P\_rodasii:0.03971,P\_rwandensis:0.01726):0.01032):0.01827):0.00431,(P\_wallisii:0.04756,P\_eucrina:0.19557):0.0231):0.09057):0.02943):0.02868):0.0324):0.08029):0.02157,(P\_brenneri:0.01987,P\_conspicua:0.02363):0.0284):0.01741):0.00351):0.00681);

[1072] tree 't1072'=[&R] ((P\_sp\_At-9b:5.5E-4,(P\_sp\_A4:0.01189,(E\_billingiae:0.01028,(E\_pyriifoliae:0.00957,E\_tasmaniensis:0.03239):0.01864):0.00338):0.00724):0.00314,((P\_cyprapedii:0.0,P\_ananatis:0.0,P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.5E-4,(P\_allii:0.00637,(P\_deleyi:0.0432,(P\_conspicua:0.0,P\_anthophila:0.0,P\_brenneri:0.0,P\_agglomerans:0.0,P\_vagans:0.0,P\_sp\_aB:0.0):5.5E-4):0.00637):5.5E-4):5.3E-4):0.00319,(P\_wallisii:0.00321,(P\_rwandensis:5.5E-4,(P\_rodasii:0.0031,P\_sp\_GM01:0.00616):5.5E-4):0.00319):5.5E-4,((P\_septica:0.00642,(P\_eucrina:5.4E-4,(T\_morbirosei:0.01863,(T\_ptyseos:0.01926,T\_sp\_NML\_06:0.01601):0.01752):0.04333):0.00322):0.00316,P\_dispersa:5.4E-4):0.00315);

[1073] tree 't1073'=[&R]  
(P\_wallisii:0.01625,(((P\_septica:0.03727,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00814,(P\_allii:0.03753,P\_ananatis:5.3E-4):0.01241):0.02526,(((P\_vagans:0.00406,(P\_anthophila:0.01248,P\_agglomerans:0.00407):0.00421):0.0041,P\_sp\_aB:0.00822):5.5E-4,P\_deleyi:0.0082):0.00435,(P\_brenneri:5.4E-4,P\_conspicua:0.00803):0.0166):0.00551):0.00711):0.00423,(P\_sp\_At-9b:0.01718,P\_cyprapedii:0.00801):5.5E-4):0.008,P\_dispersa:0.0041):0.004,((P\_eucrina:0.03896,P\_rodasii:5.4E-4):0.00403,(P\_rwandensis:0.00407,(P\_sp\_GM01:0.02441,(P\_sp\_A4:0.02205,((E\_pyriifoliae:0.03352,E\_tasmaniensis:0.0328):0.05769,((T\_morbirosei:0.04724,(T\_ptyseos:0.09434,T\_sp\_NML\_06:0.10087):0.05607):0.16335,E\_billingiae:0.03666):0.011):0.02946):0.01561):5.5E-4):0.00411):5.5E-4);

[1074] tree 't1074'=[&R]  
(P\_brenneri:0.00229,(P\_conspicua:0.00213,((P\_ananatis:0.00589,(P\_allii:0.00828,(P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00205):0.02687):0.01042):0.02735,(P\_septica:0.03031,(((P\_sp\_At-9b:0.00297,P\_cyprapedii:0.0054):0.02486,(P\_eucrina:0.05137,(P\_sp\_GM01:0.01138,(P\_wallisii:0.0194,(P\_dispersa:0.01092,(P\_rwandensis:0.00635,P\_rodasii:0.00843):0.00393):0.00422):0.00223):0.00148):0.01462):0.02357,(P\_sp\_A4:0.0769,((T\_sp\_NML\_06:0.04712,(T\_ptyseos:0.07491,T\_morbirosei:0.06304):0.03662):0.1607,(E\_billingiae:0.04306,(E\_pyriifoliae:0.01709,E\_tasmaniensis:0.0161):0.07796):0.09102):0.02513):0.01759):0.00523):0.02745):0.01994):0.00199,(P\_anthophila:0.01407,(P\_agglomerans:0.01196,(P\_deleyi:0.0042,(P\_sp\_aB:0.00628,P\_vagans:0.00206):0.00423):0.00483):0.00635):0.00698);

[1075] tree 't1075'=[&R] (P\_rodasii:0.20343,(P\_sp\_GM01:0.04752,(P\_rwandensis:0.04279,(P\_sp\_At-9b:0.00616,P\_cyprapedii:0.02529):0.04008):0.01001):0.00878,(P\_wallisii:0.029,(P\_dispersa:0.01683,(((P\_brenneri:0.00732,(P\_conspicua:5.5E-4,(P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00606):0.04555,(P\_allii:0.02431,P\_ananatis:0.0174):0.02147):0.10497):0.01707):0.02731,(((P\_sp\_A4:0.16081,(T\_morbirosei:0.17224,(T\_ptyseos:0.11857,T\_sp\_NML\_06:0.12439):0.03891):0.34308):0.09191,(E\_billingiae:0.12592,(E\_pyriifoliae:0.10491,E\_tasmaniensis:0.06184):0.18369):0.06051):0.08031,(P\_deleyi:0.02158,(P\_anthophila:0.00663,(P\_agglomerans:5.4E-4,(P\_sp\_aB:0.01857,P\_vagans:5.5E-4):0.01245):0.01183):0.01654):0.04549):0.02157):0.05897,(P\_septica:0.07232,P\_eucrina:0.02244):0.04014):0.02376):0.00836):0.00766);

[1076] tree 't1076'=[&R] (P\_sp\_aB:0.02408,P\_vagans:0.0153,(P\_agglomerans:0.00914,(P\_deleyi:0.02977,(P\_anthophila:0.03708,((((T\_morbirosei:0.16185,(T\_ptyseos:0.10431,T\_sp\_NML\_06:0.10017):0.05943):0.149,(E\_billingiae:0.13916,(E\_pyriifoliae:0.06249,E\_tasmaniensis:0.02689):0.07635):0.06999):0.03716,((P\_sp\_At-9b:0.02493,P\_cyprapedii:0.0239):0.02605,((P\_rodasii:0.02744,(P\_rwandensis:0.02421,(P\_sp\_GM01:0.02585,(P\_dispersa:0.04006,P\_wallisii:0.02784):0.02308):0.01378):0.01917):0.01553,P\_eucrina:0.14922):0.03139):0.03104):0.0362,(P\_sp\_A4:0.09753,P\_septica:0.06942):0.02748):0.01448,(((P\_s\_indologenes:0.00271,P\_s\_stewartii:5.5E-4):0.03635,(P\_allii:0.02777,P\_ananatis:0.00875):0.01475):0.06238,(P\_brenneri:0.00779,P\_conspicua:0.03007):0.03009):0.01114):0.0264):0.01012):0.01124):0.00621);

[1077] tree 't1077'=[&R] (P\_deleyi:0.01389,(P\_anthophila:0.0167,P\_agglomerans:5.5E-4):0.00249,(P\_sp\_aB:0.00923,((P\_brenneri:0.00939,P\_conspicua:0.01198):0.03364,(P\_vagans:0.00187,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01877,(P\_allii:0.00854,P\_ananatis:0.01258):0.01025):0.05662,(P\_septica:0.04614,(P\_sp\_A4:0.07331,(((P\_sp\_At-9b:0.02717,P\_cyprapedii:0.01169):0.02138,((P\_dispersa:0.03287,P\_wallisii:0.02339):0.01234,((P\_rodasii:0.01423,P\_rwandensis:0.00462):0.01224,P\_sp\_GM01:0.02828):0.00281):0.01074):0.01854,(P\_eucrina:0.06154,((T\_sp\_NML\_06:0.08082,(T\_morbirosei:0.09873,T\_ptyseos:0.05107):0.02764):0.12588,(E\_billingiae:0.04959,(E\_pyriifoliae:0.04775,E\_tasmaniensis:0.04263):0.08755):0.06123):0.03244):0.0145):0.03749):0.01284):0.01946):0.03667):0.00512):0.00273):0.00465);

[1078] tree 't1078'=[&R] (P\_septica:0.01408,((P\_brenneri:0.00349,P\_conspicua:0.01042):0.00342,(P\_deleyi:5.4E-4,((P\_vagans:0.00672,(P\_sp\_aB:0.0102,P\_agglomerans:5.4E-4):0.00348):0.00361,P\_anthophila:0.00363):0.00334):0.00714,((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00348):0.00405,(P\_ananatis:0.01552,P\_allii:0.0165):0.01383):0.02125):0.00704):0.00352,(((E\_billingiae:0.04897,((T\_morbirosei:0.05937,(T\_sp\_NML\_06:0.08335,T\_ptyseos:0.07509):0.0618):0.07477,(E\_pyriifoliae:0.02165,E\_tasmaniensis:0.0362):0.04694):0.02726):0.00943,(P\_eucrina:0.03679,(P\_wallisii:0.00344,(P\_dispersa:0.00972,((P\_sp\_At-9b:0.00689,P\_cyprapedii:5.4E-4):0.01031,(P\_rwandensis:0.00147,(P\_sp\_GM01:0.01435,P\_rodasii:0.00985):0.00987):0.00939):0.01776):0.00477):0.00981):0.01447):0.01449,P\_sp\_A4:0.05819):5.5E-4);

[1079] tree 't1079'=[&R] (P\_sp\_GM01:0.02775,(P\_rodasii:0.01361,P\_rwandensis:0.00855):0.01717,(((P\_sp\_At-9b:0.00386,P\_cyprapedii:0.00931):0.0307,(P\_eucrina:0.0676,P\_wallisii:0.01751):0.01172):0.0106,(((P\_sp\_A4:0.11799,(((P\_brenneri:0.00427,(((P\_deleyi:0.00431,(P\_agglomerans:0.00432,P\_sp\_aB:5.5E-4):0.00429):0.00434,P\_vagans:0.00855):5.3E-4,P\_anthophila:0.00874):0.03519,((P\_s\_indologenes:5.5E-

4,P\_s\_stewartii:0.00439):0.02358,(P\_allii:0.00456,P\_ananatis:0.00877):0.02745):0.04722):0.00931):0.00862,P\_conspicua:5.4E-4):0.04564,P\_septica:0.03126):0.00352):0.03046,((E\_billingiae:0.03405,(E\_pyriifoliae:0.04231,E\_tasmaniensis:0.01228):0.03975):0.09169,(T\_morbirosei:0.16845,(T\_sp\_NML\_06:0.2502,T\_ptyseos:0.17236):0.1138):0.08093):0.02099):0.01389,P\_dispersa:0.0047):5.4E-4):0.00858);

[1080] tree 't1080'=[&R] (((P\_sp\_At-9b:0.01533,(P\_rodasii:0.00868,P\_rwandensis:5.5E-4):0.00848):0.00636,(P\_sp\_GM01:0.06661,(P\_cypripedii:0.0,P\_dispersa:0.0):5.4E-4):0.01385):0.00679,(P\_wallisii:0.02381,P\_septica:0.022):0.00836,(P\_eucrina:5.5E-4,(((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.01818):0.01829,(((T\_morbirosei:0.04835,(T\_ptyseos:0.00818,T\_sp\_NML\_06:0.04238):0.0219):0.12948,P\_sp\_A4:0.04495):0.02216,(E\_billingiae:0.01954,(E\_pyriifoliae:0.0111,E\_tasmaniensis:0.02522):0.1053):0.11196):5.4E-4):0.00894,(((P\_ananatis:5.4E-4,(P\_brenneri:5.5E-4,P\_deleyi:0.00894):0.00889,(P\_sp\_aB:0.01792,(P\_anthophila:5.4E-4,(P\_agglomerans:0.01796,P\_vagans:5.4E-4):0.00891):5.5E-4):0.00942):0.00888):0.00877,P\_conspicua:0.2471):5.4E-4,P\_allii:5.5E-4):0.00919):0.00888):0.0115);

[1081] tree 't1081'=[&R] ((P\_dispersa:0.0,P\_sp\_GM01:0.0):0.00894,(P\_rodasii:0.0,P\_rwandensis:0.0):5.5E-4,((P\_wallisii:5.5E-4,((T\_morbirosei:0.05087,(T\_ptyseos:0.06609,T\_sp\_NML\_06:0.1126):0.1032):0.27198,(((P\_septica:0.10452,((P\_ananatis:5.4E-4,(P\_allii:0.00903,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00902):0.00901):0.07557,((P\_brenneri:0.0,P\_conspicua:0.0):5.5E-4,(P\_anthophila:0.02324,((P\_deleyi:0.0,P\_vagans:0.0):0.00883,(P\_agglomerans:0.01777,P\_sp\_aB:5.4E-4):5.4E-4):0.03486):0.02345):0.00869):0.00219):0.0404,(P\_sp\_A4:0.05742,(E\_billingiae:0.08839,(E\_pyriifoliae:0.02583,E\_tasmaniensis:0.04839):0.1216):0.11548):0.02541):0.02875,(P\_sp\_At-9b:0.0,P\_cypripedii:0.0):5.5E-4):0.01767):5.4E-4):0.00885,P\_eucrina:0.09635):5.4E-4);

[1082] tree 't1082'=[&R] (P\_eucrina:0.08667,(P\_wallisii:0.02731,P\_dispersa:0.02884):0.02119,(P\_septica:0.06662,(((P\_brenneri:0.00982,P\_conspicua:0.02189):0.0218,((P\_ananatis:0.01686,(P\_allii:0.03059,(P\_s\_indologenes:0.00439,P\_s\_stewartii:5.1E-4):0.0323):0.0035):0.03068,(P\_deleyi:0.04235,((P\_agglomerans:0.01163,P\_sp\_aB:0.01712):0.01118,(P\_vagans:0.01713,P\_anthophila:0.03063):0.01097):0.00604):0.01039):0.01043):0.02805,(((P\_sp\_GM01:0.02336,P\_rwandensis:0.00395):0.00484,(P\_rodasii:0.01766,(P\_cypripedii:0.02724,P\_sp\_At-9b:0.01028):0.02757):0.00661):0.01038,((T\_morbirosei:0.0441,(T\_sp\_NML\_06:0.12083,T\_ptyseos:0.06416):0.02901):0.21731,(P\_sp\_A4:0.06213,(E\_billingiae:0.06561,(E\_tasmaniensis:0.10935,E\_pyriifoliae:0.07189):0.06702):0.0656):0.02139):0.01568):0.01202):0.01579):0.01629);

[1083] tree 't1083'=[&R] (P\_sp\_GM01:0.02213,((P\_eucrina:0.13058,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.4E-4,(P\_allii:0.02153,P\_ananatis:5.5E-4):0.02108):0.07679,((P\_septica:0.0895,((E\_billingiae:0.11411,(E\_pyriifoliae:0.1226,E\_tasmaniensis:0.01052):0.28444):0.26444,(P\_sp\_A4:0.13658,(T\_sp\_NML\_06:0.11067,(T\_morbirosei:0.1402,T\_ptyseos:0.01782):0.0567):0.13295):0.0879):0.08443):0.06215,(P\_anthophila:5.5E-4,(((P\_vagans:0.0,P\_sp\_aB:0.0):5.4E-4,P\_deleyi:0.0237):5.4E-4,(P\_agglomerans:5.4E-4,(P\_brenneri:5.4E-4,P\_conspicua:0.0237):0.04624):0.02278):0.02311):0.03098):0.02563):0.08635,P\_dispersa:5.5E-4):0.02317):0.02156,P\_wallisii:5.4E-4):5.4E-4,((P\_cypripedii:0.07299,P\_sp\_At-9b:0.0265):0.06731,(P\_rodasii:0.02259,P\_rwandensis:0.0221):5.4E-4):0.022);

[1084] tree 't1084'=[&R] (P\_sp\_aB:5.5E-4,(P\_vagans:0.00443,((P\_sp\_A4:0.0222,(((T\_morbirosei:0.02091,(T\_ptyseos:0.01848,T\_sp\_NML\_06:0.02703):0.0202):0.02772,(E\_billingiae:0.00899,(E\_pyrifoliae:0.01345,E\_tasmaniensis:0.01859):0.00459):0.04068):0.01696,(P\_septica:0.01662,(P\_sp\_At-9b:0.01896,P\_cyprapedii:0.01645):0.01396):0.005):0.01376,((P\_dispersa:0.00884,P\_wallisii:0.00441):0.00434,(P\_sp\_GM01:0.00437,(P\_eucrina:0.00931,(P\_rodasii:0.00873,P\_rwandensis:5.5E-4):0.00436):5.3E-4):5.4E-4):0.00444):0.01308):0.0058,(P\_deleyi:5.4E-4,P\_anthophila:0.00442):5.4E-4):0.0044):5.5E-4,(P\_agglomerans:0.00451,((P\_brenneri:5.5E-4,P\_conspicua:0.00443):0.00447,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00444,(P\_allii:5.5E-4,P\_ananatis:0.00448):0.00897):0.0091):0.00438):5.4E-4);

[1085] tree 't1085'=[&R] (((((T\_morbirosei:0.02368,(P\_septica:5.4E-4,((P\_sp\_A4:0.07314,(E\_billingiae:5.4E-4,(E\_pyrifoliae:0.04804,E\_tasmaniensis:5.3E-4):0.0491):0.15514):5.4E-4,T\_ptyseos:5.4E-4):0.02303,T\_sp\_NML\_06:5.5E-4):0.04623):0.02434):0.02393,P\_eucrina:5.5E-4):5.5E-4,P\_rodasii:0.02412):0.02347,P\_sp\_GM01:0.0245):5.5E-4,(P\_ananatis:0.0,P\_dispersa:0.0,P\_wallisii:0.0,P\_rwandensis:0.0):5.5E-4,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.02261,(P\_anthophila:0.04596,((P\_sp\_At-9b:0.0,P\_cyprapedii:0.0):5.3E-4,((P\_conspicua:0.0,P\_brenneri:0.0):5.3E-4,((P\_agglomerans:0.0,P\_vagans:0.0,P\_sp\_aB:0.0):5.3E-4,P\_deleyi:0.0226):0.04582):0.02274):0.02266):5.4E-4):0.02434,P\_allii:0.02353):5.5E-4);

[1086] tree 't1086'=[&R] (P\_deleyi:0.035,((P\_brenneri:0.00389,P\_conspicua:0.02413):0.00887,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.02047,(P\_allii:0.01874,P\_ananatis:0.01345):0.01496):0.04718,((P\_septica:0.05421,((E\_billingiae:0.1068,(E\_pyrifoliae:0.04633,E\_tasmaniensis:0.04568):0.06148):0.21376,P\_sp\_A4:0.15401):0.05104):0.0106,((T\_morbirosei:0.10516,(T\_ptyseos:0.10726,T\_sp\_NML\_06:0.15547):0.07582):0.26285,(P\_eucrina:0.06206,((P\_cyprapedii:0.05759,P\_sp\_At-9b:0.02712):0.03221,((P\_sp\_GM01:0.03154,(P\_rodasii:0.02745,P\_rwandensis:0.02387):0.02847):0.0229,P\_wallisii:0.01825):0.01008,P\_dispersa:0.03264):0.00913):0.0291):0.03759):0.00147):0.03052):0.0255):0.03189,(P\_anthophila:0.02699,(P\_vagans:0.0118,(P\_agglomerans:0.01139,P\_sp\_aB:0.0079):0.00387):0.01482):0.00455);

[1087] tree 't1087'=[&R] (((P\_sp\_A4:0.20686,((T\_morbirosei:0.07066,(T\_sp\_NML\_06:0.18456,T\_ptyseos:0.13454):0.03626):0.13664,(E\_billingiae:0.11512,(E\_pyrifoliae:0.11179,E\_tasmaniensis:0.05394):0.16023):0.1053):0.04448):0.06496,(((P\_sp\_At-9b:0.04486,P\_cyprapedii:0.05147):0.01089,(((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.01682):0.0566,(P\_allii:0.03622,P\_ananatis:0.017):0.03283):0.09239,((P\_anthophila:5.5E-4,(P\_sp\_aB:5.4E-4,(P\_deleyi:0.00851,(P\_agglomerans:0.0171,P\_vagans:0.00847):5.5E-4):0.0085):0.03418):0.02361,(P\_brenneri:0.02027,P\_conspicua:0.02273):0.03231):0.08219):0.08501,P\_septica:0.06389):0.03529):0.02829,P\_dispersa:0.00505):0.01617):0.01916,(P\_rwandensis:0.02694,(P\_sp\_GM01:0.02658,P\_rodasii:0.03393):0.00854):0.01926,(P\_eucrina:0.07946,P\_wallisii:0.01342):0.02386);

[1088] tree 't1088'=[&R] (P\_sp\_aB:0.02618,(P\_agglomerans:0.02655,P\_vagans:0.01794):0.00549,(P\_anthophila:0.0681,(P\_deleyi:0.04685,(((P\_s\_indologenes:0.00443,P\_s\_stewartii:5.5E-4):0.09248,(P\_allii:0.01515,P\_ananatis:0.04357):0.03878):0.03426,(P\_septica:0.07616,(((E\_billingiae:0.12549,(E\_pyrifoliae:0.07454,E\_tasmaniensis:0.05717):0.14936):0.19712,(P\_eucrina:0.08189,((P\_sp\_GM01:0.09591,(P\_sp\_At-

9b:0.0466,P\_cyprapedii:0.04888):0.01839):0.01264,(P\_wallisii:0.05006,(P\_dispersa:0.04969,(P\_rodasii:0.05081,P\_rwandensis:0.05509):0.01078):0.00931):0.01362):0.02343):0.04336):0.10417,(P\_sp\_A4:0.12123,(T\_sp\_NML\_06:0.075,(T\_morbirosei:0.17724,T\_ptyseos:0.08428):0.07088):0.18985):0.03825):0.05347):0.02068):0.06781,(P\_brenneri:0.04569,P\_conspicua:0.03161):0.0143):0.03501):0.00804):0.00587);

[1089] tree 't1089'=[&R] (((((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00309):0.02166,(P\_ananatis:0.03459,P\_allii:0.00525):0.01144):0.02968,(P\_septica:0.04573,((P\_sp\_At-9b:0.01722,P\_cyprapedii:0.01369):0.01855,(((P\_wallisii:0.01271,P\_eucrina:0.04106):0.00893,P\_dispersa:0.02227):0.01075,(P\_rodasii:0.01623,P\_rwandensis:0.00668):0.00824):0.0083,P\_sp\_GM01:0.01863):0.03704):0.0231,(P\_sp\_A4:0.08928,((T\_morbirosei:0.06122,(T\_ptyseos:0.06422,T\_sp\_NML\_06:0.05587):0.04188):0.12497,(E\_billingiae:0.05998,(E\_pyriifoliae:0.01401,E\_tasmaniensis:0.02648):0.03953):0.10128):0.03666):0.01742):0.01942):0.02245):0.03675,(P\_brenneri:0.0038,P\_conspicua:0.00748):0.00438):0.01007,(P\_sp\_aB:0.00957,(P\_deleyi:0.01106,P\_vagans:0.00157):0.0047):0.00159,(P\_anthophila:0.02438,P\_agglomerans:0.00321):0.00154);

[1090] tree 't1090'=[&R] ((P\_sp\_A4:0.0987,(T\_morbirosei:0.06383,(T\_ptyseos:0.02506,T\_sp\_NML\_06:0.04784):0.04557):0.01976):0.06133,((P\_sp\_At-9b:0.00864,(P\_rwandensis:0.01697,(P\_cyprapedii:0.00857,(P\_rodasii:0.02634,P\_sp\_GM01:0.01739):0.00811):5.4E-4):0.00832):0.00914,(P\_septica:0.01715,(P\_eucrina:0.06231,(P\_ananatis:0.01686,(((P\_anthophila:5.3E-4,((P\_agglomerans:0.0,P\_deleyi:0.0,P\_sp\_aB:0.0):5.5E-4,P\_vagans:0.00858):0.00832):0.02597,(P\_brenneri:0.02732,P\_conspicua:0.01732):0.00891):0.035,(P\_allii:0.03383,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00835):5.5E-4):0.00834):5.5E-4):0.02683):0.0168):0.00893,((E\_billingiae:0.06639,(E\_pyriifoliae:0.02482,E\_tasmaniensis:0.04546):0.05143):0.04501,(P\_dispersa:0.03285,P\_wallisii:0.03498):0.01861):0.00929);

[1091] tree 't1091'=[&R] (((P\_deleyi:0.0941,(P\_conspicua:0.01705,((P\_vagans:0.01765,(P\_agglomerans:0.05776,P\_sp\_aB:0.03736):0.03531):5.5E-4,P\_brenneri:0.01854):0.01828):0.05522):5.5E-4,P\_anthophila:0.01619):0.05543,(P\_septica:0.09092,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.06955,(P\_allii:0.01721,P\_ananatis:5.4E-4):5.3E-4):0.12982,((E\_billingiae:0.13302,(E\_pyriifoliae:0.03458,E\_tasmaniensis:5.4E-4):0.14262):0.10617,((T\_morbirosei:5.4E-4,(T\_sp\_NML\_06:0.08395,T\_ptyseos:0.08102):0.04911):0.16391,P\_sp\_A4:0.0796):0.03924):0.01691):0.07342):5.4E-4,((P\_eucrina:0.03354,(P\_sp\_GM01:0.03571,(P\_rodasii:0.01748,P\_rwandensis:5.4E-4):5.4E-4):0.03865):0.05309,((P\_sp\_At-9b:0.0,P\_cyprapedii:0.0):0.04504,(P\_dispersa:0.01691,P\_wallisii:0.03477):0.03057):0.05079):5.5E-4);

[1092] tree 't1092'=[&R] (P\_sp\_A4:0.10572,(E\_billingiae:0.12015,((E\_pyriifoliae:0.05919,E\_tasmaniensis:0.01304):0.09546,(T\_morbirosei:0.07618,(T\_ptyseos:0.05534,T\_sp\_NML\_06:0.0812):0.04099):0.1058):0.05036):0.04484,((P\_sp\_At-9b:0.01805,P\_cyprapedii:0.01218):0.02046,(((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00728):0.03076,(P\_allii:0.01446,P\_ananatis:0.00691):0.00456):0.0371,(P\_septica:0.0926,((P\_brenneri:0.00962,P\_conspicua:0.00323):0.01329,(P\_anthophila:0.01152,(P\_deleyi:0.005,(P\_agglomerans:5.4E-4,((P\_vagans:0.01097,P\_sp\_aB:5.5E-4):0.00366):0.00623):0.00529):0.02619):0.02606):0.01446):0.00722,(P\_eucrina:0.0469,(((P\_dispersa:0.03554,(P\_rodasii:



0.08523,P\_rwandensis:0.02353):0.01316):0.01422,P\_sp\_GM01:0.0055):0.00814,P\_wallisii:0.02347):0.0214):0.01883):0.00802):0.00501);

[1093] tree 't1093'=[&R] (((P\_wallisii:5.5E-4,(P\_cypripedii:0.00504,((E\_billingiae:0.01018,(E\_pyriifoliae:5.4E-4,E\_tasmaniensis:0.01511):0.00502):0.02055,P\_sp\_GM01:0.01026):0.00568):0.00503):0.0099,((P\_eucrina:0.00538,(T\_morbirosei:0.39236,(T\_ptyseos:0.02447,T\_sp\_NML\_06:0.00797):0.01289):0.05022,P\_dispersa:0.00952):5.5E-4):0.00506,P\_sp\_At-9b:0.00541):5.4E-4):0.00958,(P\_rwandensis:0.00507,P\_sp\_A4:0.01031):0.01002,((P\_septica:0.01015,P\_rodasii:5.5E-4):0.00505,(P\_allii:0.00501,((P\_deleyi:5.4E-4,((P\_sp\_aB:0.0,P\_agglomerans:0.0):0.00517,(P\_anthophila:0.0,P\_vagans:0.0,P\_brenneri:0.0,P\_conspicua:0.0):5.5E-4):0.00515):0.01545,(P\_s\_stewartii:0.0,P\_s\_indologenes:0.0,P\_ananatis:0.0):5.5E-4):0.00513):0.00514):5.5E-4);

[1094] tree 't1094'=[&R] ((P\_sp\_GM01:0.01349,(P\_rwandensis:0.02636,P\_rodasii:0.00835):0.00858):0.01686,(P\_wallisii:0.02754,P\_eucrina:0.04997):0.01929,(P\_dispersa:0.01742,((P\_sp\_At-9b:0.00873,P\_cypripedii:0.01768):0.01067,(P\_septica:0.05341,(((P\_ananatis:0.0086,((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00384):0.02052,P\_allii:0.01173):0.00466):0.03131,((P\_brenneri:5.5E-4,P\_conspicua:0.00968):0.00577,((P\_deleyi:0.00866,P\_anthophila:0.01842):0.00202,((P\_vagans:0.02468,P\_sp\_aB:0.00611):0.00381,P\_agglomerans:0.00208):0.00502):0.01443):0.01948):0.01709,(P\_sp\_A4:0.06877,((T\_morbirosei:0.09462,(T\_ptyseos:0.06176,T\_sp\_NML\_06:0.07721):0.02884):0.12874,(E\_billingiae:0.05779,(E\_pyriifoliae:0.02421,E\_tasmaniensis:0.04697):0.04349):0.04024):0.01196):0.02041):0.0122):0.00901):0.01971):0.00486);

[1095] tree 't1095'=[&R] (P\_sp\_GM01:0.11018,(P\_wallisii:0.11055,(P\_rodasii:0.0515,P\_rwandensis:0.05328):0.04482):0.01568,(((P\_sp\_At-9b:0.09325,P\_cypripedii:0.06036):0.05142,(((E\_billingiae:0.17595,(E\_pyriifoliae:0.04157,E\_tasmaniensis:0.07324):0.12722):0.27051,(T\_morbirosei:0.16605,(T\_ptyseos:0.12145,T\_sp\_NML\_06:0.16446):0.06732):0.20882):0.16543,(P\_sp\_A4:0.18231,(P\_septica:0.24509,(((P\_s\_indologenes:0.00401,P\_s\_stewartii:0.00372):0.08621,(P\_allii:0.03821,P\_ananatis:0.09813):0.02948):0.08009,((P\_brenneri:0.03854,P\_conspicua:0.03581):0.05136,(((P\_anthophila:0.06891,P\_deleyi:0.06944):0.01881,(P\_vagans:0.03716,P\_sp\_aB:0.04996):0.02187):0.01261,P\_agglomerans:0.01978):0.02713):0.0858):0.0615):0.0555):0.06683):0.04801):0.04688,(P\_eucrina:0.21256,P\_dispersa:0.13071):0.01875):0.01291);

[1096] tree 't1096'=[&R] ((P\_agglomerans:0.0,P\_vagans:0.0,P\_deleyi:0.0,P\_anthophila:0.0,P\_brenneri:0.0,P\_conspicua:0.0,P\_septica:0.0,P\_sp\_aB:0.0):5.4E-4,(P\_rodasii:0.0,P\_rwandensis:0.0):0.01439,((P\_dispersa:0.0,P\_eucrina:0.0,P\_wallisii:0.0):0.01485,(P\_sp\_GM01:0.01449,(E\_billingiae:0.0,E\_pyriifoliae:0.0,E\_tasmaniensis:0.0,P\_sp\_At-9b:0.0,P\_allii:0.0,P\_ananatis:0.0,P\_cypripedii:0.0,P\_sp\_A4:0.0,P\_s\_indologenes:0.0,P\_s\_stewartii:0.0,T\_morbirosei:0.0,T\_ptyseos:0.0,T\_sp\_NML\_06:0.0):5.5E-4):5.5E-4):0.01393);

[1097] tree 't1097'=[&R] (P\_sp\_GM01:0.05867,P\_rodasii:0.08782,(((P\_cypripedii:0.01393,(P\_septica:0.13517,(P\_sp\_At-9b:5.5E-4,(P\_eucrina:0.19324,(((P\_sp\_aB:0.0451,(P\_anthophila:0.0,P\_vagans:0.0):5.4E-4):0.01475,(P\_deleyi:0.04457,P\_agglomerans:5.4E-4):5.3E-4):0.04494,P\_conspicua:5.4E-4):0.02372,P\_brenneri:0.0219):0.06163,((P\_allii:5.4E-4,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.14717,P\_ananatis:0.01566):0.02774):0.15272,((E\_billingiae:0.22546,(E\_tasmaniensis:0.20871,E\_pyriifoliae:0.14586):0.07581):0.23147,(P\_sp\_A4:0.51103,(T\_ptyseos:0.03394,(T\_morbirosei:0.09032,

T\_sp\_NML\_06:0.17139):0.08584):0.38093):0.09367):0.05458):0.05355):0.06611):0.01955):0.02041):0.02097):0.01594,(P\_dispersa:0.07361,P\_wallisii:0.01415):5.4E-4):0.02803,P\_rwandensis:5.4E-4):5.5E-4);

[1098] tree 't1098'=[&R] (((P\_sp\_At-9b:0.01349,P\_cypripedii:5.5E-4):5.3E-4,(P\_rodasii:0.05689,(P\_ananatis:0.01399,(P\_allii:0.01417,(P\_s\_stewartii:0.01369,P\_s\_indologenes:5.5E-4):0.05497):0.01443):0.08654):0.01296):0.02697,(P\_rwandensis:5.5E-4,P\_sp\_GM01:0.08671):5.4E-4,((((P\_deleyi:5.4E-4,((P\_vagans:0.01417,P\_sp\_aB:0.01398):5.5E-4,(P\_agglomerans:5.4E-4,P\_anthophila:0.0285):0.01399):0.01406):0.01396,(P\_conspicua:0.0435,P\_brenneri:0.01483):5.4E-4):0.03698,(P\_sp\_A4:0.10454,P\_septica:0.05185):0.03846):0.02628,((E\_billingiae:0.1148,(E\_pyriifoliae:0.04457,E\_tasmaniensis:0.07712):0.10739):0.13464,P\_eucrina:0.26079):0.05439):0.03228,((P\_wallisii:0.05765,(T\_morbirosei:0.13832,(T\_sp\_NML\_06:0.28682,T\_ptyseos:0.10791):0.2707):0.37991):6.3E-4,P\_dispersa:5.4E-4):0.04153):0.01479);

[1099] tree 't1099'=[&R] ((P\_conspicua:0.01023,P\_brenneri:5.5E-4):0.00662,((P\_agglomerans:0.0,P\_vagans:0.0):5.5E-4,P\_sp\_aB:0.00331):5.4E-4):0.00334,P\_deleyi:0.00333,((((E\_billingiae:0.02986,(E\_pyriifoliae:0.01416,E\_tasmaniensis:0.01234):0.05876):0.02296,(P\_sp\_A4:0.0179,(T\_sp\_NML\_06:0.01789,(T\_ptyseos:0.04239,T\_morbirosei:0.01212):0.01031):0.04129):0.02675):0.01263,(P\_sp\_GM01:0.01773,((P\_rwandensis:0.01528,P\_rodasii:0.00786):0.02012,((P\_dispersa:0.00332,(P\_sp\_At-9b:0.00331,P\_cypripedii:5.5E-4):0.00994):0.00676,(P\_septica:0.00336,(P\_wallisii:0.0133,P\_eucrina:0.01348):0.00333):5.5E-4):0.00914):0.01584):0.0116):0.01892,(P\_ananatis:0.00588,(P\_allii:5.3E-4,(P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00332):0.01007):0.00115):0.01224):0.00413,P\_anthophila:5.5E-4):0.00326);

[1100] tree 't1100'=[&R] (P\_wallisii:0.00931,(P\_cypripedii:0.02393,P\_sp\_At-9b:0.00279):0.01068,((P\_sp\_GM01:0.011,(P\_rwandensis:0.01166,P\_rodasii:0.00682):0.00906):0.00982,(P\_dispersa:5.5E-4,(P\_eucrina:0.03338,((P\_septica:0.01523,(P\_brenneri:0.00385,((P\_agglomerans:0.00543,(P\_vagans:5.5E-4,P\_sp\_aB:0.00369):0.00199):0.00752,(P\_deleyi:0.0048,P\_anthophila:0.01217):0.00454):0.02142,P\_conspicua:0.00693):0.00643):0.01966):0.01182,((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00185):0.00631,(P\_allii:0.00855,P\_ananatis:0.00449):0.00955):0.0078,(P\_sp\_A4:0.04564,(T\_morbirosei:0.01781,(T\_ptyseos:0.04104,T\_sp\_NML\_06:0.0437):0.03583):0.11269):0.03951):0.01206):0.01156,(E\_billingiae:0.03212,(E\_pyriifoliae:0.0436,E\_tasmaniensis:0.03473):0.04911):0.0421):0.01566):0.00695):5.4E-4):0.00338);

[1101] tree 't1101'=[&R] ((P\_wallisii:5.5E-4,(P\_eucrina:0.0214,P\_dispersa:0.01436):0.0067):0.00747,(P\_rwandensis:0.01913,(T\_morbirosei:0.03678,(T\_sp\_NML\_06:0.03854,T\_ptyseos:0.06528):0.0379):0.14131):0.00929,(P\_rodasii:0.01417,((E\_billingiae:0.04771,(E\_pyriifoliae:0.03071,E\_tasmaniensis:0.0262):0.0287):0.0512,((P\_sp\_At-9b:5.5E-4,P\_cypripedii:0.01425):0.0216,(P\_sp\_GM01:0.0073,(P\_sp\_A4:0.0536,(P\_septica:0.05865,(P\_deleyi:5.5E-4,(P\_vagans:0.01417,((P\_brenneri:0.0,P\_conspicua:0.0):5.4E-4,((P\_allii:0.0,P\_ananatis:0.0):0.00695,(P\_s\_indologenes:0.00194,P\_s\_stewartii:0.00579):0.00624):0.01417):0.02864,(P\_sp\_aB:5.5E-4,(P\_agglomerans:0.007,P\_anthophila:0.01399):5.5E-4):5.5E-4):5.5E-4):0.00705):0.02323):0.02034):0.01474):0.00688):0.00593):0.00832):0.00684);

[1102] tree 't1102'=[&R] (P\_conspicua:0.0083,(P\_anthophila:0.00776,(P\_agglomerans:5.3E-4,(P\_deleyi:0.01598,P\_sp\_aB:0.00389):0.01305):0.00817):5.5E-4,(P\_brenneri:0.00819,(P\_vagans:5.4E-4,((P\_sp\_A4:0.07992,(P\_septica:0.06539,((P\_sp\_At-9b:5.5E-

4,P\_cyprapedii:0.00825):0.00798,((P\_eucrini:0.10391,P\_wallisii:0.01632):0.02572,(P\_dispersa:0.05642,(P\_rwandensis:5.3E-4,(P\_sp\_GM01:0.02565,P\_rodasii:0.04393):0.01629):0.02639):0.00665):0.00866):0.02793):0.00978):0.04937,(((T\_sp\_NML\_06:0.05348,(T\_morbirosei:0.05765,T\_ptyseos:0.07663):0.07564):0.22005,(E\_billingiae:0.07376,(E\_pyriifoliae:0.09892,E\_tasmaniensis:0.04444):0.05681):0.0257):0.11847,((P\_s\_stewartii:0.0,P\_s\_indologenes:0.0):0.03068,(P\_allii:5.4E-4,P\_ananatis:0.00818):0.02159):0.01533):0.03087):0.01503):0.00823):5.5E-4);

[1103] tree 't1103'=[&R] (P\_dispersa:0.02874,(((P\_rodasii:0.0,P\_rwandensis:0.0):0.00905,P\_sp\_GM01:5.5E-4):0.00895,(P\_wallisii:0.04488,P\_eucrini:0.02914):0.01133):0.01017,((T\_ptyseos:0.04324,(T\_morbirosei:0.02047,T\_sp\_NML\_06:0.06598):0.03085):0.06304,((P\_sp\_A4:0.07523,(P\_sp\_At-9b:0.00926,P\_cyprapedii:0.00882):0.02235):0.01688,(P\_septica:0.0034,((E\_billingiae:0.03919,(E\_pyriifoliae:0.02746,E\_tasmaniensis:0.01002):0.03631):0.05003,((P\_allii:0.00878,(P\_ananatis:0.0,P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.5E-4):0.01858,((P\_sp\_aB:0.009,(P\_agglomerans:0.0,P\_vagans:0.0):5.5E-4):5.4E-4,(P\_deleyi:5.4E-4,(P\_anthophila:0.00903,(P\_conspicua:0.00921,P\_brenneri:5.4E-4):0.02838):0.00922):0.00886):0.01821):0.01277):0.04779):0.03485):0.01044):0.00915);

[1104] tree 't1104'=[&R] (P\_agglomerans:0.01882,P\_vagans:0.00762,(((P\_brenneri:0.01061,(((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00374):0.0166,(P\_ananatis:0.01921,P\_allii:0.00764):0.01818):0.07491,(P\_septica:0.07873,((P\_eucrini:0.06301,((P\_sp\_At-9b:0.006,P\_cyprapedii:0.02506):0.04463,((P\_rwandensis:0.02206,(P\_sp\_GM01:0.03207,P\_rodasii:0.04124):0.01109):0.01962,(P\_dispersa:0.01998,P\_wallisii:0.05055):0.02511):0.01443):0.01232):0.04725,(P\_sp\_A4:0.10584,((T\_morbirosei:0.19642,(T\_ptyseos:0.07139,T\_sp\_NML\_06:0.14323):0.07062):0.13767,(E\_billingiae:0.09406,(E\_pyriifoliae:0.09233,E\_tasmaniensis:0.07256):0.08765):0.0859):0.0527):0.03379):0.03164):0.03237):0.04031,P\_conspicua:0.01181):0.01264):0.02078,P\_sp\_aB:0.01825):0.00732,P\_anthophila:0.02275):0.00403,P\_deleyi:0.36389):5.5E-4);

[1105] tree 't1105'=[&R] (P\_sp\_aB:0.02113,P\_vagans:0.00806,(P\_agglomerans:0.00691,(P\_deleyi:0.02187,(P\_anthophila:0.01857,(((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00306):0.02347,(P\_allii:0.01813,P\_ananatis:0.0115):0.01562):0.05587,(P\_septica:0.08925,((P\_eucrini:0.04323,(((P\_rodasii:0.011,P\_rwandensis:0.01892):0.01993,((P\_sp\_At-9b:0.01686,P\_cyprapedii:0.02135):0.04113,P\_sp\_GM01:0.05989):0.00802):0.02417,P\_wallisii:0.02404):0.01158,P\_dispersa:0.01535):0.01912):0.0573,(P\_sp\_A4:0.11906,((T\_morbirosei:0.09194,(T\_sp\_NML\_06:0.15157,T\_ptyseos:0.08737):0.0469):0.25997,(E\_billingiae:0.13131,(E\_pyriifoliae:0.0436,E\_tasmaniensis:0.05868):0.08164):0.08927):0.02671):0.01095):0.01969):0.02502):0.02774,(P\_brenneri:0.01767,P\_conspicua:0.02284):0.02182):0.01163):0.00966):0.00522):0.00188);

[1106] tree 't1106'=[&R] (P\_anthophila:0.05944,P\_deleyi:0.03388,((((P\_wallisii:0.03873,((P\_sp\_At-9b:0.05702,P\_cyprapedii:0.02989):0.01087,(P\_sp\_GM01:0.03301,(P\_rodasii:0.05317,P\_rwandensis:0.00344):0.01634):0.01107):0.00865):5.5E-4,(P\_dispersa:0.01737,P\_eucrini:0.10078):0.02583):0.08232,(P\_sp\_A4:0.15095,((T\_ptyseos:0.12829,(T\_sp\_NML\_06:0.10298,T\_morbirosei:0.12964):0.01777):0.1524,(E\_billingiae:0.09349,(E\_pyriifoliae:0.05175,E\_tasmaniensis:0.07865):0.13943):0.07746):0.02106):0.03498):0.02906,P\_septica:0.09986):0.02123,((P\_s\_indologenes:0.00636,P\_s\_stewartii:0.00391):0.06505,(P\_allii:0.03309,P\_ananatis:0.04917):0.02428):0.05423):0.01485,((P\_agglomerans:0.02231,(P\_vagans:0.00918,P\_sp\_aB:0.03219):0.00569):0.00835,(P\_conspicua:0.21882,P\_brenneri:0.06792):0.01668):0.0073):0.00255);

[1107] tree 't1107'=[&R] (P\_vagans:5.4E-4,(P\_sp\_aB:0.01835,P\_agglomerans:0.00925):0.01922,(P\_deleyi:0.02869,((P\_brenneri:0.01862,P\_conspicua:0.00946):0.03,(P\_anthophila:0.03337,((P\_s\_indologenes:0.00931,P\_s\_stewartii:5.5E-4):0.02303,(P\_ananatis:0.07085,P\_allii:0.02682):0.04798):0.07561,((P\_sp\_A4:0.19387,(E\_billingiae:0.1506,(E\_pyrifoliae:0.04703,E\_tasmaniensis:0.03388):0.38358):0.13949):0.10551,((T\_morbirosei:0.20006,(T\_ptyseos:0.19346,T\_sp\_NML\_06:0.15404):0.09282):0.302,(P\_sp\_At-9b:0.05392,P\_cyprapedii:0.0308):0.096,((P\_sp\_GM01:0.03969,(P\_rwandensis:0.03389,P\_rodasii:0.02786):0.01322):0.0103,P\_wallisii:0.01873):5.5E-4,(P\_dispersa:0.02666,P\_eucrina:0.09369):0.02844):0.10169):0.06736):0.05107):0.06224,P\_septica:0.08345):0.02966):0.03801):0.02449):0.01941):0.01869);

[1108] tree 't1108'=[&R] (P\_sp\_GM01:5.5E-4,(P\_sp\_A4:0.09093,((P\_sp\_At-9b:0.04395,P\_cyprapedii:0.02559):0.0269,(((T\_sp\_NML\_06:0.11235,(T\_morbirosei:0.09633,T\_ptyseos:0.0218):0.05811):0.14738,(P\_eucrina:0.03893,(E\_billingiae:0.11676,(E\_pyrifoliae:0.0152,E\_tasmaniensis:0.0391):0.01883):0.02693):0.00887):0.00807,((P\_allii:0.0,P\_ananatis:0.0):0.01246,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.5E-4):0.0251,((P\_deleyi:0.03855,(P\_brenneri:0.01277,P\_conspicua:5.4E-4):0.01274):0.01309,(P\_agglomerans:0.01284,(P\_vagans:0.01311,P\_sp\_aB:0.01326):0.01289):5.4E-4):5.5E-4,P\_anthophila:0.026):0.0374):0.01854):0.01316,P\_septica:0.0896):5.5E-4):0.02516):0.01329,((P\_rwandensis:0.0,P\_rodasii:0.0):0.01364,(P\_dispersa:0.02613,P\_wallisii:5.4E-4):0.01292):5.4E-4);

[1109] tree 't1109'=[&R] (P\_anthophila:0.007,(P\_deleyi:0.00428,(P\_vagans:0.01423,P\_sp\_aB:0.00915):0.01828):0.00829,(P\_agglomerans:0.01268,(((P\_ananatis:0.02656,(P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00459):0.03788,P\_allii:0.04448):0.00747):0.04579,((P\_septica:0.08581,((P\_eucrina:0.06886,(P\_wallisii:0.01835,(P\_dispersa:0.03765,((P\_rodasii:0.01786,P\_rwandensis:0.02273):0.01438,(P\_sp\_GM01:0.03229,(P\_sp\_At-9b:0.00952,P\_cyprapedii:0.02873):0.03759):0.01412):0.00639):0.00916):0.01781):0.0351,((E\_billingiae:0.0706,(E\_pyrifoliae:0.05706,E\_tasmaniensis:0.06403):0.09108):0.14098,(T\_ptyseos:0.14397,(T\_morbirosei:0.11632,T\_sp\_NML\_06:0.08866):0.0509):0.1723):0.03543):0.02043):0.03744,P\_sp\_A4:0.09055):0.03143):0.02956,(P\_brenneri:0.01159,P\_conspicua:0.00724):0.0176):0.01354):0.01665);

[1110] tree 't1110'=[&R] (E\_billingiae:0.05847,(P\_eucrina:0.12433,(E\_pyrifoliae:0.03971,E\_tasmaniensis:0.04471):0.03963):0.02174,((T\_morbirosei:0.03529,(T\_ptyseos:0.05229,T\_sp\_NML\_06:0.05205):0.02194):0.05274,((P\_septica:0.05232,(P\_brenneri:0.01334,(P\_conspicua:0.02724,(((P\_anthophila:0.01554,P\_agglomerans:0.01711):0.00549,P\_deleyi:0.01941):0.00386,P\_sp\_aB:0.01296):5.5E-4,P\_vagans:0.01289):0.02833):0.0061):0.02813):0.02085,(((P\_s\_indologenes:0.00639,P\_s\_stewartii:0.00325):0.01763,(P\_allii:0.01069,P\_ananatis:0.00615):0.02117):0.01876,(P\_sp\_A4:0.05323,(P\_sp\_At-9b:0.01528,((P\_rodasii:0.00724,P\_rwandensis:0.01248):0.01653,(P\_sp\_GM01:5.4E-4):0.01624):0.00816):0.00663):0.01297):0.01394):0.0123):0.02822);

[1111] tree 't1111'=[&R]  
((P\_brenneri:0.03679,P\_conspicua:0.0029):0.00236,(((P\_eucrina:0.01461,((P\_wallisii:0.00286,(P\_rwandensis:0.00986,(P\_sp\_GM01:0.00986,P\_rodasii:0.01321):0.00258):0.01096,(P\_sp\_At-9b:5.5E-4,P\_cypripedii:0.00283):0.00858):0.0114):5.4E-4,P\_dispersa:0.00809):0.01274):0.02067,((E\_billingiae:0.02656,(E\_pyrifoliae:0.01596,E\_tasmaniensis:0.01019):0.02032):0.04815,(T\_sp\_NML\_06:0.02938,(T\_morbirosei:0.04755,T\_ptyseos:0.01336):0.00954):0.00834):0.02287):0.00825,(P\_sp\_A4:0.02609,P\_septica:0.02658):0.01018):0.00806):0.00398,P\_anthophila:0.00567,(P\_agglomerans:5.5E-4,(P\_deleyi:0.00569,(P\_vagans:5.5E-4,(P\_sp\_aB:0.00283,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00569,(P\_allii:0.00864,P\_ananatis:0.00282):0.00578):0.01438):5.5E-4):0.00283):5.5E-4):5.5E-4);  
[1112] tree 't1112'=[&R] (P\_septica:0.01768,(((P\_sp\_GM01:0.00886,(P\_rodasii:5.4E-4,P\_rwandensis:0.00656):0.00885):0.00651,(P\_dispersa:5.5E-4,(P\_eucrina:0.01783,P\_wallisii:0.0036):0.00293):0.00914):0.01273,(P\_cypripedii:0.00649,(P\_sp\_At-9b:0.00297,(E\_billingiae:0.02361,(E\_pyrifoliae:0.01929,E\_tasmaniensis:0.0232):0.01634):0.02621):0.00377):0.00278):0.00735,(((P\_s\_stewartii:0.0022,P\_s\_indologenes:5.5E-4):0.00446,(P\_allii:0.00657,P\_ananatis:0.00231):0.00902):0.03337,(P\_deleyi:0.00643,(P\_anthophila:0.01009,(P\_vagans:0.00222,(P\_agglomerans:5.5E-4,((P\_brenneri:0.0,P\_conspicua:0.0):0.00885,P\_sp\_aB:5.3E-4):0.00218):0.0044):0.00801):0.00227):0.01053):0.00238,(P\_sp\_A4:0.03204,(T\_morbirosei:0.03257,(T\_sp\_NML\_06:0.0584,T\_ptyseos:0.06938):0.03902):0.07942):0.01047):0.01026);  
[1113] tree 't1113'=[&R] (P\_wallisii:5.5E-4,((P\_sp\_At-9b:0.00681,P\_cypripedii:0.01371):0.01371,(P\_septica:0.02713,(((P\_ananatis:5.4E-4,(P\_allii:0.09335,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.02497):0.01878):0.02885,(P\_deleyi:5.5E-4,(P\_vagans:0.00678,((P\_agglomerans:0.03666,((P\_brenneri:0.07528,P\_conspicua:0.00717):0.02805,P\_sp\_aB:0.00723):0.0016):0.02576,P\_anthophila:0.03524):5.5E-4):0.00682):0.02029):0.01906,((E\_billingiae:0.10991,((T\_morbirosei:0.05076,(T\_sp\_NML\_06:0.06196,T\_ptyseos:0.02174):0.01419):0.03737,P\_sp\_A4:0.07728):0.00835):0.01369,(E\_pyrifoliae:0.02015,E\_tasmaniensis:0.02135):0.14573):0.00918):0.00944):0.00693):0.01391,(P\_eucrina:0.0211,P\_dispersa:0.02122):0.01283,(P\_sp\_GM01:0.00615,(P\_rodasii:0.02742,P\_rwandensis:5.4E-4):0.01518):5.5E-4):0.00573);  
[1114] tree 't1114'=[&R]  
((P\_rodasii:0.02906,P\_rwandensis:0.04243):0.02096,(P\_dispersa:0.01564,P\_wallisii:0.02277):0.0098,(P\_sp\_GM01:0.01434,(P\_eucrina:0.12025,(P\_sp\_At-9b:0.0436,(P\_cypripedii:0.04796,(((P\_brenneri:0.02898,P\_conspicua:0.02555):0.02199,(P\_vagans:0.02216,((P\_sp\_aB:0.02979,(P\_deleyi:0.04963,P\_anthophila:0.06754):0.02003):0.00655,P\_agglomerans:0.00882):5.4E-4):0.02632):0.09263,((P\_s\_indologenes:0.00438,P\_s\_stewartii:5.5E-4):0.06582,(P\_allii:0.03087,P\_ananatis:0.07304):0.01256):0.07402):0.03055,((P\_sp\_A4:0.11932,((T\_morbirosei:0.21338,(T\_sp\_NML\_06:0.28353,T\_ptyseos:0.14196):0.06607):0.22106,(E\_billingiae:0.1889,(E\_pyrifoliae:0.06109,E\_tasmaniensis:0.09824):0.07205):0.03841):0.07217):0.04135,P\_septica:0.07626):0.00789):0.0629):0.00739):0.02611):5.5E-4):0.01638);  
[1115] tree 't1115'=[&R]  
(P\_dispersa:0.0235,P\_wallisii:0.01364,(P\_eucrina:0.06984,((P\_rwandensis:0.02453,P\_rodasii:0.00727):0.03016,((P\_sp\_A

t-  
9b:0.02681,P\_cyprapedii:0.01114):0.02387,((P\_septica:0.1079,((P\_s\_indologenes:0.00362,P\_s\_stewartii:0.00363):0.0103  
9,(P\_allii:0.01093,P\_ananatis:0.01107):0.00872):0.07196,(P\_brenneri:0.01384,(P\_conspicua:0.01913,(P\_anthophila:0.025  
41,(P\_vagans:0.00734,(P\_agglomerans:0.01133,(P\_deleyi:0.0373,P\_sp\_aB:0.00391):0.00361):0.00677):0.00812):0.01075):0.  
01251):0.04229):0.03156):0.01223,(((T\_sp\_NML\_06:0.16991,(T\_morbirosei:0.14557,T\_ptyseos:0.12451):0.04368):0.15602,(E  
\_billingiae:0.10366,(E\_pyriifoliae:0.04781,E\_tasmaniensis:0.029):0.0977):0.03718):0.033,P\_sp\_A4:0.06422):0.03321):0.0  
4013):0.01223):0.00528,P\_sp\_GM01:0.06476):0.00792):0.00496);  
[1116] tree 't1116'=[&R] ((E\_pyriifoliae:5.3E-  
4,(E\_billingiae:0.06865,E\_tasmaniensis:0.01067):0.02142):0.03252,P\_eucrina:0.01078):5.3E-  
4,P\_wallisii:0.01077,((P\_sp\_GM01:0.01073,((P\_brenneri:0.0,P\_conspicua:0.0):5.5E-  
4,(P\_septica:0.01061,(P\_rodasii:0.0,P\_rwandensis:0.0):0.01115):0.01076):5.5E-  
4,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01061,(P\_ananatis:0.0,P\_allii:0.0):5.5E-  
4):0.01069,((T\_sp\_NML\_06:0.13202,T\_ptyseos:0.01479):0.0998,((P\_deleyi:0.0,P\_vagans:0.0):5.4E-  
4,(P\_anthophila:0.01062,((P\_sp\_aB:0.01036,P\_sp\_A4:0.07663):0.01089,T\_morbirosei:0.05956):5.4E-  
4,P\_agglomerans:0.01071):0.01069):5.5E-4):0.01142):5.5E-4):0.02148):0.01078):5.5E-4,(P\_sp\_At-  
9b:0.0,P\_cyprapedii:0.0,P\_dispersa:0.0):5.5E-4):5.5E-4);  
[1117] tree 't1117'=[&R] (P\_anthophila:5.5E-4,P\_conspicua:0.00676,(P\_brenneri:0.00684,(P\_agglomerans:5.3E-  
4,((P\_sp\_aB:5.5E-4,(P\_deleyi:0.02028,(((P\_sp\_At-9b:0.01402,P\_cyprapedii:5.5E-  
4):0.02355,(P\_sp\_A4:0.09238,((T\_morbirosei:0.07497,(T\_ptyseos:0.0403,T\_sp\_NML\_06:0.0968):0.02611):0.07267,(E\_billing  
iae:0.06769,(E\_pyriifoliae:0.00707,E\_tasmaniensis:0.02777):0.08939):0.04768):0.0867):0.00106):0.0075,(P\_sp\_GM01:0.013  
75,(P\_eucrina:0.02145,P\_dispersa:0.02147):0.01368,(P\_rwandensis:5.5E-4,(P\_rodasii:5.5E-  
4,P\_wallisii:0.05083):0.00684):0.00686):5.5E-  
4):0.01413):0.0132,(P\_septica:0.0204,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.03989,(P\_allii:0.01346,P\_ananatis:5.  
5E-4):0.00838):0.03578):0.02811):0.0305):5.4E-4):5.5E-4,P\_vagans:0.00676):0.00677):0.00675):5.5E-4);  
[1118] tree 't1118'=[&R]  
(P\_eucrina:0.02298,(P\_sp\_GM01:0.0141,((P\_rwandensis:0.0276,P\_rodasii:0.00773):0.02152,P\_wallisii:5.3E-  
4):0.00925):0.01586):0.01139,(P\_dispersa:0.00548,(P\_sp\_At-9b:0.00547,P\_cyprapedii:5.5E-  
4):0.00549):0.01133,(((P\_brenneri:0.0,P\_conspicua:0.0):5.5E-4,((P\_agglomerans:0.0,P\_sp\_aB:0.0):5.4E-  
4,((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00558):0.02235,(P\_allii:0.00552,P\_ananatis:5.5E-4):5.4E-  
4):0.03377,(P\_vagans:0.00541,(P\_anthophila:0.0167,P\_deleyi:5.4E-4):5.4E-4):0.00518):5.5E-  
4):0.01101):0.0143,(E\_billingiae:0.05181,(E\_pyriifoliae:0.02237,E\_tasmaniensis:5.5E-  
4):0.02388):0.08262):0.0238,((T\_morbirosei:0.04944,(T\_ptyseos:0.0093,T\_sp\_NML\_06:0.02585):0.01087):0.06773,P\_septica  
:0.01466):0.01475):0.02146,P\_sp\_A4:0.01801):0.00456);  
[1119] tree 't1119'=[&R] ((P\_eucrina:0.00788,P\_wallisii:5.5E-  
4):0.00405,P\_dispersa:0.00962):0.00331,((P\_cyprapedii:0.01335,((E\_billingiae:0.05219,(E\_pyriifoliae:0.01194,E\_tasmani  
ensis:0.01949):0.02069):0.05416,(T\_morbirosei:0.02587,(T\_ptyseos:0.01103,T\_sp\_NML\_06:0.03775):0.04208):0.00433):0.01  
604):0.00234,(P\_sp\_GM01:0.01189,(P\_rodasii:0.01255,(P\_allii:0.00376,((P\_brenneri:0.004,(P\_anthophila:5.5E-  
4,(P\_deleyi:0.01144,((P\_agglomerans:0.0,P\_conspicua:0.0):5.5E-4,(P\_vagans:0.01219,P\_sp\_aB:5.4E-  
4):0.01193):0.00761):0.00826):0.01154):0.02416,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00644,P\_ananatis:0.01937):

0.00565):0.00405):0.01567):0.00435):0.00839):0.00758,(P\_sp\_At-  
9b:0.02351,((P\_sp\_A4:0.02955,P\_rwandensis:0.01219):0.00448,P\_septica:0.00801):0.00787):5.5E-4);  
[1120] tree 't1120'=[&R] ((P\_sp\_At-  
9b:0.00992,P\_cyprapedii:0.02656):0.0296,((P\_sp\_A4:0.1453,((T\_ptyseos:0.10014,(T\_morbirosei:0.20739,T\_sp\_NML\_06:0.250  
56):0.01406):0.14055,(E\_billingiae:0.19546,(E\_pyriifoliae:0.09073,E\_tasmaniensis:0.09371):0.04783):0.05307):0.04649):  
0.04477,(((P\_agglomerans:0.02973,(P\_sp\_aB:0.03911,P\_vagans:0.01957):0.00746):0.01838,(P\_anthophila:0.01693,P\_deleyi  
:0.05422):0.01889):0.07853,(P\_brenneri:0.02954,P\_conspicua:0.0432):0.01224):0.09359,(P\_allii:0.03765,P\_ananatis:5.5E  
-  
4):0.12115):0.05928):0.07446,(P\_septica:0.0872,(((P\_rodasii:0.02381,P\_rwandensis:0.01455):0.05027,((P\_s\_indologenes:  
0.0,P\_s\_stewartii:0.0):0.05626,P\_sp\_GM01:0.03518):0.023):0.03077,(P\_wallisii:0.03601,(P\_eucrina:0.11814,P\_dispersa:0  
.07275):0.03488):0.03256):0.04301):0.04043);  
[1121] tree 't1121'=[&R] ((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00177):0.03858,(P\_sp\_GM01:0.01372,((P\_sp\_At-  
9b:0.01143,P\_cyprapedii:0.01476):0.03567,(P\_sp\_A4:0.04868,(((P\_deleyi:0.01097,((P\_vagans:0.00538,(P\_agglomerans:0.0  
,P\_sp\_aB:0.0):5.5E-4):5.5E-  
4,P\_anthophila:0.01636):0.00715):0.00381,(P\_brenneri:0.00542,P\_conspicua:0.00359):0.00894):0.02249,(P\_allii:0.01978,  
P\_ananatis:0.02736):0.01476):0.01476,(P\_septica:0.04801,((T\_morbirosei:0.05443,(T\_ptyseos:0.04531,T\_sp\_NML\_06:0.0285  
6):0.03294):0.0952,(E\_billingiae:0.05352,(E\_pyriifoliae:0.04458,E\_tasmaniensis:0.02743):0.04471):0.04396):0.02916):0.  
01117):0.01254):0.02216):0.02668):0.00792,((P\_rodasii:0.01275,P\_rwandensis:0.01687):0.01383,(P\_dispersa:0.04479,(P\_e  
ucrina:0.04614,P\_wallisii:0.01972):0.01203):0.00788):0.01284);  
[1122] tree 't1122'=[&R]  
(P\_sp\_aB:0.04487,P\_agglomerans:0.01357):0.00872,(P\_deleyi:0.04581,P\_anthophila:0.01476):0.00709,(((P\_septica:0.1005  
9,(P\_brenneri:0.02051,P\_conspicua:0.02385):0.0125):0.02382,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00971,(P\_alli  
i:5.3E-4,P\_ananatis:0.02787):0.04649):0.0649,(P\_sp\_A4:0.16787,((P\_sp\_At-  
9b:0.0799,((P\_sp\_GM01:0.05502,((P\_rodasii:0.06231,P\_rwandensis:0.03973):0.07729,(P\_wallisii:0.04913,P\_dispersa:0.137  
68):0.03651):0.02641):0.02194,(P\_eucrina:0.0697,((E\_billingiae:0.137,(E\_pyriifoliae:0.07037,E\_tasmaniensis:0.00166):0  
.06573):0.1603,(T\_ptyseos:0.1438,(T\_sp\_NML\_06:0.13638,T\_morbirosei:0.16529):0.04557):0.13053):0.07746):0.07457):0.02  
858):5.4E-4,P\_cyprapedii:0.03475):0.10435):0.02382):0.05783):0.03609,P\_vagans:5.4E-4):0.007);  
[1123] tree 't1123'=[&R] ((P\_vagans:0.01277,P\_anthophila:0.02242):5.5E-4,P\_agglomerans:0.00785,(((P\_brenneri:5.3E-  
4,P\_conspicua:0.00828):0.01256,((P\_allii:0.00923,(P\_ananatis:5.5E-  
4,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01251):0.01226):0.03038,(((P\_sp\_At-  
9b:0.02267,P\_cyprapedii:0.01626):0.0139,(P\_dispersa:0.04183,(P\_wallisii:0.01723,(P\_rwandensis:5.4E-  
4,(P\_rodasii:0.01076,P\_sp\_GM01:0.01501):0.00775):0.017):0.0053):0.01351):0.00538,P\_eucrina:0.02453):0.01055,((T\_sp\_N  
ML\_06:0.04537,(T\_morbirosei:0.06609,T\_ptyseos:0.0426):0.00933):0.07866,(P\_sp\_A4:0.04792,(P\_septica:0.01552,(E\_billin  
giae:0.05895,(E\_tasmaniensis:0.04042,E\_pyriifoliae:0.03967):0.04428):0.07402):0.02307):0.01009):0.02028):0.01817):0.0  
0882):0.00422,P\_deleyi:0.02201):0.00366,P\_sp\_aB:0.00833):5.5E-4);  
[1124] tree 't1124'=[&R]  
(P\_sp\_aB:0.0064,P\_agglomerans:0.00319,(P\_vagans:0.00319,(P\_deleyi:0.01595,(P\_anthophila:0.0095,(P\_conspicua:0.0068,(  
P\_brenneri:5.4E-  
4,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01588,((P\_allii:0.00594,P\_ananatis:0.01018):0.01107,(P\_septica:0.05803,

((E\_billingiae:0.04881,(E\_pyrifoliae:0.04234,E\_tasmaniensis:0.02386):0.05804):0.13179,(T\_morbirosei:0.08327,(T\_ptyseos:0.0419,T\_sp\_NML\_06:0.03965):0.03151):0.09018):0.03728,(P\_sp\_A4:0.05502,(P\_sp\_At-9b:0.00977,P\_cypripedii:0.01915):0.01433,(P\_eucrina:0.03991,(P\_rodasii:0.01689,(P\_rwandensis:0.04417,P\_sp\_GM01:0.01666):0.00151):0.03231,(P\_dispersa:0.03796,P\_wallisii:0.01106):0.01218):0.00389):0.00848):0.01737):0.00687):0.01447):0.06931):0.00466):0.01343):0.00903):0.01624):0.00604):0.00367):5.3E-4);

[1125] tree 't1125'=[&R]  
(P\_wallisii:0.04262,(P\_sp\_GM01:0.02379,(P\_rodasii:0.01304,P\_rwandensis:0.0142):0.00995):0.00519,(P\_dispersa:0.01099,(P\_eucrina:0.05687,(P\_septica:0.03475,((T\_morbirosei:0.10919,(T\_sp\_NML\_06:0.11977,T\_ptyseos:0.05542):0.04032):0.10373,(E\_billingiae:0.07631,(E\_pyrifoliae:0.02009,E\_tasmaniensis:0.00516):0.04436):0.08073):0.02061,((P\_s\_indologenes:0.00298,P\_s\_stewartii:5.5E-4):0.00888,(P\_allii:0.01876,P\_ananatis:0.01106):0.01135):0.05441,(P\_brenneri:0.00319,P\_conspicua:0.01803):0.01297,(P\_anthophila:0.01235,(P\_deleyi:0.03712,(P\_agglomerans:0.00908,(P\_vagans:0.03038,P\_sp\_aB:0.00357):0.00345):0.00822):0.00783):0.01338):0.02234):0.01729):0.02755):0.01636,P\_sp\_A4:0.06499):0.00781):0.01017):0.01208,(P\_cypripedii:0.03616,P\_sp\_At-9b:0.01729):0.01382):0.00518);

[1126] tree 't1126'=[&R]  
(P\_sp\_aB:0.00671,P\_agglomerans:0.00672,((P\_brenneri:0.02768,P\_conspicua:0.00661):0.01351,(P\_vagans:0.00803,(P\_anthophila:0.03331,(P\_deleyi:0.06962,((P\_s\_stewartii:5.4E-4,(P\_s\_indologenes:5.5E-4,(P\_allii:0.00656,P\_ananatis:5.4E-4):0.04057):0.00659):0.09988,(P\_septica:0.10142,((P\_dispersa:0.02619,((P\_rodasii:0.02023,P\_rwandensis:0.01356):0.02134,(P\_sp\_GM01:0.04915,(P\_wallisii:0.06697,P\_sp\_At-9b:0.02703):0.02602,P\_cypripedii:0.02072):0.01426):0.02151):0.03961):0.04417,(P\_eucrina:0.10878,(P\_sp\_A4:0.11872,((T\_sp\_NML\_06:0.18764,(T\_morbirosei:0.16428,T\_ptyseos:0.11979):0.14362):0.13079,(E\_billingiae:0.12954,(E\_pyrifoliae:0.05069,E\_tasmaniensis:0.11033):0.23636):0.07057):0.06153):0.05864):0.06779):0.04129):0.03108):0.04522):0.00567):0.00854):0.01307):5.3E-4);

[1127] tree 't1127'=[&R]  
(((P\_sp\_A4:0.15265,((E\_billingiae:0.22096,(E\_pyrifoliae:0.03992,E\_tasmaniensis:0.04866):0.08715):0.26642,(T\_sp\_NML\_06:0.12123,(T\_ptyseos:0.1135,T\_morbirosei:0.16536):0.02191):0.23019):0.04471):0.05723,(P\_wallisii:0.06868,(P\_eucrina:0.11796,(P\_sp\_At-9b:0.00871,(P\_dispersa:0.04646,P\_cypripedii:0.03547):0.01585):0.01024,(P\_rodasii:0.03568,(P\_sp\_GM01:0.01803,P\_rwandensis:0.05406):0.01051):0.02154):5.4E-4):0.01662):0.04422):0.0107,((P\_deleyi:0.05713,(P\_agglomerans:0.01078,(P\_sp\_aB:0.03002,P\_vagans:0.04882):0.00933):0.00605):0.0492,(P\_brenneri:0.01236,(P\_septica:0.11699,P\_conspicua:0.02532):0.01559):0.00607):0.02629,(P\_anthophila:0.08032,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.05339,(P\_allii:0.05284,P\_ananatis:5.4E-4):0.03111):0.05986):0.01565);

[1128] tree 't1128'=[&R] (((P\_septica:0.04869,(((P\_s\_indologenes:0.00172,P\_s\_stewartii:5.5E-4):0.02416,(P\_allii:0.03102,P\_ananatis:0.0263):0.01404):0.04516,(P\_conspicua:0.00447,(P\_brenneri:0.00624,(P\_anthophila:0.01592,((P\_agglomerans:0.00976,P\_sp\_aB:0.00972):0.00341,(P\_vagans:0.00814,P\_deleyi:0.02082):0.00681):0.0054):0.01692):0.0073):0.03692):0.02661,((T\_morbirosei:0.04614,(T\_sp\_NML\_06:0.08271,T\_ptyseos:0.04797):0.03395):0.10265,(E\_billingiae:0.0537,(E\_pyrifoliae:0.03909,E\_tasmaniensis:0.02114):0.05063):0.06512):0.03378):0.01598):0.0369,(P\_sp\_At-



9b:0.02184,P\_cyprapedii:0.02053):0.01687):0.00819,(P\_sp\_GM01:0.03211,(P\_rwandensis:0.01473,(P\_rodasii:0.01131,P\_sp\_A4:0.04051):0.00235):0.01013):0.00965,(P\_dispersa:0.03159,(P\_eucrina:0.06003,P\_wallisii:0.0205):0.00829):0.00752);

[1129] tree 't1129'=[&R] ((P\_allii:5.3E-4,(P\_ananatis:0.00357,(P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00391):0.00815):0.00392):0.01146,(P\_agglomerans:0.00385,(P\_anthophila:5.5E-4,(P\_brenneri:5.5E-4,P\_conspicua:0.0039):0.00392):0.0037):5.5E-4,((P\_deleyi:0.0,P\_vagans:0.0):5.5E-4,(P\_sp\_aB:0.00387,(P\_septica:0.02801,((E\_billingiae:0.05596,(E\_pyrifoliae:0.0418,E\_tasmaniensis:0.03309):0.03787):0.05352,((T\_sp\_NML\_06:0.0873,(T\_morbirosei:0.16091,T\_ptyseos:0.05866):0.02468):0.246,P\_sp\_A4:0.03813):0.02349):0.01445,(P\_eucrina:0.03028,(P\_sp\_GM01:0.0206,(P\_sp\_At-9b:0.01205,P\_cyprapedii:0.00869):0.032):0.00384,((P\_dispersa:0.00428,P\_wallisii:0.02429):0.00352,(P\_rodasii:0.01583,P\_rwandensis:0.00795):0.01168):5.3E-4):0.01109):0.00815):0.00292):0.01885):5.4E-4):5.5E-4);

[1130] tree 't1130'=[&R] (P\_wallisii:0.01149,(P\_sp\_GM01:5.4E-4,(P\_cyprapedii:5.4E-4,(P\_sp\_At-9b:5.4E-4,((T\_morbirosei:0.01714,(T\_sp\_NML\_06:0.03846,T\_ptyseos:0.01873):0.01725):0.05497,(E\_billingiae:0.04099,(E\_pyrifoliae:5.5E-4,E\_tasmaniensis:0.00774):0.05035):0.03778):0.01823,(P\_septica:0.01218,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.4E-4,(P\_allii:0.0118,P\_ananatis:0.00394):0.01186):0.01171,(((P\_deleyi:0.00391,(P\_vagans:0.0,P\_sp\_aB:0.0):5.5E-4):0.00394,P\_agglomerans:5.5E-4):0.00377,P\_anthophila:0.00408):0.02037,(P\_conspicua:0.0078,P\_brenneri:5.5E-4):5.4E-4):0.00711):0.01245):0.00848):0.00388):0.00392):0.00366,((P\_rodasii:0.00351,(P\_sp\_A4:0.02345,P\_eucrina:0.01225):0.008):5.4E-4,(P\_dispersa:0.0,P\_rwandensis:0.0):5.5E-4):5.4E-4);

[1131] tree 't1131'=[&R] (((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.08907,(P\_allii:0.0215,P\_ananatis:0.03016):0.02078):0.09225,(P\_sp\_A4:0.17925,(E\_billingiae:0.09279,((T\_sp\_NML\_06:0.12786,(T\_ptyseos:0.07739,T\_morbirosei:0.24025):0.02722):0.29166,(E\_pyrifoliae:0.05108,E\_tasmaniensis:0.06264):0.01544):0.07101):0.11852):0.03051):0.0173,(P\_septica:0.05726,((P\_brenneri:5.5E-4,P\_conspicua:0.02258):0.02361,((P\_deleyi:0.02845,P\_anthophila:0.01134):0.00569,P\_vagans:5.5E-4):0.00527,(P\_agglomerans:0.01132,P\_sp\_aB:0.02282):5.4E-4):0.01167):0.03389):0.00748,(P\_eucrina:0.10306,((P\_sp\_At-9b:0.01979,P\_cyprapedii:0.03028):0.01683,(P\_rodasii:0.01748,((P\_wallisii:0.04558,P\_dispersa:0.01247):0.02074,(P\_rwandensis:0.06123,P\_sp\_GM01:0.03469):5.5E-4):0.01019):0.02881):0.00779):0.01857);

[1132] tree 't1132'=[&R] ((P\_allii:0.00453,P\_ananatis:5.5E-4):0.00449,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.4E-4,((P\_eucrina:0.01008,((P\_sp\_GM01:0.01065,(P\_rodasii:0.0,P\_rwandensis:0.0):0.00294):0.02834,(P\_dispersa:0.0134,P\_wallisii:0.00911):0.00393):0.00843):0.02309,((T\_sp\_NML\_06:0.04013,(T\_morbirosei:0.02537,T\_ptyseos:0.03645):0.01331):0.08284,(P\_sp\_A4:0.02904,(E\_billingiae:0.04043,(E\_pyrifoliae:0.02608,E\_tasmaniensis:0.01035):0.02845):0.0437):0.01596):0.00589,(P\_septica:0.02588,(P\_sp\_At-9b:0.0222,P\_cyprapedii:0.00846):0.01048):0.00982):0.00552):0.00939):0.00453,((P\_anthophila:5.5E-4,(P\_deleyi:0.0044,(P\_agglomerans:0.00455,(P\_vagans:0.0,P\_sp\_aB:0.0):0.00445):0.00455):0.0136):0.00896,(P\_brenneri:0.00451,P\_conspicua:5.4E-4):0.00334):0.00581);

[1133] tree 't1133'=[&R] ((P\_sp\_aB:5.3E-4,(P\_ananatis:0.01407,(P\_allii:0.00563,(P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.003):0.03621):0.01165):0.03884):0.01008,(P\_deleyi:0.01907,(P\_anthophila:0.00304,(P\_vagans:0.0092,(P\_conspicua:0.0058,(P\_agglomerans:0.00944,P\_brenneri:0.00881):0.00303):5.5E-4):0.00304):0.00562):0.00559):0.02429,(P\_sp\_A4:0.04535,(P\_sp\_At-

9b:0.0128,P\_cyprapedii:0.01171):0.01357):0.00627,(P\_dispersa:0.00246,(((P\_eucrina:0.03805,(P\_wallisii:0.01178,(P\_rod  
asii:5.4E-  
4,(P\_sp\_GM01:0.04176,P\_rwandensis:0.00938):0.006):0.00661):0.00371):0.01248,((E\_billingiae:0.01816,(E\_pyrifoliae:0.0  
119,E\_tasmaniensis:0.01257):0.04889):0.02607,(T\_morbirosei:0.02379,(T\_sp\_NML\_06:0.1305,T\_ptyseos:0.04405):0.04265):0  
.14793):0.02761):5.5E-4,P\_septica:0.41947):0.00589):0.00456);  
[1134] tree 't1134'=[&R]  
(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.03323,(P\_allii:0.01926,P\_ananatis:0.01809):0.024):0.0569,(P\_septica:0.05  
85,(((P\_vagans:0.00941,((P\_anthophila:0.02835,P\_agglomerans:0.00339):0.00397,P\_sp\_aB:0.01711):0.00464):0.00653,P\_del  
eyi:0.00797):0.02945,(P\_conspicua:0.02003,P\_brenneri:0.00484):0.00264):0.0172):0.00734,(((P\_sp\_At-  
9b:0.02012,P\_cyprapedii:0.00903):0.02246,(P\_dispersa:0.0315,((P\_eucrina:0.05305,(P\_sp\_GM01:0.01126,(P\_rodasii:0.0127  
5,P\_rwandensis:0.01482):0.01609):0.01566):0.01474,P\_wallisii:0.03054):0.00441):0.01931):0.01881,(P\_sp\_A4:0.05933,((T  
\_morbirosei:0.09213,(T\_sp\_NML\_06:0.12409,T\_ptyseos:0.08991):0.01984):0.156,(E\_billingiae:0.05853,(E\_pyrifoliae:0.037  
5,E\_tasmaniensis:0.02537):0.07335):0.027):0.02085):0.01564):0.01239);  
[1135] tree 't1135'=[&R] (P\_rwandensis:0.01057,(P\_sp\_GM01:0.0,P\_wallisii:0.0):5.5E-  
4,(((P\_sp\_A4:0.03483,(((P\_septica:0.00353,((E\_pyrifoliae:0.01362,E\_tasmaniensis:0.00785):0.13351,(T\_sp\_NML\_06:0.010  
41,(T\_morbirosei:0.02159,T\_ptyseos:0.02736):0.0126):0.11741):0.70861):0.03466,(P\_brenneri:5.4E-  
4,P\_conspicua:0.00522):0.00534):0.00473,(P\_deleyi:0.01063,(P\_vagans:5.5E-4,(P\_agglomerans:0.00529,P\_sp\_aB:5.5E-  
4):0.00534):5.3E-  
4):0.01703):0.00572,(E\_billingiae:0.0578,P\_anthophila:0.02188):0.00836):0.02094):0.01323,(P\_rodasii:0.00529,(P\_dispe  
rsa:0.01067,((P\_allii:5.5E-  
4,P\_ananatis:0.00531):0.01072,(P\_eucrina:0.02185,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01622):0.00509):5.5E-  
4):0.0053):5.4E-4):0.00506,(P\_sp\_At-9b:0.01056,P\_cyprapedii:5.4E-4):0.00527):5.3E-4);  
[1136] tree 't1136'=[&R]  
(P\_eucrina:0.08058,(P\_sp\_GM01:0.04256,(P\_rodasii:0.02278,P\_rwandensis:0.02303):0.02569):0.01178,(((P\_sp\_At-  
9b:0.02221,P\_cyprapedii:0.02625):0.02847,(P\_sp\_A4:0.06837,((T\_morbirosei:0.06567,(T\_sp\_NML\_06:0.07739,T\_ptyseos:0.0  
4877):0.03376):0.10942,(E\_billingiae:0.07722,(E\_pyrifoliae:0.03065,E\_tasmaniensis:0.03122):0.05375):0.06921):0.03794  
01675):0.00823):0.04579,(((P\_sp\_aB:0.01343,(P\_vagans:0.01028,P\_agglomerans:0.00921):0.00388):0.013,(P\_anthophila:0.0  
2174,P\_deleyi:0.03474):0.00624):0.01711,(P\_brenneri:0.01847,P\_conspicua:0.02596):0.0137):0.00969):0.02316):0.02089):  
0.01996):0.02011,P\_dispersa:0.0137):0.01091,P\_wallisii:0.04399):0.00807);  
[1137] tree 't1137'=[&R]  
(((P\_agglomerans:0.0,P\_vagans:0.0,P\_deleyi:0.0,P\_anthophila:0.0,P\_sp\_aB:0.0,P\_brenneri:0.0,P\_conspicua:0.0):0.02043,  
(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.5E-  
4,(P\_ananatis:0.02095,P\_allii:0.01991):0.04204):0.02019):0.02014,((E\_billingiae:0.0208,(E\_tasmaniensis:0.02357,E\_pyr  
ifoliae:0.04134):0.05294):0.09894,(T\_sp\_NML\_06:0.22287,(T\_morbirosei:0.40922,T\_ptyseos:0.15113):0.17214):0.22129):5.  
4E-4,((P\_septica:0.08777,((P\_rwandensis:5.3E-4,P\_wallisii:0.02024):0.02,(P\_dispersa:5.4E-4,P\_sp\_GM01:0.02055):5.5E-  
4):0.02004,(P\_eucrina:0.06382,P\_rodasii:0.02113):0.01937):5.4E-4):0.02041,(P\_sp\_A4:0.0,P\_sp\_At-  
9b:0.0,P\_cyprapedii:0.0):5.5E-4):5.5E-4);

[1138] tree 't1138'=[&R]  
(((((((P\_anthophila:0.00735,((P\_deleyi:0.0,P\_agglomerans:0.0):0.00737,(P\_sp\_aB:0.0,P\_vagans:0.0):5.5E-4):0.01479):0.0147,P\_conspicua:5.4E-4):0.00729,P\_brenneri:5.3E-4):0.04545,(P\_sp\_At-9b:0.00701,(E\_billingiae:0.13615,P\_cyprapedii:0.00803):0.0077):0.01604):0.05505,P\_septica:0.08198):0.04147,P\_wallisii:0.00932):0.01449,P\_eucrina:0.04796):0.02289,P\_dispersa:5.4E-4,(P\_sp\_GM01:0.05892,((P\_rodasii:0.03053,((P\_allii:0.05173,(P\_ananatis:0.01537,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00762):0.0136):0.03524,(P\_sp\_A4:0.09646,((T\_morbirosei:0.07402,(T\_ptyseos:0.04505,T\_sp\_NML\_06:0.07148):0.03884):0.28955,(E\_pyriifoliae:0.02889,E\_tasmaniensis:5.5E-4):0.15779):0.72483):0.00618):0.01123):0.00743,P\_rwandensis:5.4E-4):0.02078):0.00505);  
[1139] tree 't1139'=[&R] (((P\_sp\_A4:0.10078,((P\_sp\_At-9b:0.04213,P\_cyprapedii:0.03986):0.04722,((E\_billingiae:0.12762,(E\_pyriifoliae:0.06228,E\_tasmaniensis:5.4E-4):0.26858):0.39754,(T\_sp\_NML\_06:0.04143,(T\_ptyseos:0.14375,T\_morbirosei:0.10902):0.03699):0.05229):0.05889):0.05116):0.06756,(P\_septica:0.03823,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01386,(P\_ananatis:0.02382,P\_allii:0.01423):0.01743):0.02285):0.01056):0.00983,(P\_deleyi:0.01885,P\_anthophila:0.01858):5.4E-4,(((P\_wallisii:0.02853,(P\_eucrina:0.06717,P\_dispersa:0.02727):0.03213):0.01425,(P\_sp\_GM01:0.07101,(P\_rodasii:0.03719,P\_rwandensis:5.3E-4):0.00945):0.02338):0.05925,(P\_brenneri:5.5E-4,((P\_agglomerans:0.0,P\_vagans:0.0,P\_sp\_aB:0.0):0.00915,P\_conspicua:0.00908):5.5E-4):0.00822):6.0E-4);  
[1140] tree 't1140'=[&R]  
((P\_eucrina:0.00703,(P\_sp\_GM01:0.00721,((P\_sp\_A4:0.05537,((P\_allii:0.0,P\_ananatis:0.0,P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01732,(E\_billingiae:0.04644,((T\_morbirosei:0.36843,(T\_sp\_NML\_06:0.55526,T\_ptyseos:0.1789):0.18734):0.42632,(E\_pyriifoliae:0.0392,E\_tasmaniensis:0.05157):0.00441):0.06808):0.02618):0.00861):0.00638,(P\_septica:0.02712,(P\_conspicua:0.00686,(P\_brenneri:5.4E-4,((P\_deleyi:0.0,P\_anthophila:0.0,P\_agglomerans:0.0,P\_vagans:0.0):5.4E-4,P\_sp\_aB:0.00691):0.00686):5.5E-4):0.01866):0.00353):0.01451):0.007):5.4E-4,(P\_wallisii:0.0,P\_dispersa:0.0):5.5E-4,((P\_rwandensis:0.01422,(P\_sp\_At-9b:0.0,P\_cyprapedii:0.0):5.5E-4):0.00708,P\_rodasii:0.00706):5.5E-4);  
[1141] tree 't1141'=[&R]  
((P\_brenneri:0.00448,(P\_conspicua:0.06106,((P\_sp\_A4:0.06615,(T\_morbirosei:0.05152,(T\_sp\_NML\_06:0.06793,T\_ptyseos:0.06588):0.02253):0.11674):0.05754,(((E\_billingiae:0.09194,(E\_pyriifoliae:0.05292,E\_tasmaniensis:0.0214):0.04348):0.04373,(((P\_wallisii:0.02971,P\_dispersa:0.02044):0.01009,((P\_rwandensis:0.03942,(P\_rodasii:0.0242,P\_sp\_GM01:0.03431):0.0666):5.4E-4,(P\_sp\_At-9b:0.04799,P\_cyprapedii:0.01778):0.04635):0.01133):0.0197,(P\_septica:0.02796,P\_eucrina:0.04026):0.00607):0.02928):0.01839,(P\_allii:0.01407,P\_ananatis:0.00976):0.01871):0.01036,(P\_s\_indologenes:0.00464,P\_s\_stewartii:0.00462):5.4E-4):0.02563):0.04168):5.4E-4):0.00926,(P\_vagans:0.01835,(P\_agglomerans:0.01803,P\_deleyi:0.01329):5.5E-4):0.00457,(P\_anthophila:0.00942,P\_sp\_aB:0.03236):0.00403);  
[1142] tree 't1142'=[&R] (P\_vagans:0.02919,P\_agglomerans:0.0141,((P\_brenneri:5.4E-4,(P\_conspicua:0.02966,(P\_anthophila:0.06043,(P\_eucrina:0.12524,(((P\_septica:0.11044,(P\_sp\_At-9b:0.0436,P\_cyprapedii:5.4E-4):0.02932):0.03163,((P\_rwandensis:0.0145,P\_rodasii:5.5E-4):0.02964,(P\_sp\_GM01:0.02884,(P\_dispersa:0.06238,P\_wallisii:0.03098):0.03277):6.1E-4):5.5E-4):0.06014,(P\_sp\_A4:0.05603,((T\_sp\_NML\_06:0.16542,(T\_morbirosei:0.07781,T\_ptyseos:0.06177):0.04133):0.16693,(E\_billingiae:0.06567,(E\_tasmaniensis:0.07437,E\_pyriifoliae:0.03279):0.09688):0.08579):0.09397):0.10847):0.03639):0.08514):0.0

01554):0.01386):0.02944,((P\_deleyi:5.4E-4,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.4E-4,(P\_allii:0.04442,P\_ananatis:5.4E-4):0.04408):0.0788):0.04243,P\_sp\_aB:0.01484):0.00146):5.4E-4);  
[1143] tree 't1143'=[&R]  
(P\_dispersa:0.04766,P\_sp\_GM01:0.04038):0.02554,(P\_rodasii:0.01935,P\_rwandensis:0.02896):0.01353,((P\_eucrina:0.09693,(((T\_sp\_NML\_06:0.09994,(T\_ptyseos:0.10725,T\_morbirosei:0.10643):0.03498):0.248,(E\_billingiae:0.09633,(E\_pyrifoliae:0.06334,E\_tasmaniensis:0.05538):0.08632):0.15881):0.08298,(P\_sp\_A4:0.22473,(P\_septica:0.11905,(((P\_s\_indologenes:5.4E-4,P\_s\_stewartii:0.01331):0.04038,(P\_allii:0.02299,P\_ananatis:0.02205):0.0237):0.05197,((((P\_agglomerans:0.00477,P\_anthophila:0.03835):0.00475,P\_sp\_aB:0.00526):0.00423,P\_vagans:0.01494):0.00873,P\_conspicua:0.01458):0.0048,P\_deleyi:0.02117):0.01403,P\_brenneri:0.02198):0.06163):0.04169):0.01924):0.01924):0.01644,(P\_cypripedii:0.04658,P\_sp\_At-9b:0.01903):0.02367):0.0381):0.01851,P\_wallisii:0.05909):0.00732);  
[1144] tree 't1144'=[&R] ((P\_vagans:5.4E-4,((P\_sp\_A4:0.04129,(E\_billingiae:0.03352,E\_pyrifoliae:0.02978):0.03007):0.06406,((T\_morbirosei:0.02476,(T\_sp\_NML\_06:0.11143,T\_ptyseos:0.03814):0.04267):0.48722,P\_septica:5.5E-4):0.0108,((P\_dispersa:0.01227,(P\_wallisii:0.01302,(P\_rwandensis:0.00688,(P\_rodasii:0.00319,P\_sp\_GM01:0.00656):0.00601):0.00887):0.00403):0.01558,((P\_sp\_At-9b:0.01603,P\_cypripedii:5.4E-4):0.01037,P\_eucrina:0.05056):0.00332):0.02728):0.01091):0.02044):0.0161,(P\_allii:0.00675,((P\_s\_indologenes:0.00314,P\_s\_stewartii:5.5E-4):0.03894,P\_ananatis:0.00475):0.00137):0.06352):0.00467):0.0031,(P\_deleyi:0.00642,(P\_sp\_aB:0.00523,P\_agglomerans:0.00867):0.00521):0.00312,((P\_brenneri:5.4E-4,P\_conspicua:0.01266):0.01588,P\_anthophila:0.00638):0.00316);  
[1145] tree 't1145'=[&R]  
(P\_dispersa:0.00973,(P\_wallisii:0.03399,(P\_rwandensis:0.01276,P\_rodasii:0.00821):0.00501):0.00735,(P\_sp\_GM01:0.02423,(P\_sp\_At-9b:5.4E-4,(((P\_allii:5.3E-4,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.02555,P\_ananatis:0.01466):0.01122):0.14882,((P\_brenneri:0.0,P\_conspicua:0.0):5.4E-4,(P\_anthophila:0.01674,((P\_sp\_aB:0.01249,P\_vagans:0.00376):5.4E-4,P\_agglomerans:0.01259):0.0042,P\_deleyi:0.00858):0.01254):0.01708):0.02627):0.01586,P\_septica:0.07429):0.02816,((E\_pyrifoliae:0.11155,E\_tasmaniensis:0.11188):0.10341,E\_billingiae:0.02201):0.01914,(P\_eucrina:0.08447,(P\_sp\_A4:0.10651,(T\_morbirosei:0.07688,(T\_ptyseos:0.11736,T\_sp\_NML\_06:0.03687):0.02191):0.22019):0.06323):0.02441):0.0117):0.00925,P\_cypripedii:5.5E-4):0.00401):0.00531):0.00793);  
[1146] tree 't1146'=[&R] ((P\_s\_stewartii:0.01132,(P\_allii:0.01144,(P\_s\_indologenes:0.0,P\_ananatis:0.0):5.5E-4):5.5E-4):0.023,((P\_rodasii:0.0,P\_rwandensis:0.0):5.4E-4,(P\_sp\_A4:0.0231,P\_sp\_GM01:5.4E-4):0.02285):0.01137,((P\_agglomerans:0.0,P\_vagans:0.0,P\_deleyi:0.0,P\_anthophila:0.0,P\_sp\_aB:0.0,P\_brenneri:0.0,P\_conspicua:0.0):0.01137,((P\_sp\_At-9b:0.0,P\_cypripedii:0.0,P\_dispersa:0.0):5.4E-4,(P\_wallisii:5.3E-4,((T\_sp\_NML\_06:0.01161,(T\_ptyseos:0.03405,T\_morbirosei:0.02346):0.0116):0.02454,(P\_septica:5.4E-4,(P\_eucrina:0.02396,(E\_billingiae:0.04657,(E\_pyrifoliae:0.0346,E\_tasmaniensis:5.5E-4):0.03546):5.4E-4):0.01172):0.01089):0.0123):0.02288):0.01171):5.5E-4);  
[1147] tree 't1147'=[&R]  
(P\_vagans:0.00634,P\_sp\_aB:0.01117,(P\_agglomerans:0.01141,(P\_deleyi:0.02202,(P\_anthophila:0.02616,(((P\_sp\_A4:0.12623,(P\_septica:0.0473,(P\_eucrina:0.05902,(P\_dispersa:0.04342,((P\_wallisii:0.04977,((P\_sp\_At-

9b:0.01398,P\_cyprapedii:0.02036):0.01937,(P\_rodasii:0.02157,P\_rwandensis:0.00913):0.03365):0.01354):0.00502,P\_sp\_GM01:0.0509):0.00981):0.02402):0.02462):0.02283,((T\_sp\_NML\_06:0.10655,(T\_morbirosei:0.12658,T\_ptyseos:0.05237):0.03088):0.14185,(E\_billingiae:0.10705,(E\_pyrifoliae:0.02927,E\_tasmaniensis:0.03256):0.06479):0.07801):0.05459):0.00696):0.03411,((P\_s\_indologenes:0.00215,P\_s\_stewartii:0.00429):0.03004,(P\_allii:0.02925,P\_ananatis:0.02137):0.01452):0.03248):0.03471,(P\_conspicua:0.0109,P\_brenneri:0.00639):0.01259):0.01339):0.00839):0.01114):0.00404);

[1148] tree 't1148'=[&R] (((P\_brenneri:0.0038,P\_conspicua:5.5E-4):0.01984,(((T\_sp\_NML\_06:0.02451,(T\_morbirosei:0.0173,T\_ptyseos:0.01063):0.01155):0.03006,(E\_pyrifoliae:0.0,E\_tasmaniensis:0.0):0.03508,E\_billingiae:0.02128):0.01239):0.02383,(P\_sp\_At-9b:0.0039,P\_cyprapedii:5.4E-4):0.00791):0.00808,(((P\_wallisii:0.01816,(P\_sp\_A4:0.03683,P\_septica:0.00924):0.02721):0.01773,((P\_rodasii:0.00377,P\_rwandensis:5.5E-4):0.02492,(P\_dispersa:5.5E-4,P\_eucrina:0.02395):0.01625):0.0093):0.01079,P\_sp\_GM01:0.01977):5.4E-4):0.01823):0.01363,(P\_agglomerans:5.5E-4,P\_sp\_aB:0.00388):0.00383):0.00388,(((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00384):0.01163,(P\_allii:0.00354,P\_ananatis:5.5E-4):0.00742):0.0082,P\_vagans:0.00739):5.2E-4,(P\_anthophila:0.00386,P\_deleyi:5.5E-4):5.5E-4);

[1149] tree 't1149'=[&R] ((P\_rodasii:0.00857,P\_rwandensis:0.00771):0.00357,(P\_sp\_GM01:0.00566,(P\_eucrina:0.01861,P\_dispersa:0.00438):0.01042):0.00288,(P\_wallisii:0.0141,(((P\_septica:0.06233,(P\_allii:0.00461,((P\_s\_indologenes:0.00682,P\_s\_stewartii:0.00227):0.00903,P\_ananatis:0.00452):5.4E-4):0.0312,(P\_brenneri:0.00581,P\_conspicua:0.00566):0.01069,(P\_vagans:0.0041,(P\_deleyi:0.00686,(P\_agglomerans:0.00227,P\_sp\_aB:0.00227):0.00457):0.00464,P\_anthophila:0.0046):5.4E-4):0.013):0.01547):0.00902):0.00916,((T\_morbirosei:0.0253,(T\_ptyseos:0.0146,T\_sp\_NML\_06:0.05556):0.05329):0.06072,(E\_billingiae:0.03752,(E\_pyrifoliae:0.00936,E\_tasmaniensis:0.00938):0.02463):0.04217):0.01732):0.00751,P\_sp\_A4:0.10005):0.0339,(P\_cyprapedii:0.01365,P\_sp\_At-9b:5.5E-4):0.01573):0.01866):0.00454);

[1150] tree 't1150'=[&R] (P\_septica:0.10449,((T\_morbirosei:0.1485,(T\_ptyseos:0.14989,T\_sp\_NML\_06:0.26381):0.1261):0.38556,(E\_billingiae:0.11083,(E\_pyrifoliae:0.03285,E\_tasmaniensis:0.07322):0.19979):0.10259):0.03022,(P\_eucrina:0.18513,(((P\_rodasii:0.03002,P\_rwandensis:0.01507):0.04474,(P\_sp\_GM01:0.03509,P\_dispersa:0.05277):0.01674):0.0353,(P\_wallisii:0.08708,(P\_sp\_At-9b:0.05688,P\_cyprapedii:0.08716):0.03306):0.01854):0.05319):0.04867,(P\_sp\_A4:0.16474,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.04112,(P\_allii:0.02744,P\_ananatis:0.02731):0.02168):0.09704,(P\_brenneri:0.00979,P\_conspicua:0.02113):0.03647,(P\_vagans:0.00343,P\_sp\_aB:0.01838):0.01988,(P\_anthophila:0.02674,(P\_agglomerans:0.03744,P\_deleyi:0.01485):0.00641):0.00378):0.02961):0.07887):0.0349):0.01789):0.0305);

[1151] tree 't1151'=[&R] ((P\_sp\_A4:0.03743,(P\_eucrina:0.01396,P\_dispersa:0.00972):0.00455):0.00404,(((E\_billingiae:0.01884,(E\_pyrifoliae:0.01366,E\_tasmaniensis:5.5E-4):0.03606):0.03027,(((P\_brenneri:0.0,P\_conspicua:0.0):5.5E-4,(P\_anthophila:0.00686,(P\_agglomerans:0.0,P\_vagans:0.0,P\_sp\_aB:0.0):0.00341,P\_deleyi:5.5E-4):0.01382):0.00345):0.02241,(P\_septica:0.0194,(T\_morbirosei:0.03329,(T\_ptyseos:0.02414,T\_sp\_NML\_06:0.03658):0.02791):0.05109):0.01976):0.00949):0.00665,(P\_allii:0.01622,P\_ananatis:0.00115):0.01428):5.5E-4,(P\_s\_indologenes:0.00341,P\_s\_stewartii:5.4E-4):0.00721):0.02092,((P\_wallisii:0.01022,(P\_sp\_At-9b:5.5E-4,P\_cyprapedii:0.00699):0.01754):0.00823,(P\_rwandensis:0.01278,P\_rodasii:0.00486):0.01013,P\_sp\_GM01:0.01292):0.00457):0.00688);

[1152] tree 't1152'=[&R] (((P\_sp\_At-9b:0.01009,P\_cyprapedii:0.01258):0.00532,(P\_septica:0.07482,P\_sp\_A4:0.03774):0.02411):0.02076,(((P\_sp\_aB:0.00769,P\_deleyi:0.08135):0.00353,(P\_agglomerans:0.01275,(P\_brenneri:0.02044,P\_conspicua:0.01368):0.00885,P\_vagans:0.00911):0.00418):0.00745,P\_anthophila:0.01499):0.00338):0.0774,((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00324):0.01735,(P\_allii:0.01974,P\_ananatis:0.00951):0.00791):0.00473):0.04124,((T\_morbirosei:0.04003,(T\_ptyseos:0.05861,T\_sp\_NML\_06:0.05573):0.02874):0.11867,(E\_billingiae:0.07186,(E\_pyriifoliae:0.03235,E\_tasmaniensis:0.01554):0.07474):0.06493):0.02389):0.01324,((P\_wallisii:0.01826,(P\_dispersa:0.02168,(P\_rodasii:0.00307,P\_rwandensis:0.02327):0.03703,P\_sp\_GM01:5.5E-4):0.02115):0.0225):0.01541,P\_eucrina:0.08148):0.01316);

[1153] tree 't1153'=[&R] ((P\_anthophila:0.01411,(((P\_sp\_At-9b:0.00723,P\_cyprapedii:0.0216):0.05005,(P\_dispersa:0.01887,(P\_rwandensis:0.01445,(P\_rodasii:0.02866,(P\_sp\_GM01:0.03101,(P\_eucrina:0.01682,P\_wallisii:0.03371):0.01436):0.02655):0.00702):0.02543):0.02394):0.0219,(P\_septica:0.06889,(T\_morbirosei:0.08246,(T\_ptyseos:0.04683,T\_sp\_NML\_06:0.05817):0.03914):0.15494,P\_sp\_A4:0.06545):0.03457):0.0266):0.03938,((E\_billingiae:0.10421,(E\_pyriifoliae:0.01965,E\_tasmaniensis:0.00889):0.05083):0.09336,(P\_ananatis:0.02112,(P\_allii:0.01392,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.5E-4):5.4E-4):0.03883):0.02162):0.00375,P\_deleyi:0.00702):0.00702):5.5E-4,(P\_agglomerans:0.0,P\_sp\_aB:0.0):5.5E-4,(P\_vagans:0.00699,(P\_brenneri:0.36603,P\_conspicua:5.5E-4):0.00691):5.5E-4);

[1154] tree 't1154'=[&R] (P\_eucrina:0.02874,P\_wallisii:0.004,(P\_dispersa:0.02752,(P\_cyprapedii:0.00739,(P\_sp\_At-9b:0.00482,(P\_sp\_A4:0.02287,(P\_septica:0.06099,(((P\_brenneri:0.00665,P\_conspicua:0.02146):0.03335,(P\_anthophila:0.02239,(P\_agglomerans:5.4E-4,(P\_vagans:0.01941,(P\_deleyi:0.02747,P\_sp\_aB:0.00731):5.5E-4):0.0039):0.0051):0.0367):0.02998,((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.01172):0.02779,(P\_allii:0.03881,P\_ananatis:0.02203):0.00824):0.03209):0.02148):0.02462):0.04115,((T\_ptyseos:0.05011,(T\_morbirosei:0.04672,T\_sp\_NML\_06:0.0462):0.02236):0.09658,(E\_billingiae:0.06482,(E\_pyriifoliae:0.01812,E\_tasmaniensis:0.03545):0.09481):0.05297):0.01843):0.045):0.0039):0.02847,(P\_rodasii:0.01611,(P\_rwandensis:0.016,P\_sp\_GM01:0.00804):0.0041):0.01361):0.00256):0.00155);

[1155] tree 't1155'=[&R] (((P\_brenneri:5.4E-4,P\_conspicua:0.00386):0.01586,(P\_deleyi:5.4E-4,(P\_anthophila:0.01136,(P\_agglomerans:0.0,P\_vagans:0.0):0.00361,P\_sp\_aB:5.3E-4):0.00785):0.00406):0.01194):0.01675,(P\_dispersa:0.00731,(P\_sp\_A4:5.5E-4,(P\_septica:0.024,(T\_ptyseos:0.02044,(T\_morbirosei:0.06455,T\_sp\_NML\_06:0.02098):0.02899):0.08072,(E\_billingiae:0.00751,(E\_pyriifoliae:0.03311,E\_tasmaniensis:0.01876):0.05494):0.03574):0.0308):0.02735):0.01991,(P\_sp\_GM01:0.00387,(P\_rwandensis:0.01196,P\_rodasii:5.5E-4):0.00776):0.0039,(P\_eucrina:0.03952,P\_wallisii:5.4E-4):0.0038):0.00805):5.5E-4):0.01165,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01152,(P\_allii:0.01977,P\_ananatis:0.00373):0.00396):0.00964,(P\_sp\_At-9b:0.00905,P\_cyprapedii:0.01082):0.01123):0.00955);

[1156] tree 't1156'=[&R] ((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00825,(P\_allii:0.01512,P\_ananatis:5.4E-4):0.02201):0.00803,((P\_sp\_GM01:0.01583,(P\_wallisii:0.00752,(P\_rodasii:0.00751,P\_rwandensis:5.5E-4):0.0075):0.00753):0.0073,(P\_sp\_A4:0.03821,((P\_dispersa:0.00744,(P\_cyprapedii:0.0235,P\_sp\_At-9b:5.3E-4):0.01579):0.00764,(P\_septica:0.05252,(T\_sp\_NML\_06:0.03434,(T\_morbirosei:0.07325,T\_ptyseos:5.4E-4):0.0333):0.08642):0.01742,P\_eucrina:0.03407):0.02065):5.5E-4):0.00767):0.01499,((E\_billingiae:0.03529,(E\_pyriifoliae:0.04151,E\_tasmaniensis:0.02275):0.0925):0.04035,((P\_brenner

i:0.0064,P\_conspicua:0.00149):0.00776,(P\_anthophila:0.02236,(P\_deleyi:5.4E-4,(P\_agglomerans:0.02305,(P\_vagans:0.01491,P\_sp\_aB:5.5E-4):0.00748):0.01515):0.00836):0.01469):0.03777):5.4E-4);

[1157] tree 't1157'=[&R]  
(P\_sp\_aB:0.00218,((((P\_s\_stewartii:0.0625,P\_s\_indologenes:0.04151):0.02351,P\_eucrina:0.02798):0.00731,(((T\_morbirosei:0.01717,(T\_ptyseos:0.00881,T\_sp\_NML\_06:0.01743):0.01889):0.01754,((P\_rwandensis:0.00608,P\_sp\_A4:5.5E-4):0.03385,(E\_billingiae:0.03847,(E\_pyrifoliae:0.00279,E\_tasmaniensis:0.01669):0.02437):0.0326):0.01577):0.0112,(P\_sp\_At-9b:0.0042,P\_cyprapedii:0.00666):0.01343):0.0093):0.01359,(P\_allii:0.00888,P\_ananatis:0.01086):0.00875):0.00792,(P\_brenneri:5.5E-4,P\_conspicua:0.00214):0.00434):0.00216,P\_agglomerans:5.4E-4):0.00437):0.00432,P\_vagans:5.5E-4,(P\_septica:0.01084,(P\_deleyi:0.00429,(P\_anthophila:0.00866,(P\_wallisii:0.01083,(P\_dispersa:0.0107,(P\_rodasii:0.01314,P\_sp\_GM01:0.00894):0.00632):5.3E-4):0.01532):5.4E-4):0.00217):5.5E-4);

[1158] tree 't1158'=[&R]  
(P\_agglomerans:0.01628,(P\_anthophila:0.01387,(P\_vagans:0.01552,P\_deleyi:0.00945):0.00793):0.00697,(P\_conspicua:0.01058,(E\_billingiae:0.11827,((P\_cyprapedii:0.02077,P\_sp\_At-9b:0.00505):0.00633,((P\_septica:0.04518,P\_dispersa:0.01084):0.0106,(P\_rwandensis:0.00835,P\_rodasii:0.02785):0.0251):0.02011):0.04987,((P\_allii:0.05456,P\_s\_indologenes:0.05737):0.06408,(P\_eucrina:0.08683,((T\_ptyseos:0.15631,(T\_morbirosei:0.13979,T\_sp\_NML\_06:0.16073):0.09766):0.06843,(P\_s\_stewartii:0.18233,(E\_pyrifoliae:0.00838,E\_tasmaniensis:0.06427):0.1339,(((P\_sp\_GM01:0.0201,P\_wallisii:0.26158):0.04623,P\_sp\_A4:0.05611):0.04412,(P\_brenneri:0.04109,P\_sp\_aB:0.00514):0.02306):0.02644,P\_ananatis:0.05879):0.0435):0.0818):0.06585):0.24416):0.01991):0.05552):0.04422):0.04235):0.01002);

[1159] tree 't1159'=[&R]  
((((P\_allii:0.00333,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01091,((P\_sp\_GM01:0.01839,(P\_septica:0.00613,((P\_sp\_A4:0.01493,(P\_rodasii:0.00694,P\_rwandensis:0.00819):0.01089):0.06462,((P\_dispersa:0.00613,(P\_cyprapedii:0.00977,P\_sp\_At-9b:5.3E-4):0.00525):0.01378,(((T\_sp\_NML\_06:0.01676,(T\_ptyseos:0.017,T\_morbirosei:0.42643):0.01752):0.05094,(E\_pyrifoliae:0.00735,E\_tasmaniensis:0.00749):0.04525):0.01874,E\_billingiae:0.0526):0.01224):0.01642):0.00931):0.00875):0.00616,P\_wallisii:5.5E-4):0.00307,P\_eucrina:0.00685):0.01708):0.0093,P\_ananatis:0.00201):0.00451):0.01384,(P\_deleyi:0.00584,P\_anthophila:0.01033):0.00464):0.00605,(P\_brenneri:0.00813,P\_conspicua:5.5E-4):0.00145):5.4E-4,P\_vagans:5.5E-4,(P\_sp\_aB:0.00486,P\_agglomerans:0.0016):5.5E-4);

[1160] tree 't1160'=[&R]  
(P\_vagans:0.0226,(P\_septica:0.0076,P\_agglomerans:0.0038):0.0086,(P\_deleyi:0.01306,(P\_conspicua:0.02103,(P\_anthophila:0.02146,((P\_sp\_At-9b:0.02141,P\_cyprapedii:0.02052):0.04547,((P\_dispersa:0.06092,(P\_rodasii:0.01147,P\_rwandensis:0.01551):0.0263):0.03023,(E\_billingiae:0.09857,((P\_sp\_A4:0.14521,(E\_pyrifoliae:0.05251,E\_tasmaniensis:0.0209):0.13909):0.05239,(T\_ptyseos:0.09158,((T\_sp\_NML\_06:0.14624,T\_morbirosei:0.19452):0.19655,(P\_ananatis:0.10397,(P\_brenneri:0.05383,P\_sp\_aB:0.03554):0.1034):0.10413):0.06837):0.029):0.08803,((P\_eucrina:0.01788,P\_wallisii:0.03525):0.03115,(P\_sp\_GM01:0.07125,(P\_s\_indologenes:0.08526,(P\_s\_stewartii:0.07404,P\_allii:0.07232):0.0468):0.06431):0.02908):0.03875):0.10531):0.04422):0.02707):0.04531):0.02144):0.01189):0.00201);

[1161] tree 't1161'=[&R]  
(P\_anthophila:0.00296,(P\_deleyi:0.01696,(P\_agglomerans:0.01216,(P\_vagans:0.00589,P\_sp\_aB:5.4E-4):0.00562):0.00542):0.00469,(((P\_allii:0.0039,(P\_ananatis:0.0062,(P\_s\_indologenes:0.0028,P\_s\_stewartii:5.4E-4):0.01509):0.00865):0.04734,((P\_septica:0.02869,((E\_billingiae:0.03986,(E\_pyriifoliae:0.03462,E\_tasmaniensis:0.04791):0.05489):0.11127,(P\_sp\_A4:0.07798,(T\_sp\_NML\_06:0.02232,(T\_ptyseos:0.06486,T\_morbirosei:0.09235):0.03358):0.12757):0.03868):0.02355):0.02015,((P\_sp\_At-9b:0.01239,P\_cyprapedii:0.01803):0.02517,(P\_dispersa:0.00987,((P\_sp\_GM01:5.3E-4,(P\_rodasii:0.01333,P\_rwandensis:0.00781):0.01493):0.00754,(P\_wallisii:0.01827,P\_eucrinea:0.03161):0.00939):0.01885):0.00661):0.01347):0.0205):0.01014,(P\_conspicua:0.01497,P\_brenneri:0.00598):0.00614):5.4E-4);  
[1162] tree 't1162'=[&R] ((P\_sp\_aB:0.01238,P\_agglomerans:0.00423):0.00842,P\_conspicua:5.4E-4,(P\_vagans:5.4E-4,(P\_brenneri:0.00844,(P\_deleyi:0.00425,(P\_anthophila:0.0085,(P\_septica:0.0344,(((P\_eucrinea:0.013,(P\_rwandensis:0.0124,(P\_rodasii:0.03088,P\_sp\_GM01:0.04002):0.00454,P\_wallisii:0.02133):0.00434):0.00897):0.01303,P\_dispersa:0.00423):0.02631,(P\_sp\_At-9b:0.00425,P\_cyprapedii:0.00422):0.00396):0.01661,(((P\_s\_indologenes:0.00425,P\_s\_stewartii:5.4E-4):0.00875,(P\_allii:0.01703,P\_ananatis:0.00426):0.00402):0.01709,((T\_sp\_NML\_06:0.09876,(T\_morbirosei:0.08939,T\_ptyseos:0.06135):0.03972):0.07502,((E\_billingiae:0.05489,(E\_pyriifoliae:0.01755,E\_tasmaniensis:0.0332):0.04127):0.10813,P\_sp\_A4:0.05507):0.00903):0.01723):0.00451):0.00619):0.01775):0.00848):0.00407):0.00833):0.004);  
[1163] tree 't1163'=[&R]  
(P\_deleyi:0.01482,(P\_vagans:0.00115,P\_anthophila:0.01114):0.00348,((((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00172):0.01835,(P\_allii:0.01492,P\_ananatis:0.00438):0.00741):0.05799,(P\_septica:0.0581,((E\_billingiae:0.14014,(E\_pyriifoliae:0.05286,E\_tasmaniensis:0.06321):0.10952):0.09095,((T\_morbirosei:0.08634,(T\_sp\_NML\_06:0.11268,T\_ptyseos:0.03925):0.08773):0.58466,P\_sp\_A4:0.06814):0.05762):0.03972,((P\_sp\_At-9b:0.02639,P\_cyprapedii:0.01811):0.04462,((P\_rodasii:0.0326,P\_rwandensis:0.0357):0.01647,(P\_eucrinea:0.0489,(P\_sp\_GM01:0.03393,(P\_wallisii:0.1089,P\_dispersa:0.01047):0.01928):0.00937):0.01027):0.01615):0.03179):0.02282):0.0177):0.04322,P\_sp\_aB:0.01099):0.00866,((P\_brenneri:0.007,P\_conspicua:5.4E-4):0.0123,P\_agglomerans:0.00361):0.0053):0.00184);  
[1164] tree 't1164'=[&R]  
(P\_eucrinea:0.08035,(P\_sp\_A4:0.15224,P\_septica:0.05094):0.01687,((((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.02987,(P\_allii:0.00826,P\_ananatis:5.3E-4):0.03938):0.10794,((P\_anthophila:0.00872,(P\_sp\_aB:0.01313,(P\_vagans:0.02541,(P\_agglomerans:0.01663,P\_deleyi:0.00823):0.0045):0.01766):0.03295):0.0665,(P\_brenneri:5.3E-4,P\_conspicua:0.02387):0.01875):0.04508):0.01258,((T\_sp\_NML\_06:0.04127,(T\_ptyseos:0.03924,T\_morbirosei:0.15862):0.06322):0.54751,(E\_billingiae:0.04464,(E\_pyriifoliae:0.06604,E\_tasmaniensis:0.08767):0.09872):0.17786):0.10036):0.02327,((P\_dispersa:0.024,P\_wallisii:0.00846):0.04159,(P\_sp\_GM01:0.05372,(P\_rodasii:5.5E-4,(P\_sp\_At-9b:0.00988,P\_cyprapedii:0.02287):0.06228,P\_rwandensis:0.01679):5.4E-4):0.0251):5.4E-4):0.0353):0.02113);  
[1165] tree 't1165'=[&R]  
(P\_brenneri:0.0,P\_conspicua:0.0):0.01512,((P\_deleyi:0.0088,(P\_agglomerans:0.00611,P\_sp\_aB:0.0174):0.01032):0.02164,(((E\_pyriifoliae:0.04926,E\_tasmaniensis:0.03299):0.03953,(E\_billingiae:0.04277,(T\_sp\_NML\_06:0.05091,(T\_morbirosei:0.087,T\_ptyseos:0.01898):0.04552):0.30479):0.02382):0.07585,(P\_septica:0.03036,(P\_sp\_A4:0.11641,(P\_cyprapedii:0.01107,P\_sp\_At-9b:0.00724):0.02094,((P\_rodasii:0.03152,P\_rwandensis:0.00312):0.01303,(P\_dispersa:0.00749,(P\_sp\_GM01:0.02187,(P\_eucrinea:0.01608,P\_wallisii:0.0072):0.01192):0.00934):0.00872):0.01484):0.0109):0.04549):0.03499):0.01368,((P\_s\_indologen



es:5.5E-4,P\_s\_stewartii:0.00253):5.4E-4,(P\_ananatis:0.01276,P\_allii:0.00989):0.01073):0.02443):0.02029):0.01795,(P\_vagans:0.0079,P\_anthophila:0.01821):5.5E-4);

[1166] tree 't1166'=[&R] (((P\_septica:0.02002,((E\_pyriifoliae:0.01011,E\_tasmaniensis:5.5E-4):0.02095,(T\_morbirosei:0.02057,(T\_ptyseos:0.03106,T\_sp\_NML\_06:5.5E-4):5.5E-4):0.02067):0.01021):0.01043,(E\_billingiae:0.03176,(P\_conspicua:0.0,P\_brenneri:0.0,P\_cypripedii:0.0,P\_sp\_At-9b:0.0,P\_sp\_aB:0.0,P\_agglomerans:0.0,P\_vagans:0.0,P\_anthophila:0.0,P\_wallisii:0.0,P\_deleyi:0.0):5.5E-4):5.5E-4):0.00975,(P\_sp\_GM01:0.0,P\_rwandensis:0.0,P\_dispersa:0.0,P\_eucrina:0.0,P\_rodasii:0.0):5.5E-4,(P\_sp\_A4:0.02025,(P\_s\_stewartii:0.0,P\_s\_indologenes:0.0,P\_ananatis:0.0,P\_allii:0.0):0.01009):5.5E-4);

[1167] tree 't1167'=[&R] (((P\_septica:0.0127,((T\_morbirosei:0.02517,(T\_ptyseos:5.4E-4,T\_sp\_NML\_06:0.01943):0.01488):0.12561,(E\_pyriifoliae:0.02661,(E\_billingiae:0.08161,E\_tasmaniensis:0.01509):0.00729):0.07989):0.02409):0.02789,P\_wallisii:0.00744):0.00956,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.4E-4,(P\_allii:0.00952,P\_ananatis:5.4E-4):0.01893):5.4E-4,((P\_brenneri:0.0,P\_conspicua:0.0):5.4E-4,(P\_sp\_A4:0.0096,(P\_anthophila:0.02939,(P\_deleyi:0.0,P\_sp\_aB:0.0):5.3E-4,(P\_agglomerans:0.01922,P\_vagans:5.4E-4):0.00924):5.4E-4):0.01926):0.01882):0.01899):0.0449,((P\_dispersa:0.01933,(P\_sp\_At-9b:5.4E-4,P\_cypripedii:0.01879):0.0096,(P\_sp\_GM01:0.01894,(P\_rodasii:0.0,P\_rwandensis:0.0):5.3E-4):0.01885):0.00242):0.01303,P\_eucrina:0.03613):0.00621);

[1168] tree 't1168'=[&R] ((P\_ananatis:0.04813,(((P\_brenneri:0.02379,P\_conspicua:5.5E-4):0.01404,(((P\_deleyi:0.03756,(P\_agglomerans:0.01504,P\_sp\_aB:0.01097):0.00422):0.01551,P\_anthophila:0.02425):5.4E-4,P\_vagans:0.03712):0.04334):0.05684,(P\_septica:0.06453,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01213):0.01213):0.01229):0.01217,P\_allii:0.02347,((P\_sp\_A4:0.04879,(E\_billingiae:0.15088,(E\_tasmaniensis:0.09468,E\_pyriifoliae:0.17138):0.07269):0.15061):0.05816,((P\_wallisii:0.01659,(P\_cypripedii:0.02994,((P\_dispersa:0.01424,(P\_rwandensis:0.03727,P\_rodasii:5.4E-4):0.06122):0.01218,(P\_sp\_At-9b:0.04623,P\_eucrina:0.05241):0.01172):0.00342):0.03646):0.03513,(P\_sp\_GM01:0.01272,(T\_morbirosei:0.11835,(T\_ptyseos:0.24012,T\_sp\_NML\_06:0.17828):0.06854):0.48761):0.01641):0.03616):0.00958);

[1169] tree 't1169'=[&R] (((P\_dispersa:0.02833,P\_wallisii:0.04631):0.02405,(P\_eucrina:0.08521,(((E\_billingiae:0.06947,(E\_pyriifoliae:0.08775,E\_tasmaniensis:0.05814):0.11775):0.05926,(P\_septica:0.06732,(((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00584):0.02197,(P\_allii:0.01514,P\_ananatis:0.01194):0.00574):0.07456,((P\_brenneri:0.02333,P\_conspicua:0.00401):0.01746,((P\_agglomerans:0.0051,(P\_vagans:0.01625,P\_sp\_aB:0.01704):0.01175):0.00743,(P\_deleyi:0.04852,P\_anthophila:0.02252):0.00729):0.01893):0.04925):0.01441):0.01101):0.01103,(P\_sp\_A4:0.11225,(T\_morbirosei:0.16611,(T\_ptyseos:0.11087,T\_sp\_NML\_06:0.20906):0.08082):0.23544):0.04414):0.0385):0.00428):0.01222,(P\_rodasii:0.01744,(P\_sp\_GM01:0.01882,P\_rwandensis:0.02344):0.00866):0.01179,(P\_cypripedii:0.03258,P\_sp\_At-9b:0.01579):0.01083);

[1170] tree 't1170'=[&R] (P\_dispersa:0.00703,(P\_sp\_GM01:0.00401,(P\_sp\_A4:0.00595,(P\_rodasii:0.006,P\_rwandensis:0.00402):0.00611):0.00816):0.00503,((P\_eucrina:0.00806,P\_wallisii:0.00405):0.00506,(P\_anthophila:0.01107,(((E\_billingiae:0.01443,(E\_pyriifoliae:0.00539,E\_tasmaniensis:0.00277):0.02076):0.04098,(T\_morbirosei:0.02332,(T\_ptyseos:0.0156,T\_sp\_NML\_06:0.01529):0.01375):0.02759):0.02198,(P\_brenneri:0.00388,(P\_conspicua:0.00201,(P\_sp\_aB:0.002,(P\_agglomerans:5.5E-4,(P\_deleyi:0.00602,P\_vagans:0.002):0.00198):5.5E-

4):0.00402):0.00215):0.00833):0.00881,(P\_septica:0.01022,((P\_sp\_At-  
9b:0.01016,P\_cyprapedii:0.00632):0.01124,(P\_allii:5.4E-4,((P\_s\_indologenes:5.3E-  
4,P\_s\_stewartii:0.00196):0.01414,P\_ananatis:0.00212):0.00402):0.01524):0.00408):0.0033):0.00409):0.00231):0.00198);  
[1171] tree 't1171'=[&R]  
(P\_deleyi:0.03147,P\_vagans:0.00527,(P\_sp\_aB:0.01338,(P\_agglomerans:0.00761,(P\_anthophila:0.02277,(((P\_s\_indologenes  
:5.4E-  
4,P\_s\_stewartii:0.00259):0.02266,(P\_allii:0.00739,P\_ananatis:0.00894):0.01431):0.03502,(P\_septica:0.05827,((P\_sp\_A4:  
0.10367,(T\_morbirosei:0.08077,(T\_ptyseos:0.06319,T\_sp\_NML\_06:0.10744):0.04314):0.18677):0.04217,((E\_billingiae:0.051  
,(E\_pyrifoliae:0.08118,E\_tasmaniensis:0.0338):0.08813):0.07676,((P\_sp\_At-  
9b:0.01476,P\_cyprapedii:0.02098):0.01379,(((P\_sp\_GM01:0.02564,(P\_rodasii:0.02004,P\_rwandensis:0.00997):0.01476):0.00  
994,(P\_wallisii:0.02428,P\_eucrina:0.07048):0.01784):0.00396,P\_dispersa:0.01361):0.02516):0.01565):0.01269):0.01558):  
0.01341):0.02599,(P\_brenneri:0.00914,P\_conspicua:0.02412):0.01065):0.00722):0.0098):0.00686):0.00304);  
[1172] tree 't1172'=[&R]  
(((P\_brenneri:0.04286,P\_conspicua:0.01115):0.01791,(P\_septica:0.07353,(P\_sp\_A4:0.14214,((P\_s\_indologenes:0.0,P\_s\_st  
ewartii:0.0):0.02446,(P\_allii:0.01039,P\_ananatis:0.00687):0.00412):0.05932,(((T\_morbirosei:0.09032,(T\_sp\_NML\_06:0.11  
017,T\_ptyseos:0.08549):0.04963):0.2269,(E\_billingiae:0.07262,(E\_pyrifoliae:0.0539,E\_tasmaniensis:0.02248):0.07578):0  
.11053):0.03716,((P\_sp\_At-9b:0.00335,P\_cyprapedii:5.5E-  
4):0.02786,(P\_sp\_GM01:0.03249,((P\_rodasii:0.02649,P\_rwandensis:0.01178):0.0209,(P\_dispersa:0.04114,(P\_eucrina:0.0742  
4,P\_wallisii:0.01642):0.00728):0.01618):0.01276):0.01373):0.03903):0.01899):0.01257):0.01104):0.01061):0.01505,(P\_de  
leyi:0.01397,P\_vagans:0.01031):0.01736,((P\_agglomerans:0.00339,P\_sp\_aB:0.00336):0.011,P\_anthophila:0.02048):0.00404)  
;  
[1173] tree 't1173'=[&R] (((P\_brenneri:0.0361,P\_conspicua:0.0087):0.02178,((P\_vagans:5.4E-4,(P\_agglomerans:5.5E-  
4,P\_anthophila:0.02538):0.00627):5.4E-4,(P\_deleyi:0.05231,P\_sp\_aB:5.5E-  
4):0.00619):0.03676):0.06113,(((P\_rodasii:0.07784,P\_rwandensis:0.0067):0.02616,(P\_eucrina:0.13527,((P\_dispersa:5.5E-  
4,P\_wallisii:0.01341):0.01971,P\_sp\_GM01:0.02593):0.00655):0.00652):5.4E-4,(P\_sp\_At-  
9b:0.01167,P\_cyprapedii:0.02123):0.03303):0.03779,((P\_sp\_A4:0.12466,P\_septica:0.06917):0.01128,(((P\_s\_indologenes:5.  
5E-  
4,P\_s\_stewartii:0.01285):0.01989,(P\_allii:0.00284,P\_ananatis:0.01678):0.01296):0.05376,((T\_sp\_NML\_06:0.26341,(T\_morb  
irosei:0.18238,T\_ptyseos:0.0907):0.10205):0.24607,((E\_pyrifoliae:0.05786,E\_tasmaniensis:0.122):0.21195,E\_billingiae:  
0.04154):0.06099):0.07903):0.02917):0.02022);  
[1174] tree 't1174'=[&R]  
(P\_eucrina:0.03387,(((P\_rodasii:0.02394,P\_rwandensis:0.03349):0.00843,(P\_sp\_GM01:0.0403,P\_wallisii:0.04161):0.00464)  
:0.01161,((P\_septica:0.07572,((E\_billingiae:0.11181,(E\_pyrifoliae:0.02503,E\_tasmaniensis:0.05184):0.15059):0.12041,((  
(P\_s\_indologenes:0.00385,P\_s\_stewartii:0.00627):0.02883,(P\_allii:0.01209,P\_ananatis:0.01347):0.0319):0.08213,(P\_sp\_  
aB:0.01314,((P\_vagans:0.01375,P\_deleyi:0.01675):0.00361,((P\_anthophila:0.02683,P\_agglomerans:0.00688):0.00351,(P\_con  
spicua:0.02654,P\_brenneri:0.00709):0.02505):0.00318):0.01113):0.03671):0.02285):0.0274):0.02407,((T\_morbirosei:0.346  
43,(T\_ptyseos:0.17284,T\_sp\_NML\_06:0.22826):0.14625):0.18032,P\_sp\_A4:0.09605):0.09794):0.04925):0.01055,((P\_sp\_At-  
9b:0.04148,P\_cyprapedii:0.05288):0.01714,P\_dispersa:0.03285):0.01138);

[1175] tree 't1175'=[&R] (((P\_anthophila:0.0,P\_agglomerans:0.0,P\_vagans:0.0,P\_sp\_aB:0.0):5.4E-4,P\_deleyi:0.00936):0.01459,(((E\_pyriifoliae:5.5E-4,E\_tasmaniensis:0.01936):0.07457,(T\_morbirosei:0.08093,(T\_sp\_NML\_06:0.13702,T\_ptyseos:0.07353):0.04041):0.10242,P\_sp\_A4:0.04431):5.4E-4):0.01061,P\_eucrina:0.00984):0.01951,(P\_septica:0.00943,(P\_brenneri:0.0,P\_conspicua:0.0):5.5E-4):0.00938):0.00968):0.01364,P\_wallisii:0.00886,(P\_dispersa:0.0288,(P\_cyprapedii:5.5E-4,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00617,(P\_allii:0.00967,P\_ananatis:0.00968):0.02432):0.05738,((P\_sp\_GM01:5.3E-4,(P\_rodasii:0.04765,P\_rwandensis:5.5E-4):0.01849):0.00583,(E\_billingiae:0.04942,P\_sp\_At-9b:5.4E-4):0.01897):0.0221):5.3E-4):0.00964):0.00989);

[1176] tree 't1176'=[&R] (((P\_brenneri:5.5E-4,((P\_agglomerans:0.00595,(P\_vagans:0.0,P\_sp\_aB:0.0):0.01217):5.5E-4,P\_anthophila:0.01232):5.5E-4):5.5E-4,P\_sp\_A4:0.02495):5.4E-4,(P\_eucrina:0.09146,P\_conspicua:5.4E-4):0.13479):0.0057,P\_deleyi:0.01869):5.4E-4,(((E\_billingiae:0.0408,(E\_pyriifoliae:0.01532,E\_tasmaniensis:0.00297):0.06159):0.03834,((P\_ananatis:0.0,P\_s\_indologenes:0.0):0.00612,(P\_allii:5.5E-4,P\_s\_stewartii:0.00622):5.5E-4):0.00613):5.4E-4,(T\_ptyseos:5.5E-4,T\_sp\_NML\_06:0.04511):0.03869):0.00636,(T\_morbirosei:0.0393,(P\_septica:0.01234,(P\_cyprapedii:0.00625,(P\_sp\_At-9b:0.00647,P\_sp\_GM01:0.02554):0.00632):0.00634):0.00625):5.4E-4):0.00623,((P\_dispersa:0.01267,(P\_rodasii:0.00616,P\_rwandensis:0.01249):0.00652):0.00988,P\_wallisii:0.01174):0.01007);

[1177] tree 't1177'=[&R] ((P\_sp\_A4:0.31828,(E\_billingiae:0.17496,(E\_pyriifoliae:0.0973,E\_tasmaniensis:0.09388):0.1313):0.14003):0.08398,(P\_septica:0.14577,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.08535,(P\_allii:0.06449,P\_ananatis:0.02124):0.01623):0.18893,(P\_brenneri:0.02867,P\_conspicua:0.02997):0.029,(P\_anthophila:0.06962,(P\_agglomerans:0.0193,(P\_deleyi:0.0407,(P\_vagans:0.02963,P\_sp\_aB:0.02778):0.01697):0.01123):0.01181):0.02968):0.12469):0.03756):0.05612,((T\_sp\_NML\_06:0.24419,(T\_morbirosei:0.3243,T\_ptyseos:0.16729):0.09678):0.16692,(P\_eucrina:0.17124,(P\_sp\_At-9b:0.07767,P\_cyprapedii:0.05423):0.07449,(P\_dispersa:0.06331,((P\_sp\_GM01:0.05305,(P\_rodasii:0.06035,P\_rwandensis:0.06538):0.04659):0.06304,P\_wallisii:0.10071):0.0294):0.0324):0.03517):0.13864):0.03752);

[1178] tree 't1178'=[&R] ((P\_brenneri:0.00477,P\_conspicua:0.00874):0.00482,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01532,(P\_allii:0.00922,P\_ananatis:0.0062):5.5E-4):0.00818,(((E\_billingiae:0.04848,(E\_pyriifoliae:0.01819,E\_tasmaniensis:0.03365):0.03384):0.05315,(P\_sp\_A4:0.03484,(T\_morbirosei:0.08146,(T\_sp\_NML\_06:0.34825,T\_ptyseos:0.07267):0.05941):0.13264):0.02807):0.01243,(P\_sp\_GM01:0.02722,(P\_septica:0.03212,(((P\_wallisii:0.00222,(P\_rodasii:0.00993,P\_rwandensis:0.01124):0.01781):0.01089,(P\_dispersa:0.00927,P\_eucrina:0.02626):0.00307):0.01086,(P\_cyprapedii:0.02549,P\_sp\_At-9b:0.00744):0.01274):0.01339):0.00464):0.00763):0.0175):0.01391,(P\_anthophila:0.01225,(P\_deleyi:0.0193,(P\_vagans:0.00925,(P\_sp\_aB:0.00951,P\_agglomerans:0.00441):0.00501):0.00322):0.00328):0.00316);

[1179] tree 't1179'=[&R] (P\_conspicua:0.00526,P\_brenneri:5.5E-4,((P\_vagans:0.00531,(P\_agglomerans:5.4E-4,(P\_sp\_aB:0.01064,(P\_deleyi:0.01057,((P\_cyprapedii:0.01135,P\_sp\_At-9b:0.02102):0.01596,(((P\_sp\_A4:0.0397,(T\_morbirosei:0.05497,(T\_sp\_NML\_06:0.10748,T\_ptyseos:0.01803):0.02929):0.14124,(E\_billingiae:0.04538,(E\_pyriifoliae:0.01411,E\_tasmaniensis:0.02321):0.07899):0.05726):0.01677):0.02989,(P\_eucrina:0.04779,(P\_s\_indologenes:0.00522,P\_s\_stewartii:5.5E-4):0.01041,(P\_allii:0.00516,P\_ananatis:5.5E-4):5.5E-4

4):0.02622):0.01823):0.0045,(((P\_wallisii:0.05351,P\_dispersa:0.02519):0.02194,(P\_sp\_GM01:0.01065,(P\_rwandensis:0.01073,P\_rodasii:0.00528):0.00534):0.00626):0.02675,P\_septica:0.03938):0.00508):5.5E-4):0.01017):0.00525):0.0053):0.00534):0.00529,P\_anthophila:0.00527):5.5E-4);

[1180] tree 't1180'=[&R]  
(P\_dispersa:0.06471,(P\_wallisii:0.04969,(P\_rodasii:0.03041,P\_rwandensis:0.05086):0.03327):0.0273,(P\_sp\_GM01:0.04106,((P\_sp\_At-9b:0.03004,P\_cyprapedii:0.04198):0.05515,(((T\_morbirosei:0.23407,(T\_sp\_NML\_06:0.40737,T\_ptyseos:0.18577):0.07482):0.56306,(E\_billingiae:0.27932,(E\_pyriifoliae:0.08766,E\_tasmaniensis:0.08919):0.20895):0.18312):0.08435,((P\_sp\_A4:0.27088,P\_eucrina:0.19109):0.06769,(P\_septica:0.15251,(((P\_s\_indologenes:5.4E-4,P\_s\_stewartii:0.01481):0.13076,(P\_allii:0.06872,P\_ananatis:0.06196):0.04139):0.19046,((P\_brenneri:0.005,P\_conspicua:0.03013):0.01377,((P\_agglomerans:0.02079,(P\_sp\_aB:0.04511,P\_vagans:0.03194):0.01829):0.01337,(P\_anthophila:0.06528,P\_deleyi:0.06618):0.02421):0.04765):0.08706):0.06214):0.04948):0.02611):0.04051):0.04314):0.01113);

[1181] tree 't1181'=[&R] (P\_vagans:0.00755,(P\_agglomerans:5.5E-4,P\_sp\_aB:0.00451):0.00151,(P\_anthophila:0.01212,(P\_deleyi:0.00919,((P\_brenneri:0.00446,P\_conspicua:0.00691):0.00907,(((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00147):0.01485,(P\_allii:0.00605,P\_ananatis:0.00605):0.0066):0.01336,(P\_septica:0.02095,(((T\_morbirosei:0.03469,(T\_ptyseos:0.01712,T\_sp\_NML\_06:0.05382):0.03084):0.07894,((P\_sp\_At-9b:0.02443,P\_cyprapedii:0.00849):0.01302,(P\_eucrina:0.04172,((P\_sp\_GM01:0.00422,(P\_rodasii:0.02011,P\_rwandensis:0.00905):0.00711):0.01127,(P\_wallisii:0.01417,P\_dispersa:0.01131):0.00111):0.0059):0.01122):0.02062):0.01243,((E\_billingiae:0.03723,(E\_pyriifoliae:0.02384,E\_tasmaniensis:0.01741):0.01476):0.0545,P\_sp\_A4:0.04288):0.01106):0.00667):0.00907):0.00919):0.02):0.00361):0.00145);

[1182] tree 't1182'=[&R] ((P\_brenneri:0.0086,P\_conspicua:5.5E-4):0.0083,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.5E-4,(P\_ananatis:0.00427,P\_allii:5.5E-4):0.00421):0.00868,(P\_septica:0.01337,((E\_billingiae:0.02485,(E\_pyriifoliae:0.00431,E\_tasmaniensis:0.01275):0.03786):0.04008,(((P\_sp\_At-9b:5.5E-4,P\_cyprapedii:0.00427):5.5E-4,(P\_rodasii:0.00859,(P\_rwandensis:5.4E-4,((P\_dispersa:5.5E-4,P\_sp\_GM01:0.00832):0.01261,(P\_eucrina:0.00451,P\_wallisii:0.00413):0.00431):5.4E-4):5.1E-4):0.00855):0.00862,((T\_ptyseos:0.00814,(T\_morbirosei:0.02922,T\_sp\_NML\_06:0.02519):0.00643):0.05255,P\_sp\_A4:0.04863):0.00464):0.00416):0.00429):0.00448):0.00778,(P\_deleyi:5.5E-4,((P\_agglomerans:0.00418,P\_anthophila:5.3E-4):0.00435,(P\_sp\_aB:0.00426,P\_vagans:0.0044):0.00419):5.4E-4):9.9E-4);

[1183] tree 't1183'=[&R] ((P\_vagans:0.00356,(P\_sp\_aB:0.01139,P\_agglomerans:0.00793):0.00768):5.5E-4,(P\_deleyi:0.01861,P\_anthophila:0.00526):0.00747,(P\_conspicua:0.00174,(P\_brenneri:0.01017,(((T\_morbirosei:0.0673,(T\_ptyseos:0.03445,T\_sp\_NML\_06:0.03621):0.03075):0.17797,(E\_billingiae:0.10298,(E\_pyriifoliae:0.0654,E\_tasmaniensis:0.06656):0.23233):0.13071):0.07861,(P\_sp\_A4:0.11001,P\_septica:0.05634):0.05255):0.01894,(((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00382):0.01507,(P\_allii:0.00777,P\_ananatis:0.01553):0.0043):0.04935,((P\_sp\_GM01:0.05054,((P\_wallisii:0.01367,(P\_dispersa:0.00823,P\_eucrina:0.0894):0.03249):0.01021,(P\_rwandensis:0.00548,P\_rodasii:0.0311):0.03517):0.04018):0.03356,(P\_sp\_At-9b:0.00735,P\_cyprapedii:0.01637):0.03693):0.02776):0.01316):0.03112):0.00956):0.01377);

[1184] tree 't1184'=[&R]  
(P\_eucrina:0.05338,(((P\_septica:0.04716,(P\_sp\_A4:0.14341,((T\_sp\_NML\_06:0.13181,(T\_morbirosei:0.12365,T\_ptyseos:0.10324):0.06663):0.26745,(E\_billingiae:0.10673,(E\_pyriifoliae:0.05288,E\_tasmaniensis:0.05008):0.12127):0.05775):0.05178)

:0.03409):0.05401,(P\_deleyi:0.01502,(P\_anthophila:0.03194,((P\_conspicua:0.0225,P\_brenneri:0.01519):0.01625,(P\_agglomerans:0.02275,(P\_vagans:0.01154,P\_sp\_aB:0.00339):0.00495):0.00348):0.00329):0.011):0.02927):0.01652,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.02086,(P\_ananatis:0.03043,P\_allii:0.0165):0.01032):0.02029):0.07099):0.02737,(P\_wallisii:0.02171,(P\_cypripedii:0.04026,P\_sp\_At-9b:0.04559):0.02788):0.01597,((P\_sp\_GM01:0.03565,P\_rwandensis:0.02583):0.01161,(P\_dispersa:0.02996,P\_rodasii:0.03327):0.00773):0.00495);

[1185] tree 't1185'=[&R]  
(P\_wallisii:0.025,P\_dispersa:0.01609,((P\_sp\_GM01:0.01191,(P\_rodasii:0.00809,P\_rwandensis:0.01057):0.01508):0.01297,(((P\_deleyi:0.01855,((P\_brenneri:0.00221,P\_conspicua:0.00222):0.01404,(P\_agglomerans:5.5E-4,(P\_sp\_aB:0.009,P\_vagans:0.00448):0.00907):0.00655):0.00477,P\_anthophila:0.0186):0.00226):0.01055,(((P\_s\_indologenes:5.4E-4,P\_s\_stewartii:0.0022):0.00389,(P\_allii:0.01352,P\_ananatis:0.00956):0.01415):0.03135,P\_septica:0.03564):0.00706):0.02065,(P\_eucrina:0.02852,(T\_sp\_NML\_06:0.0487,(T\_morbirosei:0.0394,T\_ptyseos:0.01585):0.03035):0.09097):0.01221):0.00435,(P\_sp\_At-9b:0.01162,P\_cypripedii:0.00696):0.01426,(P\_sp\_A4:0.04059,(E\_billingiae:0.03477,(E\_pyriifoliae:0.02293,E\_tasmaniensis:0.02194):0.04883):0.03231):0.01852):0.00576):0.00323):0.0055);

[1186] tree 't1186'=[&R] (P\_eucrina:0.04598,(P\_dispersa:0.02602,P\_wallisii:0.02875):0.00466,(((P\_sp\_At-9b:0.00681,P\_cypripedii:5.4E-4):0.01106,(P\_sp\_A4:0.0921,(((P\_ananatis:0.01987,(P\_allii:0.01345,(P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00335):0.00672):5.4E-4):0.03517,((T\_morbirosei:0.09206,(T\_ptyseos:0.07786,T\_sp\_NML\_06:0.08414):0.03859):0.17538,(E\_billingiae:0.10108,(E\_pyriifoliae:0.04146,E\_tasmaniensis:0.03005):0.09183):0.03714):0.05098):0.01948,(P\_septica:0.05009,((P\_agglomerans:0.01568,(P\_vagans:0.00341,P\_sp\_aB:5.5E-4):5.4E-4,(P\_deleyi:5.4E-4,P\_anthophila:0.01735):0.0068):0.00586):0.01682,(P\_brenneri:0.00425,P\_conspicua:0.01346):0.01015):0.02456):0.0042):0.01373):0.0263):0.01254,(P\_rwandensis:0.03549,(P\_sp\_GM01:0.0342,P\_rodasii:0.02736):0.01367):5.4E-4):0.00748);

[1187] tree 't1187'=[&R]  
((((P\_brenneri:0.0092,P\_conspicua:0.01157):0.0471,(P\_anthophila:0.02846,(P\_deleyi:0.02245,(P\_agglomerans:0.00391,(P\_vagans:0.00332,P\_sp\_aB:5.3E-4):0.01389):0.01266):0.00551):0.0246):0.0251,(P\_eucrina:0.08387,P\_septica:0.04948):0.01389):0.01877,(((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.0034):0.01196,(P\_ananatis:0.02488,P\_allii:0.02057):0.00375):0.06708,(P\_sp\_At-9b:0.0201,P\_cypripedii:0.01927):0.00381,((P\_rodasii:0.0066,(P\_sp\_GM01:0.02874,P\_rwandensis:0.00346):0.00742):0.01184,(P\_wallisii:0.02024,P\_dispersa:0.04624):0.0274):0.02362):0.01356):0.02477,(P\_sp\_A4:0.06861,(T\_sp\_NML\_06:0.07717,(T\_morbirosei:0.04169,T\_ptyseos:0.03133):0.01859):0.09915,(E\_billingiae:0.03393,(E\_pyriifoliae:0.02289,E\_tasmaniensis:0.04421):0.05941):0.03901):0.0342):0.01745);

[1188] tree 't1188'=[&R] (P\_sp\_GM01:0.01492,((P\_rodasii:0.01141,P\_rwandensis:5.3E-4):0.00397,(P\_sp\_At-9b:0.00937,P\_cypripedii:0.00692):0.01005,(P\_sp\_A4:0.03699,((E\_pyriifoliae:0.02487,E\_tasmaniensis:0.01285):0.09208,(T\_ptyseos:0.03454,(T\_sp\_NML\_06:0.06662,T\_morbirosei:0.05618):0.03085):0.0866,E\_billingiae:0.03099):0.00802):0.00994,(P\_septica:0.03215,((P\_allii:0.01169,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01445,P\_ananatis:0.00219):0.00288):0.02145,(P\_sp\_aB:0.01433,(P\_agglomerans:0.00466,(P\_brenneri:5.5E-

4,P\_conspicua:0.00461):0.01913):0.00238,(P\_vagans:5.3E-  
4,(P\_anthophila:0.00437,P\_deleyi:0.00543):0.01348):0.00208):0.00441):0.00993):0.01447):0.01697):0.02022):0.00908):0.  
00858):0.00841,(P\_wallisii:0.00631,(P\_dispersa:0.01246,P\_eucrinea:0.02001):0.00963):0.00518);  
[1189] tree 't1189'=[&R] (P\_sp\_aB:0.00411,P\_anthophila:0.00305,(P\_vagans:5.4E-  
4,((((((T\_morbirosei:0.04542,(T\_ptyseos:0.03389,T\_sp\_NML\_06:0.09809):0.02061):0.07949,(E\_billingiae:0.01227,(E\_tas  
maniensis:0.01463,E\_pyriifoliae:0.03745):0.01742):0.00721):0.03261,(P\_dispersa:5.4E-4,((P\_wallisii:5.4E-  
4,((P\_eucrinea:0.04565,(P\_rwandensis:5.5E-4,P\_rodasii:0.00557):0.01113):5.4E-4,(P\_sp\_At-  
9b:0.00558,P\_cyprapedii:0.01118):0.00565):0.00558):5.5E-  
4,P\_sp\_GM01:0.01687):0.01698):0.01312):0.02047,P\_sp\_A4:0.06431):0.01085,P\_septica:0.04203):0.03451,(P\_conspicua:0.00  
559,P\_brenneri:0.00574):0.01064):5.4E-  
4,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01117,(P\_allii:0.00551,P\_ananatis:5.5E-4):5.3E-  
4):0.01849):0.00555,(P\_agglomerans:0.02255,P\_deleyi:0.01124):5.3E-4):0.00505):0.00409);  
[1190] tree 't1190'=[&R] ((P\_ananatis:0.03184,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.04114,P\_allii:5.4E-  
4):0.00911):0.03524,(P\_septica:0.0492,((P\_sp\_A4:0.12679,((T\_morbirosei:0.11874,(T\_sp\_NML\_06:0.12444,T\_ptyseos:0.0867  
8):0.03361):0.09742,(E\_billingiae:0.06953,(E\_pyriifoliae:0.03912,E\_tasmaniensis:0.02933):0.05212):0.05926):0.04588):0  
.06019,(P\_eucrinea:0.07473,((P\_sp\_At-  
9b:0.01449,P\_cyprapedii:0.03497):0.02351,((P\_rwandensis:0.01772,(P\_rodasii:0.03472,P\_sp\_GM01:0.03632):0.00758):0.016  
54,(P\_dispersa:0.0488,P\_wallisii:0.03909):0.00611):0.01982):0.02698):0.01264):0.01888):0.02348):0.03329,(P\_brenneri:  
5.4E-  
4,P\_conspicua:0.00556):0.00751,(P\_anthophila:0.02091,((P\_deleyi:0.02311,P\_agglomerans:0.00566):0.00546,(P\_vagans:0.0  
2019,P\_sp\_aB:0.02121):0.00246):0.0067):0.01753);  
[1191] tree 't1191'=[&R] ((P\_rodasii:0.01658,P\_wallisii:5.3E-  
4):0.00553,(((E\_billingiae:0.03473,(E\_pyriifoliae:0.02084,E\_tasmaniensis:0.02456):0.00788):0.07415,(T\_morbirosei:0.0  
1486,(T\_ptyseos:0.02919,T\_sp\_NML\_06:0.02706):0.01959):0.03573):0.0263,(((P\_brenneri:5.5E-  
4,P\_conspicua:0.00548):0.00559,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00567,(P\_allii:5.5E-  
4,P\_ananatis:0.0221):0.01104):0.00526):0.02024,(P\_deleyi:5.4E-  
4,((P\_agglomerans:0.0,P\_vagans:0.0,P\_sp\_aB:0.0):0.00532,P\_anthophila:0.02243):0.00556):0.02522):0.01633,(P\_sp\_At-  
9b:0.01081,P\_cyprapedii:0.01786):0.07604):0.00883):0.006,P\_sp\_GM01:0.00555):0.00564,((P\_dispersa:5.5E-  
4,(P\_septica:0.05078,P\_rwandensis:5.4E-4):0.00551):0.00555,(P\_eucrinea:0.06245,P\_sp\_A4:0.03868):0.01363):5.4E-4);  
[1192] tree 't1192'=[&R]  
(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.02476,(P\_allii:0.01443,P\_ananatis:0.01217):0.01309):0.05636,(((T\_morb  
irosei:0.02968,(T\_sp\_NML\_06:0.07991,T\_ptyseos:0.05527):0.02983):0.10849,(E\_billingiae:0.05763,(E\_pyriifoliae:0.03463,  
E\_tasmaniensis:0.05851):0.08717):0.05572):0.02249,((P\_sp\_At-  
9b:0.02934,P\_cyprapedii:0.01472):0.0159,(P\_eucrinea:0.08859,((P\_dispersa:0.01032,P\_wallisii:0.01404):0.01279,(P\_sp\_GM  
01:0.02293,(P\_rodasii:0.02499,P\_rwandensis:0.01871):0.00963):0.0048):0.00672):0.01194):0.02106):0.02803,(P\_sp\_A4:0.0  
9045,P\_septica:0.05667):0.01526):0.00872):0.02123,(P\_brenneri:0.00477,P\_conspicua:0.01206):0.00676):0.00932,(P\_antho  
phila:0.01277,P\_vagans:0.00725):0.00261,(P\_agglomerans:0.00237,(P\_deleyi:0.01714,P\_sp\_aB:0.00241):0.0024):0.00369);  
[1193] tree 't1193'=[&R] ((P\_rodasii:0.05394,P\_sp\_GM01:0.06151):0.01175,((P\_rwandensis:0.0395,(P\_sp\_At-  
9b:0.03336,P\_cyprapedii:0.05803):0.02793):0.01948,((P\_ananatis:0.04667,(P\_allii:0.04683,(P\_s\_indologenes:0.0,P\_s\_st

ewartii:0.0):0.04746):0.02552):0.08372,(P\_septica:0.13089,((P\_brenneri:0.01175,P\_conspicua:0.02869):0.02857,((P\_sp\_a  
B:0.04871,(P\_deleyi:0.02428,P\_anthophila:0.0244):0.01933):0.00421,(P\_agglomerans:0.02859,P\_vagans:0.01848):0.00955):  
0.01902):0.071):0.02507):0.01866,(P\_sp\_A4:0.17164,((E\_billingiae:0.19069,(E\_pyrifoliae:0.05433,E\_tasmaniensis:0.0782  
3):0.07714):0.21684,(T\_morbirosei:0.08342,(T\_ptyseos:0.03907,T\_sp\_NML\_06:0.09282):0.07872):0.17478):0.03391):0.05539  
) :0.02117):0.01017):0.04375,P\_dispersa:0.02442,(P\_wallisii:0.03041,P\_eucrina:0.08094):0.02357);  
[1194] tree 't1194'=[&R]  
(((T\_morbirosei:0.02369,(T\_ptyseos:0.07869,T\_sp\_NML\_06:0.03457):0.03696):0.06007,(P\_sp\_A4:0.02846,(P\_septica:0.0282  
,((P\_anthophila:0.0,P\_deleyi:0.0):0.00759,(P\_agglomerans:0.00785,(P\_vagans:0.0,P\_sp\_aB:0.0):5.5E-4):5.4E-  
4):0.01669,((P\_allii:0.01622,(P\_ananatis:5.4E-  
4,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01583):0.01562):0.0506,(P\_brenneri:0.00796,P\_conspicua:0.00793):5.4E-  
4):0.02368):0.02631):0.04242):0.00149):0.01872,((P\_eucrina:0.02282,((P\_sp\_At-9b:0.01576,P\_cyprapedii:5.5E-  
4):0.04968,(E\_billingiae:5.4E-  
4,(E\_pyrifoliae:0.06721,E\_tasmaniensis:0.05967):0.04792):0.05773):0.0228):0.02453,P\_sp\_GM01:0.02347):0.00625):0.0132  
2,(P\_rwandensis:0.01556,P\_rodasii:0.00767):5.3E-4,(P\_dispersa:0.02378,P\_wallisii:0.00788):0.0076);  
[1195] tree 't1195'=[&R] (P\_agglomerans:0.00389,((P\_brenneri:5.4E-  
4,((P\_allii:0.00756,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.03461,P\_ananatis:0.01093):0.00495):0.0453,((T\_morbi  
rosei:0.05657,(T\_ptyseos:0.06193,T\_sp\_NML\_06:0.13893):0.12841):0.31611,(E\_billingiae:0.06756,(E\_pyrifoliae:0.08031,E  
\_tasmaniensis:0.06026):0.09843):0.10303):0.03407,((P\_sp\_At-  
9b:0.02544,P\_cyprapedii:0.01909):0.03689,(P\_eucrina:0.09727,((P\_dispersa:0.00859,((P\_rodasii:5.4E-  
4,P\_rwandensis:0.01797):0.00668,P\_sp\_GM01:0.03107):0.02213):5.2E-  
4,P\_wallisii:0.02482):0.01081):0.00425):0.03388,(P\_sp\_A4:0.09557,P\_septica:0.08887):0.01026):0.0235):0.0191):0.03837  
,P\_conspicua:5.3E-  
4):0.00715):0.04216,(P\_anthophila:0.03526,P\_deleyi:0.00957):0.00606):0.00506,(P\_vagans:0.01881,P\_sp\_aB:5.4E-  
4):0.00355);  
[1196] tree 't1196'=[&R] ((P\_septica:0.03913,((P\_sp\_At-  
9b:0.05553,P\_cyprapedii:0.02065):0.00525,((P\_eucrina:0.04037,P\_wallisii:0.01639):0.02257,P\_dispersa:0.03601):0.0030  
2,((P\_rwandensis:5.5E-  
4,P\_rodasii:0.18216):0.01265,P\_sp\_GM01:0.0142):0.03108):0.08926):0.08986,((T\_morbirosei:0.06916,(T\_sp\_NML\_06:0.06812  
,T\_ptyseos:0.02681):0.05259):0.05729,(P\_sp\_A4:0.06886,(E\_billingiae:0.06204,(E\_pyrifoliae:0.05992,E\_tasmaniensis:0.0  
2154):0.08723):0.04528):0.04528):0.01764):0.01961):0.04718,((P\_allii:0.0063,P\_ananatis:5.4E-  
4):0.01242,(P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00642):5.4E-  
4):0.009):0.01723,P\_conspicua:0.00637,(P\_brenneri:5.5E-4,((P\_agglomerans:0.00633,P\_sp\_aB:5.5E-4):5.3E-  
4,(P\_deleyi:0.01933,(P\_vagans:5.5E-4,P\_anthophila:0.01943):0.0039):0.01579):0.01282):5.4E-4);  
[1197] tree 't1197'=[&R]  
((P\_conspicua:0.00243,(P\_brenneri:0.00859,((P\_ananatis:0.01908,((P\_s\_indologenes:0.00364,P\_s\_stewartii:5.5E-  
4):0.02127,P\_allii:0.01467):0.00247):0.02891,(P\_septica:0.04298,((P\_sp\_At-  
9b:0.02357,P\_cyprapedii:0.01507):0.02154,((P\_wallisii:0.01947,(P\_eucrina:0.04135,P\_dispersa:0.03081):0.00692):0.0118  
8,(P\_sp\_GM01:0.0207,(P\_rodasii:0.01585,P\_rwandensis:0.02318):0.01577):0.00979):0.01539):0.02928,(P\_sp\_A4:0.12449,((T  
\_morbirosei:0.09561,(T\_sp\_NML\_06:0.12016,T\_ptyseos:0.06966):0.02704):0.1966,(E\_billingiae:0.05028,(E\_pyrifoliae:0.02

886,E\_tasmaniensis:0.02438):0.0494):0.06846):0.02792):0.00777):0.00614):0.01728):0.00892):0.00196):0.01177,(P\_sp\_aB:  
0.00187,(P\_deleyi:0.06355,P\_agglomerans:0.00538):0.00392):0.00254,(P\_vagans:0.00673,P\_anthophila:0.0231):0.00185);  
[1198] tree 't1198'=[&R] (((P\_sp\_At-  
9b:0.01905,P\_cyprapedii:0.04252):0.07084,(E\_billingiae:0.12019,(((P\_anthophila:5.5E-  
4,(P\_deleyi:0.01037,((P\_agglomerans:0.0,P\_sp\_aB:0.0):0.01037,(P\_vagans:0.0,P\_brenneri:0.0,P\_conspicua:0.0):5.5E-  
4):0.02152):5.3E-4):0.0123,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01083,(P\_ananatis:5.3E-  
4,P\_allii:0.0554):0.01021):0.02055):0.04863,(E\_pyriifoliae:5.4E-  
4,E\_tasmaniensis:0.0101):0.03043):0.0371):0.01817):0.02637,(P\_sp\_A4:0.12622,(P\_sp\_GM01:0.03997,(P\_rodasii:0.07194,P\_  
rwandensis:0.02888):0.04029):0.04823):0.01344,(P\_wallisii:0.01068,((T\_morbirosei:0.05273,(T\_ptyseos:0.06918,T\_sp\_NML  
\_06:0.04074):0.02493):0.03058,(P\_dispersa:0.0314,(P\_septica:0.04321,P\_eucrina:0.01035):0.02055):0.01829):0.0235):5.4  
E-4);  
[1199] tree 't1199'=[&R] ((P\_sp\_At-9b:0.00925,P\_cyprapedii:0.01847):0.0147,((((((P\_s\_indologenes:5.5E-  
4,P\_s\_stewartii:0.00605):0.01395,(P\_allii:0.00752,P\_ananatis:0.014):0.00622):0.02175,((P\_brenneri:0.00609,P\_conspicu  
a:0.00604):0.01447,(P\_anthophila:0.01136,((P\_vagans:5.3E-4,P\_deleyi:0.02148):0.00298,P\_sp\_aB:5.5E-4):5.4E-  
4,P\_agglomerans:0.00299):0.00461):0.00634):0.01145):0.0255,P\_septica:0.03569):0.00647,((T\_sp\_NML\_06:0.06644,(T\_ptyse  
os:0.04736,T\_morbirosei:0.05036):0.00884):0.12521,(E\_billingiae:0.05023,(E\_pyriifoliae:0.02747,E\_tasmaniensis:0.00621  
) :0.03595):0.03144):0.02133):0.00639,P\_sp\_A4:0.05858):0.02174,(((P\_sp\_GM01:0.02138,(P\_rodasii:0.01675,P\_rwandensis:0  
.00787):0.0155):0.004,(P\_eucrina:0.04213,P\_wallisii:0.01469):0.00346):0.00292,P\_dispersa:0.00334):0.00976);  
[1200] tree 't1200'=[&R]  
(P\_cyprapedii:0.01676,(P\_sp\_GM01:0.01677,(P\_rodasii:0.0,P\_rwandensis:0.0):0.01679):0.01731,(P\_sp\_At-9b:5.4E-  
4,(((T\_sp\_NML\_06:0.04062,(T\_morbirosei:0.03854,T\_ptyseos:0.04909):0.03386):0.08574,((P\_sp\_A4:0.06424,(E\_pyriifoliae:0  
.01796,E\_tasmaniensis:0.01715):0.08334):0.12641,E\_billingiae:0.03064):0.02163):5.5E-  
4,((P\_eucrina:0.03475,(P\_dispersa:0.0,P\_wallisii:0.0):5.4E-  
4):0.0339,(P\_septica:0.03462,(((P\_anthophila:0.0,P\_brenneri:0.0,P\_conspicua:0.0):5.4E-  
4,(P\_agglomerans:0.0,P\_vagans:0.0,P\_sp\_aB:0.0,P\_deleyi:0.0):0.0167):0.01663,(P\_ananatis:5.5E-  
4,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.0167,P\_allii:5.5E-  
4):0.01655):0.03463):0.01655):0.0351):0.01774):0.01684):0.01675);  
[1201] tree 't1201'=[&R]  
((((P\_s\_indologenes:0.00288,P\_s\_stewartii:0.00749):0.04771,(P\_allii:0.04538,P\_ananatis:0.01012):0.01655):0.11688,(P  
\_septica:0.10586,((P\_sp\_At-  
9b:0.03237,P\_cyprapedii:0.03725):0.01102,(P\_sp\_GM01:0.05277,(P\_eucrina:0.10209,(P\_dispersa:0.03221,(P\_wallisii:0.041  
75,(P\_rodasii:0.03928,P\_rwandensis:0.04656):0.02107):0.01074):0.00637):0.01267):0.03281):0.07274,(P\_sp\_A4:0.19538,((  
T\_morbirosei:0.13732,(T\_ptyseos:0.14031,T\_sp\_NML\_06:0.20352):0.08112):0.20891,(E\_billingiae:0.15343,(E\_pyriifoliae:0.  
0737,E\_tasmaniensis:0.05381):0.17609):0.09433):0.09387):0.05774):0.02552):0.03695):0.04207,(P\_conspicua:0.01671,P\_br  
enneri:0.01293):0.02203):0.01544,(P\_agglomerans:0.01636,P\_sp\_aB:0.00743):0.00278,((P\_deleyi:0.02717,P\_anthophila:0.0  
1897):0.00798,P\_vagans:0.00498):0.0033);  
[1202] tree 't1202'=[&R] (P\_vagans:0.04132,(P\_agglomerans:5.5E-  
4,((P\_conspicua:0.0,P\_brenneri:0.0):0.14503,P\_anthophila:0.04409):5.5E-  
4):0.04067,(((P\_sp\_GM01:0.0786,(P\_cyprapedii:0.03803,(P\_dispersa:0.04635,(P\_sp\_At-9b:5.4E-



4,((P\_rwandensis:0.12835,P\_rodasii:0.03843):0.03694,P\_eucrina:0.18513):5.5E-4):0.03779):0.00311):0.0401):5.4E-4,P\_wallisii:0.04445):0.12431,(P\_sp\_aB:5.4E-4,(P\_sp\_A4:5.4E-4,P\_deleyi:0.99379):0.04016):5.5E-4):5.4E-4,((T\_ptyseos:0.05822,(T\_morbirosei:0.26784,T\_sp\_NML\_06:0.14455):0.26871):0.27017,((P\_ananatis:0.04175,((P\_s\_stewartii:0.0,P\_s\_indologenes:0.0):0.08444,P\_allii:5.3E-4):0.04181):5.4E-4,((E\_tasmaniensis:0.08559,E\_pyriifoliae:5.5E-4):0.11372,(E\_billingiae:0.13676,P\_septica:0.16948):0.07633):0.14407):0.07704):0.06067):0.03972);

[1203] tree 't1203'=[&R] ((P\_rodasii:0.02161,P\_rwandensis:0.00917):0.00922,(P\_dispersa:5.4E-4,(((P\_brenneri:0.0,P\_conspicua:0.0):5.4E-4,((P\_agglomerans:5.5E-4,P\_sp\_aB:0.00299):0.00298,((P\_anthophila:0.0,P\_deleyi:0.0):5.5E-4,P\_vagans:0.003):5.4E-4):0.01809):0.01512,(P\_allii:5.5E-4,((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00894):0.00597,P\_ananatis:0.00596):0.00299):0.02148):0.01736,(P\_sp\_At-9b:0.003,P\_cypripedii:5.5E-4):0.01009):0.00674,(P\_septica:0.01499,(P\_sp\_A4:0.01207,((T\_sp\_NML\_06:0.02171,(T\_morbirosei:0.0148,T\_ptyseos:0.01322):0.00632):0.06494,(E\_billingiae:0.00926,(E\_pyriifoliae:0.01803,E\_tasmaniensis:0.00623):0.02267):0.02359):0.01992):0.00346):0.00823):0.00667):0.00606,(P\_wallisii:0.00597,(P\_eucrina:0.03003,P\_sp\_GM01:0.0102):0.00917):5.3E-4);

[1204] tree 't1204'=[&R] (P\_wallisii:0.10162,(((T\_morbirosei:0.07335,(T\_ptyseos:0.10063,T\_sp\_NML\_06:0.10975):0.08556):0.18489,((E\_billingiae:0.09427,(E\_pyriifoliae:0.07448,E\_tasmaniensis:0.05493):0.16859):0.09049,((P\_ananatis:0.02121,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.06365,P\_allii:0.01013):0.0166):0.04365,((P\_deleyi:0.03794,((P\_sp\_aB:0.04802,P\_agglomerans:0.0186):0.01099,P\_vagans:0.0307):0.01035):0.01895,P\_anthophila:0.02894):0.05765,(P\_brenneri:0.01059,P\_conspicua:0.04945):0.02532):0.04556):0.06609):0.06669):0.01507,(P\_sp\_GM01:0.09321,((P\_sp\_At-9b:0.02399,P\_cypripedii:0.05101):0.01503,(P\_dispersa:0.04582,P\_eucrina:0.15619):0.01967):0.02156):0.02284):0.00781,((P\_rodasii:0.09438,P\_rwandensis:0.04173):0.04631,(P\_sp\_A4:0.11428,P\_septica:0.09728):0.02728):0.01346);

[1205] tree 't1205'=[&R] ((P\_wallisii:0.0,P\_eucrina:0.0,P\_sp\_At-9b:0.0,P\_cypripedii:0.0,P\_dispersa:0.0,P\_septica:0.0):5.5E-4,((P\_rodasii:5.5E-4,(P\_sp\_GM01:0.01503,E\_billingiae:0.01507):5.3E-4):0.00497,(E\_pyriifoliae:0.00504,E\_tasmaniensis:0.00497):0.01024):5.4E-4,(((T\_morbirosei:0.01019,(T\_sp\_NML\_06:0.04555,T\_ptyseos:5.4E-4):0.00987):0.02023,((P\_allii:0.0,P\_ananatis:0.0,P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.5E-4,((P\_agglomerans:0.0,P\_vagans:0.0,P\_deleyi:0.0,P\_anthophila:0.0,P\_conspicua:0.0):5.5E-4,(P\_brenneri:0.00497,P\_sp\_aB:0.00499):5.4E-4):0.00505):0.00496):0.00501,(P\_sp\_A4:0.01476,P\_rwandensis:0.00378):0.00651):5.5E-4);

[1206] tree 't1206'=[&R] (((((P\_s\_indologenes:0.00107,P\_s\_stewartii:0.00222):0.03129,(P\_allii:0.01348,P\_ananatis:0.02405):0.00866):0.06351,(P\_septica:0.07402,((P\_sp\_At-9b:0.0155,P\_cypripedii:0.02239):0.01883,(P\_eucrina:0.07168,((P\_dispersa:0.01727,P\_wallisii:0.0181):0.00666,(P\_rodasii:0.02462,(P\_sp\_GM01:0.04399,P\_rwandensis:0.02178):0.0087):0.00923):0.00621):0.01336):0.04694,(P\_sp\_A4:0.15946,((T\_morbirosei:0.08332,(T\_sp\_NML\_06:0.12769,T\_ptyseos:0.06781):0.06264):0.34644,(E\_billingiae:0.08528,(E\_pyriifoliae:0.08552,E\_tasmaniensis:0.06395):0.16046):0.10678):0.03795):0.01632):0.02103):0.0414):0.03645,(P\_brenneri:0.00629,P\_conspicua:0.01544):0.00735):0.017,(P\_vagans:0.01187,P\_agglomerans:0.00703):0.00331,(P\_sp\_aB:0.0043,(P\_anthophila:0.01548,P\_deleyi:0.00682):0.00584):0.00113);

[1207] tree 't1207'=[&R] ((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00161):0.00963,P\_ananatis:0.00854,(P\_allii:0.00185,(P\_anthophila:0.00995,((P\_septica:0.0248,((P\_rwandensis:0.01315,P\_sp\_GM01:0.00661):0.00998,((P\_rodasii:0.01958,(P\_dispersa:0.00328,(P\_wallisii:0.015,P\_eucrina:0.02001):0.00305):0.00551):0.00492,P\_sp\_A4:0.03221):0.00367):0.01866,((T\_morbirosei:0.02919,(T\_ptyseos:0.00557,T\_sp\_NML\_06:0.01767):0.01201):0.04039,(E\_billingiae:0.02347,(E\_pyrifoliae:0.00634,E\_tasmaniensis:0.01022):0.01942):0.03162):0.01661):0.00246):0.01505,(P\_sp\_At-9b:0.0066,P\_cyprapedii:0.00318):0.00353):0.01484,((P\_deleyi:0.00895,(P\_vagans:5.4E-4,(P\_agglomerans:0.00526,P\_sp\_aB:0.00301):0.01469):0.00584):0.01313,(P\_brenneri:0.00162,P\_conspicua:5.5E-4):0.0058):0.00234):0.00157):0.00803):0.00332);

[1208] tree 't1208'=[&R] (P\_sp\_aB:0.02111,P\_vagans:0.00714,(P\_agglomerans:5.5E-4,((P\_conspicua:5.5E-4,(P\_brenneri:0.0102,(P\_sp\_A4:0.10568,(P\_septica:0.05558,((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00837):0.03122,((P\_allii:0.0041,P\_ananatis:5.5E-4):0.04976,((P\_eucrina:0.07508,((P\_sp\_GM01:0.01133,P\_dispersa:0.02268):0.00439,((P\_rodasii:0.01496,P\_rwandensis:0.01884):0.01108,(P\_sp\_At-9b:0.01708,P\_cyprapedii:0.00574):0.00583):0.01968,P\_wallisii:0.03679):5.4E-4):0.01331):0.04345,((T\_morbirosei:0.03946,(T\_sp\_NML\_06:0.08158,T\_ptyseos:0.03196):0.01282):0.05853,(E\_billingiae:0.03585,(E\_pyrifoliae:0.02107,E\_tasmaniensis:0.03033):0.0649):0.09869):0.00673):0.0271):0.00589):0.02939):0.01982):0.05109):0.01248):0.0048,(P\_deleyi:0.00772,P\_anthophila:0.01325):0.00876):0.02042):0.00562);

[1209] tree 't1209'=[&R] ((P\_septica:0.01374,(P\_sp\_At-9b:0.00157,(P\_sp\_A4:0.0381,P\_cyprapedii:0.00608):0.00894):0.00919):0.01027,((P\_allii:0.00823,(P\_ananatis:5.4E-4,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00268):0.00525):0.01872,(P\_deleyi:0.0033,((P\_anthophila:5.3E-4,(P\_brenneri:0.00565,P\_conspicua:0.00244):0.00271):0.01064,(P\_agglomerans:0.00262,(P\_vagans:5.4E-4,P\_sp\_aB:0.00535):0.0027):5.4E-4):0.00504):0.01083):0.00384):0.00299,(P\_dispersa:0.01288,(P\_eucrina:0.0064,(P\_wallisii:0.00545,(P\_sp\_GM01:0.00565,(P\_rodasii:0.01671,P\_rwandensis:0.01938):0.01071):0.00835):0.00723):0.00555):0.0123,((T\_morbirosei:0.01727,(T\_ptyseos:0.02875,T\_sp\_NML\_06:0.01733):0.03154):0.05473,(E\_billingiae:0.03836,(E\_pyrifoliae:0.01367,E\_tasmaniensis:0.00573):0.03618):0.02231):5.4E-4);

[1210] tree 't1210'=[&R] ((P\_cyprapedii:0.0131,P\_sp\_At-9b:0.00264):0.00533,((P\_rwandensis:0.01088,(E\_billingiae:0.03365,(E\_pyrifoliae:0.00711,E\_tasmaniensis:0.0033):0.01888):0.03456,(P\_sp\_GM01:0.01333,P\_sp\_A4:0.01558):0.00266):0.00266):0.0081,P\_rodasii:0.01066):0.01313):0.00258,(P\_septica:0.01074,P\_dispersa:5.4E-4):0.00526,(P\_wallisii:0.00283,((T\_morbirosei:0.01534,(T\_ptyseos:0.01005,T\_sp\_NML\_06:0.01391):0.00851):0.04557,(P\_eucrina:0.00233,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01314,(P\_ananatis:0.0026,P\_allii:0.00531):0.00255):0.01068,(P\_brenneri:0.00257,(((P\_deleyi:5.3E-4,P\_anthophila:0.00806):0.00785,(P\_sp\_aB:0.00261,P\_vagans:5.5E-4):0.00258):5.5E-4,P\_agglomerans:0.00261):0.00522,P\_conspicua:5.4E-4):0.00533):0.00252):0.0138):0.01169):0.00485):0.01034);

[1211] tree 't1211'=[&R] (P\_septica:0.04375,(P\_sp\_A4:0.21385,((T\_ptyseos:0.08575,(T\_morbirosei:0.12379,T\_sp\_NML\_06:0.10025):0.05318):0.23912,(E\_billingiae:0.15931,(E\_pyrifoliae:0.03843,E\_tasmaniensis:0.04598):0.07005):0.094):0.19321):5.5E-4,(((P\_vagans:0.01312,(P\_agglomerans:0.0,P\_conspicua:0.0):5.5E-4):5.3E-

4,(P\_anthophila:0.00808,P\_deleyi:0.01143):0.00662):0.02984,(P\_brenneri:0.01356,P\_sp\_aB:0.02691):0.01047):0.09542,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.5E-4,(P\_ananatis:0.02677,P\_allii:0.01275):0.01318):0.03867):0.03919,P\_sp\_GM01:0.07056):0.01362,(P\_eucrina:0.03877,((P\_dispersa:5.4E-4,((P\_sp\_At-9b:0.02549,P\_cyprapedii:5.4E-4):0.03888,(P\_rodasii:0.06529,P\_rwandensis:5.4E-4):0.01944):0.0363):0.01283,P\_wallisii:5.5E-4):5.4E-4):0.02219):0.07052);

[1212] tree 't1212'=[&R] ((P\_dispersa:0.03112,P\_wallisii:0.04271):0.00807,((P\_eucrina:0.09487,(P\_sp\_At-9b:0.03933,P\_cyprapedii:0.02423):0.09385):0.01431,(P\_rodasii:0.02544,P\_rwandensis:0.01786):0.03464):0.01261,(((P\_sp\_A4:0.12912,((T\_morbirosei:0.19435,(T\_sp\_NML\_06:0.33566,T\_ptyseos:0.25308):0.05243):0.28363,(E\_billingiae:0.15776,(E\_pyrifoliae:0.05523,E\_tasmaniensis:0.01835):0.17526):0.17256):0.09997,(P\_brenneri:0.06921,((P\_anthophila:0.04547,P\_deleyi:0.03366):0.02076,(P\_agglomerans:0.01067,(P\_vagans:0.02438,P\_sp\_aB:0.02548):0.00263):0.00808):0.0206,P\_conspicua:0.01527):0.02556):0.03937):0.04919):0.02085,((P\_s\_indologenes:0.00251,P\_s\_stewartii:5.5E-4):0.03641,(P\_allii:0.01596,P\_ananatis:0.02069):0.01984):0.07567):0.01812,P\_septica:0.07397):0.02463,P\_sp\_GM01:0.06218):0.00614);

[1213] tree 't1213'=[&R] (P\_sp\_GM01:0.02968,((P\_rodasii:0.01623,P\_rwandensis:0.00512):0.02138,(P\_sp\_At-9b:0.03574,P\_cyprapedii:0.00398):0.00932):0.00468,(P\_dispersa:0.01607,(P\_wallisii:0.03104,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.02193,(P\_allii:0.02468,P\_ananatis:5.4E-4):0.00699):0.05575,((P\_vagans:5.4E-4,(P\_sp\_aB:5.5E-4,(P\_agglomerans:5.4E-4,P\_anthophila:0.01063):0.00324):0.00352):5.4E-4,(P\_deleyi:0.02163,(P\_conspicua:5.4E-4,P\_brenneri:0.01414):5.4E-4):0.0035):0.03539):0.01924,((P\_eucrina:0.0662,P\_septica:0.03259):0.00935,(((E\_billingiae:0.03943,(E\_pyrifoliae:0.01876,E\_tasmaniensis:0.01386):0.05857):0.09363,(T\_morbirosei:0.05498,(T\_ptyseos:0.03515,T\_sp\_NML\_06:0.06918):0.01185):0.06924):0.02566,P\_sp\_A4:0.0549):0.02841):0.01258):0.01319):0.01217):0.00789);

[1214] tree 't1214'=[&R] ((P\_agglomerans:0.0,P\_vagans:0.0,P\_deleyi:0.0,P\_allii:0.0,P\_anthophila:0.0,P\_brenneri:0.0,P\_conspicua:0.0,P\_rodasii:0.0,P\_sp\_aB:0.0):5.5E-4,(P\_rwandensis:0.01871,((P\_sp\_GM01:0.0,P\_wallisii:0.0):5.4E-4,((P\_sp\_A4:0.08307,(E\_pyrifoliae:5.5E-4,E\_tasmaniensis:0.01893):0.03075):0.0178,(T\_morbirosei:0.01884,(T\_sp\_NML\_06:0.02856,T\_ptyseos:5.5E-4):0.00925):0.00961):0.01867):0.00929):5.5E-4,((P\_ananatis:0.0,P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00932,(P\_dispersa:0.00927,(P\_eucrina:0.00929,((P\_sp\_At-9b:0.0,P\_cyprapedii:0.0):5.5E-4,(P\_septica:0.01845,E\_billingiae:0.01867):5.5E-4):5.4E-4):0.0093):5.3E-4):5.5E-4);

[1215] tree 't1215'=[&R] (((T\_morbirosei:0.05076,(T\_sp\_NML\_06:0.11662,T\_ptyseos:0.08289):0.04721):0.1918,(E\_billingiae:0.04522,(E\_pyrifoliae:0.02507,E\_tasmaniensis:0.01644):0.05897):0.04726):0.02607,((P\_brenneri:0.0,P\_conspicua:0.0):0.01077,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00883,(P\_allii:0.00216,P\_ananatis:0.01081):0.00402):0.02674,(P\_anthophila:0.01069,(P\_deleyi:0.00439,(P\_agglomerans:5.5E-4,(P\_vagans:0.00212,P\_sp\_aB:5.5E-4):0.00212):0.00632):0.00431):5.3E-4):0.00425):0.01433):0.00555,(P\_sp\_A4:0.05716,((P\_sp\_At-9b:0.00211,P\_cyprapedii:0.00646):0.01288,(P\_rodasii:0.00651,P\_rwandensis:0.00426):0.01056,(P\_dispersa:0.00563,P\_wallisii:0.02165):0.00476):0.00596):0.00255):0.00442,((P\_septica:0.03378,P\_eucrina:0.01508):0.00937,P\_sp\_GM01:0.02945):0.0029);

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[1216] tree 't1216'=[&R]
((P_dispersa:0.00767,P_wallisii:0.0097):0.00687,((P_rodasii:0.00979,(P_rwandensis:0.00684,P_sp_GM01:0.00339):0.004):
0.01355,(P_eucrina:0.02051,((P_deleyi:0.00349,(P_anthophila:0.01405,((P_sp_aB:0.0,P_agglomerans:0.0):5.4E-
4,P_vagans:0.00339):0.00688):0.0033):0.01012,(P_brenneri:0.00342,P_conspicua:5.5E-4):5.3E-4):0.01054):5.4E-
4):0.00359,(((T_morbirosei:0.03284,(T_ptyseos:0.03061,T_sp_NML_06:0.05809):0.02731):0.05547,(E_billingiae:0.04328,(
E_pyrifoliae:5.4E-
4,E_tasmaniensis:0.00671):0.02768):0.01528):0.02623,(P_septica:0.00267,(P_sp_A4:0.00679,(P_cyprapedii:0.01014,P_sp_A
t-9b:5.4E-4):0.01356):0.00796):0.00676):0.00713,((P_s_indologenes:0.0,P_s_stewartii:0.0):5.3E-
4,(P_ananatis:0.00772,P_allii:0.00953):0.00662):0.01025):5.5E-4);
[1217] tree 't1217'=[&R]
((P_rodasii:0.01692,(P_sp_GM01:0.01912,((E_billingiae:0.03422,(E_pyrifoliae:0.01731,E_tasmaniensis:0.00328):0.06775
):0.06123,P_rwandensis:0.00613):0.00645,((P_septica:0.03078,((T_morbirosei:0.03632,(T_sp_NML_06:0.08883,T_ptyseos:0.
04682):0.03322):0.09547,P_sp_A4:0.03587):0.01059):0.01165,(P_allii:0.00186,(P_ananatis:0.00855,(P_s_indologenes:5.5
E-
4,P_s_stewartii:0.00168):0.00865):0.00323):0.02667,(((P_deleyi:0.00512,(P_sp_aB:0.0087,P_anthophila:0.0121):0.00158
):0.00171,P_vagans:0.0017):0.00325,P_agglomerans:5.4E-
4):0.00712,(P_brenneri:0.00246,P_conspicua:0.00262):0.00856):0.01191):0.00957):0.01291):0.00367):0.00352):0.00493,(P
_dispersa:0.01389,P_wallisii:0.01625):0.00436,((P_sp_At-
9b:0.00361,P_cyprapedii:0.01005):0.01378,P_eucrina:0.02982):0.00288);
[1218] tree 't1218'=[&R] (P_sp_A4:0.01024,(P_sp_At-
9b:0.0,P_cyprapedii:0.0,P_dispersa:0.0,P_eucrina:0.0,P_wallisii:0.0):5.5E-4,(((T_morbirosei:5.4E-
4,(T_sp_NML_06:5.4E-4,(T_ptyseos:5.5E-
4,(E_billingiae:0.02495,(E_pyrifoliae:0.0,E_tasmaniensis:0.0):0.01839):0.08178):0.00983):0.01993):0.02015,(P_agglome
rans:0.0,P_vagans:0.0,P_deleyi:0.0,P_anthophila:0.0,P_brenneri:0.0,P_conspicua:0.0,P_septica:0.0,P_sp_aB:0.0):0.0100
3):5.4E-4,(((P_allii:0.0,P_ananatis:0.0):0.00997,(P_s_stewartii:0.00995,P_s_indologenes:5.5E-4):5.5E-
4):0.01,(P_sp_GM01:0.03045,(P_rodasii:0.0,P_rwandensis:0.0):5.5E-4):0.01007):5.5E-4):5.5E-4);
[1219] tree 't1219'=[&R] (P_deleyi:0.0058,(((P_s_indologenes:0.0,P_s_stewartii:0.0):5.5E-4,(P_allii:5.4E-
4,P_ananatis:0.00576):0.0116):0.0505,(P_septica:0.04053,(((T_ptyseos:0.04318,(T_sp_NML_06:0.05929,T_morbirosei:0.041
09):0.01032):0.07212,(E_billingiae:0.05366,(E_pyrifoliae:5.4E-
4,E_tasmaniensis:0.01751):0.11722):0.03771):0.03874,((P_dispersa:5.3E-
4,(P_sp_A4:0.07941,P_eucrina:0.06404):0.02317):0.00537,(P_wallisii:0.02258,(P_cyprapedii:5.5E-4,(P_sp_At-
9b:0.00569,(P_rwandensis:5.4E-4,(P_rodasii:0.02294,P_sp_GM01:0.00569):0.0057):0.01139):5.4E-
4):0.00673):0.00559):0.03002):0.00922):0.02588):0.0264,P_anthophila:5.4E-
4):0.0058,((P_brenneri:0.0,P_conspicua:0.0):0.01748,(P_agglomerans:5.5E-
4,(P_vagans:0.0,P_sp_aB:0.0):0.00573):0.00585):0.00575);
[1220] tree 't1220'=[&R]
(P_septica:0.03401,P_sp_A4:0.00671,((P_rwandensis:0.0,P_rodasii:0.0):0.01349,(P_eucrina:5.5E-4,(((P_dispersa:8.2E-
4,(P_cyprapedii:0.00678,P_sp_At-9b:5.4E-4):0.01359):0.00599,(P_wallisii:5.5E-
4,(T_ptyseos:0.01835,(T_morbirosei:0.00703,T_sp_NML_06:0.00661):0.00937):0.01374):5.3E-
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4):0.0068,(P\_sp\_GM01:0.00682,((E\_billingiae:5.4E-4,(E\_pyriifoliae:0.0,E\_tasmaniensis:0.0):0.0132):0.02786,((P\_allii:0.0,P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.5E-4,(((P\_agglomerans:0.0,P\_vagans:0.0,P\_sp\_aB:0.0):0.00643,(P\_brenneri:0.0,P\_conspicua:0.0):5.5E-4):0.00666,P\_anthophila:5.5E-4):0.00669,P\_deleyi:0.0067):0.01358,P\_ananatis:5.4E-4):0.00669):0.007):0.00651):0.00682):0.00674):0.00679):5.5E-4);

[1221] tree 't1221'=[&R] ((P\_septica:0.01073,((P\_rodasii:5.5E-4,P\_rwandensis:0.00531):0.01074,(P\_sp\_At-9b:0.01009,((P\_cyprapedii:0.01028,P\_sp\_GM01:0.0164):0.00526,(P\_sp\_A4:0.05284,((T\_morbirosei:0.03209,(T\_sp\_NML\_06:0.06294,T\_ptyseos:0.05038):0.03947):0.04787,(((P\_s\_stewartii:0.00522,P\_s\_indologenes:5.5E-4):5.3E-4,((P\_allii:5.5E-4,P\_ananatis:0.00531):0.00373,(E\_billingiae:0.01469,(E\_pyriifoliae:0.0,E\_tasmaniensis:0.0):0.0187):0.09774):0.01259):0.01569,((P\_agglomerans:0.0,P\_vagans:0.0,P\_sp\_aB:0.0,P\_deleyi:0.0,P\_anthophila:0.0):0.00525,(P\_brenneri:0.0,P\_conspicua:0.0):5.4E-4):0.00544):0.00765):0.02473):0.002):0.00526):0.01095):0.01585):0.0104,P\_dispersa:5.3E-4,(P\_wallisii:0.03716,P\_eucrina:0.01048):0.0052);

[1222] tree 't1222'=[&R] ((P\_sp\_A4:0.08653,((T\_morbirosei:0.10374,(T\_sp\_NML\_06:0.21578,T\_ptyseos:0.07508):0.06616):0.15908,(E\_billingiae:0.06468,(E\_pyriifoliae:0.03141,E\_tasmaniensis:5.4E-4):0.07348):0.09881):0.0273):0.02221,(((P\_s\_indologenes:0.00154,P\_s\_stewartii:0.00153):0.00858,(P\_allii:0.01382,P\_ananatis:0.01006):0.01963):0.03742,((P\_agglomerans:0.00915,(P\_brenneri:0.00469,P\_conspicua:0.00313):0.0083):0.01375,(P\_anthophila:0.02297,(P\_vagans:0.00659,(P\_sp\_aB:0.01872,P\_deleyi:0.02413):0.00514):0.01109):0.01412):0.03986):0.01809,(P\_septica:0.0638,((P\_sp\_At-9b:0.01671,P\_cyprapedii:0.00766):0.03121,((P\_sp\_GM01:0.02272,(P\_rodasii:0.01985,P\_rwandensis:0.00797):0.01902):0.01888,(P\_dispersa:0.02242,(P\_eucrina:0.07476,P\_wallisii:0.01742):0.01937):0.01269):0.01453):0.02301):0.00344);

[1223] tree 't1223'=[&R] ((T\_sp\_NML\_06:0.07756,(T\_morbirosei:0.05538,T\_ptyseos:0.02936):0.01321):0.02193,(((P\_agglomerans:0.00367,(P\_vagans:0.0,P\_sp\_aB:0.0):5.5E-4):0.0037,(P\_anthophila:0.00744,P\_deleyi:0.0114):0.00368):0.00405,((P\_brenneri:0.00361,P\_conspicua:5.4E-4):0.01177,(E\_billingiae:0.02815,(E\_pyriifoliae:0.00947,E\_tasmaniensis:0.00925):0.03566):0.02507):0.00728):0.00974,((P\_eucrina:0.02257,(((P\_cyprapedii:0.01277,(P\_sp\_GM01:0.01274,(P\_sp\_A4:0.00977,(P\_rodasii:0.07177,P\_rwandensis:0.02387):0.01186):0.00368):0.0084):0.00769,(P\_wallisii:0.00757,P\_sp\_At-9b:0.01122):0.00916):0.00859,P\_dispersa:0.01481):0.01436):0.02986,(P\_septica:0.01668,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01155,(P\_allii:0.0,P\_ananatis:0.0):0.00761):0.02264):0.00996):0.0044);

[1224] tree 't1224'=[&R] ((P\_brenneri:0.0,P\_conspicua:0.0):0.01291,((P\_allii:0.0,P\_ananatis:0.0):0.0064,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.5E-4):0.01981,(((T\_morbirosei:0.04648,(T\_sp\_NML\_06:0.07804,T\_ptyseos:0.02246):0.05039):0.04436,(P\_deleyi:0.00577,(P\_anthophila:5.5E-4,((P\_agglomerans:0.0,P\_vagans:0.0):0.01312,P\_sp\_aB:5.5E-4):0.00645):0.00718):0.00664):0.00868,(((P\_sp\_A4:0.04091,(E\_billingiae:0.05252,(E\_pyriifoliae:0.00632,E\_tasmaniensis:5.3E-4):0.01593):0.01706):0.01438,((P\_sp\_GM01:0.01293,((P\_dispersa:5.3E-4,(P\_sp\_At-9b:0.00656,P\_cyprapedii:5.4E-4):0.01317):0.00632,(P\_rodasii:0.01995,P\_rwandensis:5.5E-4):0.01928):5.4E-4):5.4E-4):0.02571,P\_wallisii:5.3E-4):0.0136):0.00914):0.02375,P\_septica:5.4E-4):5.4E-4):0.00648);

[1225] tree 't1225'=[&R] ((E\_billingiae:0.00702,(((P\_vagans:0.0,P\_deleyi:0.0,P\_anthophila:0.0,P\_sp\_aB:0.0):5.4E-4,((P\_brenneri:0.0,P\_conspicua:0.0):0.00235,P\_agglomerans:0.00472):0.00238):0.00696,(P\_sp\_A4:0.00705,(P\_sp\_GM01:0.00704,(P\_rodasii:0.0,P\_rwandensis:0.0):5.5E-4):0.00232):0.00524):0.00428,(P\_allii:5.5E-4,(P\_ananatis:0.0,P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00233):0.00466):5.5E-4):0.00467,(E\_pyriifoliae:0.00233,E\_tasmaniensis:5.5E-4):0.00466,(P\_septica:0.00234,(((P\_sp\_At-9b:0.0,P\_cyprapedii:0.0):0.00471,P\_eucrina:5.5E-4):0.00181,(P\_dispersa:0.00181,((T\_sp\_NML\_06:5.5E-4,(T\_morbirosei:0.00235,T\_ptyseos:0.00234):0.00469):0.01418,P\_wallisii:5.2E-4):5.3E-4):0.00468):0.00286):5.5E-4);

[1226] tree 't1226'=[&R] ((P\_dispersa:0.00351,P\_wallisii:0.00174):5.4E-4,(P\_sp\_A4:0.01558,(P\_sp\_At-9b:0.00856,P\_cyprapedii:0.00363):0.01292,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00171,(P\_allii:0.01035,P\_ananatis:5.4E-4):0.00148):5.4E-4,((P\_septica:0.0168,((E\_billingiae:0.03202,(E\_pyriifoliae:0.00445,E\_tasmaniensis:0.00249):0.01344):0.04544,(T\_morbirosei:0.02827,(T\_sp\_NML\_06:0.04604,T\_ptyseos:0.02633):0.01227):0.03303):0.0067):0.00263,((P\_conspicua:0.00347,P\_brenneri:5.4E-4):0.005,(((P\_sp\_aB:0.0,P\_vagans:0.0):0.00173,P\_agglomerans:0.00523):0.00352,P\_deleyi:0.00173):0.00508,P\_anthophila:0.00189):0.00918):0.01461):0.01543):0.01151):0.00356):0.00574,(P\_eucrina:0.0089,(P\_sp\_GM01:5.4E-4,(P\_rodasii:0.00358,P\_rwandensis:0.00338):0.00348):0.00884):0.00329);

[1227] tree 't1227'=[&R] ((P\_eucrina:0.00448,(P\_septica:5.5E-4,(((P\_deleyi:0.0,P\_anthophila:0.0,P\_brenneri:0.0,P\_conspicua:0.0):5.4E-4,((P\_agglomerans:0.0,P\_sp\_aB:0.0):5.5E-4,P\_vagans:0.00444):0.00444):0.00891,((T\_ptyseos:0.00289,(T\_sp\_NML\_06:0.03209,T\_morbirosei:5.4E-4):0.01044):0.00943,(E\_billingiae:0.01942,(E\_pyriifoliae:5.3E-4,E\_tasmaniensis:0.00829):0.01278):0.04959):0.00572):5.4E-4,(P\_ananatis:0.0,P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.5E-4):5.4E-4,P\_allii:0.00445):0.00896):0.00891,(P\_sp\_At-9b:5.4E-4,(P\_sp\_A4:0.01361,P\_cyprapedii:0.00442):0.00444):5.4E-4):0.00445):5.5E-4,P\_dispersa:5.5E-4,((P\_rodasii:0.0,P\_rwandensis:0.0,P\_sp\_GM01:0.0):0.00446,P\_wallisii:0.00445):5.5E-4);

[1228] tree 't1228'=[&R] (P\_anthophila:0.02548,(P\_agglomerans:0.0,P\_vagans:0.0):5.5E-4,(P\_deleyi:0.00841,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00809,(P\_allii:0.0173,P\_ananatis:5.4E-4):0.00912):0.02631,((P\_brenneri:0.0,P\_conspicua:0.0):5.3E-4,(P\_septica:0.01732,(P\_sp\_GM01:0.00655,(P\_rodasii:0.0,P\_rwandensis:0.0):0.00183):0.00874,(P\_dispersa:5.3E-4,((P\_eucrina:0.00829,(P\_cyprapedii:0.00874,((P\_sp\_A4:0.0432,((E\_billingiae:0.08788,(E\_pyriifoliae:5.5E-4,E\_tasmaniensis:0.01703):0.07421):0.11936,(T\_morbirosei:0.06875,(T\_sp\_NML\_06:0.1376,T\_ptyseos:0.01335):0.07388):0.13966):0.0218):0.02237,P\_sp\_At-9b:0.01664):0.01459):0.017):0.00866,P\_wallisii:0.00821):0.00844):5.4E-4):0.02541):0.02599):0.01619):5.4E-4,P\_sp\_aB:5.5E-4):5.5E-4):0.00837);

[1229] tree 't1229'=[&R] ((P\_sp\_A4:0.0,P\_rwandensis:0.0,P\_sp\_At-9b:0.0,P\_cyprapedii:0.0,P\_sp\_GM01:0.0):5.5E-4,(((P\_rodasii:0.0,P\_brenneri:0.0,P\_dispersa:0.0,P\_wallisii:0.0,P\_agglomerans:0.0,P\_vagans:0.0,P\_deleyi:0.0,P\_anthophila:0.0,P\_sp\_aB:0.0):5.5E-4,P\_conspicua:0.00346):5.3E-4,(E\_billingiae:0.00824,(E\_pyriifoliae:0.04298,E\_tasmaniensis:0.02129):0.02492):0.01629):0.00342,P\_septica:0.00343):5.5E-4,((T\_morbirosei:0.06739,(T\_ptyseos:0.05804,T\_sp\_NML\_06:0.06492):0.04423):0.28947,((P\_allii:0.0,P\_ananatis:0.0):5.5E-4,(P\_s\_stewartii:0.00343,P\_s\_indologenes:5.5E-4):0.00342):5.4E-4):0.0032,P\_eucrina:5.5E-4):0.00344);

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[1230] tree 't1230'=[&R]
((P_wallisii:0.02255,P_dispersa:0.00329):0.00467,(P_sp_GM01:0.00281,(P_rodasii:0.0048,P_rwandensis:5.3E-
4):0.00497):0.00497,(((P_vagans:5.5E-4,(P_agglomerans:0.00253,P_sp_aB:5.5E-4):0.00252):5.5E-
4,(P_conspicua:0.0025,P_brenneri:0.00767):0.00505):0.00253,(P_deleyi:0.00756,P_anthophila:0.0025):5.5E-
4):0.01012,(((P_s_indologenes:5.5E-
4,P_s_stewartii:0.0025):0.01066,(P_allii:0.00249,P_ananatis:0.00501):0.00184):0.00499,(((E_tasmaniensis:0.01671,E_py
rifoliae:0.01171):0.01635,(E_billingiae:0.03138,(T_sp_NML_06:0.01809,(T_morbirosei:0.02022,T_ptyseos:0.008):0.01588)
:0.02967):0.01084):0.01704,(P_septica:0.02084,P_eucrina:0.01613):0.00281):0.00529):0.00512):5.4E-
4,(P_cyprapedii:0.00512,(P_sp_A4:0.01096,P_sp_At-9b:0.00697):0.00332):0.01067):0.0034);
[1231] tree 't1231'=[&R] (P_cyprapedii:0.03619,P_sp_At-9b:5.5E-
4,(((P_rwandensis:0.01118,P_sp_GM01:0.01401):0.01532,(P_rodasii:0.00502,(P_allii:0.01225,(P_ananatis:0.00937,(P_s_i
ndologenes:0.0,P_s_stewartii:0.0):0.00738):0.00744):0.02073,(P_sp_aB:0.01083,(P_deleyi:0.02543,(P_vagans:5.3E-
4,(P_agglomerans:0.01009,(P_conspicua:0.02089,(P_brenneri:0.00482,P_anthophila:0.00527):0.00503):5.5E-
4):0.00501):5.5E-
4):0.0048):0.02157,(((P_eucrina:0.02419,(T_ptyseos:0.02557,(T_morbirosei:0.04902,T_sp_NML_06:0.11507):0.01035):1.086
29):0.06484,(E_billingiae:0.0395,(E_pyrifoliae:0.01382,E_tasmaniensis:0.0484):0.04654):0.04396):0.0192,(P_sp_A4:0.09
513,P_septica:0.02557):0.01068):0.00872):0.01839):0.01665):0.00877):0.00629,(P_wallisii:0.02034,P_dispersa:0.00514):
0.00515):0.00517);
[1232] tree 't1232'=[&R] (P_septica:0.01511,P_anthophila:0.01493,((P_agglomerans:0.01508,P_deleyi:0.0301):5.5E-
4,(P_vagans:5.5E-4,(((P_sp_A4:0.02997,P_conspicua:0.01479):5.5E-4,(P_brenneri:0.01483,(P_sp_At-9b:5.5E-
4,(P_eucrina:0.09888,P_cyprapedii:0.03081):5.4E-4):0.01128,(P_dispersa:0.0,P_rwandensis:0.0):5.4E-
4,(P_rodasii:0.01491,(P_sp_GM01:0.03002,P_wallisii:0.03184):5.4E-4):0.01509):0.021):0.01308):5.4E-4):5.4E-
4,((T_morbirosei:0.06539,(T_ptyseos:0.13036,T_sp_NML_06:0.06335):0.11166):0.26269,(E_billingiae:5.4E-
4,(E_pyrifoliae:0.06623,E_tasmaniensis:5.3E-4):0.08109):0.03002):0.04843):0.03028,(P_sp_aB:5.5E-
4,((P_s_indologenes:0.0,P_s_stewartii:0.0):0.03043,(P_allii:0.0,P_ananatis:0.0):5.5E-4):0.05152):0.01505):5.4E-
4):5.5E-4):5.4E-4);
[1233] tree 't1233'=[&R] (((P_agglomerans:5.5E-4,P_vagans:0.0075):5.5E-
4,((P_brenneri:0.01139,P_conspicua:0.00357):0.01293,(((P_s_indologenes:5.5E-
4,P_s_stewartii:0.00497):0.01939,(P_allii:0.00724,P_ananatis:0.01523):0.01084):0.03081,(((T_morbirosei:0.11604,(T_pt
yseos:0.06215,T_sp_NML_06:0.09885):0.05498):0.11433,(((P_sp_At-
9b:0.00878,P_cyprapedii:0.00797):0.01869,(P_eucrina:0.02592,(P_rodasii:0.00499,(P_rwandensis:0.00492,P_sp_GM01:0.01
014):0.00254):0.0053):0.0084,(P_wallisii:0.02155,P_dispersa:0.01061):0.00705):0.01178):0.01684,(E_billingiae:0.05401
,(E_pyrifoliae:0.02616,E_tasmaniensis:0.02775):0.0491):0.02142):0.01309):0.00627,(P_sp_A4:0.07761,P_septica:0.06067)
:0.01932):0.0068):0.01367):0.01091):0.00647,P_deleyi:0.00602,(P_anthophila:0.01194,P_sp_aB:0.00591):0.00504);
[1234] tree 't1234'=[&R] ((P_deleyi:0.01427,P_agglomerans:5.3E-
4):0.00285,(P_sp_aB:0.0062,P_vagans:0.00395):0.00248,(P_anthophila:0.00319,(P_brenneri:0.00319,P_conspicua:0.00466)
:0.00465,(P_allii:0.01169,(P_s_indologenes:0.0,P_s_stewartii:0.0):0.01242,P_ananatis:0.00516):0.00296):0.02456,(P_
septica:0.03765,(P_sp_At-
9b:0.00929,P_cyprapedii:0.01174):0.00794,(P_wallisii:0.00811,(P_sp_GM01:0.01098,((P_dispersa:0.00862,P_eucrina:0.02
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429):0.00284,(P\_rodasii:0.00457,P\_rwandensis:5.5E-4):0.01907):0.00147):0.00164):0.0143,((E\_billingiae:0.03814,(E\_pyrifoliae:0.02261,E\_tasmaniensis:0.0094):0.03735):0.02365,((T\_morbirosei:0.04249,(T\_sp\_NML\_06:0.12902,T\_ptyseos:0.0674):0.04563):0.12975,P\_sp\_A4:0.06839):0.02077):0.00748):0.00246):0.00655):0.00801):0.01272):0.00625):5.5E-4);

[1235] tree 't1235'=[&R]  
((E\_billingiae:0.03205,(E\_pyrifoliae:0.01737,E\_tasmaniensis:0.0264):0.06253):0.04063,(P\_sp\_At-9b:0.01695,P\_cyprapedii:0.01067):0.01586,((P\_sp\_GM01:0.01242,(P\_septica:0.06762,P\_dispersa:0.00941):0.01148):0.00599,((P\_sp\_A4:0.07465,(P\_rodasii:0.01793,P\_rwandensis:0.01216):0.00816):0.00505,(P\_wallisii:0.03009,(P\_eucrinea:0.01274,((T\_morbirosei:0.04236,(T\_sp\_NML\_06:0.05977,T\_ptyseos:0.06806):0.00907):0.09588,(P\_anthophila:5.4E-4,((P\_brenneri:0.01795,P\_conspicua:5.5E-4):0.00696,(P\_allii:5.5E-4,((P\_ananatis:0.0,P\_s\_indologenes:0.0):5.5E-4,P\_s\_stewartii:0.00607):0.01215):0.02533):0.0295,(P\_deleyi:0.01188,(P\_agglomerans:0.00591,(P\_vagans:0.0,P\_sp\_aB:0.0):5.5E-4):5.4E-4):0.01758):5.4E-4):0.0164):0.01285):0.00635):0.01257):0.00596):5.3E-4);

[1236] tree 't1236'=[&R]  
(P\_anthophila:0.02019,P\_deleyi:0.02503,((P\_sp\_aB:0.01571,P\_vagans:0.00734):0.00872,(P\_agglomerans:0.00806,(((P\_s\_inologenes:5.5E-4,P\_s\_stewartii:0.00275):0.01568,(P\_allii:0.00275,P\_ananatis:0.02288):0.02047):0.05639,(P\_septica:0.0751,(((P\_eucrin a:0.02921,(E\_billingiae:0.1218,(E\_pyrifoliae:0.05352,E\_tasmaniensis:0.02152):0.0509):0.10653):0.01882,((P\_cyprapedii :0.04591,P\_sp\_At-9b:0.03458):0.02014,(P\_wallisii:0.02307,((P\_sp\_GM01:0.01851,P\_dispersa:0.02622):5.4E-4,(P\_rwandensis:0.02279,P\_rodasii:0.0198):0.01153):0.00487):0.01645):0.00295):0.04958,(P\_sp\_A4:0.09354,(T\_morbirosei :0.13659,(T\_sp\_NML\_06:0.2904,T\_ptyseos:0.0841):0.05178):0.19653):0.02524):0.02614):0.02044):0.01847,(P\_conspicua:0.0 1963,P\_brenneri:0.00807):0.01286):0.00934):0.00903):0.00945);

[1237] tree 't1237'=[&R]  
((E\_billingiae:0.04588,((T\_morbirosei:0.01176,(T\_sp\_NML\_06:0.02665,T\_ptyseos:0.04392):0.02504):0.06017,(E\_pyrifoliae :0.03187,E\_tasmaniensis:0.00489):0.02773):0.03054):0.02231,(P\_sp\_A4:0.03953,((P\_sp\_At-9b:0.00376,P\_cyprapedii:0.00776):0.01079,(P\_dispersa:0.00392,((P\_eucrinea:0.02439,(P\_sp\_GM01:0.0108,(P\_rodasii:5.4E-4,P\_rwandensis:0.01119):0.01043):0.00609):0.0038,P\_wallisii:0.008):0.00394):0.01282):0.00447):0.00389,((P\_brenneri:0 .01949,(P\_anthophila:0.00713,((P\_sp\_aB:5.5E-4,(P\_agglomerans:5.5E-4,P\_conspicua:0.00386):0.01559):0.00734,(P\_deleyi:0.00776,P\_vagans:0.01556):5.5E-4):0.00812):0.01233):0.03259,(P\_septica:0.04446,((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.0038):0.00583,(P\_allii:0.01147,P\_ananatis:0.01222):0.01542):0.04205):0.00979):0.00579);

[1238] tree 't1238'=[&R] (P\_sp\_aB:0.01313,(P\_vagans:0.00871,P\_deleyi:0.00451):0.00441,(P\_agglomerans:5.5E-4,(P\_conspicua:0.00438,(P\_anthophila:5.5E-4,(P\_brenneri:0.0045,(((P\_allii:0.00871,(P\_ananatis:5.5E-4,(P\_s\_stewartii:0.00442,P\_s\_indologenes:5.5E-4):0.00443):5.3E-4):0.02642,(P\_sp\_A4:0.09283,(E\_billingiae:0.07125,(E\_pyrifoliae:0.00526,E\_tasmaniensis:0.02148):0.02941):0.04618):0.02036):0.01111,((P\_septica:0.01734,(P\_eucrinea:0.01795,(P\_dispersa:0.00438,(P\_wallisii:0.01774,(P\_sp\_GM01:0.04043,(P\_rodasii:0.00872,P\_rwandensis:5.4E-4):0.00429):0.00463):5.5E-4):0.00885):0.00902):0.00459,((P\_sp\_At-9b:0.01264,P\_cyprapedii:0.01792):0.01351,(T\_morbirosei:0.03774,(T\_ptyseos:0.03555,T\_sp\_NML\_06:0.02535):0.02973):0.10 012):0.0045):0.01309):0.01397):0.00418):0.0042):5.4E-4):5.4E-4);



[1239] tree 't1239'=[&R] (P\_septica:0.04453,(P\_sp\_At-9b:0.00934,P\_cyprapedii:0.00485):0.00494,(P\_sp\_GM01:0.01896,((P\_eucrina:0.02409,P\_wallisii:5.4E-4):0.00951,(P\_sp\_A4:0.06637,(((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.0047):0.00566,(P\_allii:0.00947,P\_ananatis:5.5E-4):0.01348):0.01671,((P\_deleyi:0.01458,(P\_vagans:0.00464,(P\_anthophila:0.00906,(P\_agglomerans:0.00902,P\_sp\_aB:0.0048):0.00463):5.4E-4):0.00454):0.0094,P\_conspicua:5.4E-4):0.00431,P\_brenneri:5.4E-4):0.02329):0.03637,(E\_pyriifoliae:0.0268,E\_tasmaniensis:0.01714):0.06534,(T\_morbirosei:0.03362,(T\_ptyseos:0.05593,T\_sp\_NML\_06:0.02935):0.04065):0.18536,E\_billingiae:0.05628):0.02367):0.01356):0.00454):0.00724):0.00466,(P\_dispersa:0.00931,(P\_rwandensis:0.01815,P\_rodasii:0.00952):0.01883):0.00472):0.00986):0.00495);

[1240] tree 't1240'=[&R] (P\_eucrina:0.04142,P\_dispersa:0.00689,(((P\_sp\_At-9b:5.5E-4,P\_cyprapedii:0.01572):0.01322,((P\_sp\_A4:0.04444,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.02334,(P\_allii:0.01575,P\_ananatis:0.00785):0.01164):0.03397,(P\_septica:0.01802,((P\_vagans:0.01256,P\_sp\_aB:0.00709):0.00395,((P\_agglomerans:5.4E-4,(P\_deleyi:0.00389,P\_anthophila:5.5E-4):0.01578):0.00396,(P\_conspicua:0.00393,P\_brenneri:0.008):0.00384):0.00474):0.01874):0.01596):0.02231):0.02166,(((T\_morbirosei:0.05835,(T\_sp\_NML\_06:0.07327,T\_ptyseos:0.10302):0.03646):0.12799,(E\_billingiae:0.0229,(E\_pyriifoliae:0.04065,E\_tasmaniensis:5.4E-4):0.08558):0.09448):0.02285,P\_wallisii:0.02744):0.00536):0.00691):0.00628,((P\_rodasii:0.01102,P\_rwandensis:0.02619):0.0199,P\_sp\_GM01:0.02935):0.00233):0.00834);

[1241] tree 't1241'=[&R] (P\_sp\_aB:0.01068,(((P\_allii:0.01104,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01505,P\_ananatis:0.01054):0.00508):0.05301,(((T\_ptyseos:0.03408,(T\_morbirosei:0.05964,T\_sp\_NML\_06:0.06203):0.02014):0.06533,(E\_tasmaniensis:0.03047,(E\_pyriifoliae:0.04176,E\_billingiae:0.06044):0.02168):0.04447):0.05007,(((P\_sp\_At-9b:0.00974,P\_cyprapedii:0.01858):0.04422,(P\_sp\_A4:0.0481,((P\_wallisii:0.02766,(P\_rodasii:0.03776,P\_rwandensis:0.01125):0.01451):0.01048,P\_dispersa:0.01342):0.00632,P\_sp\_GM01:0.04322):0.01356):0.0099):0.01843,(P\_eucrina:0.06769,P\_septica:0.04418):0.02072):0.02092):0.01986):0.01321,(P\_brenneri:0.01063,P\_conspicua:0.0147):5.4E-4):0.01652,((P\_anthophila:0.02639,P\_vagans:5.3E-4):0.00513,(P\_deleyi:0.01588,P\_agglomerans:0.00518):5.3E-4):0.00485);

[1242] tree 't1242'=[&R] (((P\_dispersa:0.00538,(P\_eucrina:0.02736,P\_wallisii:5.5E-4):0.00248):0.00904,(P\_rodasii:5.3E-4,P\_rwandensis:0.00798):0.0187):0.00158,(P\_sp\_At-9b:5.4E-4,P\_cyprapedii:0.00537):0.00426,(((T\_morbirosei:0.0299,(T\_ptyseos:5.5E-4,T\_sp\_NML\_06:0.03009):0.01481):0.0483,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.4E-4,(P\_allii:0.00537,P\_ananatis:5.5E-4):0.00529):0.01898,((P\_sp\_A4:0.04516,(E\_billingiae:0.01675,(E\_pyriifoliae:0.00818,E\_tasmaniensis:0.0027):0.02114):0.04745):0.00467,(P\_septica:0.02148,(P\_brenneri:5.4E-4,((P\_deleyi:5.4E-4,(P\_vagans:5.5E-4,(P\_agglomerans:0.00265,P\_sp\_aB:5.5E-4):0.00265):0.0053):0.00266,(P\_anthophila:0.00536,P\_conspicua:5.5E-4):5.5E-4):0.0026):0.00588):0.01158):0.00284):5.5E-4):0.00482,P\_sp\_GM01:0.00898):0.00633);

[1243] tree 't1243'=[&R] ((P\_sp\_GM01:0.0,P\_dispersa:0.0,P\_septica:0.0,P\_wallisii:0.0):5.5E-4,((P\_rodasii:0.23976,P\_rwandensis:5.5E-4):0.00415,((T\_morbirosei:0.01388,(T\_sp\_NML\_06:0.05144,T\_ptyseos:0.01111):0.01699):0.08529,(P\_sp\_A4:0.04301,(E\_bill

ngiae:0.02669,(E\_pyrifoliae:0.01339,E\_tasmaniensis:0.01316):0.01357):5.5E-4):0.01393):0.02382):0.01002,(P\_eucrinea:0.01299,(((P\_brenneri:0.0,P\_conspicua:0.0):0.01311,(P\_deleyi:5.4E-4,((P\_agglomerans:0.0,P\_vagans:0.0,P\_sp\_aB:0.0):5.4E-4,P\_anthophila:0.01318):0.01326):5.4E-4):0.01317,((P\_sp\_At-9b:0.0,P\_cyprapedii:0.0):0.01316,(P\_allii:0.05651,(P\_s\_stewartii:0.0,P\_ananatis:0.0,P\_s\_indologenes:0.0):5.4E-4):0.013):5.5E-4):0.01298):5.4E-4);

[1244] tree 't1244'=[&R] (P\_conspicua:0.01094,((E\_billingiae:0.08555,(((P\_sp\_At-9b:0.01165,P\_cyprapedii:0.01101):0.02327,(P\_dispersa:0.00396,(P\_wallisii:0.03471,((P\_rwandensis:0.02184,P\_rodasii:0.03493):0.01116,(P\_sp\_GM01:0.03382,((T\_morbirosei:0.15704,(T\_sp\_NML\_06:0.10976,T\_ptyseos:0.14753):0.12386):0.39123,(P\_septica:0.06893,P\_eucrinea:0.0804):0.02072):0.01546):0.01051):0.02251):0.04496):0.0203):0.00899,(E\_pyrifoliae:0.09254,E\_tasmaniensis:0.02189):0.10311):0.02477):0.01763,(P\_sp\_A4:0.16661,((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.01017):0.01731,(P\_allii:0.021,P\_ananatis:5.3E-4):0.01433):0.07041):0.04404):5.5E-4,((P\_anthophila:0.02145,(P\_deleyi:0.01068,((P\_sp\_aB:0.0,P\_agglomerans:0.0):5.4E-4,P\_vagans:0.03243):0.0106):0.01077):0.02374,P\_brenneri:5.5E-4):0.01094);

[1245] tree 't1245'=[&R] (P\_dispersa:0.01414,((P\_sp\_At-9b:0.00563,P\_cyprapedii:0.00391):0.00414,((P\_sp\_A4:0.0372,(E\_billingiae:0.02866,(E\_pyrifoliae:0.01789,E\_tasmaniensis:0.02185):0.04894):0.04793):0.02299,(((P\_anthophila:0.00455,((T\_morbirosei:0.05863,(T\_sp\_NML\_06:0.04175,T\_ptyseos:0.03926):0.0107):0.03526,((P\_vagans:0.00898,P\_sp\_aB:5.5E-4):0.00469,(P\_agglomerans:5.4E-4,P\_conspicua:0.0091):0.00436):0.00995):0.00845):0.01344,((P\_brenneri:0.00907,P\_deleyi:0.0045):0.00454,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00861,(P\_ananatis:0.0045,P\_allii:0.00451):0.00913):5.1E-4):0.00451):5.4E-4,P\_septica:0.02349):0.01635):0.00198):0.00943,((P\_eucrinea:0.02313,P\_wallisii:5.4E-4):0.00462,(P\_sp\_GM01:0.01362,(P\_rodasii:0.0,P\_rwandensis:0.0):0.00921):0.01887):0.00434);

[1246] tree 't1246'=[&R] (((((T\_morbirosei:0.07431,(T\_ptyseos:0.03911,T\_sp\_NML\_06:0.09374):0.04442):0.14043,(P\_sp\_A4:0.19921,(E\_billingiae:0.05528,(E\_pyrifoliae:0.06761,E\_tasmaniensis:0.04716):0.05013):0.02634):0.02496):0.0123,(P\_sp\_At-9b:0.00801,P\_cyprapedii:0.01115):0.00507):0.01876,P\_dispersa:0.00945,(P\_wallisii:0.00945,((P\_septica:0.02913,((P\_s\_stewartii:0.00944,P\_s\_indologenes:5.4E-4):0.0087,(P\_allii:0.00475,P\_ananatis:0.00476):7.1E-4):0.0229,((P\_conspicua:0.00974,P\_brenneri:0.00961):0.00341,((P\_sp\_aB:5.4E-4,(P\_vagans:0.00474,P\_agglomerans:5.5E-4):0.00919):0.01325,(P\_anthophila:0.01106,P\_deleyi:0.00857):0.0145):0.00738):0.00635):0.00491):0.0241,(P\_sp\_GM01:0.0244,(P\_rodasii:0.00477,P\_rwandensis:5.5E-4):0.00505):0.00452):0.00498,P\_eucrinea:0.00939):5.5E-4):5.5E-4);

[1247] tree 't1247'=[&R] ((P\_cyprapedii:0.03381,P\_wallisii:0.02062):0.00782,(P\_sp\_At-9b:0.00731,(P\_eucrinea:0.01521,(P\_sp\_GM01:0.03214,(P\_rodasii:0.01307,P\_rwandensis:5.4E-4):0.02986):0.03414):0.0133):0.01373,(P\_dispersa:0.01983,(P\_septica:0.01676,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00647,(P\_allii:5.4E-4,P\_ananatis:0.00683):0.01397):0.02229,((P\_anthophila:0.00679,(P\_vagans:5.5E-4,(P\_deleyi:0.04298,(P\_sp\_aB:0.0069,P\_agglomerans:5.5E-4):0.00677):5.4E-4):5.4E-4):0.03511,(P\_brenneri:0.00631,P\_conspicua:5.4E-4):0.01055):0.00143):0.00716,((T\_sp\_NML\_06:0.01701,(T\_ptyseos:0.01298,T\_morbirosei:0.02709):0.00976):0.07417,(E\_billingiae:0.0097,(E\_pyrifoliae:0.01335,E\_tasmaniensis:5.4E-4):0.06191):0.0335):0.03903):0.00779,P\_sp\_A4:0.05575):0.00837):0.02144):0.00663);

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[1248] tree 't1248'=[&R] ((P_septica:0.04657,(P_sp_A4:0.07802,((((P_s_indologenes:0.0,P_s_stewartii:0.0):5.4E-4,(P_allii:0.01693,P_ananatis:0.01091):0.00548):0.03707,(T_morbirosei:0.05518,(T_sp_NML_06:0.16686,T_ptyseos:0.09463):0.00659):0.09938):0.00293,(P_anthophila:5.5E-4,((P_deleyi:5.5E-4,(P_conspicua:0.00549,P_brenneri:5.5E-4):0.0055):5.5E-4,(P_sp_aB:0.00549,(P_agglomerans:0.0,P_vagans:0.0):5.5E-4):0.0055):0.01093):0.00865,(E_billingiae:0.09989,(E_pyriifoliae:0.02758,E_tasmaniensis:0.02418):0.03636):0.02359):0.01921):5.4E-4):0.01413,(P_sp_At-9b:0.01686,P_rodasii:0.01139):0.00468,((P_wallisii:0.00632,(P_eucrina:0.02249,P_dispersa:0.00554):0.01578):0.00591,(P_cyprapedii:0.01519,(P_sp_GM01:0.01486,P_rwandensis:0.00744):0.01053):0.00671):0.00627);
[1249] tree 't1249'=[&R]
((P_allii:0.00888,((P_s_indologenes:0.0,P_s_stewartii:0.0):0.02239,P_ananatis:0.00941):0.00227):0.0243,((T_sp_NML_06:0.04417,(T_morbirosei:0.07658,T_ptyseos:0.03983):0.02468):0.14546,(E_billingiae:0.0728,(E_pyriifoliae:0.01476,E_tasm-aniensis:0.04155):0.06144):0.01516):0.0179,(((P_sp_At-9b:0.01991,P_cyprapedii:0.00785):0.00773,(P_conspicua:0.00766,P_brenneri:0.0078):5.4E-4,(P_deleyi:0.02323,(P_agglomerans:0.0,P_sp_aB:0.0):5.5E-4,(P_anthophila:0.01891,P_vagans:0.00761):5.5E-4):0.00758):0.01571):0.03933):0.00457,(((P_dispersa:0.04674,(P_eucrina:0.07653,P_wallisii:0.0086):0.01603):0.01655,(P_rodasii:0.12247,P_rwandensis:0.00378):0.00795,P_sp_GM01:0.06913):0.00605):0.02945,(P_septica:0.03248,P_sp_A4:0.08705):0.02294):7.3E-4):0.02838);
[1250] tree 't1250'=[&R] ((P_rwandensis:0.0137,(P_rodasii:0.01771,P_dispersa:0.05829):0.01463):0.02115,(P_sp_At-9b:0.03212,P_cyprapedii:0.01788):0.03563,(((P_eucrina:0.08458,P_wallisii:0.05822):0.01828,(P_sp_A4:0.16698,(T_morb-irosei:0.06087,(T_sp_NML_06:0.12036,T_ptyseos:0.0688):0.06068):0.12347,(E_billingiae:0.06042,(E_pyriifoliae:0.02745,E_tasmaniensis:0.05069):0.05304):0.04875):0.06575):0.03672,(P_septica:0.0714,((P_deleyi:0.06028,(P_anthophila:0.01401),(P_agglomerans:0.00602,(P_vagans:0.01999,P_sp_aB:0.00449):0.01023):0.00793):5.4E-4):0.02486,((P_brenneri:0.01446,P_conspicua:0.0159):0.02314,((P_s_indologenes:0.0034,P_s_stewartii:0.00695):0.02416,(P_allii:0.1278,P_ananatis:0.02257):0.00875):0.01773):0.00753):0.00856):0.02846):0.01419):0.01572,P_sp_GM01:0.01793):0.00432);
[1251] tree 't1251'=[&R]
(P_dispersa:0.03178,(P_eucrina:0.20271,P_wallisii:0.01845):0.01519,(((P_septica:0.04799,(P_sp_At-9b:0.01561,P_cyprapedii:5.4E-4):0.0444):0.01393,((((P_s_indologenes:5.5E-4,P_s_stewartii:0.01639):0.0224,(P_ananatis:0.02108,P_allii:0.04006):0.02416):0.15184,(P_anthophila:0.05172,(P_vagan-s:0.04278,(P_deleyi:0.05395,(P_sp_aB:0.01732,(P_agglomerans:0.01353,(P_brenneri:0.01503,P_conspicua:0.02093):0.03275):0.00731):0.00772):0.02647):0.01382):0.06886):0.05436,((T_sp_NML_06:0.14662,(T_morbirosei:0.13448,T_ptyseos:0.11396):0.07897):0.31426,(E_billingiae:0.14357,(P_sp_A4:0.10353,(E_pyriifoliae:0.00676,E_tasmaniensis:0.062):0.09877):0.04026):0.02944):0.03151):0.12475):0.0186,(P_sp_GM01:0.01893,(P_rodasii:0.01348,P_rwandensis:0.02376):0.0108):0.00635):0.01437);
[1252] tree 't1252'=[&R] (P_deleyi:0.03766,P_vagans:0.01941,((P_sp_aB:0.02563,P_agglomerans:5.4E-4):0.00994,(P_anthophila:0.0211,((P_brenneri:0.01828,P_conspicua:0.00365):0.02543,(((P_s_indologenes:0.0,P_s_stewart-ii:0.0):0.01429,(P_allii:0.00797,P_ananatis:0.01804):0.02692):0.07947,(P_septica:0.10426,((E_billingiae:0.10182,(E_p-yrifoliae:0.05048,E_tasmaniensis:0.05277):0.12822):0.12106,((((P_dispersa:0.02902,P_wallisii:0.02989):0.01543,P_euc-rina:0.11327):0.0239,(P_sp_GM01:0.04375,(P_rodasii:0.02634,P_rwandensis:0.02142):0.01594):0.02978):0.00777,(P_sp_At-
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9b:0.01064,P\_cyprapedii:0.0515):0.03712):0.05632,(P\_sp\_A4:0.20799,(T\_ptyseos:0.19874,(T\_morbirosei:0.23204,T\_sp\_NML\_06:0.36186):0.053):0.44621):0.09775):0.01852):0.04784):0.03116):0.03879):0.01031):0.01951):0.01214);

[1253] tree 't1253'=[&R] (P\_allii:0.00722,P\_ananatis:5.2E-4,((P\_conspicua:5.4E-4,(P\_brenneri:0.00239,(P\_deleyi:5.4E-4,(P\_agglomerans:0.00239,(P\_anthophila:0.01234,(P\_vagans:0.00242,P\_sp\_aB:0.00242):5.4E-4):0.00438):0.00982):0.00974):0.00246):0.00999,((P\_septica:0.01349,(((T\_morbirosei:0.01948,(T\_ptyseos:0.03195,T\_sp\_NML\_06:0.02524):0.03052):0.00817,((P\_sp\_GM01:0.01017,(P\_rodasii:0.00743,P\_rwandensis:0.00486):0.00993):0.01668,(((P\_dispersa:0.01,(P\_wallisii:0.01234,P\_eucrina:0.02515):0.00251):0.00857,P\_sp\_At-9b:0.00633):0.00555,P\_cyprapedii:0.01567):0.00911):0.01854):0.00594,((E\_billingiae:0.04193,(E\_pyrifoliae:0.0263,E\_tasmaniensis:0.00175):0.03968):0.09812,P\_sp\_A4:0.02724):0.01106):0.0191):0.02285,(P\_s\_stewartii:0.00485,P\_s\_indologenes:5.5E-4):0.00914):0.00308):5.4E-4);

[1254] tree 't1254'=[&R] (P\_wallisii:0.02153,(P\_septica:0.0544,((E\_billingiae:0.01205,(E\_pyrifoliae:0.02377,E\_tasmaniensis:5.4E-4):0.05869):0.06763,(((P\_brenneri:0.0,P\_conspicua:0.0,P\_agglomerans:0.0):5.4E-4,((P\_allii:0.01143,(P\_ananatis:0.01113,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.4E-4):0.01084):0.03461,(P\_deleyi:0.02179,P\_anthophila:5.5E-4):0.01032):0.01146):5.4E-4,(P\_vagans:0.0,P\_sp\_aB:0.0):0.01084):0.0304):0.02362):0.02153,(((P\_cyprapedii:0.04456,P\_sp\_At-9b:5.5E-4):0.01181,((P\_sp\_A4:0.10955,(T\_sp\_NML\_06:0.18391,(T\_ptyseos:0.18122,T\_morbirosei:0.0752):0.10655):0.54158):0.04389,(P\_rodasii:0.02181,(P\_sp\_GM01:0.03395,P\_rwandensis:5.4E-4):0.02182):0.01336):0.02379):0.03252,(P\_dispersa:5.5E-4,P\_eucrina:0.0579):0.01109):5.3E-4);

[1255] tree 't1255'=[&R] (P\_wallisii:0.0206,((P\_rodasii:0.02467,P\_rwandensis:0.03429):0.04625,((P\_sp\_GM01:0.06038,(P\_cyprapedii:0.01977,P\_sp\_At-9b:0.04038):0.03499):0.01369,(((P\_deleyi:0.02298,(((P\_brenneri:5.5E-4,P\_conspicua:0.01109):0.02888,(P\_anthophila:0.01128,((P\_agglomerans:0.0,P\_sp\_aB:0.0):0.00562,P\_vagans:5.4E-4):0.00565):0.00589):0.00862,((P\_s\_stewartii:0.01111,P\_s\_indologenes:5.4E-4):0.03821,(P\_allii:0.02088,P\_ananatis:0.01632):0.04064):0.02396):0.01805):0.07371,P\_septica:0.0385):0.02953,P\_sp\_A4:0.10059):0.02488):0.01951):0.0063,((E\_billingiae:0.15021,((T\_morbirosei:0.15771,(T\_sp\_NML\_06:0.15535,T\_ptyseos:0.06974):0.05702):0.19936,(E\_pyrifoliae:0.0399,E\_tasmaniensis:0.05114):0.03731):0.0326):0.0539,(P\_dispersa:0.0379,P\_eucrina:0.10812):0.01162):0.00721);

[1256] tree 't1256'=[&R] (((P\_sp\_At-9b:0.02459,P\_cyprapedii:0.02927):0.04838,((P\_rodasii:0.03221,P\_rwandensis:0.00921):0.03598,(P\_sp\_GM01:0.05608,(P\_eucrina:0.05626,(P\_dispersa:0.01379,P\_wallisii:0.03633):0.0155):0.01807):0.01458):0.02488):0.03603,((E\_billingiae:0.05536,(E\_pyrifoliae:0.0249,E\_tasmaniensis:0.00921):0.15797):0.07567,((P\_ananatis:0.02077,(P\_allii:0.03245,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.0602):0.01531):0.06812,((P\_brenneri:0.01241,P\_conspicua:0.0086):0.02861,(P\_anthophila:0.01398,(P\_agglomerans:0.00859,(P\_deleyi:0.03275,(P\_vagans:0.0188,P\_sp\_aB:0.02004):0.0033):0.00431):0.00675):0.02994):0.03753):0.02816):0.04347,(P\_septica:0.05114,(P\_sp\_A4:0.10437,(T\_morbirosei:0.1289,(T\_sp\_NML\_06:0.09929,T\_ptyseos:0.10218):0.04105):0.08118):0.03407):0.01232);

[1257] tree 't1257'=[&R] ((P\_sp\_A4:0.0,P\_sp\_GM01:0.0):5.5E-4,(((P\_rodasii:0.0,P\_rwandensis:0.0,P\_sp\_At-9b:0.0):0.03093,(P\_allii:0.03094,P\_cyprapedii:5.3E-4):5.5E-4):0.03099,P\_ananatis:0.03028):5.4E-4,((P\_dispersa:0.06053,((P\_deleyi:5.4E-

4,(P\_brenneri:0.09029,((T\_sp\_NML\_06:0.1832,(T\_morbirosei:0.07562,T\_ptyseos:0.09371):5.3E-4):0.0685,(E\_billingiae:0.156,(E\_pyrifoliae:0.03183,E\_tasmaniensis:5.5E-4):0.02653):0.04053):0.13596):0.02579):0.03016,(((P\_septica:0.0,P\_wallisii:0.0):5.4E-4,((P\_conspicua:0.0,P\_anthophila:0.0):0.0301,((P\_sp\_aB:0.0,P\_agglomerans:0.0):0.02986,P\_vagans:5.4E-4):0.0303):5.4E-4):5.4E-4):0.0301):5.5E-4,(P\_eucrina:0.03218,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.0299):0.0309):5.5E-4);

[1258] tree 't1258'=[&R]  
(P\_sp\_A4:0.07119,P\_dispersa:0.02862,(P\_eucrina:0.02531,((P\_wallisii:0.00621,P\_sp\_GM01:0.02702):0.00519,((P\_rodasii:0.09996,(P\_sp\_At-9b:0.01845,P\_cyprapedii:0.04189):0.05764,((E\_billingiae:0.10764,((T\_sp\_NML\_06:0.03124,(T\_morbirosei:0.06724,T\_ptyseos:0.07733):0.01406):0.10967,(E\_pyrifoliae:0.02714,E\_tasmaniensis:0.02201):0.09184):0.04864):0.04283,((P\_septica:0.0562,(P\_allii:5.4E-4,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.02229,P\_ananatis:0.00611):0.02096):0.02826):0.01557,(((P\_agglomerans:0.01367,P\_anthophila:0.02105):5.3E-4,(P\_vagans:0.0,P\_sp\_aB:0.0):0.00685):0.00667,P\_deleyi:5.5E-4):0.04273,(P\_brenneri:0.02163,P\_conspicua:0.0065):0.02543):0.01398):0.01585):0.00986):0.01148):0.00669,P\_rwandensis:0.0145):0.02489):0.02597):0.00822);

[1259] tree 't1259'=[&R] (P\_dispersa:0.05971,P\_wallisii:0.03077,(P\_sp\_GM01:0.05254,(((P\_sp\_At-9b:0.03423,P\_cyprapedii:0.02875):0.04755,(P\_eucrina:0.11302,((P\_septica:0.10355,(((P\_s\_indologenes:0.00258,P\_s\_stewartii:0.00507):0.06191,(P\_allii:0.02593,P\_ananatis:0.02784):0.01846):0.06789,((P\_brenneri:0.0186,P\_conspicua:0.02241):0.02244,(P\_deleyi:0.04434,((P\_vagans:0.00237,P\_sp\_aB:0.01412):0.01227,(P\_agglomerans:0.00582,P\_anthophila:0.0283):0.00603):0.01079):0.02316):0.05607):0.04211):0.01835,(P\_sp\_A4:0.11503,((T\_sp\_NML\_06:0.27009,(T\_morbirosei:0.16463,T\_ptyseos:0.08608):0.05883):0.23359,(E\_billingiae:0.17397,(E\_pyrifoliae:0.03482,E\_tasmaniensis:0.03295):0.08667):0.10691):0.01713):0.03763):0.0393):0.0201):0.00881,(P\_rodasii:0.04546,P\_rwandensis:0.02517):0.01783):0.01206):0.00964);

[1260] tree 't1260'=[&R] ((P\_wallisii:0.0238,(P\_rodasii:5.4E-4,P\_rwandensis:0.02322):0.02473):0.0159,(((P\_allii:0.0,P\_ananatis:0.0):0.01402,(((P\_brenneri:0.0,P\_conspicua:0.0):0.01425,(P\_vagans:0.01485,(P\_anthophila:0.02428,(P\_deleyi:0.01547,(P\_agglomerans:0.00781,P\_sp\_aB:0.00783):5.5E-4):0.00784):0.0054):0.02397):0.02285,(P\_s\_indologenes:0.00766,P\_s\_stewartii:0.00775):0.04938):5.4E-4):0.0415,(((T\_morbirosei:0.06006,(T\_ptyseos:0.08472,T\_sp\_NML\_06:0.08084):0.01156):0.14031,(E\_billingiae:0.09336,(E\_pyrifoliae:0.06431,E\_tasmaniensis:0.03915):0.09139):0.10594):0.04675,(P\_septica:0.08173,P\_sp\_A4:0.07633):0.01536):0.01787):0.01553,(P\_eucrina:0.07121,P\_dispersa:0.02576):0.00811):0.01382,P\_cyprapedii:0.00896):0.00716,(P\_sp\_GM01:0.0572,P\_sp\_At-9b:5.4E-4):0.01611);

[1261] tree 't1261'=[&R]  
(P\_sp\_A4:0.1641,((E\_tasmaniensis:0.08877,E\_pyrifoliae:0.06714):0.09188,(E\_billingiae:0.04153,(T\_morbirosei:0.15194,(T\_sp\_NML\_06:0.26965,T\_ptyseos:0.1792):0.04819):0.21594):0.08556):0.03442,((P\_septica:0.06051,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.05051,(P\_allii:0.03611,P\_ananatis:0.01458):0.0151):0.05977,((P\_brenneri:0.0,P\_conspicua:0.0):0.04094,(P\_anthophila:0.02606,(P\_deleyi:0.04368,P\_vagans:0.00659):0.02553,(P\_agglomerans:0.00722,P\_sp\_aB:0.01697):0.00812):0.01825):0.00895):0.02383):0.06694):0.02075,((P\_sp\_At-9b:0.01662,P\_cyprapedii:0.0091):0.03182,((P\_rodasii:0.01263,P\_rwandensis:0.01198):0.01074,(P\_sp\_GM01:0.02387,(P\_eucrina:0.14943,(P\_dispersa:0.04461,P\_wallisii:0.04376):0.0244):0.05544):0.0288):0.05397):0.03763):0.03078);

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[1262] tree 't1262'=[&R] (P_agglomerans:0.00409,P_vagans:0.0041,((P_brenneri:5.5E-4,P_conspicua:0.0082):0.00819,(P_anthophila:0.01231,(P_sp_aB:0.00404,(P_deleyi:0.02651,(((P_s_indologenes:5.5E-4,P_s_stewartii:0.00416):0.02861,(P_allii:0.02306,P_ananatis:0.01504):0.01196):0.05319,(P_septica:0.04656,(((P_rodasii:0.01665,P_rwandensis:0.0124):0.00486,(P_dispersa:0.01098,P_eucrina:0.03831):0.01358):0.03033,(P_sp_GM01:0.04439,P_wallisii:0.0186):0.00905):0.01224,(P_sp_At-9b:0.03145,P_cypripedii:0.01502):0.02688,(P_sp_A4:0.12501,(E_billingiae:0.06419,(E_pyrifoliae:0.04001,E_tasmaniensis:0.01514):0.12698):0.16894,(T_morbirosei:0.05558,(T_sp_NML_06:0.12262,T_ptyseos:0.0292):0.04907):0.14584):0.05299):0.03271):0.03942):0.02249):0.04152):0.02576):0.00286):5.4E-4):0.00409):5.5E-4);
[1263] tree 't1263'=[&R] ((P_sp_At-9b:0.02016,P_cypripedii:0.01429):0.04753,(P_rodasii:0.02621,P_rwandensis:0.055):0.01321,(P_sp_GM01:0.04254,(P_wallisii:0.0412,(P_dispersa:0.02283,(P_eucrina:0.23217,((P_sp_A4:0.18778,((T_morbirosei:0.08752,(T_ptyseos:0.12627,T_sp_NML_06:0.10714):0.06004):0.29698,(E_billingiae:0.11451,(E_pyrifoliae:0.1551,E_tasmaniensis:0.06599):0.21148):0.08193):0.07298):0.04673,(((P_s_indologenes:5.5E-4,P_s_stewartii:0.00276):0.14446,(P_allii:0.06472,P_ananatis:0.0676):0.02371):0.1654,((P_anthophila:0.06999,(P_agglomerans:0.03812,(P_deleyi:0.066,(P_vagans:0.03511,P_sp_aB:0.02676):0.00974):0.01252):0.02548):0.06172,(P_brenneri:0.05931,P_conspicua:0.03912):0.05656):0.05131):0.05409,P_septica:0.11527):0.03588):0.06056):0.02181):0.00527):0.01063):0.01751);
[1264] tree 't1264'=[&R] (P_dispersa:0.00962,((P_wallisii:0.03977,P_eucrina:0.30109):0.02596,P_sp_GM01:0.05277):0.0073,(((P_sp_At-9b:0.0071,P_cypripedii:0.01416):0.01237,((((T_morbirosei:0.08817,(T_sp_NML_06:0.13598,T_ptyseos:0.03696):0.04376):0.16134,(E_billingiae:0.18598,(E_pyrifoliae:0.08834,E_tasmaniensis:0.05914):0.11903):0.19348):0.05562,((P_brenneri:0.00717,P_conspicua:5.4E-4):0.03579,(P_deleyi:0.00768,(P_anthophila:0.06917,(P_sp_aB:0.00393,(P_vagans:0.0143,P_agglomerans:0.00705):0.01025):0.02039):0.03333):0.01629):0.02573):0.01576,(P_allii:0.0276,((P_s_indologenes:5.5E-4,P_s_stewartii:0.00688):0.09875,P_ananatis:0.02391):0.01394):0.0494):0.03345,P_sp_A4:0.1398):0.01498,P_septica:0.02937):0.04146):0.01891,(P_rwandensis:0.02236,P_rodasii:0.02173):0.01532):0.01895);
[1265] tree 't1265'=[&R] (((P_s_indologenes:0.0,P_s_stewartii:0.0):0.04049,(P_ananatis:0.02717,P_allii:0.02889):0.0179):0.08693,(P_sp_A4:0.07533,(T_morbirosei:0.05589,(T_sp_NML_06:0.25207,T_ptyseos:0.03817):0.06752):0.07451):0.04623,(((E_billingiae:0.05695,(E_pyrifoliae:0.03893,E_tasmaniensis:0.01497):0.07009):0.06713,(((P_rodasii:0.01693,(P_rwandensis:0.02184,(P_cypripedii:0.00667,P_sp_At-9b:0.01057):0.03004):0.00658):0.00583,(P_sp_GM01:0.04278,P_wallisii:0.03753):0.00789):0.00678,(P_dispersa:0.02898,P_eucrina:0.11221):0.01339):0.02088):0.01803,(P_septica:0.05698,((P_sp_aB:0.02029,(P_agglomerans:0.01766,(P_anthophila:0.02289,(P_deleyi:0.02874,P_vagans:5.4E-4):0.0055):0.00531):0.01015):0.04119,(P_brenneri:0.01535,P_conspicua:0.00868):0.03143):0.02552):0.0103):0.0129);
[1266] tree 't1266'=[&R] (P_eucrina:0.0686,(P_septica:0.02427,((P_allii:0.00335,(P_ananatis:5.5E-4,(P_s_indologenes:5.5E-4,P_s_stewartii:0.00535):0.02448):0.01525):0.03713,((P_brenneri:0.00513,P_conspicua:0.0025):0.01433,(P_anthophila:0.01262,(P_deleyi:0.0125,(P_sp_aB:0.00228,(P_agglomerans:0.0,P_vagans:0.0):0.00286):0.00853):0.00536):0.014):0.01779):
```

0.0185):0.01511,((P\_dispersa:0.01302,((P\_rwandensis:0.01563,(P\_rodasii:0.02728,((P\_sp\_At-9b:0.0107,P\_cyprapedii:0.00477):0.00536,(P\_sp\_A4:0.04668,((T\_sp\_NML\_06:0.04856,(T\_ptyseos:0.02364,T\_morbirosei:0.02356):0.01411):0.03906,(E\_billingiae:0.03608,(E\_pyriifoliae:0.02856,E\_tasmaniensis:0.00899):0.04654):0.0247):0.01753):0.02974):0.00541):0.01522):0.00529,P\_sp\_GM01:0.00282):0.00762):0.00949,P\_wallisii:0.00546):0.00802);

[1267] tree 't1267'=[&R] ((P\_wallisii:0.01892,P\_dispersa:0.00924):0.00712,P\_cyprapedii:0.01479,(P\_sp\_At-9b:0.01834,(((P\_eucrina:0.15604,(E\_billingiae:0.05846,(E\_pyriifoliae:0.05198,E\_tasmaniensis:0.03516):0.09995):0.0408):0.07763,(P\_rodasii:0.01317,P\_rwandensis:9.2E-4):0.02922):5.8E-4,((P\_vagans:0.00444,((P\_agglomerans:5.4E-4,(P\_anthophila:0.05261,P\_deleyi:0.04475):0.00462):0.01403,P\_sp\_aB:0.02139):0.00945):0.06087,(P\_brenneri:0.02044,P\_conspicua:0.02154):0.03346):0.04128):0.00745,((P\_septica:0.03,P\_sp\_GM01:0.05183):0.01141,((P\_sp\_A4:0.0682,(P\_allii:0.06351,(P\_ananatis:0.05242,(P\_s\_indologenes:0.00688,P\_s\_stewartii:5.4E-4):0.00463):0.02965):0.1168):0.04363,(T\_morbirosei:0.05737,(T\_ptyseos:0.08364,T\_sp\_NML\_06:0.07505):0.03612):0.11056):0.00961):0.00809):0.01669):5.5E-4);

[1268] tree 't1268'=[&R] (P\_dispersa:0.07313,(P\_sp\_At-9b:0.04231,P\_cyprapedii:5.4E-4):0.02093,(P\_rwandensis:0.01401,((P\_rodasii:0.09992,P\_sp\_GM01:0.04476):5.4E-4,(P\_wallisii:0.06883,(P\_sp\_A4:0.07657,(P\_septica:0.12153,((E\_billingiae:0.09519,(T\_sp\_NML\_06:0.12317,(T\_ptyseos:0.21947,T\_morbirosei:0.09023):0.10374):0.31172):0.05206,(((P\_conspicua:0.07074,P\_brenneri:5.3E-4):0.01681,(P\_allii:0.16852,(P\_ananatis:0.07353,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.14959):0.18579):0.25932):0.00209,(P\_deleyi:0.01493,((P\_vagans:0.02864,(P\_anthophila:0.03014,P\_agglomerans:0.03513):0.00807):5.4E-4,P\_sp\_aB:0.01402):0.01355):0.0447):0.06375,((E\_pyriifoliae:0.13288,E\_tasmaniensis:0.10064):0.17101,P\_eucrina:0.19027):0.05209):0.02061):0.01812):0.04864):0.02129):0.02072):0.02049):0.00667);

[1269] tree 't1269'=[&R] (((T\_ptyseos:0.02853,(T\_sp\_NML\_06:0.05203,T\_morbirosei:0.04526):0.01167):0.08604,(((P\_allii:0.04755,(P\_ananatis:0.01605,(P\_s\_indologenes:0.00613,P\_s\_stewartii:0.02492):0.00893):0.04538):0.0474,(P\_anthophila:0.02407,(P\_vagans:5.5E-4,((P\_deleyi:0.02523,P\_agglomerans:0.01244):0.01269,(P\_sp\_aB:0.00637,(P\_brenneri:0.03902,P\_conspicua:0.00665):0.05178):0.00652):0.01792):0.03866):0.01686):0.02856,P\_septica:0.03179):0.01619):0.00783,(P\_sp\_A4:0.04558,(E\_billingiae:0.01831,(E\_pyriifoliae:0.02208,E\_tasmaniensis:0.04972):0.08316):0.05671):0.02802):0.01308,(P\_cyprapedii:0.01382,P\_sp\_At-9b:0.01764):0.00633,(P\_rwandensis:0.01343,(((P\_eucrina:0.14596,P\_wallisii:0.00517):0.03489,P\_dispersa:0.02488):0.01167,P\_sp\_GM01:0.01098):0.00849,P\_rodasii:0.0136):0.01245):0.00659);

[1270] tree 't1270'=[&R] (P\_agglomerans:0.01318,P\_sp\_aB:0.03131,(P\_vagans:0.02835,(((P\_s\_indologenes:0.00303,P\_s\_stewartii:0.00313):0.09185,(P\_allii:0.04581,P\_ananatis:0.06446):0.03146):0.10194,((P\_septica:0.12137,(P\_sp\_At-9b:0.09936,P\_cyprapedii:0.08767):0.04967,((P\_eucrina:0.11909,(P\_dispersa:0.04329,P\_wallisii:0.07964):0.03429):0.03783,(P\_sp\_GM01:0.07114,(P\_rodasii:0.09283,P\_rwandensis:0.06317):0.02379):0.02781):0.02754):0.13351):0.03741,((T\_morbirosei:0.13938,(T\_sp\_NML\_06:0.21543,T\_ptyseos:0.14698):0.0511):0.23226,(E\_billingiae:0.28238,(E\_pyriifoliae:0.05777,E\_tasmaniensis:0.08223):0.15272):0.13711):0.14388,P\_sp\_A4:0.18534):0.02222):0.04881):0.0509,(P\_brenneri:0.04265,P\_conspicua:0.03443):0.04054):0.03266,(P\_deleyi:0.04465,P\_anthophila:0.02646):0.01583):0.00326):0.00431);

[1271] tree 't1271'=[&R] (P\_sp\_GM01:0.02232,((P\_dispersa:0.00544,P\_wallisii:0.01106):0.00573,P\_eucrina:0.05207):5.5E-

4,((P\_rodasii:0.00551,(P\_sp\_At-9b:5.4E-4,(((P\_anthophila:0.01994,(P\_deleyi:0.03355,(P\_agglomerans:0.01086,(P\_vagans:5.5E-4,P\_sp\_aB:0.00538):0.00541):5.5E-4):0.01367):0.03388,(P\_brenneri:0.0124,P\_conspicua:0.00983):0.0244):0.01444,(P\_septica:0.04696,(P\_sp\_A4:0.05492,((P\_allii:0.03925,(P\_ananatis:0.01639,(P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.01658):0.02846):0.01876):0.03702,((T\_sp\_NML\_06:0.03981,(T\_morbirosei:0.06126,T\_ptyseos:0.02128):0.01634):0.10912,(E\_billingiae:0.04648,(E\_pyriifoliae:0.07067,E\_tasmaniensis:0.03883):0.07848):0.02405):0.02779):0.01794):0.0079):0.02178):0.03465,P\_cyprapedii:0.00519):5.4E-4):0.01154):0.00526,P\_rwandensis:0.00566):0.00573);  
[1272] tree 't1272'=[&R]  
(P\_wallisii:0.04675,(P\_dispersa:0.10354,(P\_sp\_GM01:0.06369,(P\_rodasii:0.04958,P\_rwandensis:0.02419):0.02771):0.02443):0.01972,((P\_cyprapedii:0.04034,P\_sp\_At-9b:0.04382):0.01603,(P\_eucrina:0.14203,((E\_billingiae:0.13708,(E\_pyriifoliae:0.12325,E\_tasmaniensis:0.07078):0.21062):0.10762,(((P\_brenneri:0.03174,P\_conspicua:0.04801):0.04857,(P\_sp\_A4:0.17617,P\_septica:0.08658):0.05698):0.03349,(((P\_deleyi:0.05497,(P\_vagans:0.02333,P\_sp\_aB:0.0329):0.00728):0.01878,P\_agglomerans:0.01154):0.00167,P\_anthophila:0.03175):0.05331,((P\_allii:0.12392,(P\_ananatis:0.04193,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.06785):0.12782):0.14481,(T\_morbirosei:0.03822,(T\_ptyseos:0.12272,T\_sp\_NML\_06:0.05896):0.083):0.1516):0.05849):0.03231):0.05151):0.04373):0.0285):0.02582);  
[1273] tree 't1273'=[&R] ((P\_sp\_GM01:0.01224,((P\_sp\_At-9b:0.0125,P\_cyprapedii:0.0199):0.03687,((E\_billingiae:0.12403,(E\_tasmaniensis:0.14791,E\_pyriifoliae:0.11514):0.06708):0.28571,(P\_sp\_A4:0.20231,((T\_sp\_NML\_06:0.10217,(T\_ptyseos:0.08714,T\_morbirosei:0.21235):0.0757):0.4279,(P\_septica:0.11276,((P\_ananatis:0.01549,(P\_allii:0.02071,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.02549):0.01074):0.05683,(((P\_brenneri:0.013,P\_conspicua:0.00654):0.03223,(((P\_agglomerans:0.01279,P\_vagans:5.5E-4):5.5E-4,P\_anthophila:0.04572):0.0066,P\_deleyi:0.0263):5.5E-4):0.00613,P\_sp\_aB:0.01367):0.03659):0.01483):0.03753):0.00503):0.03497):6.1E-4):0.0139):0.01334,(P\_rodasii:0.01058,P\_rwandensis:0.02431):0.01443,(P\_wallisii:0.07076,(P\_eucrina:0.10198,P\_dispersa:0.02572):0.01606):0.0304);  
[1274] tree 't1274'=[&R] (P\_rodasii:5.5E-4,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.06144,(((P\_septica:0.09323,((E\_billingiae:0.05249,(E\_pyriifoliae:0.21577,E\_tasmaniensis:0.02624):0.04555):0.04185,((T\_morbirosei:0.05837,(T\_sp\_NML\_06:0.0651,T\_ptyseos:0.03162):0.03717):0.1004,P\_sp\_A4:0.20194):0.04992):0.02371):0.01163,(P\_brenneri:0.04285,(P\_conspicua:5.5E-4,(P\_anthophila:0.01045,((P\_deleyi:0.0,P\_vagans:0.0,P\_sp\_aB:0.0):5.5E-4,P\_agglomerans:0.02122):0.01097):0.02171):0.01281):0.0121):0.01835,(P\_allii:5.4E-4,P\_ananatis:0.0106):0.0461):0.03321):0.0519,((P\_sp\_GM01:0.04276,((P\_sp\_At-9b:5.5E-4,P\_cyprapedii:0.01001):0.03226,(P\_dispersa:0.03166,P\_wallisii:5.5E-4):0.01942):0.00137):5.4E-4,(P\_eucrina:0.05558,P\_rwandensis:0.03198):0.0107):0.0106);  
[1275] tree 't1275'=[&R] ((P\_sp\_GM01:5.4E-4,((P\_rwandensis:0.01159,(P\_rodasii:0.0061,P\_eucrina:0.07486):0.00507):0.01871,(P\_wallisii:0.19344,P\_dispersa:0.01107):0.02347):0.00637):0.02387,P\_cyprapedii:0.00589,(((P\_ananatis:0.01646,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.0479,P\_allii:0.01259):0.00709):0.08963,((P\_brenneri:0.01253,P\_conspicua:0.02193):0.02092,(P\_anthophila:0.01894,((P\_sp\_aB:0.01136,(P\_agglomerans:0.00573,P\_vagans:5.5E-4):5.5E-



4):0.01211,P\_deleyi:0.03834):0.00698):0.00746):0.01984):0.02888,(P\_septica:0.03194,((E\_billingiae:0.00898,(E\_pyrifoliae:0.07829,E\_tasmaniensis:0.05884):0.07872):0.09388,((T\_ptyseos:0.40845,(T\_morbirosei:0.2028,T\_sp\_NML\_06:0.13451):0.11238):0.09646,P\_sp\_A4:0.05973):0.0215):0.03483):0.01596):0.01859,P\_sp\_At-9b:0.02949):5.3E-4);

[1276] tree 't1276'=[&R] (P\_vagans:0.00501,((P\_sp\_GM01:5.5E-4,((P\_rodasii:0.00997,P\_rwandensis:0.0049):0.01204,((P\_dispersa:0.01139,P\_wallisii:0.0054):0.00543,P\_eucrina:0.04503):0.00533):0.01823):0.04664,((((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01319,(P\_allii:0.00923,P\_ananatis:0.01038):0.01808):0.04924,((T\_morbirosei:0.09463,(T\_ptyseos:0.03996,T\_sp\_NML\_06:0.06947):0.02509):0.14903,(E\_billingiae:0.06207,(E\_pyrifoliae:0.04433,E\_tasmaniensis:0.02667):0.05106):0.07485):0.02152,(P\_septica:0.04819,P\_sp\_A4:0.0236):0.03397):0.01273):0.0088,(P\_sp\_At-9b:0.03447,P\_cypripedii:0.02306):0.0542):0.0171,(P\_brenneri:0.0,P\_conspicua:0.0):0.0301):0.02219,P\_deleyi:5.5E-4):0.0048):0.00523,(P\_agglomerans:0.01004,(P\_sp\_aB:5.4E-4,P\_anthophila:0.03096):0.00497):5.5E-4);

[1277] tree 't1277'=[&R] (P\_dispersa:0.01236,(P\_rwandensis:5.4E-4,(P\_eucrina:0.03591,P\_wallisii:0.00732):0.01741):0.01579,(P\_rodasii:0.0081,(P\_sp\_GM01:0.03119,((P\_sp\_At-9b:0.01421,P\_cypripedii:0.01037):0.02533,((E\_billingiae:0.05991,(E\_pyrifoliae:0.02862,E\_tasmaniensis:0.02785):0.11282):0.03978,((T\_morbirosei:0.05341,(T\_ptyseos:0.08252,T\_sp\_NML\_06:0.04179):0.0623):0.22855,P\_sp\_A4:0.13056):0.04375):0.01747,(P\_septica:0.02974,(((P\_anthophila:0.02463,((P\_vagans:0.00396,P\_agglomerans:0.00794):0.00395,(P\_sp\_aB:0.00479,P\_deleyi:0.02364):0.00767):0.01612):0.00832,P\_conspicua:0.00247):5.5E-4,P\_brenneri:0.00944):0.03557,(P\_ananatis:5.3E-4,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01199,P\_allii:0.00401):0.00776):0.05224):0.01175):0.01849):0.01795):0.03606):0.00541):0.00806);

[1278] tree 't1278'=[&R] (((P\_s\_stewartii:0.01041,P\_s\_indologenes:5.5E-4):0.0252,(P\_ananatis:6.3E-4,P\_allii:0.0211):0.00596):0.03224,(P\_septica:0.06745,(P\_sp\_A4:0.1439,(P\_eucrina:5.4E-4,((P\_wallisii:0.01039,(P\_sp\_GM01:0.02137,(P\_dispersa:0.02091,(P\_sp\_At-9b:0.05342,P\_cypripedii:5.4E-4):0.0214):0.01036):0.0212):0.01021,(P\_rodasii:5.5E-4,P\_rwandensis:0.01021):0.0324):0.03225):0.0288,((T\_sp\_NML\_06:0.38057,(T\_morbirosei:0.20163,T\_ptyseos:0.13191):0.07393):0.3026,(E\_billingiae:0.37308,(E\_pyrifoliae:0.06488,E\_tasmaniensis:5.3E-4):0.06095):0.20963):0.06158):0.07731):0.01896):0.05086):0.0454,(P\_anthophila:0.04168,(P\_deleyi:5.5E-4,(P\_sp\_aB:0.04315,P\_vagans:0.02094):0.00989):0.0146):0.03017,((P\_brenneri:0.01444,P\_conspicua:0.02851):0.04573,P\_agglomerans:0.02086):0.009);

[1279] tree 't1279'=[&R] (P\_dispersa:0.01575,P\_wallisii:0.01777,((P\_sp\_GM01:0.02406,(P\_rodasii:0.00241,P\_rwandensis:0.00248):0.02321):0.00548,((P\_sp\_At-9b:0.00833,P\_cypripedii:0.00638):0.00957,(P\_eucrina:0.04138,(P\_septica:0.02184,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00715,(P\_allii:0.01037,P\_ananatis:0.00441):0.00615):0.03596,((P\_brenneri:0.00749,P\_conspicua:0.00489):0.01413,((P\_vagans:0.00657,(P\_deleyi:0.01797,P\_anthophila:0.00928):0.00992):5.3E-4,(P\_agglomerans:0.00501,P\_sp\_aB:0.00491):0.00278):0.00877):0.01288,(P\_sp\_A4:0.05972,((T\_sp\_NML\_06:0.02868,(T\_ptyseos:0.03862,T\_morbirosei:0.07251):0.0108):0.04301,(E\_billingiae:0.02792,(E\_pyrifoliae:0.04823,E\_tasmaniensis:0.02063):0.04145):0.02586):0.0193):0.00986):0.0105):0.01217):0.01712):0.00684):0.00427):0.004);

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[1280] tree 't1280'=[&R]
(P_deleyi:0.02987,P_vagans:0.0122,((P_anthophila:0.02108,((P_sp_A4:0.14466,(((T_morbirosei:0.14235,(T_sp_NML_06:0.1
5695,T_ptyseos:0.13435):0.06638):0.29152,(E_billingiae:0.08856,(E_pyrifoliae:0.03858,E_tasmaniensis:0.0298):0.07241)
):0.12601):0.05405,(P_sp_At-
9b:0.03982,P_cypripedii:0.04932):0.04569,(P_eucrina:0.1131,(P_sp_GM01:0.04864,((P_rodasii:0.03311,P_rwandensis:0.042
9):0.04288,(P_wallisii:0.05312,P_dispersa:0.03188):0.01003):0.00566):0.00531):0.03616):0.03153):0.0391,(P_septica:0.
13266,((P_s_indologenes:5.5E-
4,P_s_stewartii:0.00317):0.04125,(P_allii:0.01566,P_ananatis:0.01316):0.02488):0.03772):0.01747):0.01837):0.01841,(P
_brenneri:0.02149,P_conspicua:0.02148):0.01086):0.03937):0.01232,(P_agglomerans:0.00295,P_sp_aB:0.01612):0.00528):0.
00941);
[1281] tree 't1281'=[&R] (P_sp_At-
9b:0.01184,((P_sp_A4:0.09982,(P_septica:0.08865,(((T_sp_NML_06:0.2175,(T_morbirosei:0.10462,T_ptyseos:0.0992):0.0495
5):0.16818,(E_billingiae:0.07978,(E_pyrifoliae:0.03614,E_tasmaniensis:0.04612):0.12256):0.12421):0.05749,((P_allii:0
.02268,((P_s_indologenes:0.0,P_s_stewartii:0.0):0.05504,P_ananatis:0.02671):0.016):0.086,((P_brenneri:0.00957,P_cons
picua:0.02053):0.01348,(P_anthophila:0.02488,(P_deleyi:0.01318,(P_vagans:0.01715,(P_agglomerans:0.0048,P_sp_aB:0.002
54):0.00544):0.00406):0.00718):0.01412):0.03964):0.02138):0.01056):0.0182):0.05527,P_cypripedii:0.02492):0.0152,((P_
wallisii:0.02005,(P_eucrina:0.07345,P_dispersa:0.02576):0.00806):0.03084,(P_sp_GM01:0.02428,(P_rodasii:0.02008,P_rwa
ndensis:0.02256):0.01928):0.00446):0.03811);
[1282] tree 't1282'=[&R]
(P_sp_GM01:0.04348,(P_eucrina:0.03388,P_wallisii:0.02024):0.00686,(P_dispersa:0.0109,((P_rodasii:0.00342,P_rwandensi
s:0.02225):0.00715,(P_sp_At-
9b:0.00608,P_cypripedii:0.01319):0.01617,((P_sp_A4:0.14488,((E_billingiae:0.07231,(E_pyrifoliae:0.02187,E_tasmaniens
is:0.02023):0.05654):0.12045,(T_morbirosei:0.09136,(T_ptyseos:0.03248,T_sp_NML_06:0.06706):0.07584):0.04329):0.02292
):0.03677,((P_brenneri:0.01307,(P_conspicua:0.04205,(P_anthophila:0.02946,(P_deleyi:0.01036,(P_agglomerans:0.01584,(
P_vagans:0.01223,P_sp_aB:0.00413):0.00545):0.01454):0.01291):0.01197):0.03634):0.03606,(P_septica:0.05109,(P_allii:5
.4E-4,(P_ananatis:0.02244,(P_s_indologenes:0.00312,P_s_stewartii:5.5E-
4):0.03443):0.01736):0.09526):0.0264):0.01834):0.02347):0.02763):0.0158):0.00979);
[1283] tree 't1283'=[&R]
((P_sp_A4:0.05247,P_cypripedii:0.04839):0.02909,((P_s_indologenes:0.0,P_s_stewartii:0.0):5.4E-
4,(P_conspicua:0.02612,(P_brenneri:5.3E-4,((P_anthophila:5.4E-
4,((P_agglomerans:0.0,P_sp_aB:0.0):0.02503,(P_ananatis:0.0,P_allii:0.0):0.04972):5.5E-4):5.4E-4,(P_vagans:5.4E-
4,P_deleyi:0.05119):0.02417):0.02422):0.04928):0.05103):5.4E-4,(((P_dispersa:5.4E-
4,(P_rwandensis:0.02495,P_rodasii:0.02363):0.0715):0.02263,(P_sp_GM01:0.07837,(P_wallisii:5.5E-
4,(P_eucrina:0.05345,(T_ptyseos:0.07666,(T_morbirosei:0.05349,T_sp_NML_06:0.07073):0.03898):0.11067):0.06264):0.0251
6):5.5E-4):0.0482,(E_billingiae:0.08021,(P_septica:0.0612,(E_pyrifoliae:0.07157,E_tasmaniensis:5.4E-
4):0.09581):0.04922):0.06098):0.03058,P_sp_At-9b:5.5E-4):0.07751);
[1284] tree 't1284'=[&R]
((P_eucrina:0.04362,P_dispersa:0.00302):0.00832,(P_wallisii:0.00871,(P_sp_GM01:0.02787,(P_rodasii:0.00695,P_rwandens
is:0.01007):0.00938):0.01206):0.00838,(((P_deleyi:0.01112,(P_sp_aB:5.4E-
```

4, (P\_agglomerans:0.01704, (P\_anthophila:0.01443, P\_vagans:0.00865):0.00254):0.00872):0.00841):0.01607, (P\_brenneri:0.02386, P\_conspicua:0.01072):0.01246):0.01977, (P\_sp\_A4:0.05973, ((T\_ptyseos:0.04336, (T\_morbirosei:0.07697, T\_sp\_NML\_06:0.07029):0.00949):0.13183, (P\_septica:0.05874, (E\_billingiae:0.03886, (E\_pyriifoliae:0.03548, E\_tasmaniensis:0.03363):0.07314):0.05829):0.01679):0.01905, (P\_allii:0.01814, ((P\_s\_indologenes:0.00267, P\_s\_stewartii:0.0028):0.03456, P\_ananatis:0.01384):0.00351):0.02369):0.00317):0.00607):0.0258, (P\_sp\_At-9b:0.01115, P\_cypripedii:0.0056):0.01142):0.00362);

[1285] tree 't1285'=[&R] (P\_wallisii:5.4E-4, (((P\_sp\_aB:5.5E-4, (P\_vagans:0.0, P\_agglomerans:0.0, P\_anthophila:0.0, P\_brenneri:0.0, P\_conspicua:0.0, P\_deleyi:0.0):0.00838):0.02701, (P\_allii:0.00866, (P\_ananatis:0.0, P\_s\_indologenes:0.0, P\_s\_stewartii:0.0):5.5E-4):5.5E-4):0.01825, (P\_dispersa:5.4E-4, (P\_sp\_At-9b:0.0, P\_cypripedii:0.0):0.00883):5.4E-4):0.00877, ((E\_billingiae:0.02687, (P\_sp\_GM01:0.02683, P\_septica:0.00922):0.00866):0.00953, (P\_sp\_A4:0.00872, ((P\_eucrina:0.01088, ((T\_morbirosei:0.01428, (T\_sp\_NML\_06:0.11247, T\_ptyseos:5.4E-4):0.01247):0.08279, (E\_tasmaniensis:0.00799, E\_pyriifoliae:0.00943):0.04404):0.01397):0.02448, (P\_rodasii:0.0, P\_rwandensis:0.0):0.00873):5.4E-4):0.0091):5.3E-4);

[1286] tree 't1286'=[&R] (((T\_morbirosei:0.03792, (T\_sp\_NML\_06:0.14304, T\_ptyseos:0.06251):0.05058):0.31842, (E\_billingiae:0.04599, (E\_pyriifoliae:0.04411, E\_tasmaniensis:0.03231):0.10048):0.02901):0.04177, (((P\_conspicua:0.0, P\_brenneri:0.0):0.01749, (P\_agglomerans:0.00919, (P\_deleyi:0.01841, (P\_anthophila:0.01869, (P\_vagans:5.5E-4, P\_sp\_aB:0.00884):0.0083):0.00926):0.00921):0.01821):0.0185, (((P\_s\_indologenes:0.0, P\_s\_stewartii:0.0):0.03457, (P\_allii:0.00876, P\_ananatis:0.00893):0.01045):0.02663, (P\_sp\_GM01:0.04136, P\_cypripedii:0.04727):0.02262):0.01047):0.00877, (((P\_dispersa:5.4E-4, (P\_sp\_A4:0.0822, P\_eucrina:0.06495):0.0226):0.00883, (P\_rwandensis:0.00877, (P\_rodasii:0.01743, P\_wallisii:5.5E-4):0.02644):0.01761):5.4E-4, (P\_septica:0.02682, P\_sp\_At-9b:0.00866):0.01832):5.4E-4);

[1287] tree 't1287'=[&R] ((P\_septica:0.01797, (P\_dispersa:0.00437, (P\_sp\_At-9b:5.5E-4, P\_cypripedii:0.00427):0.01744):0.00428):0.00443, P\_sp\_GM01:5.5E-4, (P\_eucrina:0.01758, (((P\_sp\_A4:0.03092, ((T\_ptyseos:0.02253, (T\_morbirosei:0.04713, T\_sp\_NML\_06:0.02609):0.01091):0.06542, ((E\_pyriifoliae:0.03438, E\_tasmaniensis:0.03129):0.02811, (P\_brenneri:0.00418, P\_conspicua:0.00439):0.00616):0.0114):0.00428, ((P\_anthophila:0.01767, (P\_vagans:0.00432, (P\_sp\_aB:0.01306, P\_deleyi:0.00867):0.0044):0.0044):0.01605, (P\_agglomerans:0.02048, E\_billingiae:0.03306):0.00844):0.00581):0.0086):0.00896, (P\_wallisii:0.01302, P\_rodasii:0.00876):0.00439):0.00412, ((P\_ananatis:0.02021, (P\_allii:0.01707, (P\_s\_indologenes:5.5E-4, P\_s\_stewartii:0.00428):0.02228):0.00605):0.04575, P\_rwandensis:0.00399):0.00481):0.00884):0.00409);

[1288] tree 't1288'=[&R] ((P\_sp\_A4:0.02256, P\_rodasii:5.5E-4):0.01117, ((P\_agglomerans:0.0, P\_vagans:0.0, P\_deleyi:0.0, P\_allii:0.0, P\_ananatis:0.0, P\_anthophila:0.0, P\_brenneri:0.0, P\_conspicua:0.0, P\_sp\_aB:0.0, P\_s\_indologenes:0.0, P\_s\_stewartii:0.0):5.3E-4, (E\_tasmaniensis:0.0107, (E\_billingiae:0.01121, E\_pyriifoliae:5.5E-4):5.4E-4):0.02276):0.01128, ((T\_morbirosei:0.01128, (T\_sp\_NML\_06:0.06872, T\_ptyseos:0.01131):5.4E-4):0.01122, (P\_sp\_At-9b:0.0, P\_cypripedii:0.0, P\_dispersa:0.0, P\_eucrina:0.0, P\_rwandensis:0.0, P\_septica:0.0, P\_sp\_GM01:0.0, P\_wallisii:0.0):5.4E-4):5.5E-4);

[1289] tree 't1289'=[&R] (P\_dispersa:5.4E-4, P\_anthophila:0.01393, (((P\_eucrina:5.4E-4, ((P\_s\_indologenes:0.0, P\_s\_stewartii:0.0):0.00146, (P\_allii:0.00696, P\_ananatis:0.00695):0.0128):0.01415):0.00694, (((

E\_billingiae:0.00529,(E\_tasmaniensis:5.5E-4,E\_pyriifoliae:0.00693):0.0091):0.03662,P\_sp\_GM01:5.5E-4):0.01382,((P\_rwandensis:0.0,P\_rodasii:0.0):5.4E-4,((P\_sp\_At-9b:5.5E-4,P\_cypripedii:0.00699):0.00701,(P\_wallisii:5.4E-4,((P\_brenneri:0.0,P\_conspicua:0.0):5.5E-4,(P\_agglomerans:0.00698,(P\_vagans:0.0,P\_deleyi:0.0,P\_sp\_aB:0.0):5.5E-4):0.00697):0.00696):0.00695):5.5E-4):5.4E-4):0.00669,(P\_septica:0.00696,(P\_sp\_A4:5.5E-4,(T\_sp\_NML\_06:0.05414,(T\_morbirosei:0.01374,T\_ptyseos:0.04342):0.03561):0.03665):0.01379):5.3E-4):0.00697);

[1290] tree 't1290'=[&R] (((P\_sp\_At-9b:5.4E-4,P\_cypripedii:0.00932):5.5E-4,((((P\_brenneri:0.00913,P\_conspicua:0.0049):0.00537,((P\_agglomerans:0.02239,(P\_vagans:0.00931,P\_sp\_aB:0.0094):0.00961):0.00219,(P\_anthophila:0.02801,P\_deleyi:0.04443):0.00931):0.0188):0.00881,(P\_eucrina:0.13655,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.02045,(P\_allii:0.00551,P\_ananatis:0.01817):0.03018):0.04637):0.03688):0.03011,P\_septica:0.02026):0.01012,P\_sp\_A4:0.03503):5.3E-4,(T\_sp\_NML\_06:0.03751,(T\_morbirosei:0.06714,T\_ptyseos:0.06149):0.03436):0.17672,(E\_billingiae:0.03012,(E\_pyriifoliae:0.06499,E\_tasmaniensis:0.04478):0.07662):0.04217):0.065):0.02854):0.01904,(P\_rodasii:5.4E-4,(P\_wallisii:0.01406,P\_sp\_GM01:5.4E-4):0.0094):0.00469,(P\_rwandensis:0.0141,P\_dispersa:0.0047):0.00449);

[1291] tree 't1291'=[&R] ((P\_sp\_GM01:0.01988,(P\_rwandensis:0.02801,P\_rodasii:0.01908):0.01224):0.0187,P\_wallisii:0.04022,(P\_dispersa:0.02618,(P\_eucrina:0.07034,((P\_sp\_At-9b:0.02343,P\_cypripedii:5.4E-4):0.01716,(((P\_brenneri:0.01334,P\_conspicua:0.00334):0.00994,(P\_vagans:0.01685,((P\_anthophila:0.02371,(P\_sp\_aB:0.01006,P\_agglomerans:0.00332):5.5E-4):0.00669,P\_deleyi:0.01012):5.4E-4):0.02462):0.02836,((P\_s\_indologenes:0.00288,P\_s\_stewartii:5.3E-4):0.02261,(P\_allii:0.0243,P\_ananatis:0.01916):0.04252):0.02914):0.02186,(P\_septica:0.08164,(P\_sp\_A4:0.1193,((E\_billingiae:0.10241,(E\_pyriifoliae:0.03237,E\_tasmaniensis:0.02716):0.07397):0.02772,(T\_sp\_NML\_06:0.11503,(T\_morbirosei:0.09838,T\_ptyseos:0.09445):0.037):0.10398):0.03069):0.01421):0.01847):0.04642):0.02562):0.00723):0.00862);

[1292] tree 't1292'=[&R] ((P\_deleyi:0.01456,P\_anthophila:0.00769):0.00992,(P\_sp\_aB:0.01762,P\_vagans:5.4E-4):0.00263,(P\_agglomerans:0.00965,((P\_sp\_A4:0.10737,((P\_cypripedii:0.02545,P\_sp\_At-9b:0.02102):0.02791,(P\_wallisii:0.03553,(P\_eucrina:0.07554,(P\_dispersa:0.01327,(P\_sp\_GM01:0.02729,(P\_rodasii:0.01721,P\_rwandensis:0.02636):0.0186):0.01126):0.00749):0.00681):0.01306):0.04398,(T\_morbirosei:0.07458,(T\_sp\_NML\_06:0.10452,T\_ptyseos:0.05891):0.01923):0.15573,(E\_billingiae:0.06765,(E\_pyriifoliae:0.03979,E\_tasmaniensis:0.04381):0.07728):0.08222):0.02431):0.01259):0.0173,(P\_septica:0.05012,((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00251):0.01905,(P\_allii:0.01281,P\_ananatis:0.00961):0.01509):0.04238):0.01374):0.03464,(P\_brenneri:0.00491,P\_conspicua:0.00748):0.00906):0.01435):0.00678);

[1293] tree 't1293'=[&R] (P\_anthophila:0.0144,P\_vagans:0.00291,((P\_conspicua:0.00584,((P\_allii:0.00854,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.02009,P\_ananatis:5.4E-4):0.00271):0.02166,(P\_septica:0.01952,((P\_sp\_A4:0.1165,((E\_billingiae:0.07805,(E\_pyriifoliae:0.04424,E\_tasmaniensis:0.03985):0.05161):0.01594,(T\_morbirosei:0.11973,(T\_ptyseos:0.10171,T\_sp\_NML\_06:0.12307):0.0535):0.21135):0.02238,P\_brenneri:0.2976):0.01105):0.00415,(((P\_eucrina:0.04288,(P\_dispersa:0.03196,((P\_rodasii:0.01423,P\_rwandensis:5.3E-4):0.02425,(P\_sp\_GM01:0.02307,P\_wallisii:0.03102):0.01457):0.01227):0.01506):0.02192,P\_cypripedii:0.01933):0.0039,P\_sp\_At-

9b:0.00717):0.01731):0.00641):0.0132):0.03384):0.00542,(P\_sp\_aB:0.00578,(P\_deleyi:0.01445,P\_agglomerans:0.01151):0.00276):7.4E-4):0.00232);  
[1294] tree 't1294'=[&R]  
(P\_conspicua:0.0112,P\_sp\_aB:0.00745,(((P\_anthophila:0.02228,(P\_deleyi:0.02327,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.02957,(P\_allii:0.01071,P\_ananatis:5.4E-4):0.01017):0.03095,(P\_sp\_A4:0.10763,P\_septica:0.05653):0.02831):0.01466,(P\_brenneri:0.02086,(P\_dispersa:0.01848,(P\_eucrina:0.02731,P\_wallisii:0.01905):0.01161):0.01463,((P\_sp\_GM01:0.00991,(P\_rodasii:0.00745,P\_rwandensis:0.0184):0.02791):0.01496,((P\_sp\_At-9b:0.03003,P\_cyprapedii:0.01512):0.01378,(T\_morbirosei:0.06971,(T\_ptyseos:0.04067,T\_sp\_NML\_06:0.07393):0.04067):0.14455,(E\_billingiae:0.06697,(E\_pyriifoliae:0.02079,E\_tasmaniensis:0.04632):0.064):0.05578):0.03757):0.01149):0.00237):0.02108):0.00782):0.01772):5.4E-4):0.00566,(P\_agglomerans:0.0036,P\_vagans:0.00361):5.4E-4):0.00342);  
[1295] tree 't1295'=[&R] (P\_wallisii:0.00746,((P\_sp\_A4:0.10277,(P\_sp\_At-9b:0.0075,(E\_billingiae:0.01173,(E\_pyriifoliae:0.02221,E\_tasmaniensis:0.00376):0.02192):0.03906,P\_cyprapedii:5.5E-4):0.00367):0.00886):0.00809,(P\_eucrina:0.01409,P\_dispersa:0.01067):0.00464):0.00661,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00748,(P\_allii:0.00369,P\_ananatis:5.5E-4):0.00369):0.00695,((P\_brenneri:0.00368,P\_conspicua:0.00733):0.00726,(P\_agglomerans:0.00741,((P\_sp\_aB:0.00514,P\_deleyi:0.00789):0.00548,(P\_vagans:0.00366,P\_anthophila:5.4E-4):5.4E-4):0.00688):5.5E-4):0.00854):0.03377,((P\_sp\_GM01:0.02248,(P\_septica:0.06102,(T\_morbirosei:0.08697,(T\_ptyseos:0.06253,T\_sp\_NML\_06:0.03851):0.03848):0.10731):0.01796):5.3E-4,(P\_rodasii:0.00754,P\_rwandensis:0.00369):0.01927):0.00753):5.5E-4);  
[1296] tree 't1296'=[&R]  
(P\_anthophila:0.05593,P\_sp\_aB:0.03636,(P\_vagans:0.01678,(P\_agglomerans:0.01672,(P\_deleyi:0.07173,(((P\_eucrina:0.24535,(P\_wallisii:0.1186,P\_dispersa:0.04618):0.01949,((P\_rodasii:0.02453,P\_rwandensis:0.0228):0.03529,(P\_sp\_GM01:0.11603,(P\_sp\_At-9b:0.03601,P\_cyprapedii:0.05182):0.05906):0.0233):0.01844):0.04029):0.13689,(P\_septica:0.1654,(E\_billingiae:0.21416,(T\_ptyseos:0.2145,(T\_sp\_NML\_06:0.31932,T\_morbirosei:0.15545):0.09091):0.21791,(E\_pyriifoliae:0.1103,E\_tasmaniensis:0.11464):0.21521):0.05738):0.12694):0.03863):0.06076,(P\_sp\_A4:0.24494,((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00508):0.10376,(P\_allii:0.01364,P\_ananatis:0.03332):0.04655):0.09823):0.01867):0.05872,(P\_brenneri:0.04295,P\_conspicua:0.03542):0.03163):0.037):0.01213):0.01192):0.00442);  
[1297] tree 't1297'=[&R] ((P\_dispersa:5.5E-4,(P\_eucrina:0.02272,(P\_wallisii:0.03274,P\_sp\_GM01:0.01497):0.0153):5.5E-4):0.00753,P\_cyprapedii:5.5E-4,(P\_rodasii:0.03834,((P\_rwandensis:0.03827,((P\_allii:0.0,P\_ananatis:0.0,P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.04682,(P\_septica:0.01532,(P\_sp\_A4:0.10005,((T\_morbirosei:0.07304,(T\_ptyseos:0.06087,T\_sp\_NML\_06:0.01088):0.07085):0.04666,(E\_billingiae:0.04496,(E\_pyriifoliae:0.00448,E\_tasmaniensis:0.01899):0.03813):0.03809):0.03873):0.025):0.02052):5.5E-4):0.01028,(P\_sp\_At-9b:5.5E-4,((P\_agglomerans:0.0,P\_vagans:0.0,P\_sp\_aB:0.0):5.5E-4,(P\_deleyi:0.00748,(P\_anthophila:5.5E-4,(P\_brenneri:0.0,P\_conspicua:0.0):0.00759):5.4E-4):0.00751):0.03889):0.0078):0.00727):5.4E-4);  
[1298] tree 't1298'=[&R]  
(((T\_morbirosei:0.03309,(T\_ptyseos:0.04695,T\_sp\_NML\_06:0.0094):0.05422):0.10048,((E\_billingiae:0.03264,(E\_pyriifoliae:0.05723,E\_tasmaniensis:0.02287):0.10375):0.04504,P\_sp\_A4:0.16069):0.0126):0.03864,(((P\_sp\_aB:0.0,P\_agglomerans:0.0

,P\_vagans:0.0):5.4E-4,(P\_anthophila:0.00621,P\_deleyi:0.01899):0.0064):0.01307,(P\_brenneri:5.3E-4,P\_conspicua:0.01979):0.01224):0.02879,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.02883,(P\_allii:0.0,P\_ananatis:0.0):0.01793):0.0228):0.02518,((P\_septica:0.10741,P\_sp\_GM01:0.02614):0.01631,(((P\_sp\_At-9b:0.0131,P\_cyprapedii:0.01247):0.01936,P\_eucrina:0.07564):0.01273,P\_wallisii:0.01955):0.00584,((P\_rodasii:0.0,P\_rwandensis:0.0):0.00626,P\_dispersa:0.01942):0.00679):0.00677):0.02142);

[1299] tree 't1299'=[&R] (((P\_rodasii:5.4E-4,P\_rwandensis:0.02413):0.01375,((P\_sp\_At-9b:0.02927,P\_cyprapedii:0.02364):0.01538,(P\_sp\_GM01:0.03799,(P\_dispersa:0.05838,P\_wallisii:0.02327):0.02362):0.00577):0.01857):0.01522,(((P\_anthophila:0.01184,P\_agglomerans:5.4E-4):0.00609,(P\_deleyi:0.02411,(P\_sp\_aB:0.01399,P\_vagans:0.01138):0.00446):5.4E-4):0.012,((P\_brenneri:0.01851,P\_conspicua:0.01225):0.0066,(P\_allii:5.5E-4,(P\_ananatis:0.01215,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.03099):0.00616):0.07936):0.01907):0.02464,(P\_septica:0.03491,((E\_pyriifoliae:0.03991,E\_tasmaniensis:0.02482):0.09057,(E\_billingiae:0.08378,(T\_morbirosei:0.03341,(T\_sp\_NML\_06:0.10141,T\_ptyseos:0.04013):0.04615):0.09362):0.03019):0.03226):0.01708):0.01829,(P\_eucrina:0.02798,P\_sp\_A4:0.09567):0.01299);

[1300] tree 't1300'=[&R] ((P\_cyprapedii:0.00535,P\_sp\_At-9b:0.01316):0.00961,(P\_rwandensis:0.00976,P\_dispersa:0.01201):0.00345,((P\_rodasii:0.00251,P\_sp\_GM01:0.00877):0.0056,((P\_sp\_A4:0.05464,((E\_billingiae:0.03372,(E\_pyriifoliae:0.02189,E\_tasmaniensis:0.0162):0.03805):0.01975,((P\_septica:0.04083,(P\_sp\_aB:0.00441,(P\_vagans:0.00908,P\_agglomerans:0.00451):0.0024):0.00654,((P\_brenneri:5.5E-4,P\_conspicua:0.00224):0.00921,(P\_anthophila:0.0069,P\_deleyi:0.00693):0.00286):0.00673):0.00894):0.00764,(((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00223):0.01887,(P\_allii:0.00223,P\_ananatis:5.5E-4):0.00402):0.0072,(T\_morbirosei:0.09379,(T\_ptyseos:0.02222,T\_sp\_NML\_06:0.03089):0.02852):0.04654):0.01211):0.01582):0.01951):0.01599,(P\_eucrina:0.02312,P\_wallisii:0.00489):0.00528):0.00751):0.00358);

[1301] tree 't1301'=[&R] (P\_vagans:0.01781,(P\_deleyi:0.02649,((P\_brenneri:0.00685,P\_conspicua:0.01202):0.0655,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.0572,(P\_allii:0.02436,P\_ananatis:0.02416):0.03358):0.11643,(P\_septica:0.21768,((P\_dispersa:0.14675,((P\_rodasii:0.06267,(P\_sp\_GM01:0.01796,(P\_rwandensis:0.04866,(P\_eucrina:0.18496,P\_wallisii:0.04335):0.04519):0.02254):0.00971):0.0148,(P\_sp\_At-9b:0.01741,P\_cyprapedii:5.5E-4):0.0715):0.07429):0.06017,((E\_pyriifoliae:0.12097,E\_tasmaniensis:0.08808):0.06565,(P\_sp\_A4:0.15852,(E\_billingiae:0.1738,(T\_morbirosei:0.15742,(T\_sp\_NML\_06:0.33661,T\_ptyseos:0.17486):0.12037):0.22266):0.05969):0.04118):0.10448):0.06859):0.03362):0.07573):0.0204):0.0267,(P\_sp\_aB:0.05404,(P\_agglomerans:0.04485,P\_anthophila:0.00897):0.01754):0.0081);

[1302] tree 't1302'=[&R] (((P\_sp\_GM01:0.02338,(P\_rodasii:5.5E-4,P\_rwandensis:0.0026):0.0093):0.01027,(P\_wallisii:0.01085,P\_dispersa:0.00788):0.00524):0.00536,(P\_sp\_At-9b:0.00529,(((T\_sp\_NML\_06:0.03476,(T\_ptyseos:0.02798,T\_morbirosei:0.06216):0.01514):0.0795,P\_sp\_A4:0.03884):0.01856,(E\_billingiae:0.03805,(E\_pyriifoliae:0.05927,E\_tasmaniensis:0.04301):0.02941):0.0507,(((P\_deleyi:0.00462,P\_sp\_aB:0.00959):0.00378,(P\_agglomerans:0.00731,P\_vagans:0.00592):0.00527):0.00592,P\_anthophila:0.00274):0.01096,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01267,(P\_allii:0.00515,P\_ananatis:0.0079):0.00842):0.03099,(P\_brenneri:0.00401,P\_conspicua:0.02306):0.01171):0.00856):0.02455):0.01629):0.01303,P\_cyprapedii:0.01985):0.00456):0.00803,(P\_septica:0.04042,P\_eucrina:0.0423):0.00817);

[1303] tree 't1303'=[&R] (P\_dispersa:0.01975,P\_wallisii:0.01955,(((P\_sp\_GM01:0.00406,((P\_rwandensis:5.4E-4,P\_rodasii:0.01226):0.01639,(((P\_allii:0.0201,(P\_ananatis:5.4E-4,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.02054):5.5E-4):0.03605,((P\_brenneri:5.4E-4,((P\_sp\_aB:0.0,P\_agglomerans:0.0,P\_vagans:0.0):5.4E-4,(P\_deleyi:0.00704,P\_anthophila:0.00269):0.00252):0.00819,P\_conspicua:5.5E-4):0.00405):0.02716,P\_septica:0.05744):0.00836):0.01969,(E\_billingiae:0.06123,(E\_pyrifoliae:0.00799,E\_tasmaniensis:0.02093):0.09287):0.02869,(P\_sp\_A4:0.05176,(T\_morbirosei:0.06363,(T\_sp\_NML\_06:0.12153,T\_ptyseos:0.03458):0.04368):0.13933):0.02387):0.01909):0.02588):5.4E-4):0.00414,(P\_sp\_At-9b:0.02873,P\_cypripedii:0.01242):0.0041):5.5E-4,P\_eucrina:0.05495):0.00962);

[1304] tree 't1304'=[&R] ((P\_dispersa:0.03624,(P\_eucrina:0.03723,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.05399,((P\_deleyi:0.0,P\_anthophila:0.0,P\_conspicua:0.0,P\_brenneri:0.0,P\_allii:0.0):5.5E-4,(P\_ananatis:0.01759,(P\_agglomerans:0.0,P\_vagans:0.0,P\_sp\_aB:0.0):5.5E-4):0.01757):5.5E-4):0.01767,(P\_septica:0.01603,P\_sp\_A4:0.11372):0.024):0.05627):5.5E-4):0.01836,((P\_rwandensis:5.2E-4,(P\_sp\_GM01:0.03658,P\_rodasii:5.4E-4):0.01785):0.03669,(P\_sp\_At-9b:0.01833,P\_cypripedii:5.5E-4):5.5E-4):0.01885,(P\_wallisii:0.05445,(E\_pyrifoliae:0.0773,E\_billingiae:0.10039):5.3E-4,(E\_tasmaniensis:0.02102,(T\_morbirosei:0.09188,(T\_ptyseos:0.03858,T\_sp\_NML\_06:0.20396):0.03894):0.10071):0.01838):0.01922):5.3E-4);

[1305] tree 't1305'=[&R] ((P\_sp\_At-9b:0.01916,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.02247,(P\_allii:0.01209,P\_ananatis:0.01388):0.01081):0.04151):0.00983,((P\_conspicua:0.0063,(P\_brenneri:0.00912,(P\_deleyi:0.02512,((P\_agglomerans:5.5E-4,P\_sp\_aB:0.00984):0.00493,(P\_vagans:0.01491,P\_anthophila:5.5E-4):0.00986):0.00472):0.01561):0.0049):0.0377,((P\_sp\_A4:0.14572,((E\_pyrifoliae:0.02955,E\_tasmaniensis:0.01881):0.14222,P\_septica:0.11927):0.02319):0.03414,(E\_billingiae:0.07452,(T\_morbirosei:0.02976,(T\_sp\_NML\_06:0.03548,T\_ptyseos:0.04018):0.02316):0.09237):0.01756):0.02399):5.4E-4,(P\_cypripedii:0.00485,(P\_eucrina:0.07285,((P\_sp\_GM01:0.01949,(P\_rodasii:0.02985,P\_rwandensis:0.00448):0.06852):0.0095,(P\_wallisii:0.01979,P\_dispersa:0.0246):0.00466):0.00734):0.0123):5.5E-4);

[1306] tree 't1306'=[&R] (P\_septica:0.01596,(((E\_billingiae:0.01824,(E\_pyrifoliae:0.02068,E\_tasmaniensis:0.01176):0.0228):0.05622,((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00432):0.0047,(P\_ananatis:0.01772,P\_allii:0.0042):0.00839):0.01434):0.00639,(P\_sp\_At-9b:0.0,P\_cypripedii:0.0):0.00697):0.01321,(P\_dispersa:0.00428,(((P\_rodasii:0.00543,(P\_eucrina:0.02494,(P\_conspicua:0.00429,(P\_brenneri:0.00772,(P\_anthophila:0.00425,((P\_vagans:0.00421,(P\_sp\_aB:0.00429,(P\_agglomerans:5.5E-4):5.5E-4):0.00861,P\_deleyi:0.00851):5.4E-4):0.00115):0.00404):0.01426):0.01296):0.0075,P\_rwandensis:5.4E-4):0.00429,P\_wallisii:5.5E-4):5.5E-4):0.00707):5.4E-4,(P\_sp\_A4:0.00431,(T\_sp\_NML\_06:0.02644,(T\_ptyseos:0.03239,T\_morbirosei:0.01298):0.0039):0.08866):0.00869,P\_sp\_GM01:0.00864):0.01539);

[1307] tree 't1307'=[&R] (P\_dispersa:0.03098,P\_wallisii:0.01787,(P\_eucrina:0.02249,((P\_rodasii:0.01315,P\_rwandensis:5.5E-4):0.02276,(P\_sp\_GM01:0.06255,((P\_sp\_At-

9b:0.01702,P\_cyripedii:0.02272):0.03213,((P\_septica:0.08914,((P\_allii:0.01112,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.05668,P\_ananatis:0.00635):0.01367):0.04786,(((P\_anthophila:5.4E-4,(P\_brenneri:0.0083,P\_conspicua:0.00495):0.03502):0.00845,P\_agglomerans:0.0042):5.3E-4,(P\_deleyi:0.02169,P\_sp\_aB:0.03923):0.01701):0.01697,P\_vagans:0.0128):0.04585):0.04684):0.04177,(P\_sp\_A4:0.11349,((T\_sp\_NML\_06:0.24719,(T\_morbirosei:0.14074,T\_ptyseos:0.16499):0.02074):0.17718,(E\_billingiae:0.13776,(E\_pyrifoliae:0.04806,E\_tasmaniensis:0.03445):0.13526):0.07792):0.04049):0.03284):0.0561):0.02035):0.01441):0.00878):0.0038);

[1308] tree 't1308'=[&R] (((P\_s\_indologenes:5.4E-4,P\_s\_stewartii:0.00442):0.02637,(P\_allii:5.5E-4,P\_ananatis:0.0089):0.01456):0.01447,((T\_sp\_NML\_06:0.03677,(T\_morbirosei:0.07184,T\_ptyseos:0.03078):0.02089):0.10612,(((P\_sp\_GM01:0.00485,(P\_rodasii:0.00496,P\_rwandensis:0.00841):0.00911):0.02011,(P\_eucrina:0.05093,(P\_wallisii:0.00943,P\_dispersa:0.00865):0.00662):0.02161):0.02,(P\_sp\_At-9b:5.5E-4,P\_cyripedii:0.00447):0.00535):0.02207,(P\_sp\_A4:0.10025,(E\_billingiae:0.02677,(E\_pyrifoliae:0.02728,E\_tasmaniensis:0.03225):0.05746):0.01959):0.01665):0.00516):0.00748,(P\_septica:0.02935,(P\_conspicua:0.00386,(P\_brenneri:5.4E-4,(P\_anthophila:0.00444,(P\_deleyi:0.00887,((P\_agglomerans:0.0,P\_vagans:0.0):5.4E-4,P\_sp\_aB:0.00884):0.00442):0.00897):0.0185):0.00517):0.02146):0.00524);

[1309] tree 't1309'=[&R] ((((((P\_agglomerans:0.0,P\_vagans:0.0):0.02007,P\_sp\_aB:5.3E-4):0.02999,(P\_anthophila:5.5E-4,P\_deleyi:0.01003):5.4E-4):0.02126,(P\_brenneri:0.01966,P\_conspicua:0.01114):0.03109):0.05491,(P\_septica:0.05445,((P\_allii:0.0,P\_ananatis:0.0):0.02993,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.5E-4):0.01013):0.02107):0.02077,(((P\_sp\_At-9b:5.4E-4,P\_cyripedii:0.03137):0.02107,(P\_sp\_GM01:0.06248,(P\_rodasii:0.17024,P\_rwandensis:0.03007):0.01764):0.01703):0.0204,(P\_dispersa:0.02061,(E\_billingiae:0.06273,(P\_eucrina:0.04502,P\_wallisii:0.05337):0.03043):0.01387):0.02109):5.5E-4,(P\_sp\_A4:0.03322,((E\_tasmaniensis:0.09238,E\_pyrifoliae:0.09436):0.01692,(T\_morbirosei:0.09058,(T\_sp\_NML\_06:0.05253,T\_ptyseos:0.04255):0.01618):0.06893):0.0117):0.02045);

[1310] tree 't1310'=[&R] ((P\_agglomerans:0.01344,(P\_sp\_aB:0.01177,(P\_conspicua:0.00896,(((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.0061):0.03048,(P\_allii:0.01459,P\_ananatis:0.01407):0.00558):0.04946,(P\_septica:0.05653,(((P\_sp\_At-9b:0.02586,P\_cyripedii:0.01361):0.03457,(P\_rodasii:0.01803,P\_rwandensis:0.02155):0.01678,(P\_sp\_GM01:0.03715,(P\_eucrina:0.05961,(P\_dispersa:0.01598,P\_wallisii:0.01906):0.00544):0.0176):0.01416):0.02608):0.04497,(P\_sp\_A4:0.10272,((T\_morbirosei:0.09614,(T\_sp\_NML\_06:0.12517,T\_ptyseos:0.08721):0.0313):0.15181,(E\_billingiae:0.06828,(E\_pyrifoliae:0.04744,E\_tasmaniensis:0.04167):0.08449):0.04578):0.01959):0.01661):0.01289):0.0242):0.01221,P\_brenneri:0.00897):0.00504):0.0161):0.00425):0.00286,P\_anthophila:0.00616,(P\_deleyi:0.02709,P\_vagans:0.00575):0.00242);

[1311] tree 't1311'=[&R] (P\_wallisii:5.5E-4,(P\_sp\_At-9b:5.4E-4,P\_cyripedii:0.018):0.00901,((P\_dispersa:5.4E-4,(P\_eucrina:0.00929,(P\_septica:0.03684,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01808,(P\_allii:0.00902,P\_ananatis:0.00901):0.00926):0.01538,((P\_brenneri:0.0,P\_anthophila:0.0,P\_deleyi:0.0,P\_agglomerans:0.0,P\_vagans:0.0):5.5E-4,(P\_sp\_aB:0.00884,P\_conspicua:0.3369):5.4E-4):0.02574):0.01457,P\_sp\_A4:0.01885):0.01613,((T\_morbirosei:0.00913,(T\_ptyseos:0.0183,T\_sp\_NML\_06:5.4E-4):0.01805):0.01881,(E\_pyrifoliae:0.01869,(E\_billingiae:0.03685,E\_tasmaniensis:0.0178):5.4E-4):0.01815):0.02314):0.00801):0.03834):0.00889):0.01795,(P\_sp\_GM01:0.00934,(P\_rodasii:0.00904,P\_rwandensis:0.00898):0.01805):0.00894):5.4E-4);

[1312] tree 't1312'=[&R] ((P\_eucrina:0.02579,P\_wallisii:0.00517):0.01212,(P\_sp\_GM01:0.02787,P\_dispersa:0.01477):0.00597,((P\_septica:0.03445,(



(P\_sp\_A4:0.02711,(T\_morbirosei:0.03518,(T\_sp\_NML\_06:0.07777,T\_ptyseos:0.0456):0.02953):0.08472):0.03429,(E\_billingia  
e:0.02001,(E\_pyriifoliae:0.03052,E\_tasmaniensis:0.01311):0.05483):0.03591):0.00989):0.0172,(((P\_rodasii:0.01497,P\_rwa  
ndensis:0.00477):0.01309,(P\_sp\_At-  
9b:0.00231,P\_cyprapedii:0.01244):0.01751):0.01066,(((P\_s\_indologenes:0.00501,P\_s\_stewartii:5.4E-  
4):0.00605,(P\_allii:0.01086,P\_ananatis:0.00971):0.00878):0.01873,(P\_brenneri:0.00447,(P\_deleyi:0.0056,((P\_vagans:0.0  
0245,P\_sp\_aB:0.00246):5.4E-  
4,((P\_conspicua:0.00752,P\_agglomerans:0.00246):0.00254,P\_anthophila:0.01029):0.00246):0.00719):0.02153):0.0155):0.02  
056):0.00308):5.3E-4);  
[1313] tree 't1313'=[&R] (P\_dispersa:5.4E-  
4,P\_eucrina:0.00935,((((T\_morbirosei:0.02512,(T\_ptyseos:0.03371,T\_sp\_NML\_06:0.02):0.01187):0.04254,((E\_tasmaniensis  
:0.03334,E\_pyriifoliae:5.5E-4):0.01032,((P\_sp\_GM01:5.5E-4,((P\_deleyi:5.4E-4,((P\_brenneri:0.0,P\_conspicua:0.0):5.3E-  
4,(P\_sp\_A4:0.02899,((P\_allii:0.0,P\_ananatis:0.0,P\_s\_indologenes:0.0):5.5E-4,P\_s\_stewartii:0.00472):5.4E-  
4):0.00943):0.00944):0.00946,(P\_sp\_aB:0.00472,(P\_agglomerans:0.0,P\_vagans:0.0,P\_anthophila:0.0):5.5E-4):5.3E-  
4):0.00473):0.00453,P\_septica:0.005):0.01422):0.00383):5.4E-4,(P\_sp\_At-9b:5.4E-  
4,(E\_billingiae:0.01938,P\_cyprapedii:5.3E-4):0.00474):0.01015):0.01387,P\_wallisii:0.01397):5.4E-  
4,(P\_rodasii:0.00472,P\_rwandensis:5.5E-4):0.0096):0.0047);  
[1314] tree 't1314'=[&R]  
((((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.06305,(P\_allii:0.02514,P\_ananatis:0.01364):0.0776):0.08709,((P\_sp\_A4:0  
.22669,(P\_sp\_At-  
9b:0.0301,P\_cyprapedii:0.05952):0.03601,((P\_eucrina:0.07211,P\_dispersa:0.04066):0.01972,((P\_rodasii:0.02446,P\_rwande  
nsis:0.03516):0.03773,(P\_wallisii:0.081,P\_sp\_GM01:0.03173):0.01869):0.01018):0.01483):0.10974):0.04863,(((T\_sp\_NML\_0  
6:0.12814,(T\_morbirosei:0.16005,T\_ptyseos:0.09124):0.0634):0.33191,(E\_billingiae:0.16522,(E\_pyriifoliae:0.1108,E\_tasm  
aniensis:0.05873):0.11321):0.0884):0.07137,P\_septica:0.10319):0.05502):0.05622):0.05656,(P\_brenneri:0.02046,P\_conspi  
cua:0.03705):0.03343):0.01634,(P\_deleyi:0.02814,(P\_vagans:0.00868,P\_sp\_aB:0.02532):0.00772):0.01019,(P\_anthophila:0.  
02438,P\_agglomerans:0.0323):0.00434);  
[1315] tree 't1315'=[&R]  
((P\_septica:0.01282,(P\_sp\_A4:0.00922,(((T\_sp\_NML\_06:0.0176,(T\_ptyseos:0.02455,T\_morbirosei:0.02771):0.01005):0.02516  
,(E\_billingiae:0.02062,(E\_pyriifoliae:0.00836,E\_tasmaniensis:5.4E-4):0.02241):0.01029):0.01182,(P\_sp\_At-  
9b:0.00423,(P\_cyprapedii:0.00853,(P\_sp\_GM01:0.00425,((P\_dispersa:0.00439,(P\_rwandensis:0.00571,(P\_wallisii:0.00723,P  
\_rodasii:0.00568):0.00422):0.00698):0.0041,P\_eucrina:0.01753):0.00423):0.00431):0.00407):0.00359):0.00883):0.00405):  
0.01307,((P\_vagans:5.5E-4,(P\_deleyi:0.00427,P\_sp\_aB:0.00432):0.00427):0.00426,(P\_anthophila:5.1E-  
4,P\_agglomerans:0.00428):5.5E-4):0.00426,(P\_conspicua:5.5E-4,(P\_brenneri:5.4E-  
4,(P\_allii:0.00429,(P\_ananatis:0.00429,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00427):5.4E-  
4):0.00432):0.00432):5.5E-4);  
[1316] tree 't1316'=[&R]  
(((T\_morbirosei:0.23255,(T\_ptyseos:0.16277,T\_sp\_NML\_06:0.24246):0.03273):0.26028,(P\_sp\_A4:0.21859,(E\_billingiae:0.06  
6,(E\_pyriifoliae:0.02259,E\_tasmaniensis:0.08138):0.09246):0.05553):0.05694):0.06251,((((P\_rwandensis:0.02097,P\_rodas  
ii:0.04044):0.00708,(P\_sp\_At-  
9b:0.04154,P\_cyprapedii:0.01794):0.02204):0.01272,P\_sp\_GM01:0.05473):0.0138,(P\_wallisii:0.06198,P\_dispersa:0.05862):

0.00932):0.00665,(P\_eucrina:0.09802,P\_septica:0.06513):0.02467):0.01355,(((P\_brenneri:0.01536,P\_conspicua:0.02007):0.03176,(P\_anthophila:0.034,(P\_vagans:0.02006,(P\_sp\_aB:0.04421,(P\_agglomerans:0.01924,P\_deleyi:0.02949):5.5E-4):0.01418):0.00706):0.00311):0.05312,((P\_s\_indologenes:0.00959,P\_s\_stewartii:5.5E-4):0.04069,(P\_allii:0.06343,P\_ananatis:0.01809):0.03441):0.06329):0.00777);

[1317] tree 't1317'=[&R] ((P\_vagans:5.4E-4,(P\_agglomerans:5.5E-4,P\_sp\_aB:0.00132):0.01164):0.0016,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.00215,(P\_allii:5.5E-4,P\_ananatis:0.00144):0.00226):0.02882,((T\_morbirosei:0.02069,(T\_sp\_NML\_06:0.02912,T\_ptyseos:0.02235):0.01632):0.09277,((E\_billingiae:0.02428,(E\_pyriifoliae:0.01649,E\_tasmaniensis:0.00597):0.01871):0.05936,((P\_eucrina:0.021,(P\_dispersa:0.00535,P\_wallisii:0.0098):0.01316,(P\_sp\_GM01:0.01765,(P\_rodasii:0.01482,P\_rwandensis:0.01199):0.00619):0.01477):0.01133):0.01944,((P\_sp\_A4:0.04497,P\_septica:0.03143):0.01524,(P\_sp\_At-9b:0.01271,P\_cyprapedii:0.01286):0.02214):0.00535):0.00308):0.01328):0.02628):0.00809,(P\_brenneri:0.00178,P\_conspicua:0.00269):0.00499):0.0091,(P\_deleyi:0.00742,P\_anthophila:0.00584):0.00287);

[1318] tree 't1318'=[&R] (P\_deleyi:0.00731,(P\_agglomerans:0.02229,((P\_brenneri:0.0,P\_conspicua:0.0):0.02282,(P\_sp\_aB:0.01189,((P\_allii:0.00397,((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00359):0.01824,P\_ananatis:5.4E-4):0.01063):0.01708,(P\_septica:0.04657,((E\_billingiae:0.04619,(E\_pyriifoliae:0.02673,E\_tasmaniensis:0.04454):0.08199):0.03912,(((P\_sp\_GM01:0.01128,(P\_rodasii:0.02726,P\_rwandensis:0.02592):0.01357):0.02165,(P\_eucrina:0.04114,(P\_dispersa:0.00629,P\_wallisii:0.04091):0.01609):0.0128):0.04635,(P\_sp\_A4:0.11112,(T\_morbirosei:0.10408,(T\_sp\_NML\_06:0.09328,T\_ptyseos:0.0633):0.02526):0.14592):0.04979):0.01784,(P\_sp\_At-9b:0.01297,P\_cyprapedii:0.02402):0.01946):0.01452):0.03124):0.00916):0.04475):0.00397):0.00675):0.00384,(P\_anthophila:0.02612,P\_vagans:0.00364):0.00376);

[1319] tree 't1319'=[&R] (P\_agglomerans:0.00549,(P\_anthophila:0.05709,P\_sp\_aB:0.01121):0.00543,(P\_vagans:0.01582,(P\_deleyi:0.0468,(P\_conspicua:0.03162,(P\_brenneri:0.03412,((P\_allii:0.03401,(P\_ananatis:0.02374,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.03882):0.01197):0.08187,((P\_sp\_A4:0.12042,((P\_sp\_At-9b:0.0241,P\_cyprapedii:0.04653):0.04801,(P\_eucrina:0.16377,((P\_sp\_GM01:0.0484,(P\_rwandensis:0.05475,P\_rodasii:0.0462):0.02301):0.02631,P\_dispersa:0.06658):0.00644,P\_wallisii:0.03945):0.00868):0.05661):0.05935):0.05239,(P\_septica:0.10743,((T\_sp\_NML\_06:0.12476,(T\_morbirosei:0.15184,T\_ptyseos:0.06574):0.03296):0.19908,(E\_billingiae:0.16846,(E\_pyriifoliae:0.12884,E\_tasmaniensis:0.20067):0.16369):0.07009):0.06257):0.00596):0.06559):0.07336):0.01295):0.03393):0.03092):0.00612);

[1320] tree 't1320'=[&R] (P\_dispersa:0.00795,(P\_sp\_A4:0.01967,(P\_sp\_At-9b:0.00748,P\_cyprapedii:0.00786):0.0113):0.00561,((P\_septica:0.01717,((P\_agglomerans:0.01106,(P\_ananatis:0.00174,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01346,P\_allii:0.01131):0.0023):0.03032):0.01078,(((P\_deleyi:0.00651,P\_anthophila:0.01269):0.00259,((P\_vagans:0.00752,P\_sp\_aB:0.00195):0.00263,(P\_brenneri:0.00188,P\_conspicua:0.00382):0.00684):0.00125):0.00783,((T\_ptyseos:0.01273,(T\_morbirosei:0.01519,T\_sp\_NML\_06:0.02948):0.00672):0.05837,(E\_billingiae:0.03687,(E\_pyriifoliae:0.00955,E\_tasmaniensis:0.00197):0.02399):0.02497):0.01388):0.0078):0.00827):0.00645,(P\_eucrina:0.01064,((P\_sp\_GM01:0.00618,(P\_rodasii:0.00229,P\_rwandensis:0.01331):0.00911):0.00971,P\_wallisii:0.00416):0.00689):0.0092):0.00555);

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[1321] tree 't1321'=[&R]
(((P_eucrina:0.0176,(P_wallisii:0.01009,(P_septica:0.01034,((P_s_indologenes:0.0,P_s_stewartii:0.0):0.00518,(((P_conspicua:0.12079,(P_brenneri:5.5E-4,P_deleyi:0.00748):0.00241):5.3E-4,(P_anthophila:5.5E-4,(P_vagans:0.00764,(P_sp_aB:0.00505,P_agglomerans:0.00507):0.00253):0.00491):0.02096,(P_allii:0.00252,P_ananatis:0.00253):0.00516):0.00292):0.01055):0.00204):0.00823):5.5E-4,P_dispersa:0.00522):0.00601,((E_billingiae:0.01993,(E_pyriifoliae:0.00532,E_tasmaniensis:0.00499):0.01739):0.02301,(P_sp_A4:0.03982,(T_morbirosei:0.03058,(T_sp_NML_06:0.03018,T_ptyseos:0.01332):0.02652):0.04436):0.01139):0.00885,((P_rwandensis:0.00385,(P_sp_GM01:0.0193,P_rodasii:0.0041):0.00772):0.01154,(P_cypripedii:0.0093,P_sp_At-9b:0.00502):0.00351):0.00768);
[1322] tree 't1322'=[&R]
((P_vagans:0.02455,P_anthophila:0.02233):0.00891,P_agglomerans:0.01305,((P_deleyi:0.02784,(((P_s_indologenes:0.00219,P_s_stewartii:5.5E-4):0.03428,(P_allii:0.01375,P_ananatis:0.01955):0.01802):0.03523,(P_septica:0.08499,((P_eucrina:0.09883,((P_dispersa:0.02622,P_wallisii:0.03531):0.01259,((P_sp_GM01:0.01737,(P_rodasii:0.01269,P_rwandensis:0.00655):0.01752):0.01073,(P_sp_At-9b:0.02782,P_cypripedii:0.02192):0.03298):0.00596):0.01406):0.02915,((E_billingiae:0.06084,(E_pyriifoliae:0.024,E_tasmaniensis:0.03898):0.08683):0.07932,((T_morbirosei:0.09932,(T_ptyseos:0.05865,T_sp_NML_06:0.10836):0.0509):0.20987,P_sp_A4:0.09612):0.03628):0.02358):0.04945):0.0295):0.0318,(P_brenneri:0.01709,P_conspicua:0.0239):0.00751):0.01884):0.00823,P_sp_aB:0.01547):0.00232);
[1323] tree 't1323'=[&R] (P_agglomerans:9.8E-4,((P_brenneri:0.0034,P_conspicua:0.01044):0.01297,((P_septica:0.01683,((P_sp_A4:0.06593,(P_sp_At-9b:0.01528,P_cypripedii:0.01217):0.01744):0.02482,(P_dispersa:0.01489,(((P_eucrina:0.01723,P_wallisii:0.01392):0.01191,(P_rodasii:0.0519,P_rwandensis:0.00176):0.01754):0.0034,P_sp_GM01:0.01218):0.01845):0.01325):0.03159):0.03085,(((E_pyriifoliae:0.02734,E_tasmaniensis:0.02786):0.10296,(E_billingiae:0.09251,(T_ptyseos:0.03379,(T_morbirosei:0.0103,T_sp_NML_06:0.02801):0.00624):0.10532):0.05283):0.08511,((P_s_indologenes:5.5E-4,P_s_stewartii:0.00336):0.00948,(P_allii:0.00344,P_ananatis:0.00335):0.00774):0.01568):0.01055):0.01141):0.00775,((P_anthophila:0.01734,P_vagans:5.5E-4):0.00687,(P_sp_aB:0.00346,P_deleyi:0.01735):0.00341):0.00594);
[1324] tree 't1324'=[&R]
(P_conspicua:0.00457,(P_brenneri:0.00877,(((P_s_indologenes:0.0,P_s_stewartii:0.0):0.00611,((P_septica:0.03012,((P_rodasii:0.00919,(P_sp_GM01:0.01403,P_rwandensis:0.00457):0.01487):0.04425,((T_morbirosei:0.03976,(T_ptyseos:0.01295,T_sp_NML_06:0.00807):0.03219):0.04015,(P_sp_A4:0.03511,(E_billingiae:0.05841,(E_pyriifoliae:0.0164,E_tasmaniensis:5.4E-4):0.03014):0.03893):0.01378):0.01276):0.01789):0.00648,(((P_wallisii:0.00838,P_dispersa:0.01035):0.00501,P_eucrina:0.0211):0.01143,P_cypripedii:0.00205):0.00409,P_sp_At-9b:5.5E-4):0.01502):0.02562):0.00412,P_ananatis:5.3E-4):0.00396,P_allii:5.5E-4):0.03323):0.00401,((P_deleyi:0.00406,P_anthophila:0.00408):0.00405,(P_vagans:0.00414,(P_sp_aB:0.00403,P_agglomerans:0.01023):0.00204):0.01259):0.00779);
[1325] tree 't1325'=[&R]
((P_sp_GM01:0.02212,(P_rodasii:0.02896,P_rwandensis:0.01103):0.01651):0.00572,(((P_septica:0.03335,(T_sp_NML_06:0.0
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3555,(T\_ptyseos:0.05512,T\_morbirosei:0.04295):0.01456):0.06791):0.01663,(((E\_billingiae:0.03329,(E\_pyriifoliae:0.0367,E\_tasmaniensis:0.01875):0.07631):0.06299,(P\_conspicua:0.01988,P\_brenneri:0.0882):0.0141,(P\_anthophila:0.02237,(P\_deleyi:0.01639,(P\_agglomerans:0.00523,(P\_vagans:0.01608,P\_sp\_aB:5.5E-4):5.4E-4):0.0163):0.00559):0.0166):0.03886):0.01813,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.03946,(P\_allii:0.01887,P\_ananatis:0.00416):0.01235):0.04347,P\_sp\_A4:0.0699):0.02514):0.01298):0.00703,(P\_sp\_At-9b:0.02688,P\_cypripedii:0.02387):0.0108):0.00356,P\_dispersa:0.02435):0.01311,(P\_eucrina:0.04329,P\_wallisii:0.03286):0.00815);

[1326] tree 't1326'=[&R] (P\_anthophila:0.00448,((P\_sp\_aB:0.01835,(((P\_s\_indologenes:0.00252,P\_s\_stewartii:5.5E-4):0.01669,(P\_allii:0.01279,P\_ananatis:0.00247):0.00739):0.03227,(P\_sp\_A4:0.08101,((E\_billingiae:0.04554,(E\_pyriifoliae:0.02299,E\_tasmaniensis:0.01495):0.05821):0.07131,(T\_ptyseos:0.03617,(T\_morbirosei:0.08398,T\_sp\_NML\_06:0.05848):0.0197):0.10499):0.01904):0.01926):0.01988,(((P\_wallisii:0.01364,(P\_dispersa:0.01587,P\_eucrina:0.03577):0.00744):0.00351,((P\_sp\_GM01:0.01811,(P\_rodasii:0.01797,P\_rwandensis:0.01745):0.00859):0.01953,(P\_sp\_At-9b:0.02176,P\_cypripedii:0.00341):0.02984):0.00157):0.01947,P\_septica:0.03305):0.01592):0.02076):0.00661,P\_deleyi:0.00908):0.00468,(((P\_conspicua:0.0204,P\_brenneri:0.00941):0.01126,P\_agglomerans:0.00761):5.4E-4,P\_vagans:0.01238):0.00604);

[1327] tree 't1327'=[&R] (P\_vagans:0.00592,P\_sp\_aB:0.0059,(P\_agglomerans:5.5E-4,(((P\_sp\_A4:0.14228,(P\_eucrina:0.08789,((P\_sp\_GM01:0.02974,(P\_sp\_At-9b:0.02417,P\_cypripedii:0.00632):0.01213):0.01165,(P\_rodasii:0.0061,P\_rwandensis:0.01144):0.03065):0.01586,(P\_dispersa:5.4E-4,P\_wallisii:0.06514):0.00879):0.03329):0.03488):0.04693,(P\_septica:0.12166,((T\_morbirosei:0.07489,(T\_sp\_NML\_06:0.16208,T\_ptyseos:0.09384):0.05937):0.22144,(E\_billingiae:0.11389,(E\_pyriifoliae:0.04195,E\_tasmaniensis:0.03587):0.12669):0.17799):0.03355):5.0E-4):0.03567,((P\_brenneri:0.01191,P\_conspicua:0.01718):0.12558,((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.03615,(P\_allii:5.4E-4,P\_ananatis:0.01766):0.00568):0.03101):0.00493):0.02674,(P\_anthophila:0.00592,P\_deleyi:0.00595):0.01168):5.5E-4):0.00591);

[1328] tree 't1328'=[&R] (((T\_morbirosei:0.02817,(T\_sp\_NML\_06:0.07329,T\_ptyseos:0.02158):0.04192):0.07499,(E\_billingiae:0.08247,(E\_pyriifoliae:0.02323,E\_tasmaniensis:0.01755):0.04514):0.01813):0.0219,(P\_septica:0.05101,((P\_allii:0.01083,(P\_ananatis:0.01087,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01234):0.00787):0.03724,(((P\_agglomerans:0.00752,(P\_vagans:0.00495,P\_sp\_aB:0.00249):0.00495):0.00611,(P\_deleyi:0.0122,P\_anthophila:0.00984):5.3E-4):0.00746,(P\_brenneri:0.00478,P\_conspicua:0.00762):0.0097):0.02646):0.02438):0.01491,(((P\_sp\_At-9b:0.00952,P\_cypripedii:0.02648):0.02,(P\_sp\_GM01:0.02438,(P\_eucrina:0.03779,(P\_dispersa:0.01477,P\_wallisii:0.0025):0.0064):0.00683):0.01654):0.02645,(P\_sp\_A4:0.04111,(P\_rodasii:0.01015,P\_rwandensis:0.00964):0.02054):0.02338):0.01817);

[1329] tree 't1329'=[&R] (((P\_anthophila:0.0,P\_agglomerans:0.0,P\_vagans:0.0,P\_sp\_aB:0.0,P\_deleyi:0.0,P\_eucrina:0.0):5.5E-4,P\_sp\_GM01:0.05057):5.4E-4,(E\_pyriifoliae:5.5E-4,P\_conspicua:1.21576):0.04871,(((T\_ptyseos:0.0,P\_septica:0.0):5.4E-4,(T\_sp\_NML\_06:0.02722,((E\_billingiae:0.0,P\_s\_indologenes:0.0,P\_s\_stewartii:0.0,P\_allii:0.0,P\_ananatis:0.0):0.04945,

(P\_brenneri:0.0,P\_sp\_A4:0.0,P\_sp\_At-9b:0.0,P\_cyprapedii:0.0,P\_dispersa:0.0,P\_wallisii:0.0):5.5E-4):0.0375):0.0376):0.0512,(T\_morbirosei:5.5E-4,(E\_tasmaniensis:0.05009,(P\_rodasii:0.0,P\_rwandensis:0.0):0.05044):5.5E-4):5.5E-4):0.05152);

[1330] tree 't1330'=[&R] (P\_vagans:5.5E-4,(P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00272):0.00827,(((E\_billingiae:0.03244,(E\_pyriifoliae:0.00963,E\_tasmaniensis:0.0097):0.01602):0.03691,(P\_dispersa:0.01483,(P\_wallisii:5.4E-4,(P\_eucrina:0.00799,P\_rodasii:0.014):0.00811):0.00537,(P\_rwandensis:0.01843,P\_sp\_GM01:0.00652):0.00517):0.00725):0.01678):0.01181,(P\_sp\_A4:0.02747,((T\_morbirosei:0.02477,(T\_ptyseos:0.01433,T\_sp\_NML\_06:0.01041):0.01022):0.03873,(P\_cyprapedii:5.3E-4,(P\_sp\_At-9b:0.00515,P\_septica:0.03163):0.0083):0.01074):0.01576):0.01178):0.02435,(P\_allii:0.00275,P\_ananatis:5.5E-4):5.4E-4):5.3E-4):0.00522,((P\_conspicua:5.4E-4,P\_brenneri:0.00273):0.00552,(P\_sp\_aB:0.01108,P\_agglomerans:5.5E-4):5.3E-4):0.00222,(P\_anthophila:5.5E-4,P\_deleyi:0.00224):0.00275):5.5E-4);

[1331] tree 't1331'=[&R] (P\_eucrina:0.00683,(T\_morbirosei:0.01387,(((P\_agglomerans:0.0,P\_vagans:0.0,P\_deleyi:0.0,P\_allii:0.0,P\_ananatis:0.0,P\_anthophila:0.0,P\_brenneri:0.0,P\_conspicua:0.0,P\_septica:0.0,P\_sp\_aB:0.0,P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.02742,(E\_billingiae:5.5E-4,(E\_pyriifoliae:5.5E-4,E\_tasmaniensis:0.00679):0.01321):0.0205):0.02877,(T\_ptyseos:0.00676,T\_sp\_NML\_06:5.3E-4):0.01361):0.00689):0.01374,((P\_sp\_A4:0.0339,P\_sp\_At-9b:5.5E-4):0.00672,(P\_cyprapedii:0.0,P\_sp\_GM01:0.0):5.5E-4,((P\_rodasii:0.0,P\_rwandensis:0.0):0.00672,(P\_dispersa:0.00673,P\_wallisii:5.3E-4):0.00672):5.4E-4):5.5E-4):0.00665);

[1332] tree 't1332'=[&R] (P\_rodasii:0.02291,P\_rwandensis:0.01172):0.04861,(P\_dispersa:0.03031,P\_wallisii:0.03792):0.00994,((P\_eucrina:0.1873,(P\_sp\_At-9b:0.08716,P\_cyprapedii:0.05476):0.04735):0.02043,(((P\_brenneri:0.06115,P\_conspicua:0.04362):0.05875,(P\_septica:0.09493,((E\_billingiae:0.17616,(E\_pyriifoliae:0.06707,E\_tasmaniensis:0.05153):0.17697):0.12987,(P\_sp\_A4:0.15113,(T\_sp\_NML\_06:0.17528,(T\_morbirosei:0.10855,T\_ptyseos:0.19893):0.09696):0.15425):0.04593):0.05208,((P\_s\_indologenes:0.00652,P\_s\_stewartii:5.5E-4):0.04882,(P\_allii:0.03513,P\_ananatis:0.02348):0.0383):0.05694,(P\_anthophila:0.02709,(P\_deleyi:0.07731,(P\_sp\_aB:0.02684,(P\_agglomerans:0.03364,P\_vagans:0.01332):0.01362):0.00534):0.01506):0.02375):0.03225):0.04819):0.01999):0.0501,(P\_sp\_GM01:0.06071):0.00344):0.03118);

[1333] tree 't1333'=[&R] (P\_dispersa:0.03259,(P\_septica:0.05906,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.04886,(P\_allii:0.01869,P\_ananatis:0.02537):0.01795):0.02922,((P\_brenneri:0.0053,P\_conspicua:0.00303):0.04183,((T\_morbirosei:0.1201,(T\_sp\_NML\_06:0.57311,T\_ptyseos:0.26298):0.14045):0.44606,(P\_deleyi:0.06143,(P\_anthophila:0.04141,(P\_agglomerans:0.01687,(P\_sp\_aB:0.03414,P\_vagans:5.4E-4):0.00821):0.00584):0.01469):0.01003):0.01574):0.01599):0.0316,(P\_sp\_A4:0.13839,(E\_billingiae:0.10536,(E\_pyriifoliae:0.05264,E\_tasmaniensis:0.07309):0.11279):0.12365):0.02672):0.03032):0.06845,((P\_wallisii:0.04405,(P\_sp\_GM01:0.03818,(P\_rodasii:0.03925,P\_rwandensis:0.01346):0.01461):0.00828):0.00797,(P\_eucrina:0.07656,(P\_cyprapedii:0.02867,P\_sp\_At-9b:0.04101):0.04273):0.01596):0.02584);

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[1334] tree 't1334'=[&R]
(P_rwandensis:0.01988,(P_rodasii:0.02104,P_eucrina:0.07361):0.00748,((P_dispersa:0.04361,((P_sp_At-
9b:0.013,P_cyprapedii:0.03332):0.02253,((T_morbirosei:0.08563,(T_ptyseos:0.04997,T_sp_NML_06:0.10561):0.03774):0.12
229,((E_pyrifoliae:0.03733,E_tasmaniensis:0.04336):0.08843,E_billingiae:0.09975):0.04008):0.03837,(P_sp_A4:0.10504,(
P_septica:0.09992,(P_allii:0.00676,((P_s_indologenes:5.5E-
4,P_s_stewartii:0.00227):0.03487,P_ananatis:0.00852):0.00571):0.06869,((P_brenneri:0.00449,P_conspicua:0.00697):0.02
237,(P_anthophila:0.01416,(P_deleyi:0.01176,(P_agglomerans:0.00624,(P_sp_aB:0.01552,P_vagans:0.01012):0.00423):0.005
16):0.0054):0.02855):0.01104):0.03802):0.00844):0.01025):0.02345):0.02016):0.01092,(P_sp_GM01:0.0453,P_wallisii:0.02
414):0.00621):0.01299);
[1335] tree 't1335'=[&R]
(((P_brenneri:0.01843,P_conspicua:0.0249):0.03565,(P_deleyi:0.03647,(((P_s_indologenes:5.3E-
4,P_s_stewartii:0.00239):0.03312,(P_allii:0.01551,P_ananatis:0.02104):0.01026):0.08535,((P_sp_A4:0.13778,(E_billingi
ae:0.10817,((E_pyrifoliae:0.04527,E_tasmaniensis:0.05423):0.12309,(T_sp_NML_06:0.01603,(T_ptyseos:0.00339,T_morbiros
ei:0.05125):0.00693):0.07364):0.02821):0.09906):0.01832,(P_septica:0.0907,(P_eucrina:0.08044,(P_wallisii:0.04823,(P_
dispersa:0.066,(P_sp_GM01:0.04558,((P_sp_At-
9b:0.01836,P_cyprapedii:0.02564):0.03556,(P_rodasii:0.02916,P_rwandensis:5.4E-
4):0.02475):0.00474):0.01374):0.00914):0.01581):0.06751):0.02612):0.01443):0.0331):0.01175):5.5E-
4,P_sp_aB:0.01024,(P_agglomerans:0.0102,(P_anthophila:0.03295,P_vagans:0.01411):0.0077):5.4E-4);
[1336] tree 't1336'=[&R]
(P_conspicua:0.00522,P_brenneri:0.00471,(((P_sp_aB:0.00989,(P_anthophila:0.00996,((P_allii:0.00554,(P_ananatis:0.01
528,(P_s_indologenes:5.5E-
4,P_s_stewartii:0.00993):0.00505):0.00434):0.01685,(P_septica:0.03031,(P_sp_A4:0.03985,((P_eucrina:0.04792,((P_sp_GM
01:0.01504,P_rwandensis:0.00981):5.4E-4,((P_sp_At-
9b:0.00489,P_cyprapedii:0.01004):0.01503,(P_wallisii:0.18291,P_dispersa:0.01055):0.0091):0.00563,P_rodasii:5.5E-
4):0.00491):0.01637):0.00651,(E_billingiae:0.06165,((T_sp_NML_06:0.07706,(T_morbirosei:0.03217,T_ptyseos:0.04368):0.
02206):0.07762,(E_pyrifoliae:0.02596,E_tasmaniensis:0.01722):0.03585):0.02892):0.03466):0.01285):0.00781):0.00871):0
.01415):0.01545,P_vagans:5.5E-4):0.00983):5.4E-4,P_agglomerans:5.5E-4):5.4E-4,P_deleyi:0.01989):0.00498);
[1337] tree 't1337'=[&R] ((P_sp_GM01:5.5E-
4,(P_rwandensis:0.02263,P_rodasii:0.00752):0.01485):0.00735,(P_dispersa:5.3E-4,P_eucrina:0.0073):5.4E-
4,(P_wallisii:5.4E-
4,(((T_morbirosei:0.04634,(T_sp_NML_06:0.08601,T_ptyseos:0.00951):0.03513):0.07548,(E_billingiae:0.04859,(E_pyrifoli
ae:0.01528,E_tasmaniensis:0.0079):0.03248):0.06737):0.01228,(P_cyprapedii:5.4E-
4,(((P_s_indologenes:0.0,P_s_stewartii:0.0):0.03073,((P_brenneri:5.5E-
4,(P_conspicua:0.00708,(P_sp_aB:0.02153,(P_deleyi:5.5E-
4,(P_vagans:0.01341,(P_agglomerans:0.00706,P_anthophila:0.00708):0.00249):0.00514):0.01473):0.02225):0.00735):0.0365
7,(P_allii:5.4E-4,P_ananatis:0.00717):5.4E-
4):0.00644):0.02218,(P_sp_A4:0.02186,P_septica:0.02247):0.00817):0.02201,P_sp_At-9b:0.00733):0.00735):5.4E-
4):0.0074):0.00731);
```

[1338] tree 't1338'=[&R] (((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00561):0.0291,(P\_allii:0.00566,P\_ananatis:5.4E-4):0.00591):0.01783,P\_agglomerans:5.4E-4):0.0056,(P\_brenneri:0.0,P\_conspicua:0.0):5.4E-4,((((T\_ptyseos:0.01315,(T\_morbirosei:0.04729,T\_sp\_NML\_06:0.03124):0.0078):0.07788,(P\_sp\_At-9b:0.00557,P\_cyprapedii:0.00572):5.4E-4,((P\_wallisii:0.03416,(P\_dispersa:0.00685,P\_eucrina:0.02443):0.00617):0.00498,(P\_sp\_GM01:0.01132,P\_rwandensis:0.01829):0.00575):0.01722):0.01789):0.00429,P\_septica:0.02404):0.01563,((E\_billingiae:0.02673,(E\_pyrifoliae:0.0287,E\_tasmaniensis:0.01103):0.03697):0.05671,P\_rodasii:0.16673):5.5E-4):0.00776,((P\_anthophila:0.0,P\_vagans:0.0):5.5E-4,(P\_sp\_aB:0.00561,(P\_sp\_A4:0.05867,P\_deleyi:5.4E-4):0.01707):5.4E-4):0.00561):5.4E-4);

[1339] tree 't1339'=[&R] (P\_sp\_A4:0.05304,(P\_sp\_At-9b:5.3E-4,P\_cyprapedii:0.00441):0.02203,(((P\_dispersa:0.0267,P\_wallisii:0.0043):0.0061,(P\_rodasii:0.0508,P\_rwandensis:0.00815):0.00515):0.0072,(P\_sp\_GM01:0.01794,(((T\_morbirosei:0.02463,(T\_ptyseos:0.02168,T\_sp\_NML\_06:0.0372):0.02772):0.06674,(P\_septica:0.03889,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.4E-4,(P\_allii:0.01336,P\_ananatis:5.4E-4):0.00885):0.0102,(P\_brenneri:0.0,P\_conspicua:0.0):5.4E-4,(P\_anthophila:0.00851,(P\_agglomerans:0.0,P\_sp\_aB:0.0):0.01343,(P\_deleyi:0.0,P\_vagans:0.0):5.3E-4):0.00931):0.04162):0.01275):0.0188):0.01764):0.00337,(P\_eucrina:0.01385,(E\_billingiae:0.02114,(E\_pyrifoliae:0.03178,E\_tasmaniensis:0.00803):0.03919):0.01714):0.00551):0.00593):0.00227):0.01104);

[1340] tree 't1340'=[&R] (((P\_sp\_At-9b:0.00612,P\_cyprapedii:0.00618):0.00778,((((P\_anthophila:0.01594,(P\_deleyi:0.00673,(P\_vagans:5.4E-4,(P\_agglomerans:0.00615,P\_sp\_aB:0.00608):0.01226):0.00552):0.00591):0.01217,P\_conspicua:0.00902):0.0037,P\_brenneri:0.00284):0.02219,(((T\_ptyseos:0.0148,(T\_morbirosei:0.03198,T\_sp\_NML\_06:0.02941):0.00665):0.0153,(E\_billingiae:0.05276,(P\_rodasii:0.44027,(E\_pyrifoliae:0.03352,E\_tasmaniensis:0.01711):0.01366):0.01056):0.03466):0.02176,(P\_sp\_A4:0.0792,P\_septica:0.02462):0.00724):0.008):0.01074,(P\_eucrina:0.02356,((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00613):0.01738,(P\_ananatis:0.01205,P\_allii:0.00702):0.01195):0.01301):0.01103):0.00487):0.00899,(P\_dispersa:0.00365,P\_wallisii:0.0088):0.01094,(P\_sp\_GM01:0.02144,P\_rwandensis:5.4E-4):0.00507);

[1341] tree 't1341'=[&R] (P\_wallisii:0.02736,(P\_sp\_GM01:0.00978,(P\_rodasii:0.00675,P\_rwandensis:0.00918):0.0134):0.00823,(P\_dispersa:0.01977,((((T\_morbirosei:0.0456,(T\_ptyseos:0.07178,T\_sp\_NML\_06:0.06167):0.03182):0.12422,(E\_billingiae:0.04945,(E\_pyrifoliae:0.03054,E\_tasmaniensis:0.03494):0.05807):0.04133):0.01713,(P\_sp\_A4:0.02676,(P\_septica:0.04321,((P\_ananatis:0.01865,(P\_allii:0.01895,(P\_s\_indologenes:0.00131,P\_s\_stewartii:0.00126):0.0232):0.00415):0.04227,(P\_brenneri:0.0127,P\_conspicua:0.01234):0.0173,(P\_deleyi:0.0158,(P\_anthophila:0.0071,(P\_vagans:0.00286,(P\_sp\_aB:0.00676,P\_agglomerans:0.01138):0.00257):0.00427):0.00407):0.01504):0.01978):0.01236):0.01061):0.00772):0.01747,(P\_eucrina:0.0415,(P\_sp\_At-9b:0.0111,P\_cyprapedii:0.00881):0.01546):0.00575):0.00788):0.00549);

[1342] tree 't1342'=[&R] (P\_wallisii:0.00802,P\_sp\_GM01:0.01121,((P\_eucrina:0.0667,(P\_dispersa:0.01065,((P\_sp\_A4:0.10101,(((P\_septica:0.07276,((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00619):0.03164,(P\_allii:0.00629,P\_ananatis:0.01953):0.01766):0.04614,(P\_brenneri:0.01079,(P\_deleyi:0.01687,(P\_anthophila:0.00209,(P\_vagans:0.01067,(P\_sp\_aB:0.01801,P\_agglomerans:0.00327):0.00517):0.00319):0.00439):0.0191,P\_conspicua:0.00393):0.0088):0.03557):0.00602):0.00394,(T\_morbirosei:0.0352,(T\_sp\_NML\_06:0.12841,T\_ptyseos:0.06535):0.06897):0.29593):0.01308,(E\_billingiae:0.0671,(E\_pyrifoliae:0.0262,E\_tasmaniensis:0.0627):0.11591):0.06568)

:0.03029):0.02398,(P\_sp\_At-  
9b:0.0162,P\_cyprapedii:0.02018):0.01375):0.0101):0.00879):0.00628,(P\_rodasii:0.00427,P\_rwandensis:0.00848):0.00645):  
0.0042);  
[1343] tree 't1343'=[&R] (P\_anthophila:0.0176,(P\_agglomerans:0.00936,P\_vagans:5.4E-  
4):0.01093,(((P\_brenneri:0.03727,P\_conspicua:5.4E-4):0.04027,(((P\_s\_indologenes:0.00888,P\_s\_stewartii:5.5E-  
4):0.02859,(P\_allii:0.01829,P\_ananatis:0.01808):0.00721):0.05344,(P\_septica:0.03396,P\_sp\_A4:0.07296):0.01158,(((P\_s  
p\_GM01:0.01826,((P\_wallisii:0.01875,(P\_rodasii:0.00903,P\_rwandensis:5.5E-4):5.4E-  
4):0.0091,(P\_dispersa:0.03164,P\_eucrina:0.06741):0.00494):0.00934):0.01008,(P\_sp\_At-  
9b:0.00909,P\_cyprapedii:0.00904):0.00928):0.01663,(E\_billingiae:0.05545,((T\_ptyseos:0.04379,(T\_morbirosei:0.13118,T  
sp\_NML\_06:0.06672):0.07614):0.16714,(E\_pyriifoliae:0.03774,E\_tasmaniensis:0.029):0.04761):0.04886):0.03969):0.01262):  
0.02575):5.5E-4):0.02419,(P\_sp\_aB:0.01553,P\_deleyi:0.02223):0.01118):0.00788);  
[1344] tree 't1344'=[&R]  
(P\_deleyi:0.02306,(P\_sp\_aB:0.01715,(P\_agglomerans:0.00577,(P\_conspicua:0.02923,P\_brenneri:0.00568):0.00578):0.00576)  
:5.4E-4,(P\_vagans:0.00658,(((P\_s\_indologenes:0.0112,P\_s\_stewartii:5.5E-  
4):0.01083,(P\_allii:0.01719,P\_ananatis:0.01725):5.5E-  
4):0.06671,(P\_anthophila:0.00565,(P\_septica:0.02858,((E\_pyriifoliae:0.04708,E\_tasmaniensis:0.04222):0.09341,(E\_billin  
giae:0.0987,(((P\_sp\_At-  
9b:0.02905,P\_cyprapedii:0.019):0.01705,((P\_sp\_GM01:0.03318,(P\_rodasii:0.02885,P\_rwandensis:0.04391):0.01479):0.00263  
,((P\_dispersa:0.0212,P\_wallisii:0.03448):0.01829,P\_eucrina:0.04693):0.01132):0.01715):0.02576,(P\_sp\_A4:0.14218,(T\_mo  
rbirosei:0.57124,(T\_ptyseos:0.20005,T\_sp\_NML\_06:0.23093):0.03915):0.18175):0.06491):0.01083):0.00833):0.0353):0.0385  
5):0.00661):0.00579):0.00493);  
[1345] tree 't1345'=[&R]  
((P\_sp\_GM01:0.05444,(P\_rodasii:0.02538,P\_rwandensis:0.02242):0.04505):0.01627,(P\_eucrina:0.09239,(P\_dispersa:0.06006  
,P\_wallisii:0.06148):0.0083):0.02051,(((P\_sp\_A4:0.09684,(T\_morbirosei:0.17087,(T\_sp\_NML\_06:0.12691,((E\_billingiae:0.  
00853,(E\_pyriifoliae:0.06349,E\_tasmaniensis:0.10447):0.20088):0.64551,T\_ptyseos:0.13813):0.04242):0.06223):0.09844):0  
.04155,(P\_septica:0.09952,(((P\_brenneri:0.04914,P\_conspicua:0.01994):0.05779,(P\_deleyi:0.03153,(P\_sp\_aB:0.01951,(P  
agglomerans:0.00501,P\_vagans:5.5E-  
4):0.01011):0.00642):0.01043):0.00525,P\_anthophila:0.01076):0.03373,((P\_s\_indologenes:0.00359,P\_s\_stewartii:0.00667)  
:0.07718,(P\_allii:0.03715,P\_ananatis:0.0294):0.01996):0.04657):0.05248):0.0379):0.03762,(P\_sp\_At-  
9b:0.04968,P\_cyprapedii:0.04019):0.02275):0.03203);  
[1346] tree 't1346'=[&R]  
((((T\_morbirosei:0.02996,(T\_sp\_NML\_06:0.05903,T\_ptyseos:0.02508):0.01727):0.16417,(P\_allii:0.04046,(P\_ananatis:0.0,P  
\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.5E-4):0.01646):0.04892,((P\_cyprapedii:0.02943,P\_sp\_At-  
9b:0.01158):0.00762,(((P\_rodasii:0.0,P\_rwandensis:0.0):0.00794,(P\_dispersa:0.0,P\_sp\_GM01:0.0):5.3E-  
4):0.0073,(P\_wallisii:0.03248,P\_eucrina:0.04134):0.0201):0.03628):0.02665):0.01124,(P\_septica:0.05664,((P\_sp\_A4:0.04  
065,(E\_billingiae:0.05394,(E\_pyriifoliae:0.0466,E\_tasmaniensis:0.04764):0.03538):0.06063):0.00301,P\_deleyi:0.03404):0  
.00706):0.01244,((P\_agglomerans:5.5E-  
4,(P\_vagans:0.04957,P\_sp\_aB:0.0079):0.01633):0.02456,(P\_brenneri:0.0255,(P\_anthophila:0.02113,P\_conspicua:0.01067):0  
.00867):5.4E-4):5.3E-4);



```
[1347] tree 't1347'=[&R] (((P_sp_At-9b:0.00746,((P_sp_A4:0.03419,((T_morbirosei:0.0385,(T_ptyseos:0.02869,T_sp_NML_06:0.00987):0.06256):0.06242,(E_billिंगiae:0.0176,(E_pyrifoliae:0.02096,E_tasmaniensis:0.00872):0.02674):0.03891):0.02102):0.01512,(P_septica:0.02945,(((P_agglomerans:5.5E-4,(P_deleyi:0.01501,P_anthophila:5.4E-4):0.00708):0.00104,(P_sp_aB:0.00746,P_vagans:0.00743):0.00295):0.0071,(P_brenneri:5.5E-4,P_conspicua:0.00373):5.5E-4):0.01942,((P_allii:0.00749,P_ananatis:0.00744):0.01343,(P_s_indologenes:5.5E-4,P_s_stewartii:0.00367):0.00897):0.01371):0.02773):0.00976):0.00489):0.00767,P_cypripedii:0.00714):0.01483,(P_wallisii:0.01104,P_rwandensis:0.00367):5.3E-4):0.00682,(P_sp_GM01:0.03756,P_eucrina:0.02526):0.00877,(P_rodasii:0.01514,P_dispersa:5.4E-4):5.4E-4);
[1348] tree 't1348'=[&R] (P_agglomerans:5.5E-4,(P_vagans:0.00739,P_sp_aB:7.2E-4):0.00811,(P_deleyi:0.004,(P_anthophila:0.01536,(((P_sp_A4:0.06251,((P_allii:0.00437,(P_ananatis:0.00431,(P_s_indologenes:5.5E-4,P_s_stewartii:0.00402):0.0207):0.01215):0.02107,((T_morbirosei:0.04045,(T_ptyseos:0.07082,T_sp_NML_06:0.04263):0.06211):0.09003,(E_billिंगiae:0.08994,(E_tasmaniensis:0.05536,E_pyrifoliae:0.03017):0.03184):0.05633):0.01935):0.00793):0.02485,((P_dispersa:0.04688,((P_sp_GM01:0.00782,(P_rodasii:0.01197,P_rwandensis:5.4E-4):0.00831):0.02957,(P_eucrina:0.05978,(P_septica:0.03842,P_wallisii:0.03568):0.01236):0.00611):5.5E-4):0.02867,(P_cypripedii:0.01055,P_sp_At-9b:0.01504):0.01364):0.00438):0.01029,(P_brenneri:0.0082,P_conspicua:0.0122):0.00625):0.0207):0.00494):5.4E-4);
[1349] tree 't1349'=[&R] (P_sp_At-9b:0.00665,P_cypripedii:0.02473,((P_rodasii:0.01033,P_rwandensis:0.00946):0.01986,(P_wallisii:0.02028,(P_eucrina:0.05355,(P_sp_GM01:0.04003,(P_dispersa:0.00973,(((P_sp_A4:0.14331,(E_billिंगiae:0.16051,(E_pyrifoliae:0.05766,E_tasmaniensis:0.00555):0.09359):0.06415):5.4E-4,P_septica:0.07287):0.01065,((P_deleyi:0.03053,((P_sp_aB:0.01339,(P_vagans:0.01962,P_anthophila:0.04055):0.0079):0.01829,P_agglomerans:5.4E-4):5.5E-4):0.02837,(P_conspicua:5.5E-4,P_brenneri:0.37023):0.06117):0.06535):0.01017,((T_morbirosei:0.04623,(T_ptyseos:0.08619,T_sp_NML_06:0.027):0.08904):0.11135,((P_s_indologenes:0.0,P_s_stewartii:0.0):0.03071,(P_allii:0.02034,P_ananatis:0.01019):0.01998):0.04662):5.6E-4):0.00993):0.01011):0.0195):5.4E-4):0.02215):0.01615);
[1350] tree 't1350'=[&R] (((P_s_indologenes:0.0,P_s_stewartii:0.0):0.01744,(P_allii:0.0112,P_ananatis:0.00561):0.00667):0.02348,((T_morbirosei:0.0366,(T_ptyseos:0.01579,T_sp_NML_06:0.02871):0.033):0.07732,(E_billिंगiae:0.05514,(E_pyrifoliae:0.01601,E_tasmaniensis:0.01865):0.03816):0.01739):0.02188):0.01344,(P_septica:0.01245,(P_sp_At-9b:0.02104,P_cypripedii:0.01747):0.04716):0.01788,(((P_sp_A4:0.04992,(P_rodasii:0.01078,(P_rwandensis:0.02974,P_sp_GM01:0.0059):0.0289):0.02022):0.0148,((P_dispersa:0.00464,P_wallisii:0.00509):0.02408,P_eucrina:0.01859):0.0169):5.4E-4,(P_brenneri:0.01916,(P_anthophila:0.0097,(P_conspicua:0.00486,(P_agglomerans:5.5E-4,(P_sp_aB:5.5E-4,(P_vagans:0.00477,P_deleyi:5.5E-4):0.00956):0.00482):0.01462):0.00969):0.00517):0.01497):0.00447);
[1351] tree 't1351'=[&R] (P_septica:5.4E-4,(((P_eucrina:0.01336,(P_rodasii:0.00885,P_rwandensis:0.00454):0.00898):5.4E-4,(P_dispersa:0.0,P_wallisii:0.0):5.4E-4):0.00878,((P_cypripedii:0.00899,P_sp_At-9b:0.00444):0.00451,(((P_sp_aB:0.00485,((P_agglomerans:0.0,P_vagans:0.0,P_deleyi:0.0):5.5E-
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4,P\_anthophila:0.00443):0.00404):0.01349,(P\_brenneri:0.00438,P\_conspicua:5.5E-4):5.5E-4):0.00847,((P\_allii:0.0,P\_ananatis:0.0):0.00443,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.4E-4):0.00443):0.0045,P\_sp\_A4:0.02283):0.00894):0.0042):5.5E-4,((T\_morbirosei:0.01207,(T\_sp\_NML\_06:0.01327,T\_ptyseos:5.4E-4):0.02034):0.05548,(P\_sp\_GM01:0.01394,(E\_billingiae:0.01632,(E\_pyrifoliae:0.01292,E\_tasmaniensis:0.00458):0.02298):0.03399):0.0086):5.4E-4);

[1352] tree 't1352'=[&R]  
(P\_eucrina:0.04092,P\_dispersa:0.00354):0.0109,(P\_sp\_GM01:0.0094,(P\_rodasii:0.01382,P\_rwandensis:0.01612):0.00932):0.01221,(((P\_sp\_At-9b:0.01032,P\_cypripedii:0.00733):0.02783,(P\_sp\_A4:0.06224,((T\_sp\_NML\_06:0.01553,(T\_ptyseos:0.00883,T\_morbirosei:0.08114):0.01628):0.15536,(P\_septica:0.0383,(((P\_vagans:5.4E-4,(P\_agglomerans:0.00337,P\_sp\_aB:0.0181):0.01839):0.00355,(P\_brenneri:5.5E-4,P\_conspicua:0.00705):0.0071):0.01079,P\_deleyi:0.0036):5.5E-4,P\_anthophila:0.01433):0.04859,(((P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):5.3E-4,(P\_allii:0.01456,P\_ananatis:0.0036):0.01077):0.06855,(E\_billingiae:0.06603,(E\_pyrifoliae:0.05408,E\_tasmaniensis:0.0141):0.05319):0.09014):0.02856):0.01467):0.011):0.00791):0.01497):0.01348,P\_wallisii:0.00515):0.00339);

[1353] tree 't1353'=[&R] (P\_vagans:0.02189,((P\_allii:0.00706,(P\_ananatis:5.5E-4,(P\_s\_indologenes:0.0,P\_s\_stewartii:0.0):0.01392):0.00711):0.03558,P\_deleyi:5.5E-4):0.00707,(P\_agglomerans:0.00699,(P\_sp\_aB:0.02086,((P\_brenneri:0.02105,P\_conspicua:0.00663):0.01671,(P\_anthophila:0.02379,(P\_septica:0.07089,(((P\_sp\_At-9b:0.01242,P\_cypripedii:0.01665):0.02532,(((P\_eucrina:0.05178,P\_wallisii:0.00705):0.02093,P\_dispersa:5.5E-4):0.01787,(P\_sp\_GM01:0.02784,(P\_rodasii:0.03068,P\_rwandensis:0.01434):0.00827):0.0192):0.04126):0.02737,(P\_sp\_A4:0.1417,(T\_morbirosei:0.05787,(T\_sp\_NML\_06:0.06883,T\_ptyseos:0.05447):0.03432):0.12808,(E\_billingiae:0.12306,(E\_pyrifoliae:0.04385,E\_tasmaniensis:0.01281):0.08456):0.09508):0.0259):0.03267):0.02433):0.03444):0.0146):0.01154):5.4E-4):0.00661);

[1354] tree 't1354'=[&R]  
(P\_rodasii:0.00477,P\_rwandensis:0.0157):0.01237,(P\_wallisii:0.02841,(P\_sp\_GM01:0.03798,P\_dispersa:0.00423):0.00208):0.00393,(P\_eucrina:0.05584,((P\_cypripedii:0.03013,P\_sp\_At-9b:0.01838):0.04047,(((P\_ananatis:0.00643,(P\_allii:0.01262,(P\_s\_indologenes:0.0081,P\_s\_stewartii:5.5E-4):0.0535):0.01567):0.10675,(P\_conspicua:5.5E-4,(P\_brenneri:0.01222,(P\_deleyi:0.00942,((P\_vagans:0.01613,P\_agglomerans:5.4E-4):0.00394,(P\_sp\_aB:5.4E-4,P\_anthophila:0.02046):0.00415):0.01535):0.0282):0.00781):0.03955):0.05199,((P\_sp\_A4:0.10732,((T\_morbirosei:0.08842,(T\_sp\_NML\_06:0.10485,T\_ptyseos:0.07623):0.03866):0.24646,(E\_billingiae:0.12884,(E\_pyrifoliae:0.06396,E\_tasmaniensis:0.07307):0.13472):0.12084):0.03656):0.05093,P\_septica:0.06472):5.3E-4):0.03347):0.02263):0.01224);

[1355] tree 't1355'=[&R] (P\_sp\_aB:0.01091,P\_agglomerans:0.01447,(P\_vagans:5.5E-4,(P\_anthophila:0.00482,(((P\_s\_indologenes:5.5E-4,P\_s\_stewartii:0.00475):0.02646,(P\_allii:0.00906,P\_ananatis:0.01785):0.01097):0.07164,(((P\_sp\_At-9b:0.00299,P\_cypripedii:0.01611):0.04031,((P\_rodasii:0.01437,P\_rwandensis:0.01369):0.01234,(P\_sp\_GM01:0.02252,(P\_dispersa:0.01997,(P\_wallisii:0.00975,P\_eucrina:0.06671):0.00437):0.03081):5.4E-

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4):0.01662):0.05543,((P_sp_A4:0.09983,((T_morbirosei:0.03986,(T_ptyseos:0.08289,T_sp_NML_06:0.10269):0.09726):0.1662
,P_septica:0.07942):0.02221):0.02481,(E_billingiae:0.10189,(E_pyriifoliae:0.07174,E_tasmaniensis:0.10578):0.17609):0.
12039):0.01329):0.03784):0.0085,P_conspicua:0.0049):0.00489,P_brenneri:5.3E-
4):0.04122,P_deleyi:0.00496):0.00476):0.00991):0.00879);
[1356] tree 't1356'=[&R] (P_rodasii:5.4E-4,((P_rwandensis:0.0,P_sp_GM01:0.0):5.4E-
4,((P_conspicua:0.0,P_agglomerans:0.0,P_sp_A4:0.0):5.5E-
4,((P_sp_aB:0.0,P_allii:0.0,P_ananatis:0.0,P_s_indologenes:0.0,P_s_stewartii:0.0,P_brenneri:0.0,P_vagans:0.0,P_antho
phila:0.0):5.5E-4,P_deleyi:0.00659):0.00659):0.00661):0.00664,((P_sp_At-
9b:0.00664,(P_eucrina:0.00662,(P_cyprapedii:0.0,P_dispersa:0.0,P_septica:0.0,P_wallisii:0.0):5.5E-4):5.5E-
4):0.00661,((T_morbirosei:0.02659,(T_sp_NML_06:0.01375,T_ptyseos:0.01292):0.0278):5.4E-4,(E_billingiae:5.5E-
4,(E_pyriifoliae:0.02007,E_tasmaniensis:0.00659):0.02007):0.01309):0.00668):5.3E-4);
[1357] tree 't1357'=[&R] ((P_rodasii:0.22168,(P_rwandensis:0.10372,P_sp_GM01:0.05114):0.02067):5.4E-
4,(P_eucrina:0.11555,((P_sp_At-
9b:0.02491,P_cyprapedii:0.07909):0.07897,(P_septica:0.16087,((P_ananatis:0.02759,(P_allii:0.0474,(P_s_indologenes:0.
00905,P_s_stewartii:0.00466):0.10218):0.01545):0.09696,((P_anthophila:0.08306,((P_brenneri:0.07517,P_conspicua:0.01
823):0.03597,(P_agglomerans:0.05863,P_sp_aB:0.05498):0.0184):0.02734):0.01481,P_vagans:0.04193):0.03861,P_deleyi:0.0
5009):0.08698):0.03252):0.04398):0.09901,((E_pyriifoliae:0.1029,E_tasmaniensis:0.08389):0.09887,(E_billingiae:0.12117
,(T_sp_NML_06:0.13989,(T_ptyseos:0.32162,T_morbirosei:0.21387):0.12316):0.41441):0.07949):0.07006):0.12919):0.0564):
0.0222,P_wallisii:0.06321,(P_dispersa:0.08194,P_sp_A4:0.12063):0.01695);
END; [Trees]

```

BEGIN Splits;

DIMENSIONS ntax=27 nsplits=119;

FORMAT labels=no weights=yes confidences=yes intervals=no;

PROPERTIES fit=-1.0 non compatible;

CYCLE 1 12 9 16 19 22 6 15 7 24 27 4 26 25 2 13 20 10 11 8 14 17 18 21 5 23 3;

MATRIX

[1, size=2]	102.0	0.07516581	1 2 3 4 5 6 8 9 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27,
[2, size=5]	59.0	0.04347826	1 3 10 12 23,
[3, size=2]	18.0	0.013264555	1 2 3 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 27,
[4, size=1]	1357.0	1.0	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 27,
[5, size=1]	1357.0	1.0	1 2 3 4 5 6 7 8 9 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27,
[6, size=2]	92.0	0.06779661	1 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 27,
[7, size=8]	81.0	0.059690494	1 2 3 4 5 8 11 12 13 14 17 18 20 21 23 24 25 26 27,
[8, size=3]	57.0	0.04200442	1 2 3 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 27,
[9, size=5]	121.0	0.08916728	1 3 4 5 6 7 8 9 10 11 12 14 15 16 17 18 19 21 22 23 24 27,
[10, size=4]	133.0	0.09801032	1 3 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 27,
[11, size=2]	879.0	0.6477524	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 27,
[12, size=4]	12.0	0.008843036	1 3 4 5 6 7 8 9 10 11 12 14 15 16 17 18 19 20 21 22 23 24 27,

[13, size=3]	543.0	0.40014738	1 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 27,
[14, size=5]	82.0	0.060427412	1 3 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 27,
[15, size=2]	3.0	0.002210759	1 2 3 4 5 6 8 9 10 11 12 13 14 15 16 17 18 19 20 21 23 24 25 26 27,
[16, size=2]	1194.0	0.8798821	1 23,
[17, size=3]	233.0	0.17170228	1 12 23,
[18, size=4]	218.0	0.1606485	1 2 3 4 5 8 9 10 11 12 13 14 16 17 18 19 20 21 23 24 25 26 27,
[19, size=1]	1357.0	1.0	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 24 25 26 27,
[20, size=2]	8.0	0.0058953576	1 2 3 4 5 6 7 8 9 10 11 13 14 15 16 17 18 19 20 21 22 24 25 26 27,
[21, size=2]	3.0	0.002210759	1 2 3 4 5 6 8 9 10 11 12 13 14 16 17 18 19 20 21 22 23 24 25 26 27,
[22, size=1]	1357.0	1.0	1 2 3 4 5 6 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27,
[23, size=4]	1142.0	0.8415623	1 3 12 23,
[24, size=3]	158.0	0.11643331	1 3 23,
[25, size=3]	15.0	0.011053795	1 2 4 5 6 7 8 9 10 11 13 14 15 16 17 18 19 20 21 22 24 25 26 27,
[26, size=2]	2.0	0.0014738394	1 2 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 24 25 26 27,
[27, size=5]	14.0	0.010316876	1 3 5 12 23,
[28, size=1]	1357.0	1.0	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 23 24 25 26 27,
[29, size=1]	1357.0	1.0	1 2 3 4 5 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27,
[30, size=2]	165.0	0.12159175	1 2 3 4 5 6 7 8 9 10 11 12 13 14 16 17 18 19 20 21 23 24 25 26 27,
[31, size=2]	329.0	0.24244657	1 2 3 4 5 7 8 9 10 11 12 13 14 16 17 18 19 20 21 22 23 24 25 26 27,
[32, size=2]	1023.0	0.7538688	1 2 3 4 5 6 7 8 9 10 11 12 14 15 16 17 18 19 21 22 23 24 25 26 27,
[33, size=1]	1357.0	1.0	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 21 22 23 24 25 26 27,
[34, size=1]	1357.0	1.0	1 2 3 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27,
[35, size=1]	1357.0	1.0	1,
[36, size=2]	1.0	7.369197E-4	1 12,
[37, size=1]	1357.0	1.0	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 18 19 20 21 22 23 24 25 26 27,
[38, size=2]	327.0	0.24097273	1 2 3 4 5 6 7 8 9 10 11 12 13 15 16 18 19 20 21 22 23 24 25 26 27,
[39, size=1]	1357.0	1.0	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 17 18 19 20 21 22 23 24 25 26 27,
[40, size=2]	831.0	0.61238027	1 2 3 4 5 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 23 24 25 26 27,
[41, size=1]	1357.0	1.0	1 2 3 4 5 6 7 8 9 10 11 12 13 14 16 17 18 19 20 21 22 23 24 25 26 27,
[42, size=1]	1357.0	1.0	1 2 3 4 5 6 7 8 9 10 11 12 13 15 16 17 18 19 20 21 22 23 24 25 26 27,
[43, size=1]	1357.0	1.0	1 2 3 4 5 6 7 8 9 10 11 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27,
[44, size=1]	1357.0	1.0	1 2 3 4 5 6 7 8 9 10 11 12 14 15 16 17 18 19 20 21 22 23 24 25 26 27,
[45, size=3]	1303.0	0.96020633	1 2 3 4 5 7 8 9 10 11 12 13 14 16 17 18 19 20 21 23 24 25 26 27,
[46, size=2]	15.0	0.011053795	1 2 3 4 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 22 23 24 25 26 27,
[47, size=3]	100.0	0.073691964	1 2 3 4 5 6 7 8 9 10 11 12 13 15 16 19 20 21 22 23 24 25 26 27,
[48, size=2]	99.0	0.07295505	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 19 20 21 22 23 24 25 26 27,
[49, size=2]	103.0	0.07590273	1 2 3 4 5 6 7 8 9 10 11 12 13 15 16 17 19 20 21 22 23 24 25 26 27,
[50, size=1]	1357.0	1.0	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 19 20 21 22 23 24 25 26 27,
[51, size=1]	1357.0	1.0	1 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27,

[52, size=2]	5.0	0.0036845985	1 3,
[53, size=3]	6.0	0.004421518	1 3 12,
[54, size=5]	56.0	0.041267503	1 2 3 4 5 7 8 9 10 11 12 13 14 17 18 20 21 23 24 25 26 27,
[55, size=2]	1272.0	0.93736184	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 17 18 20 21 22 23 24 25 26 27,
[56, size=1]	1357.0	1.0	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 20 21 22 23 24 25 26 27,
[57, size=1]	1357.0	1.0	1 2 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27,
[58, size=2]	831.0	0.61238027	1 2 4 5 6 7 8 9 10 11 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27,
[59, size=4]	5.0	0.0036845985	1 2 3 4 5 7 8 9 10 11 12 13 14 16 17 18 20 21 23 24 25 26 27,
[60, size=2]	79.0	0.058216654	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 18 19 20 22 23 24 25 26 27,
[61, size=1]	1357.0	1.0	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 22 23 24 25 26 27,
[62, size=1]	1357.0	1.0	1 2 3 4 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27,
[63, size=3]	65.0	0.04789978	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 19 20 22 23 24 25 26 27,
[64, size=4]	97.0	0.071481206	1 2 3 4 5 6 7 8 9 10 11 12 13 15 16 19 20 22 23 24 25 26 27,
[65, size=2]	274.0	0.201916	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 19 20 22 23 24 25 26 27,
[66, size=10]	12.0	0.008843036	1 3 5 8 12 14 17 18 21 23,
[67, size=2]	238.0	0.17538688	1 2 3 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 25 26 27,
[68, size=3]	443.0	0.3264554	1 2 3 4 5 6 7 9 10 11 12 13 15 16 18 19 20 21 22 23 24 25 26 27,
[69, size=2]	172.0	0.12675019	1 2 3 4 5 6 7 9 10 11 12 13 14 15 16 18 19 20 21 22 23 24 25 26 27,
[70, size=1]	1357.0	1.0	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 25 26 27,
[71, size=2]	299.0	0.22033899	1 2 3 4 5 6 7 9 10 11 12 13 15 16 17 18 19 20 21 22 23 24 25 26 27,
[72, size=1]	1357.0	1.0	1 2 3 4 5 6 7 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27,
[73, size=4]	332.0	0.24465734	1 2 3 4 5 6 7 9 10 11 12 13 15 16 19 20 21 22 23 24 25 26 27,
[74, size=6]	129.0	0.095062636	1 2 3 4 6 7 9 10 11 12 13 15 16 19 20 22 23 24 25 26 27,
[75, size=3]	70.0	0.051584378	1 2 3 4 5 6 7 9 10 11 12 13 15 16 17 19 20 21 22 23 24 25 26 27,
[76, size=4]	190.0	0.14001474	1 2 3 4 5 6 7 9 10 11 12 13 15 16 18 19 20 22 23 24 25 26 27,
[77, size=2]	68.0	0.050110538	1 2 3 4 5 6 7 9 10 11 12 13 14 15 16 17 18 19 20 22 23 24 25 26 27,
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1893 805 808 s=100 w=57.0,  
1894 806 48 s=1 w=102.0,  
1895 806 819 s=119 w=136.0,  
1896 806 809 s=100 w=57.0,  
1897 806 217 s=91 w=398.0,  
1898 807 819 s=7 w=81.0,  
1899 807 758 s=91 w=398.0,  
1900 807 810 s=100 w=57.0,  
1901 807 822 s=118 w=86.0,  
1902 808 809 s=7 w=81.0,  
1903 808 810 s=119 w=136.0,  
1904 808 811 s=99 w=165.0,  
1905 809 47 s=1 w=102.0,  
1906 809 816 s=119 w=136.0,  
1907 809 812 s=99 w=165.0,  
1908 810 816 s=7 w=81.0,  
1909 810 823 s=118 w=86.0,  
1910 810 813 s=99 w=165.0,  
1911 811 812 s=7 w=81.0,  
1912 811 813 s=119 w=136.0,  
1913 812 46 s=1 w=102.0,  
1914 812 814 s=119 w=136.0,  
1915 813 814 s=7 w=81.0,

1916 814 45 s=1 w=102.0,  
1917 814 815 s=79 w=325.0,  
1918 814 816 s=99 w=165.0,  
1919 815 60 s=1 w=102.0,  
1920 815 817 s=99 w=165.0,  
1921 815 831 s=18 w=218.0,  
1922 816 42 s=1 w=102.0,  
1923 816 817 s=79 w=325.0,  
1924 816 818 s=118 w=86.0,  
1925 816 819 s=100 w=57.0,  
1926 817 59 s=1 w=102.0,  
1927 817 824 s=118 w=86.0,  
1928 817 828 s=18 w=218.0,  
1929 818 820 s=100 w=57.0,  
1930 818 824 s=79 w=325.0,  
1931 818 823 s=7 w=81.0,  
1932 819 43 s=1 w=102.0,  
1933 819 820 s=118 w=86.0,  
1934 819 216 s=91 w=398.0,  
1935 820 39 s=91 w=398.0,  
1936 820 821 s=79 w=325.0,  
1937 820 822 s=7 w=81.0,  
1938 821 824 s=100 w=57.0,  
1939 822 760 s=91 w=398.0,  
1940 822 823 s=100 w=57.0,  
1941 824 825 s=18 w=218.0,  
1942 825 826 s=15 w=3.0,  
1943 825 827 s=21 w=3.0,  
1944 825 828 s=118 w=86.0,  
1945 826 835 s=21 w=3.0,  
1946 826 829 s=118 w=86.0,  
1947 827 835 s=15 w=3.0,  
1948 827 830 s=118 w=86.0,  
1949 828 829 s=15 w=3.0,  
1950 828 830 s=21 w=3.0,  
1951 828 252 s=1 w=102.0,  
1952 828 831 s=99 w=165.0,  
1953 829 103 s=1 w=102.0,  
1954 829 834 s=21 w=3.0,

```
1955 829 832 s=99 w=165.0,  
1956 830 834 s=15 w=3.0,  
1957 830 246 s=1 w=102.0,  
1958 830 833 s=99 w=165.0,  
1959 831 832 s=15 w=3.0,  
1960 831 833 s=21 w=3.0,  
1961 831 251 s=1 w=102.0,  
1962 832 104 s=1 w=102.0,  
1963 832 836 s=21 w=3.0,  
1964 833 836 s=15 w=3.0,  
1965 833 249 s=1 w=102.0,  
1966 834 153 s=1 w=102.0,  
1967 834 835 s=118 w=86.0,  
1968 834 836 s=99 w=165.0,  
1969 836 154 s=1 w=102.0,  
;  
END; [Network]
```

```
BEGIN st_Assumptions;  
uptodate;  
treestransform=ConsensusNetwork EdgeWeights = count Threshold = 0.0;  
splitstransform=EqualAngle;  
SplitsPostProcess filter=dimension value=4;  
  exclude no missing;  
autolayoutnodelabels;  
END; [st_Assumptions]
```