

## Supplementary tables

**Tab. S1** A summary of the species and family names of all plants on which no PSHB infestations or *Fusarium* infections were recorded

Family	Species	No. trees
Acanthaceae	<i>Avicennia marina</i>	7
Achariaceae	<i>Kiggelaria africana</i>	6
Anacardiaceae	<i>Harpephyllum caffrum</i>	3
	<i>Schinus terebinthifolia</i>	1
	<i>Searsia pallens</i>	1
Annonaceae	<i>Monanthes affra</i>	1
Apocynaceae	<i>Acokanthera oppositifolia</i>	1
	<i>Carissa bispinosa</i>	8
	<i>Carissa</i> sp.	1
	<i>Gonioma kamassi</i>	19
	<i>Rauvolfia affra</i>	3
	<i>Tabernaemontana ventricosa</i>	16
Aquifoliaceae	<i>Ilex mitis</i>	15
Araliaceae	<i>Cussonia sp. haerocephala</i>	2
Achariaceae		
Asteraceae	<i>Brachylaena discolor</i>	1
	<i>Euryops virgineus</i>	2
	<i>Osteospermum moniliferum</i>	4
Cannabaceae	<i>Celtis africana</i>	14
	<i>Trema orientalis</i>	8
Capparaceae	<i>Maerua racemulosa</i>	3
Celastraceae	<i>Cassine peragua</i>	6
	<i>Cassine schinoides</i>	1
	<i>Elaeodendron croceum</i>	23
	<i>Gymnosporia nemorosa</i>	3
	<i>Maytenus acuminata</i>	1
	<i>Maytenus peduncularis</i>	2
	<i>Maytenus undata</i>	1
	<i>Pterocelastrus tricuspidatus</i>	33
	<i>Robsonodendron eucleiforme</i>	6
	<i>Scalopia mundii</i>	2
Crassulaceae	<i>Crassula ovata</i>	5
Cunoniaceae	<i>Cunonia capensis</i>	6
	<i>Platylophus trifolius</i>	12
Curtisiaceae	<i>Curtisia dentata</i>	13

Ebenaceae	<i>Diospyros natalensis</i>	3
Erythroxylaceae	<i>Erythroxylum</i> sp.	1
Euphorbiaceae	<i>Cavacoa aurea</i>	4
	<i>Sclerocroton integerrimum</i>	14
Fabaceae	<i>Acacia mearnsii</i>	3
	<i>Acacia melanoxylon</i>	2
	<i>Dalbergia armata</i>	1
Hamamelidaceae	<i>Trichocladus crinitus</i>	104
Icacinaceae	<i>Cassinopsis ilicifolia</i>	1
Lamiaceae	<i>Clerodendrum glabrum</i>	3
Lauraceae	<i>Cryptocarya woodii</i>	1
	<i>Litsea glutinosa</i>	7
	<i>Litsea sebifera</i>	2
	<i>Ocotea bullata</i>	53
Loganiaceae	<i>Strychnos gerrardii</i>	2
	<i>Strychnos</i> sp.	1
	<i>Strychnos usambarensis</i>	1
Malvaceae	<i>Hibiscus tiliaceus</i>	1
Meliaceae	<i>Melia azedarach</i>	1
Moraceae	<i>Ficus burtt-davyi</i>	3
	<i>Ficus natalensis</i>	1
	<i>Ficus</i> sp.	6
	<i>Ficus sur</i>	6
Myrtaceae	<i>Eugenia uniflora</i>	1
	<i>Psidium cattleianum</i>	1
	<i>Syzygium cordatum</i>	1
	<i>Syzygium cumini</i>	1
	<i>Syzygium cordatum</i>	16
Ochnaceae	<i>Ochna arborea</i>	8
Oleaceae	<i>Chionanthus foveolatus</i>	2
	<i>Olea capensis</i>	49
	<i>Olea woodiana</i>	5
Peraceae	<i>Clutia pulchella</i>	101
Pinaceae	<i>Pinus pinaster</i>	1
Pittosporaceae	<i>Pittosporum viridiflorum</i>	5
Podocarpaceae	<i>Podocarpus latifolius</i>	78
Polygalaceae	<i>Polygala myrtifolia</i>	14
Putranjivaceae	<i>Drypetes arguta</i>	5
	<i>Drypetes natalensis</i>	12
Rhamnaceae	<i>Rhamnus prinoides</i>	10

	<i>Ziziphus mucronata</i>	1
Rhizophoraceae	<i>Bruguiera gymnorrhiza</i>	42
	<i>Cassipourea malosana</i>	1
Rubiaceae	<i>Afrocanthium mundianum</i>	57
	<i>Afrocarpus falcatus</i>	1
	<i>Canthium</i> sp.	2
	<i>Canthium spinosum</i>	3
	<i>Gardenia thunbergia</i>	1
	<i>Lagynias lasiantha</i>	2
	<i>Pachystigma bowkeri</i>	9
	<i>Pavetta lanceolata</i>	1
	<i>Psydrax obovata</i>	1
	<i>Rothmania globosa</i>	4
	<i>Rothmannia capensis</i>	11
	<i>Rothmannia globosa</i>	6
	<i>Tarenna pavetoides</i>	41
	<i>Vangueria esculenta</i>	1
Rutaceae	<i>Zanthoxylum davyi</i>	2
Salicaceae	<i>Dovyalis rhamnoides</i>	1
	<i>Trimeria grandifolia</i>	4
Sapindaceae	<i>Allophylus decipiens</i>	1
	<i>Allophylus</i> sp.	1
Sapotaceae	<i>Englerophytum natalense</i>	21
	<i>Mimusops obovata</i>	2
	<i>Sideroxylon inerme</i>	14
Scrophulariaceae	<i>Buddleja saligna</i>	31
Strelitziaceae	<i>Strelitzia nicolai</i>	1
Unknown	<i>Unknown</i>	5
Vitaceae	<i>Rhoicussus tomentosa</i>	5

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**Tab. S2** Models used in the analyses, the predictor variables included in each model and Variance Inflation Factor (VIF) and Coefficient of Variation (CV) for each predictor variable.

Model number	Predictors included	VIF	CV
Model 1 – Host species selection	Tree relative abundance (tree_rel_abun)	NA	1.17
Model 2 – Host utilisation	Tree relative abundance (tree_rel_abun)	NA	1.17
Model 3 – Host family selection	Tree relative abundance (fam_rel_abun)	NA	1.09
Model 4 – individual tree level analysis	Diameter at breast height (dbh)	1.03	1.27
	Canopy health (canhealth)	1.03	0.18
	Distance to water source (dh2o)	1.10	2.73
	Year of sampling (year)	1.10	0.47
Model 5 – plot-level analysis	Distance to source population (dsp)	1.02	1.64
	Number of host trees (no_hosts)	1.12	0.80
	Tree density (dens)	1.11	0.37
	Tree species richness (spprich)	1.13	0.45