

Land use change rather than surrounding vegetation affects fungal endophyte assemblages in the African wild olive

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Supplementary materials

OTU36	Fungi	Basidiomycota	Tremellomycetes	unidentified	unidentified	unidentified	unidentified
OTU37	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit
OTU38	Fungi	Ascomycota	Eurotiomycetes	Chaetothyriales	Herpotrichiellaceae	unidentified	unidentified
OTU39	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit
OTU40	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit
OTU41	Fungi	Basidiomycota	Tremellomycetes	Tremellales	unidentified	unidentified	unidentified
OTU42	Fungi	Ascomycota	Dothideomycetes	Capnodiales	Neodevriesiaceae	<i>Neodevriesia</i>	<i>lagerstroemiae</i>
OTU43	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit
OTU44	Fungi	Ascomycota	Sordariomycetes	Xylariales	Sporocadaceae	unidentified	unidentified
OTU46	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit
OTU47	Fungi	Ascomycota	Dothideomycetes	Dothideales	Dothioraceae	<i>Perusta</i>	<i>inaequalis</i>
OTU48	Fungi	Ascomycota	Dothideomycetes	Venturiales	Sympoventuriaceae	unidentified	unidentified
OTU50	Fungi	Ascomycota	Dothideomycetes	Capnodiales	unidentified	unidentified	unidentified
OTU51	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit
OTU53	Fungi	unidentified	unidentified	unidentified	unidentified	unidentified	unidentified
OTU54	Fungi	Ascomycota	Dothideomycetes	Capnodiales	Teratosphaeriaceae	<i>Parateratosphaeria</i>	<i>altensteinii</i>
OTU55	Fungi	Ascomycota	unidentified	unidentified	unidentified	unidentified	unidentified
OTU56	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit
OTU57	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit
OTU59	Fungi	Basidiomycota	Agaricomycetes	Auriculariales	unidentified	unidentified	unidentified
OTU60	Fungi	Ascomycota	unidentified	unidentified	unidentified	unidentified	unidentified
OTU61	Fungi	Ascomycota	Dothideomycetes	Dothideales	Dothioraceae	unidentified	unidentified
OTU62	Fungi	Ascomycota	Sordariomycetes	unidentified	unidentified	unidentified	unidentified
OTU63	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit
OTU64	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit
OTU65	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit
OTU66	Fungi	Ascomycota	Dothideomycetes	Pleosporales	Amorosiaceae	<i>Angustimassarina</i>	<i>acerina</i>
OTU67	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit
OTU68	Fungi	Ascomycota	Dothideomycetes	Pleosporales	Didymellaceae	unidentified	unidentified
OTU71	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit
OTU73	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Cyphellaceae	<i>Rectipilus</i>	<i>natalensis</i>
OTU74	Fungi	unidentified	unidentified	unidentified	unidentified	unidentified	unidentified

OTU77	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit
OTU78	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit
OTU79	Fungi	Ascomycota	Lecanoromycetes	Caliciales	Caliciaceae	<i>Amandinea</i>	<i>decedens</i>
OTU81	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit
OTU82	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit
OTU83	Fungi	Ascomycota	Leotiomyces	Helotiales	Vibrissaceae	unidentified	unidentified
OTU84	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit
OTU85	Fungi	Ascomycota	unidentified	unidentified	unidentified	unidentified	unidentified
OTU86	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Physalacriaceae	unidentified	unidentified
OTU87	Fungi	unidentified	unidentified	unidentified	unidentified	unidentified	unidentified
OTU88	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit
OTU89	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit
OTU91	Fungi	unidentified	unidentified	unidentified	unidentified	unidentified	unidentified
OTU92	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit
OTU93	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit
OTU95	Fungi	Ascomycota	Dothideomycetes	Pleosporales	Lophiostomataceae	<i>Lophiostoma</i>	<i>cynaroidis</i>
OTU98	Fungi	Ascomycota	Dothideomycetes	Capnodiales	Teratosphaeriaceae	<i>Neocatenulostroma</i>	<i>microsporium</i>
OTU100	Fungi	Ascomycota	Dothideomycetes	Capnodiales	Cladosporiaceae	<i>Cladosporium</i>	<i>delicatum</i>
OTU103	Fungi	Ascomycota	Eurotiomycetes	Eurotiales	Aspergillaceae	<i>Aspergillus</i>	<i>carbonarius</i>
OTU104	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit
OTU108	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit
OTU110	Fungi	Ascomycota	unidentified	unidentified	unidentified	unidentified	unidentified
OTU112	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit
OTU113	Fungi	Ascomycota	Dothideomycetes	Capnodiales	Neodevriesiaceae	<i>Neodevriesia</i>	<i>simplex</i>
OTU114	Fungi	Ascomycota	Dothideomycetes	Capnodiales	Cladosporiaceae	unidentified	unidentified
OTU116	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit
OTU117	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit
OTU118	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit
OTU119	Fungi	Ascomycota	Dothideomycetes	Pleosporales	Sporormiaceae	unidentified	unidentified
OTU121	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit
OTU122	Fungi	Ascomycota	Dothideomycetes	Myriangiales	Incertae_sedis	unidentified	unidentified
OTU123	Fungi	Ascomycota	Dothideomycetes	Pleosporales	Pleosporaceae	<i>Ulocladium</i>	<i>chartarum</i>

OTU234	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit
OTU236	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit
OTU237	Fungi	Ascomycota	Saccharomycetes	Saccharomycetales	Incertae_sedis	<i>Candida</i>	<i>parapsilosis</i>
OTU238	Fungi	Ascomycota	Eurotiomycetes	Chaetothyriales	Trichomeriaceae	unidentified	unidentified
OTU241	Fungi	Ascomycota	Dothideomycetes	unidentified	unidentified	unidentified	unidentified
OTU243	Fungi	Ascomycota	Dothideomycetes	Pleosporales	Pleosporaceae	<i>Alternaria</i>	<i>eureka</i>
OTU245	Fungi	Ascomycota	Dothideomycetes	Capnodiales	Neodevriesiaceae	<i>Neodevriesia</i>	<i>capensis</i>
OTU246	Fungi	Ascomycota	Dothideomycetes	Pleosporales	unidentified	unidentified	unidentified
OTU247	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit
OTU248	Fungi	Ascomycota	Dothideomycetes	Capnodiales	Teratosphaeriaceae	<i>Phaeothecoidea</i>	<i>intermedia</i>
OTU252	Fungi	Basidiomycota	Tremellomycetes	Tremellales	unidentified	unidentified	unidentified
OTU253	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit
OTU254	Fungi	Ascomycota	Dothideomycetes	Capnodiales	unidentified	unidentified	unidentified
OTU255	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit
OTU257	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit
OTU259	Fungi	Ascomycota	Eurotiomycetes	unidentified	unidentified	unidentified	unidentified
OTU262	Fungi	Basidiomycota	Tremellomycetes	Tremellales	Bulleribasidiaceae	<i>Dioszegia</i>	<i>hungarica</i>
OTU263	Fungi	Basidiomycota	Microbotryomycetes	Sporidiobolales	Sporidiobolaceae	<i>Sporobolomyces</i>	<i>symmetricus</i>
OTU266	Fungi	Ascomycota	Sordariomycetes	Hypocreales	Nectriaceae	<i>Fusicolla</i>	<i>violacea</i>
OTU274	Fungi	Basidiomycota	Agaricomycetes	Polyporales	Fomitopsidaceae	unidentified	unidentified
OTU275	Fungi	Ascomycota	unidentified	unidentified	unidentified	unidentified	unidentified
OTU276	Fungi	Ascomycota	Dothideomycetes	Pleosporales	Didymosphaeriaceae	<i>Pseudopithomyces</i>	<i>chartarum</i>
OTU278	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit
OTU281	Fungi	unidentified	unidentified	unidentified	unidentified	unidentified	unidentified
OTU285	Fungi	Ascomycota	Dothideomycetes	Capnodiales	Incertae_sedis	<i>Hispidiconidioma</i>	<i>alpinum</i>
OTU287	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit
OTU292	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit
OTU294	Fungi	Ascomycota	unidentified	unidentified	unidentified	unidentified	unidentified
OTU295	Fungi	Ascomycota	Dothideomycetes	Myriangiales	unidentified	unidentified	unidentified
OTU297	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit
OTU298	Fungi	Ascomycota	unidentified	unidentified	unidentified	unidentified	unidentified
OTU302	Fungi	Ascomycota	Dothideomycetes	Pleosporales	Incertae_sedis	<i>Libertasomyces</i>	<i>myopori</i>

OTU377	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit
OTU379	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit
OTU383	Fungi	Ascomycota	Dothideomycetes	Pleosporales	Coniothyriaceae	<i>Hazslinszkyomyces</i>	<i>aloes</i>
OTU384	Fungi	Ascomycota	Dothideomycetes	Capnodiales	Teratosphaeriaceae	unidentified	unidentified
OTU385	Fungi	Basidiomycota	Agaricomycetes	unidentified	unidentified	unidentified	unidentified
OTU386	Fungi	Ascomycota	Dothideomycetes	Capnodiales	Cladosporiaceae	<i>Rachicladosporium</i>	<i>cboliae</i>
OTU388	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit
OTU391	Fungi	Ascomycota	Dothideomycetes	Pleosporales	unidentified	unidentified	unidentified
OTU392	Fungi	Ascomycota	Sordariomycetes	Hypocreales	Nectriaceae	unidentified	unidentified
OTU393	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit
OTU394	Fungi	Ascomycota	Sordariomycetes	Xylariales	Sporocadaceae	<i>Pestalotiopsis</i>	<i>rhododendri</i>
OTU396	Fungi	Ascomycota	Dothideomycetes	Pleosporales	Sporormiaceae	<i>Preussia</i>	<i>africana</i>
OTU397	Fungi	Basidiomycota	Tremellomycetes	Tremellales	Bulleraceae	<i>Bullera</i>	<i>crocea</i>
OTU401	Fungi	Ascomycota	Eurotiomycetes	Chaetothyriales	Herpotrichiellaceae	unidentified	unidentified
OTU402	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit
OTU405	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit
OTU411	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit
OTU412	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit
OTU413	Fungi	Ascomycota	Dothideomycetes	Pleosporales	Didymellaceae	<i>Didymella</i>	<i>calidophila</i>
OTU414	Fungi	Ascomycota	Dothideomycetes	Capnodiales	Teratosphaeriaceae	unidentified	unidentified
OTU419	Fungi	Ascomycota	Eurotiomycetes	Chaetothyriales	unidentified	unidentified	unidentified
OTU421	Fungi	Ascomycota	Lecanoromycetes	Ostropales	unidentified	unidentified	unidentified
OTU424	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit
OTU426	Fungi	Basidiomycota	Agaricomycetes	Tremellodendropsidales	unidentified	unidentified	unidentified
OTU432	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit
OTU433	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit
OTU434	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit
OTU435	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit
OTU437	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit
OTU440	Fungi	Ascomycota	Dothideomycetes	unidentified	unidentified	unidentified	unidentified
OTU442	Fungi	Basidiomycota	Microbotryomycetes	Leucosporidiales	Leucosporidiaceae	<i>Leucosporidium</i>	<i>fragarium</i>
OTU446	Fungi	Basidiomycota	Tremellomycetes	Tremellales	Bulleribasidiaceae	<i>Dioszegia</i>	<i>hungarica</i>

OTU532	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit
OTU541	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit
OTU543	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit
OTU548	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit
OTU549	Fungi	unidentified	unidentified	unidentified	unidentified	unidentified	unidentified
OTU552	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit
OTU553	Fungi	Ascomycota	Dothideomycetes	Capnodiales	Teratosphaeriaceae	<i>Parateratosphaeria</i>	<i>persoonii</i>
OTU555	Fungi	unidentified	unidentified	unidentified	unidentified	unidentified	unidentified
OTU556	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit
OTU557	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit
OTU559	Fungi	Ascomycota	Dothideomycetes	unidentified	unidentified	unidentified	unidentified
OTU561	Fungi	Ascomycota	Dothideomycetes	Capnodiales	Teratosphaeriaceae	<i>Xenophacidiella</i>	<i>pseudocatenata</i>
OTU565	Fungi	Ascomycota	Eurotiomycetes	Chaetothyriales	Herpotrichiellaceae	<i>Alysiella</i>	<i>parasitica</i>
OTU566	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit
OTU569	Fungi	Ascomycota	Saccharomycetes	Saccharomycetales	Debaryomycetaceae	<i>Debaryomyces</i>	<i>prosopidis</i>
OTU570	Fungi	Basidiomycota	Cystobasidiomycetes	Erythrobasidiales	Erythrobasidiaceae	<i>Erythrobasidium</i>	<i>elongatum</i>
OTU573	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit	No blast hit
OTU574	Fungi	Ascomycota	Orbiliomycetes	Orbiliales	Orbiliaceae	<i>Orbilium</i>	unidentified
OTU576	Fungi	unidentified	unidentified	unidentified	unidentified	unidentified	unidentified
OTU577	Fungi	Ascomycota	Dothideomycetes	Pleosporales	Lophiostomataceae	<i>Lophiostoma</i>	<i>macrostromoides</i>
OTU578	Fungi	Ascomycota	Dothideomycetes	unidentified	unidentified	unidentified	unidentified
OTU580	Fungi	Ascomycota	Leotiomycetes	Helotiales	Vibrisseaceae	unidentified	unidentified
OTU581	Fungi	Ascomycota	Dothideomycetes	Capnodiales	Cladosporiaceae	<i>Cladosporium</i>	<i>ramotenellum</i>
OTU583	Fungi	Basidiomycota	Agaricomycetes	Polyporales	Coriolaceae	unidentified	unidentified
OTU585	Fungi	Ascomycota	Dothideomycetes	Pleosporales	unidentified	unidentified	unidentified
OTU586	Fungi	unidentified	unidentified	unidentified	unidentified	unidentified	unidentified

Table S2 List of Core OTUs. Core OTUs were identified as the OTUs that appeared in at least 50% of all samples. OTUs taxonomic assignments was done using the UNITE database. When OTUs could not be assigned at all (No BLAST Hits) the sequences were queried using BLAST on the NCBI website based on 97% similarity. IDs based on BLAST are shown below the UNITE assignments. Sequences without similarity matches at the 97% cut-off, the next closest matches are presented.

UNITE							
Label	Kingdom	Phylum	Class	Order	Family	Genus	Species
OTU1	Fungi	Ascomycota	Dothideomycetes	Capnodiales	Teratosphaeriaceae	<i>Teratosphaericola</i>	unidentified
OTU4	Fungi	Basidiomycota	Agaricomycetes	Corticiales	Corticaceae	<i>Marchandiomyces</i>	<i>quercinus</i>
OTU10	No BLAST hit	No BLAST hit	No BLAST hit	No BLAST hit	No BLAST hit	No BLAST hit	No BLAST hit
OTU13	No BLAST hit	No BLAST hit	No BLAST hit	No BLAST hit	No BLAST hit	No BLAST hit	No BLAST hit
OTU16	No BLAST hit	No BLAST hit	No BLAST hit	No BLAST hit	No BLAST hit	No BLAST hit	No BLAST hit
OTU33	Fungi	Basidiomycota	Malasseziomycetes	Malasseziales	Malasseziaceae	<i>Malassezia</i>	<i>restricta</i>
OTU37	No BLAST hit	No BLAST hit	No BLAST hit	No BLAST hit	No BLAST hit	No BLAST hit	No BLAST hit
OTU62	Fungi	Ascomycota	Sordariomycetes	unidentified	unidentified	unidentified	unidentified
OTU65	No BLAST hit	No BLAST hit	No BLAST hit	No BLAST hit	No BLAST hit	No BLAST hit	No BLAST hit
OTU68	Fungi	Ascomycota	Dothideomycetes	Pleosporales	Didymellaceae	<i>Phoma</i>	unidentified
OTU71	No BLAST hit	No BLAST hit	No BLAST hit	No BLAST hit	No BLAST hit	No BLAST hit	No BLAST hit
OTU100	Fungi	Ascomycota	Dothideomycetes	Capnodiales	Cladosporiaceae	<i>Cladosporium</i>	<i>delicatulum</i>
OTU123	Fungi	Ascomycota	Dothideomycetes	Pleosporales	Pleosporaceae	<i>Ulocladium</i>	<i>chartarum</i>
BLAST							
Label	Description	Max score	Total score	Query coverage	E-value	Percentage identity	Accession
OTU10	Fungal sp. clone ITS1_OTU_2624	150	150	100%	2,00E-32	83,15	MF966116.1
OTU13	Uncultured fungus clone OTU_F577	289	289	100%	3,00E-74	96,55	MF976037.1
OTU16	Uncultured fungus clone C1_BC9	316	316	100%	1,00E-82	99,43	JX043121.1
OTU37	Uncultured fungus clone OTU_2719	305	305	100%	1,00E-79	98,28	KF221893.1
OTU62	Uncultured fungus clone 80-2932	191	191	100%	9,00E-45	86,03	FJ762852.1
OTU65	Uncultured fungus clone OTU_334	316	316	100%	1,00E-82	99,43	MK717605.1
OTU71	Uncultured fungus clone OTU_F635	270	270	100%	1,00E-68	94,83	MF976543.1

Table S3 Non-parametric diversity estimators (Chao2 and Jackknife2) of fungal endophyte diversity (full fungal richness (left) and core fungal richness (right)) within olive twigs from different LUC habitats (natural, semi-natural and planted) and differences in surrounding vegetation types (high= grassy/shrubby, medium = heterospecific and low = conspecific surrounding vegetation types)

LUC	Surrounding vegetation	Richness			Core Richness		
		Chao2	Chao (+SD)	Jackknife2	Chao2	Chao (+SD)	Jackknife2
Natural	(Regardless of surrounding vegetation)	289.167	29.843	322.450	13.500	1.323	13.989
Planted		356.558	50.994	336.582	13.083	2.506	13.500
Semi-natural		338.558	43.984	332.224	26.000	16.492	15.850
(Regardless of LUC level)	High	280.780	27.757	313.900	16.250	7.552	15.583
	Medium	376.821	41.805	390.479	20.000	7.483	16.000
	Low	268.329	25.505	304.610	13.250	0.729	14.083
Natural	High	215.265	44.529	183.024	29.000	23.622	18.950
Natural	Medium	331.125	160.706	193.476	22.500	17.139	15.917
Natural	Low	208.323	27.598	228.048	61.000	59.582	18.467
Planted	High	201.042	51.042	166.690	15.000	6.481	12.167
Planted	Medium	237.500	35.969	227.976	13.167	0.536	13.250
Planted	Low	175.500	31.357	168.262	14.250	3.396	15.083
Semi-natural	High	183.364	30.442	179.595	26.000	16.492	16.333
Semi-natural	Medium	356.346	91.079	270.400	17.900	6.840	19.167
Semi-natural	Low	209.524	33.836	200.071	26.000	16.492	18.167

Table S4 Linear models *post hoc* results of the significant main effect predictors (land use change; LUC and differences in surrounding vegetation types; SVT) only for the richness response variable and their interaction (used to denote significance in Fig. 2). Naming system for interactions *post hoc* are arranged as LUC first followed by differences in surrounding vegetation. Comparisons significant at $p < 0.05$ (*). Different surroundings are denoted as follows: Low = conspecific trees; medium = heterospecific trees; high = no trees, only grassy and shrubby vegetation.

LUC						Interaction					
		Estimate	SE	z-value	p(> z)			Estimate	SE	z-value	p(> z)
Planted	Natural	0.210	0.120	1.758	0.184	Natural Low	Natural High	0.546	0.109	4.992	<0.001*
Seminatural	Natural	0.261	0.116	2.245	0.064	Natural Medium	Natural High	-0.055	0.125	-0.441	1.000
Seminatural	Planted	0.051	0.112	0.456	0.892	Natural Medium	Natural Low	-0.601	0.111	-5.402	<0.001*
SVT						Planted High	Natural High	0.210	0.120	1.758	0.707
Low	High	0.546	0.109	4.992	<0.05*	Planted Low	Natural Low	-0.398	0.107	-3.719	0.006*
Medium	High	-0.055	0.125	-0.441	0.898	Planted Low	Planted High	-0.063	0.115	-0.544	1.000
Medium	Low	-0.601	0.111	-5.402	< 0.05*	Planted Medium	Natural Medium	0.649	0.113	5.739	<0.001*
LUC (Core)						Planted Medium	Planted High	0.384	0.104	3.672	0.007*
Planted	Natural	0.511	0.231	2.212	0.069	Planted Medium	Planted Low	0.446	0.106	4.204	<0.001*
Seminatural	Natural	0.449	0.234	1.921	0.132	Seminatural High	Natural High	0.261	0.116	2.246	0.373
Seminatural	Planted	-0.062	0.203	-0.305	0.950	Seminatural High	Planted High	0.051	0.112	0.456	1.000
						Seminatural Low	Natural Low	-0.120	0.098	-1.233	0.949
						Seminatural Low	Planted Low	0.278	0.108	2.585	0.191
						Seminatural Low	Seminatural High	0.164	0.104	1.573	0.818
						Seminatural Medium	Natural Medium	0.542	0.112	4.823	<0.001*
						Seminatural Medium	Planted Medium	-0.107	0.097	-1.098	0.974
						Seminatural Medium	Seminatural High	0.226	0.104	2.172	0.421
						Seminatural Medium	Seminatural Low	0.062	0.099	0.623	0.999

Table S5 Beta diversity *post hoc* comparisons of the significant Main test effect; land use change (PERMANOVA and PERMDISP, Table 3). Tests are significant at $p < 0.05$ (*). Sizes of sample distribution around the centroids are also presented.

PERMANOVA (β_1)					
		Jaccard		Jaccard (Core)	
Groups		t	p	t	p
Planted	Natural	1.217	0.017*	1.779	0.004*
Planted	Seminatural	1.090	0.170	1.203	0.194
Natural	Seminatural	1.115	0.103	1.534	0.017*
		Bray-Curtis		Bray-Curtis (Core)	
Groups		t	p	t	p
Planted	Natural	1.310	0.007*	1.600	0.008*
Planted	Seminatural	1.084	0.222	1.017	0.403
Natural	Seminatural	1.086	0.213	1.438	0.033*
PERMDISP (β_2)- (Jaccard-based)					
		t	p(perm)		
Planted	Natural	2.518	0.021*		
Planted	Seminatural	0.410	0.690		
Natural	Seminatural	2.260	0.025*		
Group	Size	Average	SE		
Planted	21	58.630	1.067		
Natural	21	61.832	0.691		
Seminatural	21	59.211	0.931		

Table S6 Statistics describing network topologies of the fungal endophyte from olive trees planted in urban/agricultural habitats, olive naturally growing in transformed habitat and olives growing in natural/undisturbed habitats.

	Natural	Seminatural	Planted
Edges (e)	119	22	9
Nodes (v)	36	25	16
Average node degree (ad)	6,611	1,760	1,125
Modularity (md)	0,212	0,073	0,815
clustering co-efficient (cn)	0,717	0,522	0,000
Shortest path length (spl)	1,818	2,470	0,986
Graph density (gd)	0,189	0,073	0,075
network diameter	9	8	3