Apigo and Oono (2018) Dimensions of Host Specificity in Foliar Fungal Endophytes

Appendix E1. P-values for Figure 2 with presence-absence data using a two-sample Wilcoxon Rank Sum test.

Structural Specificity: Host Richness

Percent Removed	Phylum	N (OTUs)	Mean	Standard Error	W statistic	p-value
0	Ascomycota	1087	-4.129	0.202	147200	0.004
U	Basidiomycota	301	-2.618	0.182	14/200	
1	Ascomycota	458	-7.611	0.424	24332	0.001
1	Basidiomycota	132	-4.220	0.363	24332	
5	Ascomycota	208	-11.279	0.750	4204.5	0.022
3	Basidiomycota	51	-6.588	0.755		
10	Ascomycota	135	-12.711	0.975	1210.5	0.282
10	Basidiomycota	21	-8.810	1.519		
1.5	Ascomycota	97	-14.629	1.188	398	0.351
15	Basidiomycota	10	-10.200	2.533		
20	Ascomycota	71	-16.155	1.401	100.5	0.201
20	Basidiomycota	7	-10.857	2.668	198.5	0.381

Network Specificity: Resource Range Index

Percent Removed	Phylum	N (OTUs)	Mean	Standard Error	W statistic	p-value
0	Ascomycota	1087	0.913	0.006	147200	0.004
U	Basidiomycota	301	0.955	0.088	14/200	
1	Ascomycota	458	0.816	0.012	24222	0.001
1	Basidiomycota	132	0.911	0.116	24332	
E	Ascomycota	208	0.714	0.021	4204.5	0.022
5	Basidiomycota	51	0.845	0.150		
10	Ascomycota	135	0.675	0.027	1210.5	0.282
10	Basidiomycota	21	0.783	0.193		
1.5	Ascomycota	97	0.621	0.033	398	0.251
15	Basidiomycota	10	0.744	0.223		0.351
20	Ascomycota	71	0.579	0.039	100.5	0.201
20	Basidiomycota	7	0.726	0.196	198.5	0.381

Phylogenetic Specificity: Presence-absence Mean Pairwise Phylogenetic Distance

Percent Removed	Phylum	N (OTUs)	Mean	Standard Error	W statistic	p-value
0	Ascomycota	1053	-0.477	0.018	141920	0.057
U	Basidiomycota	289	-0.405	0.565	141920	
1	Ascomycota	456	-0.742	0.024	28242	0.669
1	Basidiomycota	127	-0.715	0.605	28242	
5	Ascomycota	206	-0.863	0.031	4777.5	0.161
3	Basidiomycota	53	-0.781	0.511		
10	Ascomycota	134	-0.889	0.037	1166	0.349
10	Basidiomycota	20	-0.795	0.478		
1.5	Ascomycota	96	-0.871	0.040	400.5	0.927
15	Basidiomycota	10	-0.958	0.462	488.5	
20	Ascomycota	71	-0.897	0.039	176.5	0.200
20	Basidiomycota	7	-0.765	0.354	176.5	0.208

Appendix E2. P-values for Figure 3 with abundance-weighted data using a two-sample Wilcoxon Rank Sum test.

Structural Specificity: Shannon's H

Percent Removed	Phylum	N (OTUs)	Mean	Standard Error	W statistic	p-value
0	Ascomycota	1087	-0.540	0.024	140710	0.009
U	Basidiomycota	301	-0.388	0.561	148610	
1	Ascomycota	458	-0.942	0.044	25560	0.006
1	Basidiomycota	132	-0.659	0.654	25560	
E	Ascomycota	208	-1.194	0.071	4590	0.136
5	Basidiomycota	51	-0.914	0.754		
10	Ascomycota	135	-1.261	0.091	1267.5	0.436
10	Basidiomycota	21	-1.041	0.872		
1.5	Ascomycota	97	-1.382	0.111	395.5	0.338
15	Basidiomycota	10	-1.013	0.931		
20	Ascomycota	71	-1.450	0.131	211	0.512
20	Basidiomycota	7	-1.094	0.783	211	0.512

Network Specificity: Paired Difference Index

Percent Removed	Phylum	N (OTUs)	Mean	Standard Error	W statistic	p-value
0	Ascomycota	1087	0.981	0.001	147960	0.006
U	Basidiomycota	301	0.991	0.016	14/900	0.000
1	Ascomycota	458	0.965	0.003	25562	0.007
1	Basidiomycota	132	0.985	0.020	25562	0.007
~	Ascomycota	208	0.951	0.006	4506	0.096
5	Basidiomycota	51	0.979	0.023		
10	Ascomycota	135	0.943	0.008	1251.5	0.389
10	Basidiomycota	21	0.974	0.028		
	Ascomycota	97	0.934	0.011		0.229
15	Basidiomycota	10	0.979	0.025	372.5	
	Ascomycota	71	0.926	0.013		
20	Basidiomycota	7	0.979	0.023	202	0.416

Phylogenetic Specificity: Abundance-weighted Mean Pairwise Phylogenetic Distance

Percent Removed	Phylum	N (OTUs)	Mean	Standard Error	W statistic	p-value
0	Ascomycota	1053	-0.242	0.010	139870	0.023
U	Basidiomycota	289	-0.189	0.300	1398/0	
1	Ascomycota	456	-0.387	0.017	2/200	0.110
1	Basidiomycota	127	-0.336	0.346	26289	
<i>-</i>	Ascomycota	206	-0.465	0.026	4864.5	0.221
5	Basidiomycota	53	-0.394	0.357		
10	Ascomycota	134	-0.473	0.033	1126	0.250
10	Basidiomycota	20	-0.379	0.333		
1.5	Ascomycota	96	-0.512	0.039		0.132
15	Basidiomycota	10	-0.315	0.301	340.5	
20	Ascomycota	71	-0.528	0.044	160.5	0.122
20	Basidiomycota	7	-0.306	0.312	162.5	0.133