

**Table S1**DNA yields from 20 soil samples collected from the wild site of *Dactylorhiza incarnata* ssp. *ochroleuca*

Sample ID	DNA (ng/ $\mu$ l)	260/280	260/230
1	84	1.8	1.5
2	70	1.9	1.4
3	78	1.9	1.1
4	90	1.8	1.4
5	99.1	1.61	0.95
6	48.8	1.87	2.01
7	87	1.7	1.3
8	103	1.9	1.6
9	42.1	1.94	0.83
10	164	1.8	1.4
11	57	1.9	1.5
12	95	1.9	1.5
13	140	1.8	1.1
14	118	1.8	1.3
15	76	1.8	1.5
16	82	1.8	1.5
17	104	1.8	1
18	104	1.8	1.8
19	71	1.8	1.5
20	91	1.7	1.2

Table S3. Metabarcoding results of soil samples of *Dactyloctena incarnata* ssp. *ochroleuca* collected from 20 sites showing community composition and relative abundance percentages.





**Table S3.** Soil analysis results showing p values from Pearson Correlation analysis of all plots studied, orchid hosting plots, and non-orchid hosting plots

Shan Index	Sim Index	N03	P04	Cantharellales	Sebacinales	Thelphophorales	Cannodiaceae	Pleosporales	Chaetothyriales	Heltolitales	Pezizales	Hypocreales	Sordariidae	Acaricidae	Tremellales	Gliomerales	Moniliellales						
Shan Index	3.68229E-11	0.44538588	0.445385857	0.782041433	0.847244941	0.805759579	0.84784982	0.845544352	0.326894149	0.131194218	0.725693593	0.845723938	0.90102178	0.314514249	0.979537345	0.98533806	0.162737373						
Sim Index	0.660840709	0.660840708	0.6820414758	0.9267121433	0.554357113	0.63851818	0.393240772	0.172280217	0.078945486	0.640981413	0.792119538	0.867339754	0.99502883	0.95529484	0.137262059	0.98533806	0.162737373						
N03				0.003080209	0.065097979	0.69729924	0.99152626	0.057684408	0.117565613	0.029287494	0.770915183	0.04330318	0.645849212	0.887319508	0.937700915	0.633317258							
P04				0.003080209	0.065097979	0.69729924	0.99152626	0.067844084	0.117565613	0.029287494	0.770915183	0.04330318	0.645849212	0.887319508	0.937700915	0.633317258							
Cantharellales					0.55994604	0.679763015	0.99253037	0.067844084	0.117565613	0.029287494	0.770915183	0.04330318	0.645849212	0.887319508	0.937700915	0.633317258							
Sebacinales					0.390496782	0.588962672	0.991615989	0.067844084	0.117565613	0.029287494	0.770915183	0.04330318	0.645849212	0.887319508	0.937700915	0.633317258							
Thelphophorales						0.685564252	0.85131902	0.39791334	0.177905032	0.13801398	0.227714394	0.047205841	0.648786553	0.887319508	0.937700915	0.633317258							
Cannodiaceae							0.01555476	0.08455779	0.470245236	0.462248611	0.17901197	0.54187319	0.057378185	0.309162636	0.37090381	0.29270561							
Pleosporales								0.596810695	0.336823591	0.24627012	0.00425808	0.000438513	0.462248611	0.17901197	0.309162636	0.37090381	0.29270561						
Chaetothyriales									0.654587786	0.247917088	0.151964802	0.001002914	0.00072267	0.240584752	0.588721677	0.159505139	0.056582525	0.376470769					
Heltolitales										0.654587786	0.247917088	0.151964802	0.001002914	0.00072267	0.240584752	0.588721677	0.159505139	0.056582525	0.376470769				
Pezizales											0.654587786	0.247917088	0.151964802	0.001002914	0.00072267	0.240584752	0.588721677	0.159505139	0.056582525	0.376470769			
Sordariidae												0.654587786	0.247917088	0.151964802	0.001002914	0.00072267	0.240584752	0.588721677	0.159505139	0.056582525	0.376470769		
Acaricidae													0.654583497	0.895584854	0.681620047	0.07472723	0.6588321	0.454885352	0.723673551				
Tremellales														0.6588321	0.454885352	0.723673551							
Gliomerales															0.6588281	0.454882995	0.723673551						
Moniliellales																0.658716749	0.454882995	0.723673551					

ORCHID PLOTS

NON-ORCHID PLOTS ONLY  
Shrub Index

Char. Index	Shan Index	2.54595E-07	0.516939677	0.516939677	0.540123955	0.737657536	0.898350575	0.407320013	0.585130209	0.156551616	0.950177496	0.705390797	0.490252093	0.851751875	0.218966195	0.98102773	0.989252486	0.001276148			
	Sim Index	0.6645396	0.6645396	0.717117436	0.811002917	0.553640067	0.537468164	0.84210506	0.795139434	0.731189853	0.862163956	0.11785307	0.779802543	0.779802543	0.11785307	0.779802543	0.00801081	0.00836866			
	NO3	0	0.007688855	0.646641448	0.646641448	0.645057505	0.705317395	0.4117789125	0.192089125	0.592929968	0.051768175	0.121293148	0.2092624422	0.5329484422	0.5329484422	0.15701205	0.571259854	0.56801901	0.000125001		
	PO4	0	0.007688855	0.646641448	0.646641448	0.645057505	0.705317395	0.4117789125	0.192089125	0.592929968	0.051768175	0.121293148	0.2092624422	0.5329484422	0.5329484422	0.15701205	0.571259854	0.56801901	0.000125001		
	Cantharellales	0.582823202	0.658579073	0.893828903	0.893828903	0.893828903	0.893828903	0.507685648	0.430330745	0.00261875	0.186681179	0.174774339	0.726582089	0.726582089	0.726582089	0.22213051	0.470797936	0.470797936	0.000125001		
	Sclerotiniales	0.430054448	0.61058142	0.331296256	0.61058142	0.331296256	0.331296256	0.61058142	0.331296256	0.264387075	0.304432628	0.500837379	0.640476482	0.640476482	0.640476482	0.591761766	0.488744721	0.488744721	0.000125001		
	Sebacinales	0	0.576373343	0.576373343	0.190936485	0.190936485	0.190936485	0.190936485	0.150280306	0.472908014	0.085079716	0.18210379	0.594100654	0.240993881	0.229936353	0.229936353	0.488744721	0.591761766	0.488744721	0.000125001	
	Thelephorales	0	0.286235273	0.624080791	0.192637178	0.624080791	0.192637178	0.624080791	0.241423704	0.154234318	0.324437407	0.706044503	0.17872189	0.33933551	0.33933551	0.33933551	0.33933551	0.33933551	0.33933551	0.000125001	
	Chetomiatales	0	0.362525228	0.923590419	0.948460462	0.923590419	0.948460462	0.923590419	0.313045957	0.897895053	0.188146833	0.022418282	0.00232846	0.00232846	0.00232846	0.481458243	0.481458243	0.481458243	0.481458243	0.481458243	0.481458243
	Helotiales	0	0.230205689	0.006723359	0.0020085025	0.892048444	0.23012168441	0.201718993	0.483474464	0.006723359	0.0020085025	0.892048444	0.23012168441	0.201718993	0.483474464	0.006723359	0.0020085025	0.892048444	0.23012168441	0.201718993	0.483474464
	Pezizales	0	0.230205689	0.006723359	0.0020085025	0.892048444	0.23012168441	0.201718993	0.483474464	0.006723359	0.0020085025	0.892048444	0.23012168441	0.201718993	0.483474464	0.006723359	0.0020085025	0.892048444	0.23012168441	0.201718993	0.483474464
	Archaeopeltidales	0	0.230205689	0.006723359	0.0020085025	0.892048444	0.23012168441	0.201718993	0.483474464	0.006723359	0.0020085025	0.892048444	0.23012168441	0.201718993	0.483474464	0.006723359	0.0020085025	0.892048444	0.23012168441	0.201718993	0.483474464
	Sordariidales	0	0.230205689	0.006723359	0.0020085025	0.892048444	0.23012168441	0.201718993	0.483474464	0.006723359	0.0020085025	0.892048444	0.23012168441	0.201718993	0.483474464	0.006723359	0.0020085025	0.892048444	0.23012168441	0.201718993	0.483474464
	Ascomycetales	0	0.230205689	0.006723359	0.0020085025	0.892048444	0.23012168441	0.201718993	0.483474464	0.006723359	0.0020085025	0.892048444	0.23012168441	0.201718993	0.483474464	0.006723359	0.0020085025	0.892048444	0.23012168441	0.201718993	0.483474464
	Gymnosporangiales	0	0.230205689	0.006723359	0.0020085025	0.892048444	0.23012168441	0.201718993	0.483474464	0.006723359	0.0020085025	0.892048444	0.23012168441	0.201718993	0.483474464	0.006723359	0.0020085025	0.892048444	0.23012168441	0.201718993	0.483474464
	Tremellales	0	0.230205689	0.006723359	0.0020085025	0.892048444	0.23012168441	0.201718993	0.483474464	0.006723359	0.0020085025	0.892048444	0.23012168441	0.201718993	0.483474464	0.006723359	0.0020085025	0.892048444	0.23012168441	0.201718993	0.483474464
	Glomerales	0	0.230205689	0.006723359	0.0020085025	0.892048444	0.23012168441	0.201718993	0.483474464	0.006723359	0.0020085025	0.892048444	0.23012168441	0.201718993	0.483474464	0.006723359	0.0020085025	0.892048444	0.23012168441	0.201718993	0.483474464