

Table S1. Information of specimens used in this study.

Fungal species	Voucher	Substrate	Country	GenBank accession		
				ITS	<i>tef1α</i>	<i>tub2</i>
<i>Neopestalotiopsis magna</i>	MFLUCC 12-0652*	<i>Pteridium</i> sp.	France	KF582795	KF582791	KF582793
	CFCC 53011*	<i>Abies fargesii</i>	China	MK397013	MK622277	MK622280
<i>Pestalotiopsis abietis</i>	CFCC 53012	<i>Abies fargesii</i>	China	MK397014	MK622278	MK622281
	CFCC 53013	<i>Abies fargesii</i>	China	MK397015	MK622279	MK622282
<i>P. adusta</i>	ICMP 6088*	Refrigerator door	Fiji	JX399006	JX399070	JX399037
	MFLUCC 10-146	<i>Syzygium</i> sp.	Thailand	JX399007	JX399071	JX399038
<i>P. aggestorum</i>	LC6301*	<i>Camellia sinensis</i>	China	KX895015	KX895234	KX895348
	LC8186	<i>Camellia sinensis</i>	China	KY464140	KY464150	KY464160
<i>P. anacardiacearum</i>	IFRDCC 2397*	<i>Mangifera indica</i>	China	KC247154	KC247156	KC247155
<i>P. anhuiensis</i>	CFCC 54791*	<i>Cyclobalanopsis glauca</i>	China	ON007028	ON005045	ON005056
<i>P. arceuthobii</i>	CBS 434.65*	<i>Arceuthobium campylopodium</i>	USA	KM199341	KM199516	KM199427
<i>P. arengae</i>	CBS 331.92*	<i>Arenga undulatifolia</i>	Singapore	KM199340	KM199515	KM199426
	CBS 114126*	<i>Knightia</i> sp.	New Zealand	KM199297	KM199499	KM199409
<i>P. australasiae</i>						
	CBS 114141	<i>Protea</i> sp.	New South Wales	KM199298	KM199501	KM199410
	CBS 111503	<i>Protea neriifolia</i>	South Africa	KM199331	KM199557	KM199382
<i>P. australis</i>	CBS 114193*	<i>Grevillea</i> sp.	New South Wales	KM199332	KM199475	KM199383
<i>P. biciliata</i>	CBS 124463*	<i>Platanus hispanica</i>	Slovakia	KM199308	KM199505	KM199399
	CBS 236.38	<i>Paeonia</i> sp.	Italy	KM199309	KM199506	KM199401
	LC2988*	<i>Camellia</i> sp.	China	KX894933	KX895150	KX895265
<i>P. brachiata</i>	LC8188	<i>Camellia</i> sp.	China	KY464142	KY464152	KY464162
	LC8189	<i>Camellia</i> sp.	China	KY464143	KY464153	KY464163
<i>P. brassicae</i>	CBS 170.26*	<i>Brassica napus</i>	New Zealand	KM199379	KM199558	-
<i>P. camelliae</i>	MFLUCC 12-0277*	<i>Camellia japonica</i>	China	JX399010	JX399074	JX399041
<i>P. camelliae-oleiferae</i>	CSUFTCC08*	<i>Camelliae oleiferae</i>	China	OK493593	OK507963	OK562368
	CSUFTCC09	<i>Camelliae oleiferae</i>	China	OK493594	OK507964	OK562369
	CFCC 54430*	<i>Castanopsis lamontii</i>	China	OK339732	OK358493	OK358508
<i>P. castanopsidis</i>	CFCC 54305	<i>Castanopsis hystrix</i>	China	OK339733	OK358494	OK358509
	CFCC 54384	<i>Castanopsis hystrix</i>	China	OK339734	OK358495	OK358510
	CBS 186.71*	<i>Chamaerops humilis</i>	Italy	KM199326	KM199473	KM199391
	LC3619	<i>Camellia</i> sp.	China	KX894991	KX895208	KX895322
	CFCC 55124	<i>Quercus acutissima</i>	China	OM746221	OM839993	OM839894
<i>P. chamaeropsis</i>	CFCC 55019	<i>Quercus aliena</i>	China	OM746224	OM839996	OM839897
	CFCC 55023	<i>Castanopsis fissa</i>	China	OM746233	OM840005	OM839906
	CFCC 54977	<i>Quercus acutissima</i>	China	OM746223	OM839995	OM839896
	CFCC 55122	<i>Quercus aliena</i>	China	OM746229	OM840001	OM839902
	CFCC 54776	<i>Quercus variabilis</i>	China	OM746234	OM840006	OM839907
	CFCC 54314*	<i>Castanopsis tonkinensis</i>	China	OK339739	OK358500	OK358515
<i>P. changjiangensis</i>	CFCC 54433	<i>Castanopsis hainanensis</i>	China	OK339740	OK358501	OK358516
	CFCC 52803	<i>Cyclobalanopsis</i> sp.	China	OK339741	OK358502	OK358517
<i>P. chiaroscuro</i>	BRIP 72970*	<i>Sporobolus natalensis</i>	Australia	OK422510	OK423753	OK423752
<i>P. chinensis</i>	MFLUCC 12-0273	<i>Taxus</i> sp.	China	JX398995	-	-
<i>P. clavata</i>	MFLUCC 12-0268*	<i>Buxus</i> sp.	China	JX398990	JX399056	JX399025
<i>P. colombiensis</i>	CBS 118553*	<i>Eucalyptus urograndis</i>	Colombia	KM199307	KM199488	KM199421
<i>P. cyclobalanopsidis</i>	CFCC 54328*	<i>Cyclobalanopsis glauca</i>	China	OK339735	OK358496	OK358511
	CFCC 55891	<i>Cyclobalanopsis glauca</i>	China	OK339736	OK358497	OK358512
<i>P. dianellae</i>	CPC 32261	<i>Dianella</i> sp.	Australia	MG386051	-	MG386164

<i>P. digitalis</i>	MFLU 14-0208*	<i>Digitalis purpurea</i>	New Zealand	KP781879	-	KP781883
<i>P. dilucida</i>	LC3232*	<i>Camellia sinensis</i>	China	KX894961	KX895178	KX895293
	LC8184	<i>Camellia sinensis</i>	China	KY464138	KY464148	KY464158
<i>P. diploclisiae</i>	CBS 115449	<i>Psychotria tutcheri</i>	China	KM199314	KM199485	KM199416
	CBS 115587*	<i>Diploclisia glaucescens</i>	China	KM199320	KM199486	KM199419
<i>P. disseminata</i>	CBS 143904	<i>Persea americana</i>	New Zealand	MH554152	MH554587	MH554825
	MEAN 1165	<i>Pinus pinea</i>	Portugal	MT374687	MT374699	MT374712
<i>P. diversiseta</i>	MFLUCC 12-0287*	<i>Rhododendron</i> sp.	China	JX399009	JX399073	JX399040
<i>P. doitungensis</i>	MFLUCC 14-0115*	<i>Dendrobium</i> sp.	Thailand	MK993574	MK975832	MK975837
<i>P. dracaenicola</i>	MFLUCC 18-0913*	<i>Dracaena</i> sp.	Thailand	MN962731	MN962732	MN962733
<i>P. dracontomelonis</i>	MFLU 14-0207*	<i>Dracontomelon</i> sp.	Thailand	KP781877	KP781880	-
<i>P. endophytica</i>	MFLU 20-0607*	<i>Magnolia garrettii</i>	Thailand	MW263946	MW417119	-
<i>P. ericacearum</i>	IFRDCC 2439*	<i>Rhododendron delavayi</i>	China	KC537807	KC537814	KC537821
<i>P. etonensis</i>	BRIP 66615*	<i>Sporobolus jacquemontii</i>	Australia	MK966339	MK977635	MK977634
	SAUCC230046*	<i>Ficus microcarpa</i>	China	OQ691974	OQ718691	OQ718749
<i>P. ficicola</i>	SAUCC230042	<i>Ficus microcarpa</i>	China	OQ691972	OQ718689	OQ718747
	SAUCC230043	<i>Ficus microcarpa</i>	China	OQ691973	OQ718690	OQ718748
	CFCC 54440*	<i>Castanopsis faberi</i>	China	ON007029	ON005046	ON005057
<i>P. foliicola</i>	CFCC 57359	<i>Castanopsis faberi</i>	China	ON007030	ON005047	ON005058
	CFCC 57360	<i>Castanopsis faberi</i>	China	ON007031	ON005048	ON005059
<i>P. formosana</i>	NTUCC 17-009*	<i>Poaceae</i> sp.	China	MH809381	MH809389	MH809385
<i>P. furcata</i>	MFLUCC 12-0054*	<i>Camellia sinensis</i>	Thailand	JQ683724	JQ683740	JQ683708
	LC6691	<i>Camellia sinensis</i>	China	KX895030	KX895248	KX895363
<i>P. gaultheriae</i>	IFRD 411-014*	<i>Gaultheria forrestii</i>	China	KC537805	KC537812	KC537819
<i>P. gibbosa</i>	NOF 3175*	<i>Gaultheria shallon</i>	Canada	LC311589	LC311591	LC311590
	E-72-02	<i>Eucalyptus</i> sp.	Brazil	KU926708	KU926712	KU926716
<i>P. grandis-urophylla</i>	E-72-03	<i>Eucalyptus</i> sp.	Brazil	KU926709	KU926713	KU926717
	E-72-04	<i>Eucalyptus</i> sp.	Brazil	KU926710	KU926714	KU926718
	E-72-06	<i>Eucalyptus</i> sp.	Brazil	KU926711	KU926715	KU926719
<i>P. grevilleae</i>	CBS 114127*	<i>Grevillea</i> sp.	Australia	KM199300	KM199504	KM199407
	CFCC 54308*	<i>Quercus griffithii</i>	China	OK339737	OK358498	OK358513
<i>P. guangxiensis</i>	CFCC 54300	<i>Quercus griffithii</i>	China	OK339738	OK358499	OK358514
	CFCC 54803	<i>Cyclobalanopsis glauca</i>	China	ON007035	ON005052	ON005063
<i>P. guizhouensis</i>	CFCC 57364	<i>Cyclobalanopsis glauca</i>	China	ON007036	ON005053	ON005064
<i>P. hawaiiensis</i>	CBS 114491*	<i>Leucospermum</i> sp.	USA	KM199339	KM199514	KM199428
<i>P. hispanica</i>	CBS 115391*	<i>Protea</i> sp.	Spain	MH553981	MH554399	MH554640
<i>P. hollandica</i>	CBS 265.33*	<i>Sciadopitys verticillata</i>	The Netherlands	KM199328	KM199481	KM199388
<i>P. humicola</i>	CBS 336.97*	Soil	Papua New Guinea	KM199317	KM199484	KM199420
<i>P. hunanensis</i>	CSUFTCC15*	<i>Camellia oleifera</i>	China	OK493599	OK507969	OK562374
<i>P. hunanensis</i>	CSUFTCC18	<i>Camellia oleifera</i>	China	OK493600	OK507970	OK562375
<i>P. hydei</i>	MFLUCC 20-0135	<i>Litsea elliptica</i>	Thailand	MW266063	MW251113	MW251112
	CAA 1004*	<i>Pinus radiata</i>	Spain	MW732248	MW759038	MW759035
<i>P. iberica</i>	CAA 1005	<i>Pinus sylvestris</i>	Spain	MW732250	MW759037	MW759034
	CAA 1006	<i>Pinus radiata</i>	Spain	MW732249	MW759039	MW759036
<i>P. inflexa</i>	MFLUCC 12-0270*	Unidentified tree	China	JX399008	JX399072	JX399039
<i>P. intermedia</i>	MFLUCC 12-0259*	Unidentified tree	China	JX398993	JX399059	JX399028
<i>P. italiana</i>	MFLU 14-0214*	<i>Cupressus glabra</i>	Italy	KP781878	KP781881	KP781882
<i>P. jesteri</i>	CBS 109350*	<i>Fragraea bodenii</i>	Papua New Guinea	KM199380	KM199554	-
<i>P. jiangxiensis</i>	LC4399*	<i>Camellia</i> sp.	China	KX895009	KX895227	KX895341
	LC6636*	<i>Camellia sinensis</i>	China	KX895028	KX895247	KX895361
<i>P. jinchanghensis</i>	LC8190	<i>Camellia sinensis</i>	China	KY464144	KY464154	KY464164

<i>P. kaki</i>	KNU-PT-1804*	<i>Diospyros kaki</i>	Korea	LC552953	LC553555	LC552954
<i>P. kandelicola</i>	NCYUCC 19-0354	<i>Kandelia candel</i>	China	MT560723	MT563102	MT563100
	NCYUCC 19-0355*	<i>Kandelia candel</i>	China	MT560722	MT563101	MT563099
<i>P. kenyanana</i>	CBS 442.67*	<i>Coffea</i> sp.	Kenya	KM199302	KM199502	KM199395
	LC6633	<i>Camellia sinensis</i>	China	KX895027	KX895246	KX895360
<i>P. knightiae</i>	CBS 111963	<i>Knightia</i> sp.	New Zealand	KM199311	KM199495	KM199406
	CBS 114138*	<i>Knightia</i> sp.	New Zealand	KM199310	KM199497	KM199408
<i>P. krabiensis</i>	MFLUCC 16-0260*	<i>Pandanus</i> sp.	Thailand	MH388360	MH388395	MH412722
<i>P. leucadendri</i>	CBS 121417*	<i>Leucadendron</i> sp.	South Africa	MH553987	MH554412	MH554654
	HGUP 4057*	<i>Licuala grandis</i>	China	KC492509	KC481684	KC481683
<i>P. licualicola</i>	SAUCC210087	<i>Ilex chinensis</i>	China	OK087323	OK104879	OK104872
	SAUCC210088	<i>Ilex chinensis</i>	China	OK087324	OK104880	OK104873
<i>P. lijiangensis</i>	CFCC 50738*	<i>Castanopsis carlesii</i>	China	KU860520	KU844185	-
<i>P. linearis</i>	MFLUCC 12-0271*	<i>Trachelospermum</i> sp.	China	JX398992	JX399058	JX399027
<i>P. lithocarp</i>	CFCC 55100*	<i>Lithocarpus chiungchungensis</i>	China	OK339742	OK358503	OK358518
	CFCC 55893	<i>Lithocarpus chiungchungensis</i>	China	OK339743	OK358504	OK358519
	LC4344*	<i>Camellia</i> sp.	China	KX895005	KX895223	KX895337
<i>P. lushanensis</i>	LC8182	<i>Camellia</i> sp.	China	KY464136	KY464146	KY464156
	LC8183	<i>Camellia</i> sp.	China	KY464137	KY464147	KY464157
	CFCC 54894	<i>Quercus serrata</i>	China	OM746282	OM840054	OM839955
<i>P. macadamiae</i>	BRIP 63738b	<i>Macadamia integrifolia</i>	Australia	KX186588	KX186621	KX186680
	BRIP 63739b	<i>Macadamia integrifolia</i>	Australia	KX186587	KX186620	KX186679
	BRIP 63741a	<i>Macadamia integrifolia</i>	Australia	KX186586	KX186619	KX186678
<i>P. malayana</i>	CBS 102220*	<i>Macaranga triloba</i>	Malaysia	KM199306	KM199482	KM199411
<i>P. microspora</i>	SS1-033I	<i>Cornus canadensis</i>	Canada	MT644300	-	-
<i>P. monochaeta</i>	CBS 144.97*	<i>Quercus robur</i>	The Netherlands	KM199327	KM199479	KM199386
	CBS 440.83	<i>Taxus baccata</i>	The Netherlands	KM199329	KM199480	KM199387
<i>P. montellica</i>	MFLUCC 12-0279*	dead plant material	China	JX399012	JX399076	JX399043
<i>P. nanjingensis</i>	CFCC 53882	<i>Quercus aliena</i>	China	OM746295	OM840067	OM839968
	CSUFTCC16*	<i>Camellia oleifera</i>	China	OK493602	OK507972	OK562377
<i>P. nanningensis</i>	CSUFTCC10*	<i>Camellia oleifera</i>	China	OK493596	OK507966	OK562371
<i>P. neolitsea</i>	NTUCC 17-011*	<i>Neolitsea villosa</i>	China	MH809383	MH809391	MH809387
	CFCC 54590	<i>Lithocarpus amygdalifolius</i>	China	OK339744	OK358505	OK358520
<i>P. novae-hollandiae</i>	CBS 130973*	<i>Banksia grandis</i>	Australia	KM199337	KM199511	KM199425
	CBS 111522	<i>Telopea</i> sp.	USA	KM199294	KM199493	KM199394
<i>P. oryzae</i>	CBS 171.26	Unknown host	Italy	KM199304	KM199494	KM199397
	CBS 353.69*	<i>Oryza sativa</i>	Denmark	KM199299	KM199496	KM199398
<i>P. pallidotheae</i>	MAFF 240993*	<i>Pieris japonica</i>	Japan	AB482220	-	-
<i>P. pandanicola</i>	MFLUCC 16-0255*	<i>Pandanus</i> sp.	Thailand	MH388361	MH388396	MH412723
<i>P. papuana</i>	CBS 331.96*	Coastal soil	Papua New Guinea	KM199321	KM199491	KM199413
	CBS 887.96	<i>Cocos nucifera</i>	Papua New Guinea	KM199318	KM199492	KM199415
<i>P. parva</i>	CBS 265.37	<i>Delonix regia</i>	-	KM199312	KM199508	KM199404
	CBS 278.35*	<i>Delonix regia</i>	-	KM199313	KM199509	KM199405
<i>P. phoebes</i>	SAUCC230093*	<i>Phoebe zhennan</i>	China	OQ692028	OQ718745	OQ718803
	SAUCC230092	<i>Phoebe zhennan</i>	China	OQ692027	OQ718744	OQ718802
	SAUCC230094	<i>Phoebe zhennan</i>	China	OQ692029	OQ718746	OQ718804
<i>P. photiniicola</i>	YB28-2	Unknown	China	MK228997	MK512491	MK360938
<i>P. pini</i>	MEAN 1092	<i>Pinus pinea</i>	Portugal	MT374680	MT374693	MT374705

<i>P. pinicola</i>	KUMCC 19-0183*	<i>Pinus armandii</i>	China	MN412636	MN417509	MN417507
	CBS 393.48*	Unknown	Portugal	KM199335	KM199510	KM199422
<i>P. portugalica</i>	LC4324	<i>Camellia chekiangoleosa</i>	China	KX895001	KX895219	KX895333
<i>P. rhizophorae</i>	MFLUCC 17-0416*	<i>Rhizophora mucronata</i>	Thailand	MK764283	MK764327	MK764349
<i>P. rhododendri</i>	IFRDCC 2399*	<i>Rhododendron sinogrande</i>	China	KC537804	KC537811	KC537818
	CFCC 54733	<i>Quercus aliena</i>	China	OM746310	OM840082	OM839983
<i>P. rhodomyrtus</i>	CFCC 55052	<i>Cyclobalanopsis augustinii</i>	China	OM746311	OM840083	OM839984
<i>P. rosea</i>	MFLUCC 12-0258*	<i>Pinus</i> sp.	China	JX399005	JX399069	JX399036
<i>P. scoparia</i>	CBS 176.25*	<i>Chamaecyparis</i> sp.	China	KM199330	KM199478	KM199393
<i>P. sequoiae</i>	MFLUCC 13-0399*	<i>Sequoia sempervirens</i>	Italy	KX572339	-	-
	CFCC 54958*	<i>Quercus variabilis</i>	China	ON007026	ON005043	ON005054
<i>P. shaanxiensis</i>	CFCC 57356	<i>Quercus variabilis</i>	China	ON007027	ON005044	ON005055
<i>P. shorea</i>	MFLUCC 12-0314*	<i>Shorea obtusa</i>	Thailand	KJ503811	KJ503817	KJ503814
	CFCC 55296*	<i>Cyclobalanopsis kerrii</i>	China	ON007032	ON005049	ON005060
<i>P. silvicola</i>	CFCC 54915	<i>Cyclobalanopsis kerrii</i>	China	ON007033	ON005050	ON005061
	CFCC 57363	<i>Cyclobalanopsis kerrii</i>	China	ON007034	ON005051	ON005062
	SAUCC231201*	<i>Spatholobus suberectus</i>	China	OQ692023	OQ718740	OQ718798
	SAUCC231203	<i>Spatholobus suberectus</i>	China	OQ692024	OQ718741	OQ718799
<i>P. spatholobi</i>	SAUCC231204	<i>Spatholobus suberectus</i>	China	OQ692025	OQ718742	OQ718800
	SAUCC231213	<i>Spatholobus suberectus</i>	China	OQ692026	OQ718743	OQ718801
<i>P. spathulata</i>	CBS 356.86*	<i>Gevuina avellana</i>	Chile	KM199338	KM199513	KM199423
<i>P. spathuliappendiculata</i>	CBS 144035*	<i>Phoenix canariensis</i>	Australia	MH554172	MH554607	MH554845
	CBS 114137	<i>Protea</i> sp.	Australia	KM199301	KM199559	KM199469
<i>P. telopeae</i>	CBS 114161*	<i>Telopea</i> sp.	Australia	KM199296	KM199500	KM199403
	CBS 113606	<i>Telopea</i> sp.	Australia	KM199295	KM199498	KM199402
<i>P. terricola</i>	CBS 141.69*	Soil	Pacific islands	MH554004	MH554438	MH554680
<i>P. thailandica</i>	MFLUCC 17-1616*	<i>Rhizophora mucronata</i>	Thailand	MK764285	MK764329	MK764351
	OP068*	<i>Trachycarpus fortunei</i>	China	JQ845947	JQ845946	JQ845945
<i>P. trachycarpicola</i>	IFRDCC 2403	<i>Podocarpus macrophyllus</i>	China	KC537809	KC537816	KC537823
	LC4523	<i>Camellia sinensis</i>	China	KX895011	KX895230	KX895344
<i>P. unicolor</i>	MFLUCC 12-0276*	<i>Rhododendron</i> sp.	China	JX398999	-	JX399030
	MFLUCC 12-0275	Unidentified tree	China	JX398998	JX399063	JX399029
<i>P. verruculosa</i>	MFLUCC 12-0274*	<i>Rhododendron</i> sp.	China	JX398996	JX399061	-
	LC4553*	<i>Camellia sinensis</i>	China	KX895012	KX895231	KX895345
<i>P. yanglingensis</i>	LC3412	<i>Camellia sinensis</i>	China	KX894980	KX895197	KX895312
<i>P. yunnanensis</i>	HMAS 96359*	<i>Podocarpus macrophyllus</i>	China	AY373375	-	-

Notes: Ex-type strains are marked with “*”. Novel species introduced are in bold in this study.