

Supplementary Table S1. GenBank accession numbers and culture collection numbers of species of *Leptosphaeriaceae*. Ex-type strains are in bold. The newly generated sequence is indicated in red.

Species	Culture Collection / Voucher No.	GenBank Accession Numbers		
		LSU	SSU	ITS
<i>Alloleptosphaeria italica</i>	MFLUCC 14-0934	KT454714	-	KT454722
<i>Alternariaster bidentis</i>	CBS 134021	KC609341	-	KC609333
<i>Alternariaster centaureae-diffusae</i>	MFLUCC 14-0992	KT454715	KT454730	KT454723
<i>Alternariaster helianthi</i>	CBS 327.69	KC584369	KC584627	KC609335
<i>Didymella exigua</i>	CBS 183.55	EU754155	EU754056	GU237794
<i>Heterosporicola chenopodii</i>	CBS 115.96	EU754188	EU754089	JF740227
<i>Heterosporicola dimorphospora</i>	CBS 165.78	JF740281	JF740098	JF740204
<i>Leptosphaeria cichorium</i>	MFLUCC 14-1063	KT454712	KT454728	KT454720
<i>Leptosphaeria conoidea</i>	CBS 616.75	MH872726	JF740099	MH860957
<i>Neoleptosphaeria rubefaciens</i>	CBS 223.77	JF740312		JF740243
<i>Ochraceocephala foeniculi</i>	CBS 145654	MN516774	MN516743	MN516753
<i>Paraleptosphaeria dryadis</i>	CBS 643.86	GU301828	KC584632	JF740213
<i>Paraleptosphaeria macrospora</i>	CBS 114198	MH874520	-	MH862957
<i>Paraphoma radicina</i>	CBS 111.79	EU754191	EU754092	FJ427058
<i>Phaeosphaeria oryzae</i>	CBS 110110	GQ387591	GQ387530	KF251186
<i>Plenodomus agnitus</i>	CBS 121.89	JF740271	-	JF740194
<i>Praeclarispora artemisiae</i>	KUMCC 20-0201A	MT957053	MT957046	MT957060
<i>Pseudoleptosphaeria etheridgei</i>	CBS 125980	JF740291	-	JF740221
<i>Querciphoma carteri</i>	CBS 101633	GQ387593	GQ387532	KF251210
<i>Sclerenchymomyces clematidis</i>	MFLUCC 17-2180	MT214558	MT226675	MT310605
<i>Sphaerellopsis artemisiae</i>	KUMCC 20-0202A	MT957058	MT957051	MT957065
<i>Sphaerellopsis artemisiae</i>	KUMCC 20-0202B	MT957059	MT957052	MT957066
<i>Sphaerellopsis filum</i>	CBS 234.51	KP170723	-	KP170655
<i>Sphaerellopsis filum</i>	CBS 235.51	KP170724	-	KP170656
<i>Sphaerellopsis filum</i>	CBS 317.68	KP170725	-	KP170657
<i>Sphaerellopsis hakeae</i>	CPC 29566T	KY173555	-	KY173466
<i>Sphaerellopsis isthmospora</i>	HKAS 102225A	MK387963	MK387933	MK387925
<i>Sphaerellopsis isthmospora</i>	HKAS 102225B	MK387964	MK387934	MK387926
<i>Sphaerellopsis macroconidialis</i>	CBS 233.51	KP170726	-	KP170658
<i>Sphaerellopsis macroconidialis</i>	CBS 658.78	KP170727	-	KP170659
<i>Sphaerellopsis macroconidialis</i>	CPC 21113	KP170728	-	KP170660
<i>Sphaerellopsis paraphysata</i>	CPC 21841	KP170729	-	KP170662
<i>Sphaerellopsis paraphysata</i>	KUMCC 18-0195	MK387965	MK387935	MK387927
<i>Sphaerellopsis paraphysata</i>	MFLU 19-2774	ON870393	ON870916	ON878080
<i>Subplenodomus apiicola</i>	CBS 285.72	GU238040	GU238211	JF740196
<i>Subplenodomus drobnjakensis</i>	CBS 270.92	JF740286	-	JF740212

Supplementary Table S2. GenBank accession numbers and culture collection numbers of species of *Lophiostomataceae*. Ex-type strains are in bold. The newly generated sequence is indicated in red.

Species	Culture Collection/ Voucher No.	GenBank Accession Numbers				
		SSU	ITS	LSU	<i>tef1</i>	<i>rpb2</i>
<i>Crassiclypeus aquaticus</i>	KH 104	LC312470	LC312499	LC312528	LC312557	LC312586
<i>Crassiclypeus aquaticus</i>	KT 970	LC312472	LC312501	LC312530	LC312559	LC312588
<i>Dimorphiopsis brachystegiae</i>	CPC 22679	-	KF777160	KF777213	-	-
<i>Flabellascoma aquaticum</i>	KUMCC 15-0258	-	MN304827	MN274564	MN328898	MN328895
<i>Flabellascoma cycadicola</i>	KT 2034	LC312473	LC312502	LC312531	LC312560	LC312589
<i>Flabellascoma fusiforme</i>	MFLUCC 18-1584	-	MN304830	MN274567	MN328902	-
<i>Flabellascoma minimum</i>	KT 2040	LC312475	LC312504	LC312533	LC312562	LC312591
<i>Flabellascoma minimum</i>	KT 2013	LC312474	LC312503	LC312532	LC312561	LC312590
<i>Lentistoma bipolare</i>	KT 2415	LC312483	LC312513	LC312542	LC312571	LC312600
<i>Lentistoma bipolare</i>	CBS 115375	LC312477	LC312506	LC312535	LC312564	LC312593
<i>Leptoparies palmarum</i>	KT 1653	LC312485	LC312514	LC312543	LC312572	LC312601
<i>Leptoparies magnoliae</i>	MFLU 18-1291	ON870915	ON878077	ON870390	-	-
<i>Lophiostoma clematidis</i>	MFLUCC 17-2081	MT226679	MN393004	MT214562	MT394741	MT394689
<i>Lophiostoma vitigenum</i>	HH 26930	AB618697	LC001735	AB619015	LC001761	-
<i>Lophiostoma vitigenum</i>	HH 26931	AB618698	LC001736	AB619016	LC001762	-
<i>Neovaginatisspora clematidis</i>	MFLUCC 17-2156	MT226676	MT310606	MT214559	MT394738	-
<i>Neovaginatisspora fuckelii</i>	KT 634	AB618690	LC001732	AB619009	LC001750	-
<i>Parapaucispora pseudoarmatispora</i>	KT 2237	LC100018	LC100021	LC100026	LC100030	-
<i>Paucispoar quadrispora</i>	KH 448	LC001720	LC001733	LC001722	LC001754	-
<i>Paucispoar quadrispora</i>	KT 843	AB618692	LC001734	AB619011	LC001755	-
<i>Paucispoar versicolor</i>	KH 110	LC001721	AB918731	AB918732	LC001760	-
<i>Pseudopaucispora brunneospora</i>	KH 227	LC312494	LC312523	LC312552	LC312581	LC312610
<i>Teichospora trabicola</i>	C134	-	KU601591	KU601591	KU601601	KU601600
<i>Vaginatisspora amygdali</i>	MFLUCC 18-1526	MK085057	MK085055	MK085059	MK087657	-
<i>Vaginatisspora amygdali</i>	KT 2248	LC312495	LC312524	LC312553	LC312582	LC312611
<i>Vaginatisspora appendiculata</i>	MFLUCC 16-0314	KU743219	KU743217	KU743218	KU743220	-
<i>Vaginatisspora aquatica</i>	MFLUCC 11-0083	KJ591575	KJ591577	KJ591576	-	-
<i>Vaginatisspora armatispora</i>	MFLUCC 18-0213	-	MN304826	MN274563	MN328897	MN328894
<i>Vaginatisspora armatispora</i>	MFLUCC 18-0247	-	MK085056	MK085060	MK087658	MK087669
<i>Vaginatisspora microarmatispora</i>	MTCC 12733	MF142594	MF142592	MF142593	MF142595	MF142596
<i>Vaginatisspora scabrispora</i>	KT 2443	LC312496	LC312525	LC312554	LC312583	LC312612

Supplementary Table S3. GenBank accession numbers and culture collection numbers of species of *Sulcatissporaceae*. Ex-type strains are in bold. The newly generated sequence is indicated in red.

Species	Culture Collection / Voucher No.	GenBank Accession Numbers			
		LSU	SSU	ITS	TEF
<i>Anthosulcatisspora subglobosa</i>	MFLUCC 17-2065	MT214592	MT226705	MT310636	MT394649
<i>Bambusicola bambusae</i>	MFLUCC 11-0614	JX442035	JX442039	NR_121546	-
<i>Bambusicola massarinia</i>	MFLUCC 11-0389	JX442037	JX442041	NR_121548	-
<i>Bambusicola pustulata</i>	MFLUCC 15-0190	KU863107	KU872112	KU940118	KU940190
<i>Bambusicola splendida</i>	MFLUCC 11-0439	JX442038	JX442042	NR_121549	-
<i>Bambusicola triseptatispora</i>	MFLUCC 11-0166	KU863109	-	KU940120	-
<i>Didymosphaeria rubi-ulmifolii</i>	MFLUCC 14-0024	KJ436585	KJ436587	-	-
<i>Latorua caligans</i>	CBS 576.65	KR873266	-	NR_132923	-
<i>Latorua grootfonteinensis</i>	CBS 369.72	KR873267	-	-	-
<i>Magnicamarosporium diospyricola</i>	MFLUCC 16-0419	KY554212	KY554211	KY554210	KY554209
<i>Magnicamarosporium iriomotense</i>	KT 2822	AB807509	AB797219	AB809640	AB808485
<i>Neobambusicola brunnea</i>	MFLU 18-1393	MH644791	-	MH644792	-
<i>Neobambusicola strelitziae</i>	CBS 138869	KP004495	-	KP004467	-
<i>Neobambusicola magnoliae</i>	HKAS 107122	ON870389	ON870914	ON878076	ON911576
<i>Parasulcatisspora clematidis</i>	MFLUCC 17-2082	MT214593	-	MT310637	MT394650
<i>Pseudobambusicola thailandica</i>	BCC 79462	MG926560	MG926559	-	MG926562
<i>Sulcatisspora acerina</i>	KT 2982 ^T	LC014610	LC014605	LC014597	LC014615
<i>Sulcatisspora berchemiae</i>	KT 1607	AB807534	AB797244	AB809635	AB808509

Supplementary Table S4. GenBank accession numbers and culture collection numbers of species of *Teichosporaceae*. Ex-type strains are in bold. The newly generated sequence is indicated in red.

Species	Culture Collection/ Voucher No.	GenBank Accession Numbers			
		LSU	ITS	SSU	<i>tef1</i>
<i>Angustimassarina acerina</i>	MFLUCC 14-0505	KP888637	KP899132	KP899123	KR075168
<i>Angustimassarina populi</i>	MFLUCC 13-0034	KP888642	KP899137	KP899128	MG812528
<i>Angustimassarina quercicola</i>	MFLUCC 14-0506	KP888638	KP899133	KP899124	KR075169
<i>Asymmetrispora mariae</i>	C136	-	KU601583	-	KU601613
<i>Asymmetrispora mariae</i>	CBS 140732	KU601580	KU601580	-	KU601614
<i>Asymmetrispora mariae</i>	C 139	KU601582	KU601582	-	KU601615
<i>Asymmetrispora mariae</i>	C 136	KU601581	KU601581	-	KU601611
<i>Asymmetrispora tennesseensis</i>	ANM 911	GU385207	-	-	GU327769
<i>Asymmetrispora zingiberacearum</i>	NCYUCC 19-0273	ON870391	ON878078	-	ON856444
<i>Asymmetrispora zingiberacearum</i>	NCYUCC 19-0283	ON870392	ON878079	-	ON856445
<i>Aurantiascoma parva</i>	ANM 60	GU385182	-	-	-
<i>Aurantiascoma parva</i>	GKM 169N	GU385165	-	-	GU327768
<i>Aurantiascoma quercus</i>	CBS 143396	MH107966	MH107920	-	MH108030
<i>Decaisnella formosa</i>	BCC 25617	GQ925847	-	GQ925834	GU479850

<i>Decaisnella formosa</i>	BCC 25616	GQ925846	-	GQ925833	GU479851
<i>Floricola clematidis</i>	MFLUCC 17-2182	MT214594	MT310638	MT226706	MT394651
<i>Floricola festucae</i>	MFLU 17-0773	MW587275	MW587280	MW587277	MW590256
<i>Floricola striata</i>	JK 5603K	GU479785	-	GU479751	-
<i>Floricola striata</i>	JK 5678I	GU301813	-	GU296149	GU479852
<i>Floricola viticola</i>	MFLUCC 15-0039	KT305993	KT305997	KT305995	-
<i>Guttulispora crataegi</i>	MFLUCC 14-0993	KP888640	KP899135	KP899126	KR075162
<i>Halotthia posidoniae</i>	BBH 22481	GU479786	-	GU479752	-
<i>Hermatomyces tectonae</i>	MFLUCC 14-1140	KU764695	KU144917	KU712465	-
<i>Hermatomyces thailandica</i>	MFLUCC 14-1143	KU764692	KU144920	KU712468	-
<i>Lophiostoma arundinis</i>	JCM 13550	AB618998	JN942964	AB618679	LC001737
<i>Lophiostoma arundinis</i>	AFTOL-ID 1606	DQ782384	-	DQ782383	DQ782387
<i>Lophiostoma crenatum</i>	AFTOL-ID 1581	DQ678069		DQ678017	DQ677912
<i>Magnibotryascoma acaciae</i>	CPC 24801	KR611898	KR611877	-	-
<i>Magnibotryascoma mali</i>	MFLUCC 17-0933	MF173429	MF173433	MF173431	MF173435
<i>Magnibotryascoma melanommoides</i>	MP5	-	KU601585	-	KU601610
<i>Mauritiana rhizophorae</i>	BCC 28866	GU371824		GU371832	GU371817
<i>Misturatosphaeria aurantiacinotata</i>	GKM 1280	GU385174	-	-	GU327762
<i>Misturatosphaeria aurantiacinotata</i>	GKM 1238	GU385173	-	-	GU327761
<i>Misturatosphaeria viridibrunnea</i>	MFLUCC 10-0930	MH940252	MH940251	-	-
<i>Paulkirkia arundinis</i>	MFLU 13-0315	-	-	-	-
<i>Pseudoaurantiascoma kenyensis</i>	GKM 1195	GU385194	-	-	GU327767
<i>Pseudoaurantiascoma kenyensis</i>	GKM 234N	GU385188	-	-	GU327765
<i>Pseudoaurantiascoma kenyensis</i>	GKM L100Na	GU385189	-	-	GU327766
<i>Pseudoaurantiascoma kenyensis</i>	GKM 194N	-	-	-	GU327764
<i>Pseudomisturatosphaeria cruciformis</i>	SMH 5151	GU385211	-	-	-
<i>Ramusculicola clematidis</i>	MFLUCC 17-2146	MT214596	MT310640	MT226707	MT394652
<i>Ramusculicola thailandica</i>	MFLUCC 17-0884		MW587274	MW590255	MW587279
<i>Ramusculicola thailandica</i>	MFLUCC 13-0284	KP888647	KP899141	KP899131	KR075167
<i>Ramusculicola thailandica</i>	MFLUCC 10-0126	KP888644	KP899138	KP899130	KR075170
<i>Ramusculicola thailandica</i>	HKAS 107136	ON870388	ON878075	ON870913	ON911577
<i>Sigarispora arundinis</i>	KT651	-	-	-	LC001738
<i>Sporormiella minima</i>	S:Lundqvist 17212-a	GQ203744	GQ203786	-	-
<i>Sulcosporium thailandica</i>	MFLUCC 12-0004	-	MG520958	-	-
<i>Teichospora austroafricana</i>	CBS 119330	EU552115	EU552115	-	-
<i>Teichospora austroafricana</i>	CBS 122674	EU552116	EU552116	-	-
<i>Teichospora trabicola</i>	C 141	KU601592	KU601592	-	KU601603
<i>Teichospora trabicola</i>	C 157	KU601593	KU601593	-	KU601604
<i>Teichospora trabicola</i>	C 160	KU601594	KU601594	-	KU601602
<i>Teichospora trabicola</i>	CBS 140730	KU601591	KU601591	-	KU601600
<i>Westerdykella cylindrica</i>	AFTOL-ID 1037	-	DQ491519	-	DQ497610
<i>Westerdykella ornata</i>	CBS 379.55	GU301880	-	GU296208	GU349021

Supplementary Table S5. GenBank accession numbers and culture collection numbers of *Kirschsteiniothelia* species. Ex-type strains are in bold. The newly generated sequence is indicated in red.

Species	Culture Collection/ Voucher No.	GenBank Accession Numbers		
		ITS	LSU	SSU
<i>Kirschsteiniothelia aethiops</i>	CBS 109.53	-	AY016361	AY016344
<i>Kirschsteiniothelia aethiops</i>	MFLUCC 15-0424	KU500571	KU500578	KU500585
<i>Kirschsteiniothelia aquatica</i>	MFLUCC 17-1685	MH182587	MH182594	MH182618
<i>Kirschsteiniothelia arasbaranica</i>	IRAN 2509C	KX621986	KX621987	KX621988
<i>Kirschsteiniothelia arasbaranica</i>	IRAN 2508C	KX621983	KX621984	KX621985
<i>Kirschsteiniothelia cangshanensis</i>	MFLUCC 16-1350	MH182584	MH182592	-
<i>Kirschsteiniothelia fluminicola</i>	MFLUCC 16-1263	MH182582	MH182588	-
<i>Kirschsteiniothelia lignicola</i>	MFLUCC 10-0036	HQ441567	HQ441568	HQ441569
<i>Kirschsteiniothelia phoenicis</i>	MFLUCC 18-0216	MG859978	MG860484	MG859979
<i>Kirschsteiniothelia rostrata</i>	MFLUCC 15-0619	KY697280	KY697276	KY697278
<i>Kirschsteiniothelia rostrata</i>	MFLUCC 16-1124	-	MH182590	-
<i>Kirschsteiniothelia submersa</i>	MFLUCC 15-0427	KU500570	KU500577	KU500584
<i>Kirschsteiniothelia submersa</i>	S-481	-	MH182591	MH182616
<i>Kirschsteiniothelia submersa</i>	S-601	MH182585	MH182593	-
<i>Kirschsteiniothelia tectonae</i>	MFLUCC 12-0050	KU144916	KU764707	-
<i>Kirschsteiniothelia thailandica</i>	MFLUCC 20-0116	MT985633	MT984443	MT984280
<i>Kirschsteiniothelia thailandica</i>	MFLUCC 22-0020	ON878074	ON870387	ON870912
<i>Kirschsteiniothelia thujina</i>	JF 13210	KM982716	KM982718	KM982717
<i>Phyllobathelium anomalum</i>	MPN 242	-	GU327722	JN887386
<i>Phyllobathelium firmum</i>	ERP 3175	-	GU327723	-
<i>Pseudorobillarda eucalypti</i>	MFLUCC 12-0422	KF827451	KF827457	KF827463
<i>Pseudorobillarda phragmitis</i>	CBS 398.61	MH858101	EU754203	EU754104
<i>Strigula guangxiensis</i>	HMAS-L0138040	NR146255	MK206256	-
<i>Strigula univelbiserialis</i>	HMAS-L0137657	-	MK206243	MK206224