

Supplementary materials

Table S1. The names, isolate numbers, and corresponding GenBank accession numbers of the taxa used in Figure 1. The taxa produced in this study are indicated in red, and the type strains are indicated in bold with “*”.

Species	Isolate No.	GenBank accession No.			
		LSU	ITS	<i>tef1-a</i>	<i>rpb2</i>
<i>Acremoniisimulans hongheensis</i>	HKAS 122669 *	OQ379416	OQ379005	OQ378995	OQ378988
<i>Acremoniisimulans hongheensis</i>	HKAS 122670	OQ379417	OQ379006	OQ378996	OQ378989
<i>Acremoniisimulans thailandensis</i>	MFLU 18-0012 *	MH260315	MH275081	/	/
<i>Acremonjisimulans cocois</i>	MFLUCC 15-0817 *	ON650672	ON650683	/	/
<i>Acrostalagmus annulatus</i>	CBS 121.84	LR025802	LR026673	LR026374	LR026104
<i>Acrostalagmus annulatus</i>	CBS 185.70	LR025803	LR026674	LR026375	LR026105
<i>Acrostalagmus annulatus</i>	CBS 450.85	LR025804	LR026675	LR026376	LR026106
<i>Acrostalagmus luteoalbus</i>	CBS 112.16	LR025797	LR026668	LR026369	LR026101
<i>Acrostalagmus luteoalbus</i>	CBS 222.60	LR025794	LR026665	LR026366	LR026099
<i>Acrostalagmus luteoalbus</i>	CBS 236.55	LR025798	LR026669	LR026370	LR026102
<i>Brunneochlamydosporium cibotii</i>	CBS 109240 *	LR025807	LR026678	LR026380	/
<i>Brunneochlamydosporium macroclavatum</i>	CBS 373.93	LR025809	LR026680	LR026382	LR026109
<i>Brunneochlamydosporium macroclavatum</i>	CBS 823.73	LR025810	LR026681	LR026383	LR026110
<i>Brunneochlamydosporium macroclavatum</i>	CBS 101249	LR025811	LR026682	LR026384	/
<i>Brunneochlamydosporium nepalense</i>	CBS 971.72 *	LR025813	LR026684	LR026386	LR026112
<i>Brunneochlamydosporium nepalense</i>	CBS 112045	LR025814	LR026685	LR026387	LR026113
<i>Brunneochlamydosporium terrestre</i>	CBS 112777	LR025819	LR026690	LR026392	LR026118
<i>Brunneomyces brunnescens</i>	CBS 559.73 *	HQ231966	LN810520	LN810534	LR026119

<i>Brunneomyces europaeus</i>	CBS 560.86	LN810511	LN810518	LN810537	LN810527
<i>Brunneomyces europaeus</i>	CBS 652.96 *	LN810512	LN810519	LN810538	LN810528
<i>Brunneomyces hominis</i>	FMR 10429 *	LN810509	KP131517	LN810535	/
<i>Chlamydosporiella restricta</i>	CBS 119.97	LR025820	LR026691	LR026393	LR026120
<i>Chlamydosporiella restricta</i>	CBS 177.40	LR025821	LR026692	LR026394	LR026121
<i>Chlamydosporiella restricta</i>	CBS 178.40 *	LR025822	LR026693	LR026395	LR026122
<i>Chlamydosporiella restricta</i>	CBS 434.83	LR025823	LR026694	LR026396	LR026123
<i>Chlamydosporiella restricta</i>	CBS 443.66	LR025824	LR026695	LR026397	LR026124
<i>Chlamydosporiella restricta</i>	CBS 716.88	LR025825	LR026696	LR026398	LR026125
<i>Chlamydosporiella restricta</i>	CBS 988.69	LR025826	LR026697	LR026399	/
<i>Chordomyces albus</i>	CBS 987.87 *	JX158444	DQ825970	JX158400	JX158466
<i>Chordomyces albus</i>	CBS 206.70	LR025829	LR026700	LR026402	LR026128
<i>Chordomyces albus</i>	CBS 299.70E	LR025830	LR026701	LR026403	LR026129
<i>Chordomyces albus</i>	CBS 204.70	LR025827	LR026698	LR026400	LR026126
<i>Chordomyces albus</i>	CBS 205.70	LR025828	LR026699	LR026401	LR026127
<i>Chordomyces antarcticus</i>	CBS 120042	KJ443108	KJ443240	KJ443196	KJ443156
<i>Chordomyces antarcticus</i>	CBS 120045 *	KJ443109	KJ443241	KJ443197	KJ443157
<i>Chordomyces antarcticus</i>	CBS 120046	KJ443110	KJ443242	KJ443198	KJ443158
<i>Furcasterigmium furcatum</i>	CBS 116548	LR025842	LR026712	LR026409	LR026134
<i>Furcasterigmium furcatum</i>	CBS 116550	LR025843	LR026713	LR026410	LR026135
<i>Furcasterigmium furcatum</i>	CBS 122.42 *	LR025838	LR026709	LR026408	LR026133
<i>Fuscohypha expansa</i>	CBS 103.95	LR025844	LR026714	LR026411	/
<i>Fuscohypha expansa</i>	CBS 418.89 *	LR025845	LR026715	LR026412	LR026136
<i>Gibellulopsis aquatica</i>	CBS 117131 *	LR025850	LR026720	LR026414	/
<i>Gibellulopsis capsici</i>	CBS 175.75	LR025871	LR026741	LR026432	LR026152

<i>Gibellulopsis capsici</i>	CBS 290.30 *	LR025872	LR026742	LR026433	/
<i>Gibellulopsis capsici</i>	CBS 345.39	LR025873	LR026743	LR026434	LR026153
<i>Gibellulopsis capsici</i>	CBS 565.78C	LR025884	LR026754	LR026444	LR026158
<i>Gibellulopsis capsici</i>	CBS 892.70	LR025885	LR026755	LR026445	LR026159
<i>Gibellulopsis capsici</i>	CBS 100826	LR025886	LR026756	LR026446	LR026160
<i>Gibellulopsis capsici</i>	CBS 100827	LR025887	LR026757	LR026447	LR026161
<i>Gibellulopsis catenata</i>	CBS 113951 *	LR025851	LR026721	LR026415	LR026137
<i>Gibellulopsis fusca</i>	CBS 308.38	LR025852	LR026722	LR026416	LR026138
<i>Gibellulopsis fusca</i>	CBS 402.80	LR025853	LR026723	LR026417	LR026139
<i>Gibellulopsis fusca</i>	CBS 560.65 *	LR025854	LR026724	LR026418	LR026140
<i>Gibellulopsis nigrescens</i>	CBS 120949 *	NG_067330	NR_149327	LR026429	LR026149
<i>Gibellulopsis nigrescens</i>	CBS 123176	LR025869	LR026739	LR026430	LR026150
<i>Lectera capsici</i>	CBS 142534 *	KY979825	KY979770	LR026454	LR026166
<i>Lectera colletotrichoides</i>	IMI 303685	LR025894	JQ647450	LR026455	LR026167
<i>Lectera colletotrichoides</i>	IMI 332702	LR025895	JQ647428	LR026456	LR026168
<i>Lectera colletotrichoides</i>	IMI 265740	LR025896	JQ647449	LR026457	LR026169
<i>Lectera longa</i>	IMI 181698 *	LR025897	JQ647448	LR026458	LR026170
<i>Lectera phaseoli</i>	IMI 366179	LR025898	JQ693168	LR026459	LR026171
<i>Longitudinalis nabanheensis</i>	KUMCC 16-0145 *	NG_068250	KY882037	KY882040	/
<i>Monilochaetes infuscans</i>	CBS 379.77	GU180645	LR026764	LR026460	GU180658
<i>Monilochaetes infuscans</i>	CBS 869.96 *	GU180639	GU180626	LR026461	GU180657
<i>Musicillium elettariae</i>	CBS 252.80 *	LR025899	LR026765	LR026462	LR026172
<i>Musicillium elettariae</i>	CBS 110322	LR025900	LR026766	LR026463	/
<i>Musicillium elettariae</i>	CBS 140681	LR025901	LR026767	LR026464	LR026173
<i>Musicillium theobromae</i>	CBS 360.76	LR025904	LR026770	LR026465	LR026175

<i>Musicillium theobromae</i>	CBS 385.32	LR025905	LR026771	LR026466	LR026176
<i>Musicillium theobromae</i>	CBS 397.58	LR025906	LR026772	LR026467	LR026177
<i>Musicillium tropicale</i>	CBS 458.51	LR025915	LR026781	LR026475	LR026184
<i>Musicillium tropicale</i>	CBS 100951	LR025916	LR026782	LR026476	LR026185
<i>Musicillium tropicale</i>	CBS 120009 *	LR025917	LR026783	LR026477	LR026186
<i>Musidium stromaticum</i>	CBS 863.73 *	HQ232143	DQ825969	LN810533	/
<i>Musidium stromaticum</i>	CBS 132.74	LR025919	LR026785	LR026479	LR026187
<i>Musidium stromaticum</i>	CBS 133.74	LR025920	LR026786	LR026480	LR026188
<i>Musidium stromaticum</i>	CBS 135.74A	LR025922	LR026787	LR026482	LR026189
<i>Nigrocephalum collariferum</i>	CBS 124585	LR025928	FJ765365	LR026485	LR026192
<i>Nigrocephalum collariferum</i>	CBS 124586 *	LR025929	FJ765367	LR026486	LR026193
<i>Paragibellulopsis chrysanthemi</i>	MAFF 242621 *	KC287230	KC287235	KC287232	/
<i>Paragibellulopsis chrysanthemi</i>	MAFF 243429	KC287229	KC287234	KC287231	/
<i>Paragibellulopsis chrysanthemi</i>	MAFF 243430	KC287228	KC287233	/	/
<i>Paramusicillium asperulatum</i>	CBS 120158 *	LR025930	LR026792	LR026487	LR026194
<i>Phialoparvum bifurcatum</i>	CBS 299.70B *	LR025931	LR026793	LR026488	LR026195
<i>Plectosphaerella alismatis</i>	CBS 113362	LR025932	LR026794	LR026489	LR026196
<i>Plectosphaerella citrullae</i>	CBS 131740	LR025933	LR026795	LR026490	/
<i>Plectosphaerella citrullae</i>	CBS 131741 *	LR025934	LR026796	LR026491	LR026197
<i>Plectosphaerella cucumerina</i>	CBS 137.37 *	LR025936	LR026798	LR026493	LR026199
<i>Plectosphaerella cucumerina</i>	CBS 139.60	LR025937	LR026799	LR026494	LR026200
<i>Plectosphaerella cucumerina</i>	CBS 286.64	LR025938	LR026800	LR026495	LR026201
<i>Plectosphaerella delsorboi</i>	CBS 116708 *	LR025948	LR026810	LR026505	LR026209
<i>Plectosphaerella humicola</i>	CBS 423.66 *	LR025949	LR026811	LR026506	LR026210
<i>Plectosphaerella melonis</i>	CBS 489.96T *	LR025950	LR026812	LR026507	/

<i>Plectosphaerella oligotrophica</i>	CBS 440.90	LR025952	LR026814	LR026509	LR026211
<i>Plectosphaerella pauciseptata</i>	CBS 131745	LR025954	LR026816	LR026511	LR026212
<i>Plectosphaerella plurivora</i>	CBS 131742 *	LR025967	LR026829	LR026524	LR026219
<i>Plectosphaerella populi</i>	CBS 139623 *	KR476783	KR476750	LR026527	LR026222
<i>Plectosphaerella ramiseptata</i>	CBS 131861 *	LR025970	LR026832	LR026530	LR026225
<i>Plectosphaerella sinensis</i>	ACCC 39145 *	KX527891	KX527888	/	/
<i>Sayamraella subula</i>	BCC 78964 *	LR025971	LR026833	LR026531	LR026226
<i>Sodiomyces alcalophilus</i>	CBS 114.92 *	JX158443	JX158421	JX158399	JX158465
<i>Sodiomyces alkalinus</i>	CBS 110278 *	JX158427	NR_145378	JX158383	JX158449
<i>Sodiomyces magadii</i>	CBS 137619 *	KJ443148	KJ443278	/	/
<i>Sodiomyces tronii</i>	CBS 137618 *	KJ443147	KJ443277	/	/
<i>Stachylidium bicolor</i>	CBS 121802 *	LR025972	LR026834	LR026532	/
<i>Stachylidium pallidum</i>	BCC 79031	LR025973	LR026835	LR026533	LR026227
<i>Summerbellia oligotrophica</i>	CBS 299.70G	LR025846	LR026716	LR026413	/
<i>Theobromium fuscum</i>	CBS 112271 *	LR025976	LR026839	LR026535	LR026229
<i>Verticillium albo-atrum</i>	CBS 388.82	LR025978	LR026841	LR026537	LR026231
<i>Verticillium albo-atrum</i>	CBS 130340 *	LR025984	LR026847	LR026543	LR026233
<i>Verticillium alfalfae</i>	CBS 130603 *	LR025988	LR026851	LR026547	LR026236
<i>Verticillium dahliae</i>	CBS 179.66	LR025992	LR026854	LR026549	LR026238
<i>Verticillium isaacii</i>	CBS 100839	LR026034	LR026895	LR026575	LR026258
<i>Verticillium isaacii</i>	CBS 130343 *	LR026038	LR026899	LR026577	/
<i>Verticillium klebahnii</i>	CBS 130344 *	LR026039	LR026900	LR026578	/
<i>Verticillium longisporum</i>	CBS 124.64 *	LR026040	LR026901	/	/
<i>Verticillium nonalfalfae</i>	CBS 130339 *	LR026074	LR026935	LR026590	/
<i>Verticillium nonalfalfae</i>	CBS 454.51	LR026070	LR026931	LR026586	LR026279

<i>Verticillium nubilum</i>	CBS 457.51 *	LR026076	LR026937	LR026591	LR026282
<i>Verticillium tricorpus</i>	CBS 447.54 *	LR026083	LR026944	/	/
<i>Verticillium tricorpus</i>	CBS 545.79	LR026084	LR026945	LR026597	LR026284
<i>Verticillium tricorpus</i>	CBS 803.97	LR026085	LR026946	LR026598	LR026285
<i>Verticillium zaregamsianum</i>	CBS 130342 *	LR026098	LR026959	LR026610	/
<i>Verticillium zaregamsianum</i>	CBS 100842	LR026097	LR026958	LR026609	/
<i>Xenoplectosphaerella clematidis</i>	MFLUCC 17-2067 *	NG_071256	NR_172181	MT394674	MT394722

Table S2. The names, isolate numbers, and corresponding GenBank accession numbers of the taxa used in Figure 3. The taxa produced in this study are indicated in red, and the type strains are indicated in bold with “*”.

Species	Strain	GenBank accession No.			
		ITS	LSU	<i>tef1-a</i>	<i>rpb2</i>
<i>Acanthohelicospora aurea</i>	GZCC 16-0059	KY321322	KY321325	KY792599	MF589910
<i>Acanthohelicospora scopula</i>	MFLUCC10-0116	KF301526	KF301534	KF301555	/
<i>Acanthohelicospora scopulum</i>	ANM 386	GQ856141	GQ850489	/	/
<i>Acanthohelicospora scopulum</i>	ANM 95	GQ856142	GQ850490	/	/
<i>Acanthostigma Chiangmaiensis</i>	MFLUCC10-0125 *	JN865209	JN865197	/	/
<i>Acanthostigma perpusillum</i>	UAMH 7237	AY916492	AY856892	/	/
<i>Acanthostigma minuta</i>	ANM 818	/	GQ850488	/	/
<i>Acanthostigma minuta</i>	ANM 238	/	GQ850486	/	/
<i>Acanthostigma multiseptatum</i>	ANM 665	GQ856144	GQ850493	/	/

<i>Acanthostigma multiseptatum</i>	ANM 475 *	GQ856145	GQ850492	/	/
<i>Acanthotubeufia filiformis</i>	ANM 101	/	GQ850495	/	/
<i>Acanthotubeufia filiformis</i>	ANM 514	GQ856146	GQ850494	/	/
<i>Aquaphila albicans</i>	BCC 3520	DQ341098	DQ341102	/	/
<i>Aquaphila albicans</i>	BCC 3543	DQ341096	DQ341101	/	/
<i>Berkleasmium aquaticum</i>	MFLUCC 17-0039	KY790443	KY790431	KY792607	MF535267
<i>Berkleasmium aquaticum</i>	GZCC 16-0056	KY790442	KY790430	KY792606	MF535266
<i>Berkleasmium aquaticum</i>	MFLUCC 17-0049 *	KY790444	KY790432	KY792608	MF535268
<i>Berkleasmium brunneisporum</i>	MFLUCC 16-1127	KY790447	KY790435	KY792611	MF535269
<i>Berkleasmium brunneisporum</i>	MFLUCC 16-0015 *	KY790446	KY790434	KY792610	/
<i>Berkleasmium concinnum</i>	DAOM:696499	KY611397	KY611399	/	/
<i>Berkleasmium fusiforme</i>	MFLUCC 17-1988	MH558696	MH558823	MH550887	MH551010
<i>Berkleasmium guangxiense</i>	MFLUCC 17-0042 *	KY790448	KY790436	KY792612	MF535270
<i>Berkleasmium latisporum</i>	MFLUCC 16-0019 *	KY790449	KY790437	KY792613	MF535271
<i>Berkleasmium longisporum</i>	MFLUCC 17-2002	MH558699	MH558826	MH550890	MH551013
<i>Berkleasmium longisporum</i>	MFLUCC 17-1999 *	MH558698	MH558825	MH550889	MH551012
<i>Berkleasmium thailandicum</i>	MFLUCC 17-1984	MH558700	MH558827	MH550891	MH551015
<i>Berkleasmium thailandicum</i>	MFLUCC 17-2000	MH558701	MH558828	MH550892	MH551016
<i>Boerlagiomyces macrospora</i>	MFLUCC 12-0388	KU144927	KU764712	KU872750	/
<i>Botryosphaeria pseudoramosa</i>	CERC 2001 *	KX277989	MF410031	/	MF410140
<i>Botryosphaeria wangensis</i>	CERC 2298 *	KX278002	MF410044	/	MF410153
<i>Camporesiomyces mali</i>	KUMCC 19-0216 *	MN792813	MN792811	MN794018	/
<i>Camporesiomyces patagoniensis</i>	BBB:MVB 573 *	NG_056997	JN127359	/	/
<i>Camporesiomyces vaccinii</i>	CBS:216.90 *	MH862204	MH873889	/	/
<i>Camporesiomyces vaccinii</i>	CBS 216.91	AY916486	AY856879	/	/

<i>Chlamydotubeufia cylindrica</i>	MFLU 17-1177 *	NR_159761	NG_066230	MH550893	MH551018
<i>Chlamydotubeufia huaikangplaensis</i>	MFLUCC 16-0227	KY678765	KY678757	KY792596	MF535260
<i>Chlamydotubeufia huaikangplaensis</i>	MFLUCC 16-0023	KY678766	KY678758	KY792597	MF535259
<i>Chlamydotubeufia krabiensis</i>	MFLUCC 16-1134 *	KY678767	KY678759	KY792598	MF535261
<i>Dematiohelicoma pulchrum</i>	MUCL 39827	AY916457	AY856872	/	/
<i>Dematiohelicomycetes helicosporus</i>	MFLUCC 16-0007	MH558704	MH558832	MH550895	MH551020
<i>Dematiohelicomycetes helicosporus</i>	MFLUCC 16-0003	MH558703	MH558831	MH550894	MH551019
<i>Dematiohelicosporum guttulatum</i>	MFLUCC 17-2011 *	MH558705	MH558833	MH550896	MH551021
<i>Dematitubeufia chiangraiensis</i>	MFLU 10-0048	/	/	KF301551	/
<i>Dictyospora thailandica</i>	MFLUCC 16-0001 *	KY873627	KY873622	KY873286	MH551023
<i>Dictyospora thailandica</i>	MFLUCC 18-0641	MH558706	MH558834	MH550897	MH551022
<i>Discotubeufia browneae</i>	MFLUCC 17-0908 *	NR_163321	MK347938	/	MK434903
<i>Excipulariopsis narsapurensis</i>	KUMCC 21-0464	OQ379007	OQ379418	OQ378997	OQ378990
<i>Excipulariopsis narsapurensis</i>	KUMCC 21-0465	OQ379008	OQ379419	OQ378998	OQ378991
<i>Helicangiospora lignicola</i>	MFLUCC 11-0378	KF301523	KF301531	KF301552	/
<i>Helicoarctatus aquaticus</i>	MFLUCC 17-1996 *	MH558707	MH558835	MH550898	MH551024
<i>Helicodochium aquaticum</i>	MFLUCC 17-2016 *	MH558709	MH558837	MH550900	MH551026
<i>Helicodochium aquaticum</i>	MFLUCC 18-0490	MH558710	MH558838	MH550901	MH551027
<i>Helicohyalinum aquaticum</i>	MFLUCC 16-0014	MH558711	MH558839	MH550902	MH551028
<i>Helicohyalinum aquaticum</i>	MFLUCC 16-1131 *	KY873625	NG_070412	KY873284	MF535257
<i>Helicohyalinum infundibulum</i>	MFLUCC 16-1133 *	MH558712	MH558840	MH550903	MH551029
<i>Helicoma aquaticum</i>	MFLUCC 17-2025 *	MH558713	MH558841	MH550904	MH551030
<i>Helicoma brunneisporum</i>	MFLUCC 17-1983 *	MH558714	MH558842	MH550905	MH551031
<i>Helicoma guttulatum</i>	MFLUCC 16-0022	KX454171	KX454172	MF535254	MH551032
<i>Helicoma hongkongense</i>	MFLUCC 17-2005 *	MH558716	MH558843	MH550907	MH551033

<i>Helicoma longisporum</i>	MFLUCC 16-0211	MH558719	MH558845	MH550910	MH551036
<i>Helicoma nematosporum</i>	MFLUCC 16-0011	MH558722	MH558848	MH550913	MH551039
<i>Helicoma rubriappendiculatum</i>	MFLUCC 18-0491 *	MH558723	MH558849	MH550914	MH551040
<i>Helicoma rufum</i>	MFLUCC 17-1806 *	MH558724	MH558850	MH550915	/
<i>Helicoma septoconstrictum</i>	MFLUCC 17-2001 *	MH558726	MH558852	MH550917	MH551042
<i>Helicoma septoconstrictum</i>	MFLUCC 17-1991	MH558725	MH558851	MH550916	MH551041
<i>Helicoma siamense</i>	MFLUCC 12-0563	KU144928	KU764713	KU872751	/
<i>Helicomycetes colligatus</i>	MFLUCC 16-1132 *	MH558727	MH558853	MH550918	MH551043
<i>Helicomycetes hyalosporus</i>	MFLUCC 17-0051 *	MH558731	MH558857	MH550922	MH551047
<i>Helicomycetes torquatus</i>	MFLUCC 16-0217 *	MH558732	MH558858	MH550923	MH551048
<i>Helicosporium aquaticum</i>	MFLUCC 17-2008 *	NR_160371	/	MH550924	MH551049
<i>Helicosporium flavisporum</i>	MFLUCC 17-2020 *	MH558734	MH558860	MH550925	MH551050
<i>Helicosporium flavum</i>	MFLUCC 16-1230 *	KY873626	KY873621	KY873285	/
<i>Helicosporium gracile</i>	CBS 284.54	MH857334	MH868875	/	/
<i>Helicosporium luteosporum</i>	MFLUCC 16-0226 *	KY321324	KY321327	KY792601	MH551056
<i>Helicosporium setiferum</i>	MFLUCC 17-1994 *	MH558735	MH558861	MH550926	MH551051
<i>Helicosporium setiferum</i>	MFLUCC 17-2007	MH558737	MH558863	MH550928	MH551053
<i>Helicosporium</i> sp.	NBRC 9014	AY916489	AY856903	/	/
<i>Helicosporium vegetum</i>	CBS 941.72	AY916488	AY856883	/	/
<i>Helicosporium vesicarium</i>	MFLUCC 17-1795	MH558739	MH558864	MH550930	MH551055
<i>Helicosporium viridiflavum</i>	MFLUCC 17-2336 *	MH558738	/	MH550929	MH551054
<i>Helicotruncatum palmigenum</i>	MFLUCC 15-0993	MT627685	MN913690	/	/
<i>Helicotubeufia guangxiensis</i>	MFLUCC 17-0040 *	MH290018	MH290023	MH290028	MH290033
<i>Helicotubeufia hydei</i>	MFLUCC 17-1980 *	MH290021	MH290026	MH290031	MH290036
<i>Helicotubeufia jonesii</i>	MFLUCC 17-0043 *	MH290020	MH290025	MH290030	MH290035

<i>Kamalomyces mangrovei</i>	MFLUCC 17-0407	MN047097	MN017863	MN077072	/
<i>Kamalomyces thailandicus</i>	MFLUCC 13-0233 *	MF506884	MF506882	MF506886	/
<i>Kamalomyces thailandicus</i>	MFLUCC 11-0158	MF506883	MF506881	MF506885	MF506887
<i>Kevinyhydea brevistipitata</i>	MFLUCC 18-1269	MH747102	MH747115	/	/
<i>Manoharachariella tectonae</i>	MFLUCC 12-0170	KU144935	KU764705	KU872762	/
<i>Muripulchra aquatica</i>	KUMCC 15-0276 *	KY320534	KY320551	KY320564	MH551058
<i>Muripulchra aquatica</i>	KUMCC 15-0245 *	KY320533	KY320550	KY320563	MH551057
<i>Neocanthostigma fusiforme</i>	MFLUCC 11-0510	KF301529	KF301537	/	/
<i>Neochlamydotubeufia fusiformis</i>	MFLUCC 16-0016 *	MH558740	MH558865	MH550931	MH551059
<i>Neochlamydotubeufia khunkornensis</i>	MFLUCC 16-1126	MH558743	MH558868	MH550934	MH551062
<i>Neohelicoma fagacearum</i>	MFLUCC110379	KF301524	KF301532	KF301553	/
<i>Neohelicomyces aquaticus</i>	KUMCC 15-0463	KY320529	KY320546	KY320562	MH551065
<i>Neohelicomyces aquaticus</i>	MFLUCC 16-0993 *	KY320528	KY320545	KY320561	MH551066
<i>Neohelicomyces dehongensis</i>	MFLUCC 18-1029 *	MT627701	MN913709	MT954393	/
<i>Neohelicomyces hyalosporus</i>	GZCC 16-0086 *	MH558745	MH558870	MH550936	MH551064
<i>Neohelicosporium acrogenisporum</i>	MFLUCC 17-2019 *	MH558746	MH558871	MH550937	MH551069
<i>Neohelicosporium aquaticum</i>	MFLUCC 17-1519	MF467916	MF467929	MF535242	MF535272
<i>Neohelicosporium astrictum</i>	MFLUCC 17-2004 *	MH558747	MH558872	MH550938	MH551070
<i>Neohelicosporium ellipsoideum</i>	MFLUCC 16-0229 *	MH558748	MH558873	MH550939	MH551071
<i>Neohelicosporium fusisporum</i>	MFUCC 16-0642	MG017612	MG017613	MG017614	/
<i>Neohelicosporium guangxiense</i>	GZCC 16-0068	MH558749	MH558874	MH550940	MH551072
<i>Neohelicosporium guangxiense</i>	MFLUCC 17-0054	MH558750	MH558875	MH550941	MH551073
<i>Neohelicosporium hyalosporum</i>	GZCC 16-0076 *	MF467923	MF467936	MF535249	MF535279
<i>Neohelicosporium irregulare</i>	MFLUCC 17-1796 *	MH558752	MH558877	MH550943	MH551075
<i>Neohelicosporium krabiense</i>	MFLUCC 16-0224 *	MH558754	MH558879	MH550945	MH551077

<i>Neohelicosporium laxisporum</i>	MFLUCC 17-2027 *	MH558755	MH558880	MH550946	MH551078
<i>Neohelicosporium ovoideum</i>	GZCC 16-0064 *	MH558756	MH558881	MH550947	MH551079
<i>Neohelicosporium parvisporum</i>	MFLUCC 16-0218	MF467927	MF467940	MH550955	MH551087
<i>Neohelicosporium parvisporum</i>	MFLUCC 17-1521	MH558758	MH558883	MH550949	MH551081
<i>Neohelicosporium parvisporum</i>	MFLUCC 17-1804	MH558760	MH558885	MH550951	MH551083
<i>Neohelicosporium thailandicum</i>	MFLUCC 16-0221 *	MF467928	MF467941	MF535253	MF535283
<i>Neotubeufia krabiensis</i>	MFLUCC 16-1125 *	MG012031	MG012024	MG012010	MG012017
<i>Parahelicomyces paludosus</i>	AR 4206	DQ341095	DQ341103	/	/
<i>Parahelicomyces quercus</i>	MFUCC 17-0895 *	MK347720	MK347934	MK360077	MK434906
<i>Pleurohelicosporium parvisporum</i>	MFLU 17-1124 *	MH558764	MH558889	MH550956	MH551088
<i>Podonectria kuwanaspidis</i>	SICAUCC 21-0007	MW484994	MW462905	MW462116	MW462123
<i>Podonectria kuwanaspidis</i>	SICAUCC 21-0002 *	MW484989	MW462900	MW462112	MW462119
<i>Podonectria novae-zelandiae</i>	SICAUCC 21-0005	MW484992	MW462903	MW462115	MW462122
<i>Podonectria sichuanensis</i>	SICAUCC 21-0001	MW484988	MW462899	MW462111	MW462118
<i>Pseudohelicomyces aquaticus</i>	MFLUCC 16-0234 *	MH558766	MH558891	MH550958	MH551092
<i>Pseudohelicomyces talbotii</i>	MFLUCC 17-2021 *	MH558765	MH558890	MH550957	MH551091
<i>Pseudohelicoon gigantisporum</i>	BCC 3550	AY916467	AY856904	/	/
<i>Tamhinispora indica</i>	NFCCI 2924 *	KC469282	KC469283	/	/
<i>Tamhinispora srinivasanii</i>	NFCCI 4231	MG763746	MG763745	/	/
<i>Thaxteriella amazonensis</i>	ATCC 42524	AY916458	AY787938	/	/
<i>Thaxteriella inthanonensis</i>	MFLUCC11-0003 *	JN865211	JN865199	/	/
<i>Thaxteriellopsis lignicola</i>	MFLUCC 16-0026	MH558768	MH558893	MH550960	MH551094
<i>Thaxteriellopsis lignicola</i>	MFLUCC 16-0024	MH558767	MH558892	MH550959	MH551093
<i>Tubeufia abundata</i>	MFLUCC 17-2024 *	MH558769	MH558894	MH550961	MH551095
<i>Tubeufia aquatica</i>	MFLUCC 15-0990	MT627687	MN913689	MT954399	MT878463

<i>Tubeufia aquatica</i>	MFLUCC 17-1794	MH558770	MH558895	MH550962	MH551096
<i>Tubeufia bambusicola</i>	MFLUCC 17-1803 *	MH558771	MH558896	MH550963	MH551097
<i>Tubeufia brunnea</i>	MFLUCC 17-2022 *	MH558773	MH558898	MH550965	MH551099
<i>Tubeufia Chiangmaiensis</i>	MFLUCC 17-1801	MH558774	MH558899	MH550966	MH551100
<i>Tubeufia cylindrothecia</i>	MFLUCC 17-1792	MH558776	MH558901	MH550968	MH551102
<i>Tubeufia dictyospora</i>	MFLUCC 17-1805 *	MH558778	MH558903	MH550970	MH551104
<i>Tubeufia fangchengensis</i>	MFLUCC 17-0047 *	MH558783	MH558908	MH550975	MH551109
<i>Tubeufia filiformis</i>	MFLUCC 16-1135	KY092416	KY092411	KY117032	MF535285
<i>Tubeufia hechiensis</i>	MFLUCC 17-0052 *	MH558785	MH558910	MH550978	MH551112
<i>Tubeufia krabiensis</i>	MFLUCC 16-0324	MH275090	MH260324	MH412787	MH412761
<i>Tubeufia latispora</i>	MFLUCC 16-0027 *	KY092417	KY092412	KY117033	MH551119
<i>Tubeufia laxispora</i>	MFLUCC 17-2023	MH558794	MH558919	MH550987	MH551121
<i>Tubeufia machaerinae</i>	MFLUCC 17-0055 *	MH558795	MH558920	MH550988	MH551122
<i>Tubeufia mackenziei</i>	MFLUCC 16-0222 *	KY092415	KY092410	KY117031	MF535288
<i>Tubeufia parvispora</i>	MFLUCC 17-2009	MH558798	MH558923	MH550991	MH551125
<i>Tubeufia parvispora</i>	MFLUCC 17-1992	MH558796	MH558921	MH550989	MH551123
<i>Tubeufia roseohelicospora</i>	MFLUCC 17-1797	MH558800	MH558925	MH550993	MH551127
<i>Tubeufia tectonae</i>	MFLUCC 17-1985 *	MH558810	MH558934	MH551003	MH551137
<i>Tubeufia tratensis</i>	MFLUCC 17-1993 *	NR_160398	MH558935	MH551004	MH551138
<i>Tubeufiaceae</i> sp.	UBC F14999	AY916456	AY856870	/	/

Table S3. The names, isolate numbers, and corresponding GenBank accession numbers of the taxa used in Figure 5. The taxa produced in this study are indicated in red, and the type strains are indicated in bold with “*”

Species	Strain	GenBank accession No.	
		ITS	LSU
<i>Brunneocarpos banksiae</i>	CPC 29841 *	NR_147648	NG_066277
<i>Caliciopsis indica</i>	GUFCC 4947 *	GQ259981	GQ259980
<i>Chaenothecopsis consociata</i>	Tibell 22472	AY795851	DQ008999
<i>Chaenothecopsis debilis</i>	Tibell 16643	AY795852	AY795991
<i>Chaenothecopsis diabolica</i>	H:Tuovila 06-035 *	JX119109	JX119118
<i>Chaenothecopsis dolichocephala</i>	Tibell 19281 *	AY795854	AY795993
<i>Chaenothecopsis epithallina</i>	Tibell 22705	AY795855	/
<i>Chaenothecopsis fennica</i>	Tibell 16024	AY795857	AY795995
<i>Chaenothecopsis golubkovae</i>	Titov 6707 *	AY795859	AY795996
<i>Chaenothecopsis haematopus</i>	CBS:173.95	MH862507	MH874148
<i>Chaenothecopsis haematopus</i>	16625	AY795861	AY795997
<i>Chaenothecopsis hongheensis</i>	HKAS 122672	OQ379009	OQ379420
<i>Chaenothecopsis hongheensis</i>	HKAS 122673 *	OQ379010	OQ379421
<i>Chaenothecopsis khayensis</i>	H:JR 04G058 *	JX122785	HQ172895
<i>Chaenothecopsis matai</i>	PDD 110746	OQ308931	OQ308874
<i>Chaenothecopsis matai</i>	PDD 110749 *	OQ308932	OQ308875
<i>Chaenothecopsis montana</i>	H:Tuovila 07-086 *	JX119105	JX119114
<i>Chaenothecopsis nana</i>	Tibell 22473 *	AY795862	/
<i>Chaenothecopsis neocaledonica</i>	Rikkinen 010179 *	KF815196	KF815197
<i>Chaenothecopsis nigripunctata</i>	H:Tuovila 06-013 *	JX119103	JX119112
<i>Chaenothecopsis nodosa</i>	PDD 110743	OQ308933	OQ308876
<i>Chaenothecopsis nodosa</i>	PDD 110745 *	OQ308934	OQ308877
<i>Chaenothecopsis novae-zelandiae</i>	PDD 110742	OQ308935	OQ308878
<i>Chaenothecopsis novae-zelandiae</i>	PDD 110744 *	OQ308936	OQ308879
<i>Chaenothecopsis pallida</i>	H:JR 10652 *	JX122779	JX122781
<i>Chaenothecopsis pusilla</i>	Tibell 1658	/	DQ009000
<i>Chaenothecopsis pusiola</i>	H:Tuovila 09-047	JX119106	JX119115
<i>Chaenothecopsis quintralis</i>	BCRU:05233 *	/	JQ267741
<i>Chaenothecopsis resinicola</i>	Tibell 19234 *	AY795867	/
<i>Chaenothecopsis resinophila</i>	H:JR 000424 *	JX122780	JX122782
<i>Chaenothecopsis schefflerae</i>	Rikkinen 13183	KY499965	KY499967
<i>Chaenothecopsis sitchensis</i>	H:Tuovila 06-033 *	JX119102	JX119111
<i>Chaenothecopsis sp. 1</i>	Tuovila 09-052	JX119110	JX119119
<i>Chaenothecopsis sp. 2</i>	Tuovila 08-004	KC590480	KC590485
<i>Chaenothecopsis tsugae</i>	H:JR07005B	JX119104	JX119113
<i>Chaenothecopsis vainioana</i>	H:Tuovila 09-066	JX119107	JX119116
<i>Chaenothecopsis viridireagens</i>	Tibell 22803	AY795872	DQ013257

<i>Mycocalicium albonigrum</i>	Tibell 19038	AF223966	AY796001
<i>Mycocalicium hyaloparvicellulum</i>	MFLUCC 14-0169 *	KR920004	KR920005
<i>Mycocalicium sequoiae</i>	Rikkinen 92055 *	/	AY796002
<i>Mycocalicium sp. 2</i>	Tuovila 09-131	KC590482	KC590487
<i>Mycocalicium sp.1</i>	Tibell 17604	AF243133	/
<i>Mycocalicium subtile</i>	Tibell 21020	AF225445	AY796003
<i>Mycocalicium subtile</i>	JR6450	OQ308930	OQ308873
<i>Phaeocalicium interruptum</i>	Tibell 23044	AY795873	/
<i>Phaeocalicium polyporaeum</i>	ZW-Geo60-Clark	AY789363	AY789362
<i>Phaeocalicium populneum</i>	Tibell 19286	AY795874	AY796009
<i>Phaeocalicium praecedens</i>	Tuovila 09-240	KC590481	KC590486
<i>Phaeocalicium sp.</i>	Tuovila 10-017	KC590483	KC590484
<i>Phaeocalicium triseptatum</i>	L280 *	KJ871615	/
<i>Rhopalophora clavispora</i>	CBS 129.74	KX537751	MH872573
<i>Sphinctrina intermedia</i>	L281 *	KJ865747	/
<i>Sphinctrina leucopoda</i>	Kalb 33829	AY795875	AY796006
<i>Sphinctrina turbinata</i>	Tibell 22478	AY795876	AY796007
<i>Sphinctrina turbinata</i>	Tibell 23093	AY795877	DQ009001
<i>Stenocybe pullatula</i>	Tibell 17117	AY795878	AY796008

Table S4. The names, isolate numbers, and corresponding GenBank accession numbers of the taxa used in Figure 7. The taxa produced in this study are indicated in red, and the type strains are indicated in bold with “*”.

Species name	Strain	GenBank accession No.	
		ITS	tub2
<i>Camarops amorphia</i>	SMH1450	AY780054	AY780093
<i>Camarops petersii</i>	JM1655	AY346265	AY780094
<i>Camarops tubulina</i>	SMH4614	AY346266	AY780095
<i>Camarops ustulinoides</i>	SMH1988	AY346267	AY780096
<i>Chaetosphaeria biapiculata</i>	SMH 3074 *	AF466065	AF466026
<i>Chaetosphaeria cubensis</i>	SMH 3258	AF466067	AF466028
<i>Chaetosphaeria decastyla</i>	SMH 2629	AF466068	AF466029
<i>Chaetosphaeria hebetiseta</i>	SMH 2729	AF466069	AF466030
<i>Chaetosphaeria innumera</i>	SMH 2748	AY017375	AF466018
<i>Chaetosphaeria lignomollis</i>	SMH 3015	AF466073	AF466034
<i>Chaetosphaeria longiseta</i>	SMH 3854	AF279417	AF466036
<i>Chaetosphaeria luquillensis</i>	SMH 2973 *	AF466074	AF466037
<i>Chaetosphaeria minuta</i>	SMH 3396	AF466075	AF466038
<i>Chaetosphaeria ovoidea</i>	SMH2605	AF064641	AF466057
<i>Chaetosphaeria pygmaea</i>	UPSC 2523	AF466077	AF466040

<i>Coniochaetidium savoryi</i>	TRTC 51980	AY346276	AY780114
<i>Diaporthe phaseolorum</i>	FAU458	AY346279	AY780115
<i>Echinosphaeria canescens</i>	JHC97-006	KF765604	KF765622
<i>Echinosphaeria canescens</i>	SMH4666	KF765605	KF765623
<i>Echinosphaeria canescens</i>	SMH4791	AY436403	/
<i>Echinosphaeria canescens</i>	TL5730	AY436404	KF765624
<i>Eutypa</i> sp.	SMH3580	AY346280	AY780117
<i>Fusarium ambrosium</i>	SMH1999	AY780077	AY780137
<i>Helminthosphaeria carpathica</i>	SMH3903	KF765606	KF765625
<i>Helminthosphaeria cf. stuppea</i>	JF04120	KF765611	KF765632
<i>Helminthosphaeria cf. stuppea</i>	TL11998 *	KF765612	KF765633
<i>Helminthosphaeria clavariarum</i>	ANM Acc.17 *	/	KF765626
<i>Helminthosphaeria corticiorum</i>	JF04225	KF765607	KF765627
<i>Helminthosphaeria hispidissima</i>	ILLS00121145 *	MN447129	/
<i>Helminthosphaeria hyphodermiae</i>	SMH4192	KF765608	KF765628
<i>Helminthosphaeria ludens</i>	JF04126 *	/	KF765629
<i>Helminthosphaeria mammillata</i>	ANM986	KF765609	KF765630
<i>Helminthosphaeria odontiae</i>	ANM928	KF765610	KF765631
<i>Helminthosphaeria tomaculum</i>	SMH2485 *	KF765613	KF765634
<i>Helminthosphaeria triseptata</i>	JF02048 *	/	KF765635
<i>Helminthosphaeria triseptata</i>	JF04015	KF765614	KF765636
<i>Hilberina caudata</i>	SMH1542 *	KF765615	KF765637
<i>Hilberina hongheensis</i>	HKAS 122677 *	OQ379011	OQ379003
<i>Hilberina hongheensis</i>	HKAS 122678	OQ379012	OQ379004
<i>Hilberina munkii</i>	SMH1531	KF765616	KF765638
<i>Hilberina punctata</i>	SMH4825 *	/	KF765639
<i>Hilberina robusta</i>	SMH3054 *	/	KF765640
<i>Hilberina sphagnum</i>	Buck49156 *	KF765617	KF765641
<i>Lasiosphaeria ovina</i>	SMH1538 *	AF064643	AF466046
<i>Melanochaeta aotearoae</i>	SMH 3551	AF466082	AF466048
<i>Melanochaeta hemipsila</i>	SMH2125 *	AY346292	AF466049
<i>Neurospora crassa</i>	MUCL 19026	AF286411	M13630
<i>Poroconiochaeta discoidea</i>	SANK 12878 *	AY346297	AY780134
<i>Ruzenia spermoides</i>	ANM163	KF765618	KF765642
<i>Ruzenia spermoides</i>	SMH4606	AY436422	KF765644
<i>Ruzenia spermoides</i>	SMH4655	KF765619	KF765645
<i>Synaptospora plumbea</i>	ANM963	KF765620	KF765646
<i>Synaptospora plumbea</i>	SMH3962	KF765621	KF765647
<i>Valsa ceratosperma</i>	AR3426	AF408387	AY780144
<i>Valsonectria pulchella</i>	SMH1193 *	AY346304	AY780145

Table S5. The names, isolate numbers, and corresponding GenBank accession numbers of the taxa used in Figure 9. The taxa produced in this study are indicated in red, and the type strains are indicated in bold with “*”

Species	Strain	GenBank accession No.		
		ITS	LSU	<i>rpb2</i>
<i>Amphibambusa bambusicola</i>	MFLUCC 11-0617 *	KP744433	KP744474	/
<i>Amphibambusa hongheensis</i>	KUMCC 20-0334	MW892972	MW892970	/
<i>Arecophila bambusae</i>	HKUCC 4794	/	AF452038	/
<i>Arecophila muroiana</i>	GZUCC0122	MT742127	MT742134	/
<i>Biscogniauxia capnodes</i>	YMJ 138	EF026131	/	JX507779
<i>Biscogniauxia nummularia</i>	MUCL 51395 *	JX658444	KT281894	KY624236
<i>Biscogniauxia petrensis</i>	LC5697	KU746669	KU746715	/
<i>Cainia graminis</i>	CBS 136.62	MH858123	MH869701	/
<i>Cainia</i> sp.	LSU0560	MT000421	MT000513	/
<i>Delonicicola siamense</i>	MFLUCC 15-0670 *	MF167586	MF158345	MF158346
<i>Delonicicola siamense</i>	KUMCC 21-0459	OQ379013	OQ379424	OQ378992
<i>Discula destructiva</i>	ATCC 76230	DQ323528	AF362568	/
<i>Graphostroma platystoma</i>	AFTOL-ID 1249	/	DQ836906	DQ836893
<i>Kretzschmaria deusta</i>	CBS163.93	KC477237	KY610458	/
<i>Liberomyces macrosporus</i>	CCF 4028 *	NR_154605	/	FR715509
<i>Liberomyces pistaciae</i>	CPC 33866	MH797616	/	MH797684
<i>Liberomyces saliciphilus</i>	H041	FR715510	/	FR715507
<i>Obolarina dryophila</i>	8401 = H86	/	GQ428313	FR715505
<i>Podosordaria tulasnei</i>	CBS 128.80	KT281902	KT281897	/
<i>Seynesia erumpens</i>	SMH 1291	/	AF279410	AY641073
<i>Xylaria hypoxylon</i>	ATCC 42768	AY327477	AY327480	/

Table S6. The names, isolate numbers, and corresponding GenBank accession numbers of the taxa used in Figure 11. The taxa produced in this study are indicated in red, and the type strains are indicated in bold with “*”

Species	Strain	GenBank accession No.		
		LSU	<i>tef1-a</i>	<i>rpb2</i>
<i>Acanthonitschkea argentinensis</i>	SMH1395	AY695259	FJ969042	FJ968943
<i>Acanthonitschkea tristis</i>	SMH4723	FJ968949	FJ969043	/
<i>Bertia gigantospora</i>	GKM1136 *	/	FJ969008	FJ968937
<i>Bertia orbis</i>	GKM1271 *	FJ968955	FJ969009	/
<i>Chaetosphaerella phaeostroma</i>	SMH4585	AY346274	FJ969003	/
<i>Chaetosphaerella phaeostroma</i>	SMH4257	AY695264	FJ969004	FJ968940
<i>Coronophora gregaria</i>	ANM1555	/	FJ969007	FJ968938
<i>Coronophorella chaetomioides</i>	GKM1099 *	FJ968969	FJ969034	FJ968922
<i>Cryptosphaerella celata</i>	GKM1231 *	FJ968975	FJ969035	FJ968929
<i>Cryptosphaerella costaricensis</i>	MO2111 *	FJ968971	FJ969028	/
<i>Cryptosphaerella cylindriformis</i>	GKM1042	FJ968973	FJ969032	FJ968918
<i>Cryptosphaerella cylindriformis</i>	GKM1187	GQ217531	FJ969033	FJ968925
<i>Cryptosphaerella cylindriformis</i>	GKM434N *	FJ968972	FJ969031	FJ968934
<i>Cryptosphaerella elliptica</i>	SMH4722 *	FJ968974	FJ969029	FJ968944
<i>Cryptosphaerella globosa</i>	GKM471N *	FJ968977	FJ969036	FJ968935
<i>Cryptosphaerella malindensis</i>	GKM1150 *	FJ968970	FJ969027	FJ968923
<i>Euacanthofoveolata</i>	GKM1221	FJ968978	FJ969026	FJ968927
<i>Fracchiaria broomeana</i>	GKM1071	/	FJ969040	FJ968919
<i>Fracchiaria broomeana</i>	SMH347	FJ968979	FJ969041	FJ968947
<i>Fracchiaria broomeana</i>	SMH2809	AY695268	FJ969039	FJ968942

<i>Fracchiacea lunata</i>	GKM1089	/	FJ969005	FJ968921
<i>Fracchiacea myricoides</i>	IFRD 9201 *	KX856174	/	/
<i>Fracchiacea myricoides</i>	HKAS 122671	OQ379425	OQ378999	OQ378993
<i>Neofracchiacea callista</i>	SMH2689	AY695269	FJ969020	FJ968941
<i>Nitschkia menicoidea</i>	SMH1523	AY695270	/	/
<i>Nitschkia tetraspora</i>	SMH4787	FJ968984	FJ969010	/
<i>Nitschkia tetraspora</i>	GKML213N	FJ968985	/	/
<i>Nitschkia tetraspora</i>	SMH2469.2	FJ968986	/	/
<i>Scortechinia acanthostroma</i>	SMH1164	FJ968989	FJ969014	FJ968924
<i>Scortechinia acanthostroma</i>	SMH1143	FJ968988	FJ969012	FJ968948
<i>Tympanopsis confertula</i>	GKM1242	FJ968997	FJ969023	FJ968930
<i>Tympanopsis confertula</i>	ANM1567	FJ969001	FJ969025	FJ968939
<i>Tympanopsis confertula</i>	SMH4841	FJ968998	FJ969024	FJ968946
<i>Tympanopsis uniseriata</i>	GKM1203	FJ968999	FJ969016	FJ968926
<i>Tympanopsis uniseriata</i>	GKM1228	FJ969000	FJ969017	FJ968928

Table S7. The names, isolate numbers, and corresponding GenBank accession numbers of the taxa used in Figure 13. The taxa produced in this study are indicated in red, and the type strains are indicated in bold with “*”

Species name	Strain	GenBank accession No.			
		ITS	LSU	SSU	<i>tefl-a</i>
<i>Acrocordia subglobosa</i>	HTL940	/	JN887392	JN887373	JN887417
<i>Anisomeridium</i> cf. <i>willeyanum</i>	MPN549	/	JN887393	/	/
<i>Anisomeridium phaeospermum</i>	MPN539	/	JN887394	JN887374	/
<i>Anisomeridium</i> sp.	MPN533	/	JN887395	JN887375	JN887419
<i>Anisomeridium</i> sp.	MPN540	/	JN887397	JN887377	JN887420
<i>Anisomeridium</i> sp.	MPN534	/	JN887396	JN887376	/
<i>Anisomeridium</i> sp.	MPN542	/	JN887398	JN887378	/
<i>Anisomeridium ubianum</i>	MPN94	/	GU327709	JN887379	/
<i>Elsinoe centrolobii</i>	CBS 222.50 *	NR_148132	KX886969	NG_062717	DQ677934
<i>Elsinoe phaseoli</i>	CBS 165.31 *	NR_148161	DQ678095	NG_062718	DQ677935
<i>Eriomyces heveae</i>	MFLUCC 17-2232 *	NR_169673	MH109524	/	/
<i>Heleiosa barbatula</i>	JK 5548I	/	GU479787	GU479753	/
<i>Heleiosa barbatula</i>	HKAS 122668	OQ379015	OQ379426	OQ372923	OQ379000
<i>Italiotremis phillyreae</i>	CPC 35566	MT223804	MT223899	/	/
<i>Megalotremis verrucosa</i>	Lucking 26316	/	GU327718	JN887383	/
<i>Myriangium hispanicum</i>	CBS 247.33	KX887304	GU301854	GU296180	GU349055
<i>Neoheliosia lincangensis</i>	HKAS 111911	MW424766	MW424781	MW424796	MW430102
<i>Neoheliosia lincangensis</i>	HKAS 111912	MW424765	MW424780	MW424795	MW430101
<i>Neoheliosia lincangensis</i>	HKAS 111913	MW424767	MW424782	MW424797	MW430103
<i>Neoheliosia lincangensis</i>	HKAS 111914 *	MW424764	MW424779	MW424794	MW430100

<i>Pseudopassalora gouriqua</i>	CBS 101954 *	NR_160207	NG_067272	/	/
<i>Pseudopassalora gouriqua</i>	CPC 1811	/	JN712565	/	/
<i>Trypetheliopsis kalbii</i>	MPN243	/	JN887406	JN887391	/

Table S8. The names, isolate numbers, and corresponding GenBank accession numbers of the taxa used in Figure 15. The taxa produced in this study are indicated in red, and the type strains are indicated in bold with “*”

Species	Strain	GenBank Accession No.			
		ITS	LSU	<i>tefl-a</i>	<i>rpb2</i>
<i>Anteaglonium globosum</i>	ANM925.2 *	/	GQ221879	GQ221925	/
<i>Anteaglonium parvulum</i>	MFLUCC 14-0821 *	/	KU922915	KU922921	/
<i>Hermatomyces amphispurus</i>	ILLS 82999	LR812667	/	LR812661	LR812672
<i>Hermatomyces amphispurus</i>	ILLS 82998	LR812666	/	LR812660	LR812671
<i>Hermatomyces amphispurus</i>	ILLS 82997	LR812665	/	LR812659	LR812670
<i>Hermatomyces amphispurus</i>	ILLS 82991	LR812662	/	LR812657	LR812668
<i>Hermatomyces amphispurus</i>	ILLS 82994	LR812663	/	LR812658	LR812669
<i>Hermatomyces bauhiniae</i>	MFLU 18-1381 *	MK443382	MK443378	MK443384	MK443386
<i>Hermatomyces sphaericus</i> (<i>H. biconisporus</i>)	KUMCC 17-0183	MH275063	MH260296	/	/
<i>Hermatomyces bifurcatus</i>	CCF 5900 *	LS398263	LS398263	LS398417	LS398344
<i>Hermatomyces bifurcatus</i>	CCF 5899	LS398262	LS398262	LS398416	LS398343
<i>Hermatomyces krabiensis</i> (<i>H.</i>	MFLUCC 16-2819	/	KY559394	/	/

<i>chiangmaiensis</i>)					
<i>Hermatomyces sphaericus</i> (<i>H. chromolaenae</i>)	MFLUCC 16-2817	/	KY559393	/	/
<i>Hermatomyces clematidis</i>	MFLUCC 17-2085 *	MT310603	MT214556	MT394735	MT394684
<i>Hermatomyces constrictus</i>	CCF 5904 *	LS398264	LS398264	LS398418	LS398345
<i>Hermatomyces indicus</i>	MFLUCC 14-1145	KU144922	KU764694	KU872756	KU712490
<i>Hermatomyces indicus</i>	MFLUCC 14-1144	KU144921	KU764693	KU872755	KU712489
<i>Hermatomyces indicus</i>	MFLUCC 14-1143 *	KU144920	KU764692	KU872754	KU712488
<i>Hermatomyces indicus</i>	MFLUCC 21-0453	OQ379016	OQ379427	OQ379001	OQ378994
<i>Hermatomyces iriomotensis</i>	KT2016-1 *	LC194483	LC194367	LC194394	LC194449
<i>Hermatomyces krabiensis</i>	MFLUCC 16-0249 *	KX525750	KX525742	KX525758	KX525754
<i>Hermatomyces megasporus</i>	CCF 5897	LS398265	/	LS398419	LS398346
<i>Hermatomyces megasporus</i>	CCF 5898 *	LS398266	LS398266	LS398420	/
<i>Hermatomyces nabanheensis</i>	KUMCC 16-0149 *	KY766058	KY766059	KY766061	/
<i>Hermatomyces sphaericus</i> (<i>H. pandanicola</i>)	MFLUCC:160251	KX525751	KX525743	KX525759	KX525755
<i>Hermatomyces reticulatus</i>	CCF 5893	LS398267	LS398267	LS398421	LS398347
<i>Hermatomyces reticulatus</i>	CCF 5905	LS398268	LS398269	LS398422	LS398348
<i>Hermatomyces reticulatus</i> (<i>H. subiculosus</i>)	MFLUCC 15-0843 *	KX259521	KX259523	KX259527	KX259529
<i>Hermatomyces sphaericus</i> (<i>H. saikhuensis</i>)	MFLUCC 16-0266	KX525748	KX525740	KX525756	KX525752
<i>Hermatomyces sphaericus</i> (<i>H. saikhuensis</i>)	MFLUCC 16-0267	KX525749	KX525741	KX525757	KX525753
<i>Hermatomyces sphaericoides</i>	CCF 5907	LS398272	/	LS398426	/
<i>Hermatomyces sphaericoides</i>	CCF 5908 *	LS398273	LS398273	LS398427	LS398352

<i>Hermatomyces sphaericoides</i>	KZP 470	LS398274	/	LS398428	LS398353
<i>Hermatomyces sphaericoides</i>	CCF 5895	LS398270	LS398270	LS398424	LS398350
<i>Hermatomyces sphaericoides</i>	CCF 5896	LS398271	/	LS398425	LS398351
<i>Hermatomyces sphaericus</i>	MFLUCC 17-0915 *	/	/	MK360058	MK434868
<i>Hermatomyces sphaericus</i>	CCF 5916	LS398284	LS398284	LS398433	LS398358
<i>Hermatomyces sphaericus</i>	CCF 5894	LS398277	LS398277	LS398429	LS398354
<i>Hermatomyces sphaericus</i>	KZP462	LS398287	LS398287	LS398434	LS398359
<i>Hermatomyces sphaericus</i>	CCF 5914	LS398283	LS398283	LS398432	LS398357
<i>Hermatomyces sphaericus</i>	CCF 5911	LS398281	LS398281	LS398431	LS398356
<i>Hermatomyces sphaericus</i>	CCF5901	LS398278	/	LS398430	LS398355
<i>Hermatomyces sphaericus</i> (<i>H. tectonae</i>)	MFLUCC 14-1140	KU144917	KU764695	KU872757	KU712486
<i>Hermatomyces sphaericus</i> (<i>H. tectonae</i>)	MFLUCC 14-1141	KU144918	KU764696	KU872758	/
<i>Hermatomyces sphaericus</i> (<i>H. tectonae</i>)	MFLUCC 14-1142	KU144919	KU764697	/	KU712487
<i>Hermatomyces thailandicus</i>	MFLUCC 20-0114	MT883355	MT883353	/	/
<i>Hermatomyces trangensis</i>	BCC 80742	KY790599	KY790601	KY790607	KY790605
<i>Hermatomyces trangensis</i>	BCC 80741 *	KY790598	KY790600	KY790606	KY790604
<i>Hermatomyces tucumanensis</i>	CCF 5915	LS398290	LS398290	LS398437	LS398362
<i>Hermatomyces tucumanensis</i>	CCF 5913	LS398289	LS398289	LS398436	LS398361
<i>Hermatomyces tucumanensis</i>	CCF 5912	LS398288	LS398288	LS398435	LS398360
<i>Hermatomyces verrucosus</i>	CCF 5892	LS398291	LS398291	LS398438	LS398363
<i>Hermatomyces verrucosus</i>	CCF 5903 *	LS398292	LS398292	LS398439	LS398364