

Table 1. Taxa used for phylogenetic analyses, including representatives of the *Eurotiomycetes* and subsequent ranks, and *Lecanoromycetes* used as outgroup.

Taxonomic position	Isolate	ITS	LSU	SSU	<i>RPB2</i>	<i>MCM7</i>	<i>TEF</i>
EUROTIOMYCETES							
<i>Chaetothyriomycetidae</i>							
<i>Chaetothyriales</i>							
<i>Cyphellophora guyanensis</i>	MUCL 43737	NR_132880	KC455253	NG_065005	—	—	—
<i>Exophiala eucalyptorum</i>	CBS 121638	KC455245	KC455258	KC455302	—	—	—
<i>Knufia perforans</i>	CBS 885.95	NR_121502	NG_042586	NG_062148	—	—	—
<i>Vonarxia vagans</i>	CBS 123533	FJ839636	FJ839672	KC455310	—	—	—
<i>Pyrenulales</i>							
<i>Pyrenula nitida</i>	F-5929	JQ927458	DQ329023	—	—	—	—
<i>Pyrgillus javanicus</i>	AFTOL-ID 342	DQ826741	DQ823103	DQ823110	—	—	—
<i>Rhynchostoma proteae</i>	CBS 112051	NR_132824	NG_073789	—	—	—	—
<i>Verrucariales</i>							
<i>Catapyrenium cinereum</i>	AFTOL-ID 2230	—	EF643747	EF689829	—	—	—
<i>Verrucaria lecideoides</i>	AFTOL-ID 2295	EU010256	EF643798	—	—	—	—
<i>Verrucaria muralis</i>	AFTOL-ID 2265	EU010261	EF643803	EF689878	—	—	—
<i>Coryneliomycetidae</i>							
<i>Coryneliaceae</i>							
<i>Caliciopsis pinea</i>	CBS 139.64	KP881691	DQ678097	DQ678043	EF411067	OP524467	OM982873
<i>Caliciopsis pseudotsugae</i>	CBS 140.64	MT334518	MT334517	MT359911	—	—	—
<i>Corynelia africana</i>	PREM 57242	NR_153901	NG_058910	KP881719	—	—	—
<i>Corynelia fructigena</i>	PREM 57240	NR_153902	NG_058911	KP881720	—	—	—
<i>Lagenulopsis bispora</i>	PREM 57232	NR_154120	NG_060325	NG_061200	—	—	—
<i>Pewenomyces kutranfyi</i>	CMW 54240	NR_172182	MT334515	NG_074914	—	—	—
<i>Cryptocaliciomycetidae</i>							
<i>Cryptocaliciales</i>							
<i>Cryptocalicium blascoi</i>	ARAN-Fungi 14723	MW999967	MW999967	—	MZ020967	MZ020966	—
	Etayo 31798	MW999969	MW999951	MW999950	—	—	—
<i>Resinogalea araucana</i> sp. nov (sp. 1)	CMW 57581*	OP508124	OP508136	OP508112	OP524474	OP524460	OP524486
	CMW 53536	OP508119	OP508131	OP508107	OP524469	OP524455	OP524481
	CMW 53539	OP508120	OP508133	OP508108	OP524470	OP524456	OP524482
	CMW 53543	OP508121	OP508134	OP508110	OP524471	OP524457	OP524483
	CMW 53544	OP508122	OP508132	OP508109	OP524472	OP524458	OP524484
<i>Resinogalea tapulicola</i> sp. nov (sp. 2)	CMW 57580	OP508123	OP508135	OP508111	OP524473	OP524459	OP524485
	CMW 53537*	OP508126	OP508138	OP508114	OP524476	OP524462	OP524488
	CMW 53535	OP508125	OP508137	OP508113	OP524475	OP524461	OP524487
	CMW 53538	OP508127	OP508139	OP508115	OP524477	OP524463	OP524489
	CMW 53540	OP508128	OP508140	OP508116	OP524478	OP524464	OP524490
	CMW 53542	OP508129	OP508141	OP508117	OP524479	OP524465	OP524491
	CMW 57582	OP508130	OP508142	OP508118	OP524480	OP524466	OP524492
<i>Eurotiomycetidae</i>							
<i>Arachnomycetales</i>							
<i>Arachnomycetes minimus</i>	CBS 324.70	—	NG_056963	AJ315167	—	—	—
<i>Arachnomycetes nodosetosus</i>	CCF 3975	HM205102	HM205103	HM205104	—	—	—
<i>Arachnomycetes peruvianus</i>	CBS 112.54	NR_160079	NG_057623	—	—	—	—
<i>Eurotiales</i>							
<i>Aspergillus cremeus</i>	NRRL 5081	NR_137455	NG_057314	NG_063231	—	—	—
<i>Aspergillus herbariorum</i>	DAOM 221134	JN942870	JN938918	JN938995	—	—	—
<i>Aspergillus penicillioides</i>	NRRL 4548	NR_131285	NG_057322	NG_063229	—	—	—
<i>Byssoschlamys nivea</i>	CBS 100.11	NR_144910	NG_058631	NG_061072	—	—	—
<i>Penicillium expansum</i>	DAOM 215345	JN942855	JN938952	JN938958	—	—	—
<i>Penicillium taxi</i>	CBS 206.57	NR_145184	NG_057624	NG_062613	—	—	—
<i>Sagenomella diversispora</i>	CBS 354.36	NR_164428	NG_063981	NG_060979	—	—	—
<i>Sagenomella verticillata</i>	CBS 414.78	NR_160158	NG_064113	NG_062610	—	—	—
<i>Thermoascus crustaceus</i>	CBS 181.67	NR_144915	NG_064060	NG_062804	—	—	—
<i>Thermoascus verrucosus</i>	CBS 605.74	NR_103601	NG_075362	NG_074947	—	—	—
<i>Trichocoma paradoxa</i>	CBS 788.83	JN899398	FJ358290	FJ358354	—	—	—
<i>Onygenales</i>							
<i>Amauroascus verrucosus</i>	NFCCI 2672	NR_160558	JQ517293	JQ517294	—	—	—
<i>Aphanoascus verrucosus</i>	NBRC 32381	NR_131309	NG_057011	—	—	—	—
<i>Apinisia graminicola</i>	CBS 721.68	—	NG_056945	NG_060969	—	—	—
<i>Arthroderma curreyi</i>	CBS 138.26	KT155805	AY176726	AJ315165	—	—	—
<i>Ctenomyces serratus</i>	CBS 187.61	NR_144890	NG_058765	NG_062605	—	—	—
<i>Eremascus albus</i>	CBS 975.69	MH859498	MH871279	FJ358348	—	—	—
<i>Gymnascella littoralis</i>	CBS 454.73	NR_155105	NG_057810	NG_062769	—	—	—
<i>Nannizziopsis vriesii</i>	CBS 407.71	NR_111874	NG_057976	NG_061166	—	—	—
<i>Paranannizziopsis australasiensis</i>	UAMH 10439	KF477218	—	KF466866	—	—	—
<i>Mycocaliciomycetidae</i>							
<i>Mycocaliciales</i>							
<i>Brunneocarpus banksiae</i>	CBS 141465	NR_147648	MH878228	—	—	—	—
<i>Chaenothecopsis golubkovae</i>	Titov 6707 UPS	AY795859	AY795996	—	—	—	—
<i>Chaenothecopsis sitchensis</i>	HT22	—	KF157988	KF157976	—	—	—
<i>Phaeocalicium polyporaerum</i>	ZW-Geo60-Clark	AY789363	AY789362	AY789361	—	—	—
<i>Sclerococcumycetidae</i>							
<i>Sclerococcales</i>							
<i>Rhopalophora clavispora</i>	CBS 637.73	NR_152542	KX537757	NG_061246	—	—	—
<i>Sclerococcum ricasoliae</i>	A.F.Fla6b	MT153964	MT153993	—	—	—	—
<i>Sclerococcum vrijmoediae</i>	NTOU 4002	KJ958534	KC692153	KC692152	—	—	—
LECANOROMYCETES							
<i>Lecanoromycetidae</i>							
<i>Caliciales</i>							
<i>Calicium glaucellum</i>	Tibell 22319 UPS	AY450569	AY453646	—	—	—	—
<i>Calicium salicinum</i>	CBS 100898	—	KF157982	KF157970	—	—	—

Note: A.F: Adam Flaku's personal collection, Department of Lichenology, W. Szafer Institute of Botany, Poland; AFTOL-ID: Assembling the Fungal Tree of Life (AFTOL) project (www.lutzonilab.net/aftol); ARAN-Fungi: ARAN-Fungi Fungarium, the Basque Country, Spain; CBS: Westerdijk Fungal Biodiversity Institute, The Netherlands; CCF: Culture Collection of Fungi, Department of Botany, Charles University in Prague, Czech Republic; Clark: Clark University, USA; CMW: Forestry and Agricultural Biotechnology Institute, University of Pretoria, South Africa; DAOM: Canadian National Mycological Herbarium, Ottawa Research and Development Centre, Canada; Etayo: Javier Etayo's personal collection, Spain; F: Personal number of Zdenek Palice, Institute of Botany, Academy of Sciences of the Czech Republic, HT: personal number of Hanna Tuovila, University of Helsinki, Finland; MUCL: Mycologue de l'Université Catholique de Louvain, Belgium; NBRC: Biological Resource Center, NITE, Japan; NFCCI: National Fungal Culture Collection of India, India, NRRL: Agricultural Research Service (ARS) Culture collection, Illinois, USA; NTOU: National Taiwan Ocean University, Taiwan; PREM: National Collection of Fungi, South Africa; UPS: Museum of Evolution, Sweden; UAMH 10439: Centre for Global Microfungal Biodiversity, University of Toronto, Canada.