

Table S1. GenBank accessions obtained in this study.

Organism	isolate	Status	GenBank accession number					
			ITS	LSU	SSU	<i>rpb2</i>	<i>tef1-α</i>	<i>tub2</i>
<i>Acroappendicula aquatica</i>	GMBC5144	ET	PX890408	PX890338	N/A	PZ019662	PZ012796	N/A
<i>Acroappendicula aquatica</i>	GMBC5145		PX890409	PX890339	N/A	PZ019663	PZ012797	N/A
<i>Aquaclavispora lignicola</i>	GMBC6925	ET	PX890368	PX890298	PX896592	PZ019643	PZ012770	N/A
<i>Aquaclavispora lignicola</i>	GMBC6926		PX890369	PX890299	PX896593	PZ019644	PZ012771	N/A
<i>Arthrobotrys bambusicola</i>	GMBC6933	ET	PX890372	PX890302	PX896596	PZ019647	N/A	N/A
<i>Arthrobotrys bambusicola</i>	GMBC6934		PX890373	PX890303	PX896597	PZ019648	N/A	N/A
<i>Brachysporium wumengshanense</i>	GMBC6947	ET	PX890415	PX890345	PX896633	PZ019666	PZ012798	N/A
<i>Brachysporium wumengshanense</i>	GMBC6948		PX890416	PX890346	PX896634	PZ019667	PZ012799	N/A
<i>Chaetosphaeria tongrenensis</i>	GMBC6921	ET	PX890377	PX890307	PX896601	PZ019652	PZ012774	N/A
<i>Chaetosphaeria tongrenensis</i>	GMBC6922		PX890378	PX890308	PX896602	PZ019653	PZ012775	N/A
<i>Corynespora guizhouensis</i>	GMBC6927	ET	PX890352	PX890282	PX896578	PZ019627	PZ012756	N/A
<i>Corynespora guizhouensis</i>	GMBC6928		PX890353	PX890283	PX896579	PZ019628	PZ012757	N/A
<i>Dematioscypha aquatica</i>	GMBC5150	ET	PX890366	PX890296	PX896590	PZ019641	PZ012768	N/A
<i>Dematioscypha aquatica</i>	GMBC5151		PX890367	PX890297	PX896591	PZ019642	PZ012769	N/A
<i>Gamsomyces guangxiensis</i>	GMBC5152	ET	PX890364	PX890294	PX896588	PZ019639	PZ012766	N/A
<i>Gamsomyces guangxiensis</i>	GMBC5153		PX890365	PX890295	PX896589	PZ019640	PZ012767	N/A
<i>Helicoma wuliangshanense</i>	GMBC5146	ET	PX890360	PX890290	N/A	PZ019635	PZ012762	N/A
<i>Helicoma wuliangshanense</i>	GMBC5147		PX890361	PX890291	N/A	PZ019636	PZ012763	N/A
<i>Hermatomyces hyalodimorphus</i>	GMBC5172	ET	PX890354	PX890284	PX896580	PZ019629	N/A	N/A
<i>Hermatomyces hyalodimorphus</i>	GMBC5173		PX890355	PX890285	PX896581	PZ019630	N/A	N/A

<i>Hypomyces aquatilis</i>	GMBC6929	ET	PX890387	PX890317	PX896611	PZ019656	PZ012782	N/A
<i>Hypomyces aquatilis</i>	GMBC6930		PX890388	PX890318	PX896612	PZ019657	PZ012783	N/A
<i>Kirschsteiniothelia chinensis</i>	GMBC5168	ET	PX890348	PX890278	PX896574	PX987633	PZ012752	N/A
<i>Kirschsteiniothelia chinensis</i>	GMBC5169		PX890349	PX890279	PX896575	PX987634	PZ012753	N/A
<i>Melanopsamma wumengshanensis</i>	GMBC6943	ET	PX890379	PX890309	PX896603	PZ019654	PZ012776	N/A
<i>Melanopsamma wumengshanensis</i>	GMBC6944		PX890380	PX890310	PX896604	PZ019655	PZ012777	N/A
<i>Monilochaetes camelliae</i>	GMBC5170		PX890376	PX890306	PX896600	PZ019651	N/A	N/A
<i>Musicillium verticillatum</i>	GMBC5180	ET	PX890385	PX890315	PX896609	N/A	N/A	N/A
<i>Musicillium verticillatum</i>	GMBC5181		PX890386	PX890316	PX896610	N/A	N/A	N/A
<i>Myrmecridium bambusicola</i>	GMBC6939	ET	PX890396	PX890326	PX896620	N/A	N/A	N/A
<i>Myrmecridium bambusicola</i>	GMBC6940		PX890397	PX890327	PX896621	N/A	N/A	N/A
<i>Myxospora aquatica</i>	GMBC5158	ET	PX890390	PX890320	PX896614	N/A	N/A	PX987638
<i>Myxospora aquatica</i>	GMBC5159		PX890391	PX890321	PX896615	N/A	N/A	PX998165
<i>Neohelicomycetes wuliangshanensis</i>	GMBC5174	ET	PX890362	PX890292	PX896586	PZ019637	PZ012764	N/A
<i>Neohelicomycetes wuliangshanensis</i>	GMBC5175		PX890363	PX890293	PX896587	PZ019638	PZ012765	N/A
<i>Niesslia waitemataensis</i>	GMBC6949		PX890389	PX890319	PX896613	N/A	N/A	N/A
<i>Nigrograna chinensis</i>	GMBC6935	ET	PX890350	PX890280	PX896576	PX987635	PZ012754	N/A
<i>Nigrograna chinensis</i>	GMBC6936		PX890351	PX890281	PX896577	PX987636	PZ012755	N/A
<i>Ophiostoma balanophorae</i>	GMBC5176	ET	PX890392	PX890322	PX896616	PZ019658	N/A	N/A
<i>Ophiostoma balanophorae</i>	GMBC5177		PX890393	PX890323	PX896617	PZ019659	N/A	N/A
<i>Parascedosporium juglandicola</i>	GMBC5160	ET	PX890394	PX890324	PX896618	N/A	PZ012784	N/A
<i>Parascedosporium juglandicola</i>	GMBC5161		PX890395	PX890325	PX896619	N/A	PZ012785	N/A

<i>Plectosphaerella guangxiensis</i>	GMBC5156	ET	PX890383	PX890313	PX896607	N/A	PZ012780	N/A
<i>Plectosphaerella guangxiensis</i>	GMBC5157		PX890384	PX890314	PX896608	N/A	PZ012781	N/A
<i>Pleurothecium longisetosum</i>	GMBC6937	ET	PX890398	PX890328	PX896622	N/A	PZ012786	N/A
<i>Pleurothecium longisetosum</i>	GMBC6938		PX890399	PX890329	PX896623	N/A	PZ012787	N/A
<i>Radiaticonidium aquaticum</i>	GMBC5154	ET	PX890381	PX890311	PX896605	N/A	PZ012778	N/A
<i>Radiaticonidium aquaticum</i>	GMBC5155		PX890382	PX890312	PX896606	N/A	PZ012779	N/A
<i>Rhamphoriopsis flabelliformis</i>	GMBC6923	ET	PX890402	PX890332	PX959809	PZ019660	PZ012790	N/A
<i>Rhamphoriopsis flabelliformis</i>	GMBC6924		PX890403	PX890333	PX959810	PZ019661	PZ012791	N/A
<i>Rhodoveronaea obovoidea</i>	GMBC5162	ET	PX890404	PX890334	N/A	N/A	PZ012792	N/A
<i>Rhodoveronaea obovoidea</i>	GMBC5163		PX890405	PX890335	N/A	N/A	PZ012793	N/A
<i>Sporidesmium guiyangense</i>	GMBC6931	ET	PX890410	PX890340	PX896628	PZ019664	N/A	N/A
<i>Sporidesmium guiyangense</i>	GMBC6932		PX890411	PX890341	PX896629	PZ019665	N/A	N/A
<i>Sporidesmium wuliangshanense</i>	GMBC5178	ET	PX890412	PX890342	PX896630	N/A	N/A	N/A
<i>Sporidesmium wuliangshanense</i>	GMBC5179		PX890413	PX890343	PX896631	N/A	N/A	N/A
<i>Stachylidium bicolor</i>	GMBC5148		PX890414	PX890344	PX896632	N/A	N/A	N/A
<i>Strossmayeria multiseptata</i>	GMBC5166	ET	PX890370	PX890300	PX896594	PZ019645	N/A	N/A
<i>Strossmayeria multiseptata</i>	GMBC5167		PX890371	PX890301	PX896595	PZ019646	N/A	N/A
<i>Vamsapriya tongluobaensis</i>	GMBC5164		PX890417	PX890347	PX896635	N/A	PZ012800	N/A
<i>Vamsapriya tongluobaensis</i>	GMBC5165		PX878710	PX878711	PX878712	N/A	PZ012801	N/A
<i>Xenopleopunctum dictyosporum</i>	GMBC6953	ET	PX890358	PX890288	PX896584	PZ019633	PZ012760	N/A
<i>Xenopleopunctum dictyosporum</i>	GMBC6954		PX890359	PX890289	PX896585	PZ019634	PZ012761	N/A
<i>Xenopleopunctum yunnanense</i>	GMBC6941	ET	PX890356	PX890286	PX896582	PZ019631	PZ012758	N/A

<i>Xenopleopunctum yunnanense</i>	GMBC6942		PX890357	PX890287	PX896583	PZ019632	PZ012759	N/A
<i>Xylolentia wumengshanensis</i>	GMBC6945	ET	PX890406	PX890336	PX896626	N/A	PZ012794	N/A
<i>Xylolentia wumengshanensis</i>	GMBC6946		PX890407	PX890337	PX896627	N/A	PZ012795	N/A

Note: ET indicates Ex-type, NA indicates sequence not available, ITS: Internal transcribed spacer region, LSU: Large Subunit of Ribosomal RNA, SSU: Small Subunit of ribosomal RNA, *rpb2*: RNA polymerase II second largest subunit. *tefl-α*: Translation elongation factor, *tub2*: β-tubulin.