

Table S1. Voucher information and GenBank accession numbers of the samples used in the phylogenetic analyses of ITS sequences. Sequences newly generated in this study are indicated in bold.

Species	Voucher	GenBank No.	Locality
<i>A. albidostipes</i>	HKAS57358	MH508500	China
<i>A. albidostipes</i>	HKAS95189	MH508501	China
<i>A. cf. angustilamellata</i>	HKAS89451	MH508292	China
<i>A. battarrae</i>	HKAS92090	MH508266	China
<i>A. battarrae</i>	MB-000643	MH508267	China
<i>A. brunneofuliginea</i>	HKAS89226	MH508269	China
<i>A. brunneoprocera</i>	BZ2015-24	MF461573	Thailand
<i>A. brunneoprocera</i>	EFHAAU4162	OR042746	China
<i>A. brunneoumbonata</i>	BZ2015-67	MF461579	Thailand
' <i>A. ceciliae</i> '	ASIS26247	KU139510	South Korea
' <i>A. ceciliae</i> '	ASIS26935	KU139512	South Korea
' <i>A. ceciliae</i> '	KA12-0916	KF017930	South Korea
' <i>A. ceciliae</i> '	LEM950069	AB015694	Japan
<i>A. ceciliae</i>	RET 270-1	OK299148	United Kingdom
<i>A. ceciliae</i>	RET 305-4	OK299150	Germany
<i>A. ceciliae</i>	SFC20120821-92	KJ609157	South Korea
<i>A. changtuia</i>	HKAS92100	MH508299	China
<i>A. chiui</i>	HKAS76328	MH508303	China
<i>A. cinctipes</i>	HKAS101388	MH508304	China
<i>A. cinctipes</i>	HKAS78465	MH508305	China
<i>A. cingulata</i>	HKAS100640	MH508309	China
<i>A. cingulata</i>	HKAS75600	KY949582	China
<i>A. circulata</i>	HKAS127629	OR042763	China
<i>A. circulata</i>	HKAS127639	OR042766	China
<i>A. circulata</i>	HKAS128052	OR042764	China
<i>A. circulata</i>	HKAS97543	OR042765	China
<i>A. emodotrygon</i>	MFM-219	MF489730	Pakistan
<i>A. emodotrygon</i>	SUA902	MF489728	Pakistan
<i>A. flavidocerea</i>	BZ2015-60	MF461578	Thailand
' <i>A. fulva</i> '	ASIS26398	KU139519	South Korea
' <i>A. fulva</i> '	FB-30952(CBM)	AB015692	Japan
<i>A. fulva</i>	HKAS96168	MH508371	Austria
<i>A. fulva</i>	RET 078-8	MK141039	Switzerland
<i>A. fulva</i>	RET 372-2	MK522022	Canada
' <i>A. fulva</i> '	KA13-1263	KR673720	South Korea
<i>A. griseofolia</i>	HKAS38159	NR_119498	China
<i>A. griseofolia</i>	HKAS54443	MH508376	China
<i>A. griseofolia</i>	JL2	ON059312	China
<i>A. griseofolia</i>	KA12-0818	KF017934	South Korea
<i>A. griseofolia</i>	EFHAAU555	OR042758	China

<i>A. griseoumbonata</i>	HKAS92103	MH508389	China
<i>A. hamadae</i>	HKAS83451	MH508395	China
<i>A. hamadae</i>	EFHAAU3013	OR042748	China
<i>A. lignitincta</i>	HKAS69411	MH508424	China
<i>A. liquii</i>	HKAS54568	KU714559	China
<i>A. liquii</i>	HKAS93915	MH508427	China
<i>A. multicingulata</i>	HKAS127630	OR042750	China
<i>A. multicingulata</i>	HKAS127631	OR042752	China
<i>A. multicingulata</i>	HKAS127632	OR042754	China
<i>A. multicingulata</i>	HKAS127633	OR042753	China
<i>A. multicingulata</i>	HKAS127634	OR042757	China
<i>A. multicingulata</i>	HKAS127635	OR042755	China
<i>A. multicingulata</i>	HKAS128049	OR042751	China
<i>A. multicingulata</i>	HKAS128054	OR042756	China
<i>A. neocinctipes</i>	HKAS78463	MH508443	China
<i>A. olivaceofusca</i>	HKAS97581	MH508457	China
<i>A. olivaceofusca</i>	HKAS80243	MH508455	China
<i>A. olivaceofusca</i>	HKAS87076	MH508456	China
<i>A. olivaceogrisea</i>	AF2427	MF461569	The Netherlands
<i>A. orientalis</i>	EFHAAU1367	OR042759	China
<i>A. orientalis</i>	HKAS127638	OR042760	China
<i>A. orienticrocea</i>	HKAS80029	MH508464	China
<i>A. orienticrocea</i>	HKAS90455	MH508465	China
<i>A. orienticrocea</i>	EFHAAU2919	OR042747	China
<i>A. orientifulva'</i>	ASIS15547	KP004956	South Korea
<i>A. orientifulva</i>	HKAS32522	NR_137544	China
<i>A. orientifulva</i>	HKAS87937	MH508468	China
<i>A. orientifulva'</i>	MHHNU30269	MK239233	China
<i>A. orientifulva'</i>	STDS-2-10	LC098745	Japan
<i>A. orientifulva'</i>	YJ92	OM867743	China
<i>A. orientifulva'</i>	-	FJ375333	China
<i>A. ovalispora</i>	HKAS101406	MH508478	China
<i>A. pallidocarnea</i>	HKAS97678	MH508482	China
<i>A. pallidozonata</i>	HKAS100608	MH508486	China
<i>A. pallidozonata</i>	EFHAAU114	OR042749	China
<i>A. protecta</i>	RET 086-6	NR_154690	USA
<i>A. protecta</i>	RET 820-4	MT073009	USA
<i>A. pseudovaginata</i>	HKAS70138	MH508531	China
<i>A. aff. pseudovaginata</i>	LE 296432	KM658286	Russia
<i>A. retenta</i>	HKAS70020	MH508543	China
<i>A. shennongjiana</i>	HKAS75553	MH508590	China
<i>A. shennongjiana</i>	HKAS75554	MH508591	China
<i>A. sinofulva</i>	EFHAAU207	OR042739	China
<i>A. sinofulva</i>	EFHAAU313	OR042742	China

<i>A. sinofulva</i>	EFHAAU118	OR042740	China
<i>A. sinofulva</i>	HKAS75058	OR042743	China
<i>A. sinofulva</i>	HKAS92355	OR042741	China
<i>Amanita</i> sp.	GSK-06	OK584416	China
<i>Amanita</i> sp.	RET 732-8	MT013999	USA
<i>Amanita</i> sp.	HGS2021-6-18	OK643806	China
<i>Amanita</i> sp.	RET 371-5	MN650861	Canada
<i>Amanita</i> sp.	SUA441	MW425327	Pakistan
<i>Amanita</i> sp.	SUA510	MW425329	Pakistan
<i>Amanita</i> sp.	RET 571-2	MZ385703	USA
<i>Amanita</i> sp.	RET 715-3	MN727380	USA
<i>Amanita</i> sp.	RET 866-1	MT013994	USA
<i>Amanita</i> sp.	RET 463-5	MH753075	USA
<i>Amanita</i> sp.	RET 858-8	MZ318066	USA
<i>Amanita</i> sp.	S.D. Russell MycoMap # 10025	MZ668154	USA
	S.D. Russell ONT iNaturalist		
<i>Amanita</i> sp.	130311099	OP749510	USA
	S.D. Russell ONT iNaturalist		
<i>Amanita</i> sp.	98401968	OP549077	USA
	S.D. Russell ONT iNaturalist #		
<i>Amanita</i> sp.	130409549	OP643044	USA
<i>Amanita</i> sp.	RET 589-5	KY549354	USA
<i>Amanita</i> sp.	RET 610-10	MG992501	USA
<i>Amanita</i> sp.	RET 287-7	OK285686	USA
<i>Amanita</i> sp.	RET 374-3	MN614413	USA
<i>Amanita</i> sp.	RET 303-9	MW592823	USA
<i>Amanita</i> sp.	RET 818-6	MN614382	USA
<i>A. submembranacea</i>	MB -001174	MH508626	Germany
<i>A. suborientifulva</i>	OR1276	MF461584	Thailand
<i>A. cf. suborientifulva</i>	EFHAAU4437	OR042744	China
<i>A. cf. suborientifulva</i>	EFHAAU5291	OR042745	China
<i>A. tenuifulva</i>	HKAS58877	MH508635	China
<i>A. umbrinolutea</i>	HKAS89201	MH508637	China
<i>A. umbrinolutea</i>	MB-000658	MH508641	Germnay
' <i>A. vaginata</i> '	ASIS15487	KP004955	South Korea
' <i>A. vaginata</i> '	CUB: Microbiology MN18	AB458889	Thailand
' <i>A. vaginata</i> '	FLAS-F-60889	MH016871	USA
' <i>A. vaginata</i> '	-	AB451971	Thailand
<i>A. verrucosivolva</i>	Wu1628	KY886480	China
<i>A. zonata</i>	EFHAAU607	OR042761	China
<i>A. zonata</i>	EFHAAU755	OR042762	China
<i>A. zonata</i>	HKAS97244	MH508656	China
Outgroup			
<i>A. caesarea</i>	HKAS96166	MH508283	Italy

<i>A. muscaria</i>	MB-001171	MH508442	Germany
<i>A. parvipantherina</i>	HKAS54723	MH508495	China
<i>A. yuaniana</i>	HKAS58807	MH508653	China
