

Table S2 GenBank accession numbers of the downloaded sequences used in the phylogenetic analyses. Quotation marks are added to indicate the uncertain taxonomic positions.

Taxon	ITS	Locality	Source
Ingroup			
<i>A. arocheae</i>	AY325832	Costa Rica	Direct submission
' <i>A. aff. bisporigera</i> '	AY325828	Costa Rica	Direct submission
<i>A. bisporigera</i>	EF619625	Orange County, North Carolina, USA	Parrent et al. 2007
<i>A. bisporigera</i>	EU819411	Wisconsin, USA	Palmer et al. 2008
' <i>A. bisporigera</i> '	FJ890028	Colombia	Vagas et al. 2011
' <i>A. cf. bisporigera</i> '	GQ166893	Cook County, Illinois, USA	Direct submission
<i>A. fuliginea</i>	AB509747	Yakushima, Japan	Direct submission
<i>A. fuligineoides</i>	FJ176721	Hunan, China	Zhang et al. 2010
' <i>A. marmorata</i> subsp. <i>myrtacearum</i> '	AY325826	Hawaii, USA	Direct submission
' <i>A. ocreata</i> '	AY918962	Oregon, USA	Direct submission
' <i>A. ocreata</i> '	EU909446	Santa Rosa Island, California, USA	Pringle et al. 2009
<i>A. ocreata</i>	GQ250404	Sonoma County, California, USA	Direct submission
' <i>A. ocreata</i> '	GQ250405	Oregon, USA	Direct submission
<i>A. ocreata</i>	GQ486874	Santa Cruz Island, California, USA	Wolfe et al. 2010
<i>A. pallidorosea</i>	FJ176736	Chongqing, China	Zhang et al. 2010
<i>A. phalloides</i>	AY325833	Australia	Direct submission
<i>A. phalloides</i>	AJ308097	Voronej region, Russia	Direct submission
<i>A. phalloides</i>	AJ889921	Denmark	Direct submission
<i>A. phalloides</i>	EU909443	Kragero, Norway	Pringle et al. 2009
<i>A. phalloides</i>	FM203299	Portugal	Direct submission
<i>A. phalloides</i>	GQ221841	New Jersey, USA	Wolfe et al. 2010
<i>A. phalloides</i>	GU373511	Finland	Direct submission
' <i>A. phalloides</i> var. <i>umbrina</i> '	AY325825	South Africa	Direct submission

<i>A. reidii</i>	AY325824	South Africa	Direct submission
<i>A. rimosa</i>	FJ176728	Hunan, China	Zhang et al. 2010
' <i>A. sp.</i> '	FM999697	Ohio, USA	Burke et al. 2009
' <i>A. sp. 1</i> '	DQ072729	Jilin, China	Zhang et al. 2010
<i>A. suballiacea</i>	AY325837	Texas, USA	Direct submission
<i>A. subjunquillea</i> var. <i>alba</i>	EF442101	Yunnan, China	Li et al. 2007
<i>A. subjunquillea</i> var. <i>alba</i>	EF442102	Yunnan, China	Li et al. 2007
<i>A. subjunquillea</i> var. <i>alba</i>	EF442105	Yunnan, China	Li et al. 2007
<i>A. subjunquillea</i> var. <i>alba</i>	EF442104	Yunnan, China	Li et al. 2007
<i>A. verna</i>	EU909448	France	Direct submission
' <i>A. cf. virosa</i> '	AY325830	New Jersey, USA	Direct submission
' <i>A. virosa</i> '	EU909449	Virginia, USA	Pringle et al. 2009
' <i>A. virosa</i> '	EU909450	North Carolina, USA	Pringle et al. 2009
<i>A. virosa</i>	GU373492	Finland	Direct submission
Outgroup			
<i>A. areolata</i>	AB167727	Japan	Oda et al. 2004
<i>A. clarisquomosa</i>	FJ375331	Yunnan, China	Direct submission
<i>A. cylindrispora</i>	AY325839	New Jersey, USA	Direct submission
<i>A. excelsa</i>	AY436453	Tuebingen, Germany	Zhang et al. 2004
<i>A. gillbertii</i>	AY325838	Landes, France	Direct submission
<i>A. griseoturcosa</i>	AB167728	Japan	Oda et al. 2004
<i>A. kotohiraensis</i>	FJ176722	Hunan, China	Zhang et al. 2010
<i>A. manginiana</i>	AY436463	Yunnan, China	Zhang et al. 2010
<i>A. oberwinkelrana</i>	FJ176724	Hunan, China	Zhang et al. 2010
<i>A. arenaria</i>	GQ925388	Australia	Justo et al. 2009
<i>A. arenaria</i>	GQ925393	Australia	Justo et al. 2009
<i>A. rubescens</i>	JF313654	Sweden	Direct submission
