

Table S1. Fungal taxa and their nucleotide sequences of the molecular markers used to build the phylogenetic trees.

Taxon	Strain	GenBank Accession No.			
		ITS	<i>tub2</i>	<i>rpb2</i>	<i>tef1</i>
<i>Acericola italica</i>	MFLUCC:13-0609	NR_156344			
<i>Didymella brevipilosa</i>	FMR 17415	OU612373	OU612358	OU612359	
<i>Didymella ellipsoidea</i>	CGMCC3.18350	KY742060	KY742302	KY742145	
<i>Didymella exigua</i>	CBS 183.55	GU237794	GU237525	EU874850	
<i>Didymella macrostoma</i>	CBS 223.69	GU237801	GU237623	KT389608	
<i>Didymella pteridis</i>	CBS 379.96	KT389504	KT389801	KT389624	
<i>Didymella rumicicola</i>	CBS 683.79	KT389503	KT389800	KT389622	
<i>Didymella subrosea</i>	CBS 733.79	NR_170787	MT005643	MT018174	
<i>Didymella viburnicola</i>	CBS 523.73	GU237879	GU237667	MH872477	
<i>Epicoccum nigrum</i>	CBS 173.73	FJ426996	FJ427107	KT389631	
<i>Epicoccum ovisporum</i>	CBS 180.80	FJ427068	FJ427174	LT623252	
<i>Epicoccum plurivorum</i>	CBS 558.81	GU237888	GU237647	KT389634	
<i>Heterophoma adonidis</i>	CBS 114309	MH862963	KT389803	KT389637	
<i>Heterophoma nobilis</i>	CBS 507.91	NR_170721	GU237603	KT389638	
<i>Heterophoma polypusiformis</i>	FMR17837	OU612367	OU600611	OU600610	
<i>Heterophoma poolensis</i>	CBS 113.20	MH854684	GU237638	MT018056	

<i>Heterophoma sylvatica</i>	CBS 874.97	GU237907	GU237662	MT018052	
<i>Heterophoma verbascicola</i>	CGMCC 3.18364	NR_158268	GU237650	KY742187	
<i>Heterophoma verbasci-densiflori</i>	CBS 449.81	MN973474	MT005573	MT018049	
<i>Jeremyomyces labinae</i>	CBS:144647	NR_163362	MK442733	MK442665	OU600603
<i>Neoconiothyrium hakeae</i>	CPC 27620	NR_154839	KY173600	KY173583	
<i>Neoconiothyrium multiporum</i>	CBS 353.65	MH858605			
<i>Neoconiothyrium persooniae</i>	CBS 143175	MG386041			
<i>Neoconiothyrium sp.</i>	FMR 17669	OU641117	OU641013	OU641014	
<i>Neoconiothyrium viticola</i>	CPC 36397	MN562123		MN556804	
<i>Neophaeosphaeria agaves</i>	CBS:136429	NR_137833			
<i>Neophaeosphaeria filamentosa</i>	CBS 102202	JF740259		GU357803	GU349084
<i>Paraboeremia adianticola</i>	CBS 187.83	GU237796	GU237576	KP330401	
<i>Paraboeremia camelliae</i>	CGMCC3.18106	KX829034	KX829058	KX829050	
<i>Paraboeremia clausa</i>	FMR 18597	OU612369	OU600598	OU600597	
<i>Paraboeremia clausa</i>	FMR 18598	OU612371	OU600600	OU600599	
<i>Paraboeremia litseae</i>	CGMCC3.18109	KX829029	KX829053	KX829045	
<i>Paraboeremia oligotrophica</i>	CGMCC3.18111	KX829031	KX829055	KX829047	
<i>Paraboeremia putaminum</i>	CBS 299.39	MN823454	MN824628	MN824480	
<i>Paraboeremia rekkeri</i>	CBS 144955	MN823511	MN824685	MN824537	

<i>Paraboeremia selaginellae</i>	CBS 122.93	GU237762	GU237656	LT623255	
<i>Paraboeremia taiwanensis</i>	NTUCC 17-013	MK840826	MK839232	MK839234	
<i>Paraboeremia truini</i>	CBS 144952	MN823495	MN824669	MN824521	
<i>Paraphoma aquatica</i>	FMR 16956	OU612361	OU612355	OU612357	OU612356
<i>Paraphoma dioscoreae</i>	CBS 135100	KF251167	KF252662		
<i>Paraphoma chrysanthemicola</i>	CBS 172.70	KF251165	KF252660		
<i>Paraphoma fimeti</i>	UTHSC:DI16-296	LT796872	KF252665	LT797032	LT797112
<i>Paraphoma melnikiae</i>	MF-9.88	MG764063	MG779456	MG779466	
<i>Paraphoma radicina</i>	UTHSC:DI16-209	LT796835	KF252667	LT796995	LT797075
<i>Paraphoma raphiolepidis</i>	CBS 142524	KY979758	KY979924	KY979851	
<i>Paraphoma vinacea</i>	UMPV004	KU176887	KU176895		
<i>Phaeosphaeria breonadiae</i>	CBS 141334	NR_155675			
<i>Phaeosphaeria caricicola</i>	CBS 603.86	KF251182	KF252676		
<i>Phaeosphaeria fructigena</i>	FMR 17808	OU612363	OU600608	OU600607	OU600609
<i>Phaeosphaeria glyceriae-plicatae</i>	CBS 101261	MH862724			
<i>Phaeosphaeria juncophila</i>	CBS 575.86	AF439488			GU456283
<i>Phaeosphaeria lutea</i>	CBS 455.84	MH861760			
<i>Phaeosphaeria norfolcia</i>	CBS 593.86	MH861997			
<i>Phaeosphaeria olivacea</i>	MUTITA 2854	MG813228			

<i>Phaeosphaeria parvula</i>	CBS 605.86	MH862001			
<i>Phaeosphaeriopsis glaucopunctata</i>	MFLUCC:13-0220	KJ522473	KF252693		MG520918
<i>Phaeosphaeriopsis triseptata</i>	MFLUCC:13-0271	KJ522475		KJ522485	MG520919
<i>Setomelanomma holmii</i>	CBS 110217	KT389542		GU371800	GU349028
<i>Vacuiphoma bulgarica</i>	CBS 357.84				
<i>Vacuiphoma oculihominis</i>	UTHSC:DI16-308				
<i>Xenophoma microspora</i>	FMR 17947	OU612365	OU600605	OU600604	OU600606
<i>Xenophoma puncteliae</i>	CBS 128022	JQ238617	KP170711	OU600601	OU600602
<i>Xenoseptoria neosaccardoi</i>	CBS 120.43	KF251280	KF252761		

¹**CBS**: Culture collection of the Westerdijk Biodiversity Institute, Utrecht, The Netherlands; **CGMCC**: China General Microbiological Culture Collection Center; **FMR**: Facultat de Medicina, Reus, Spain; **CPC**: Culture Collection of Pedro Crous; **MFLUCC**: Mae Fah Luang University Culture Collection, Chiang Rai, Thailand; **NTUCC**: National Taiwan University Culture Collection; **UMPV**: University of Melbourne, *Paraphoma vinacea* strain **UTHSC**, Fungus Testing Laboratory at the University of Texas Health Science Center, San Antonio, Texas, USA

²Strains studied by us are indicated in **bold**.

^TEx-type strain.

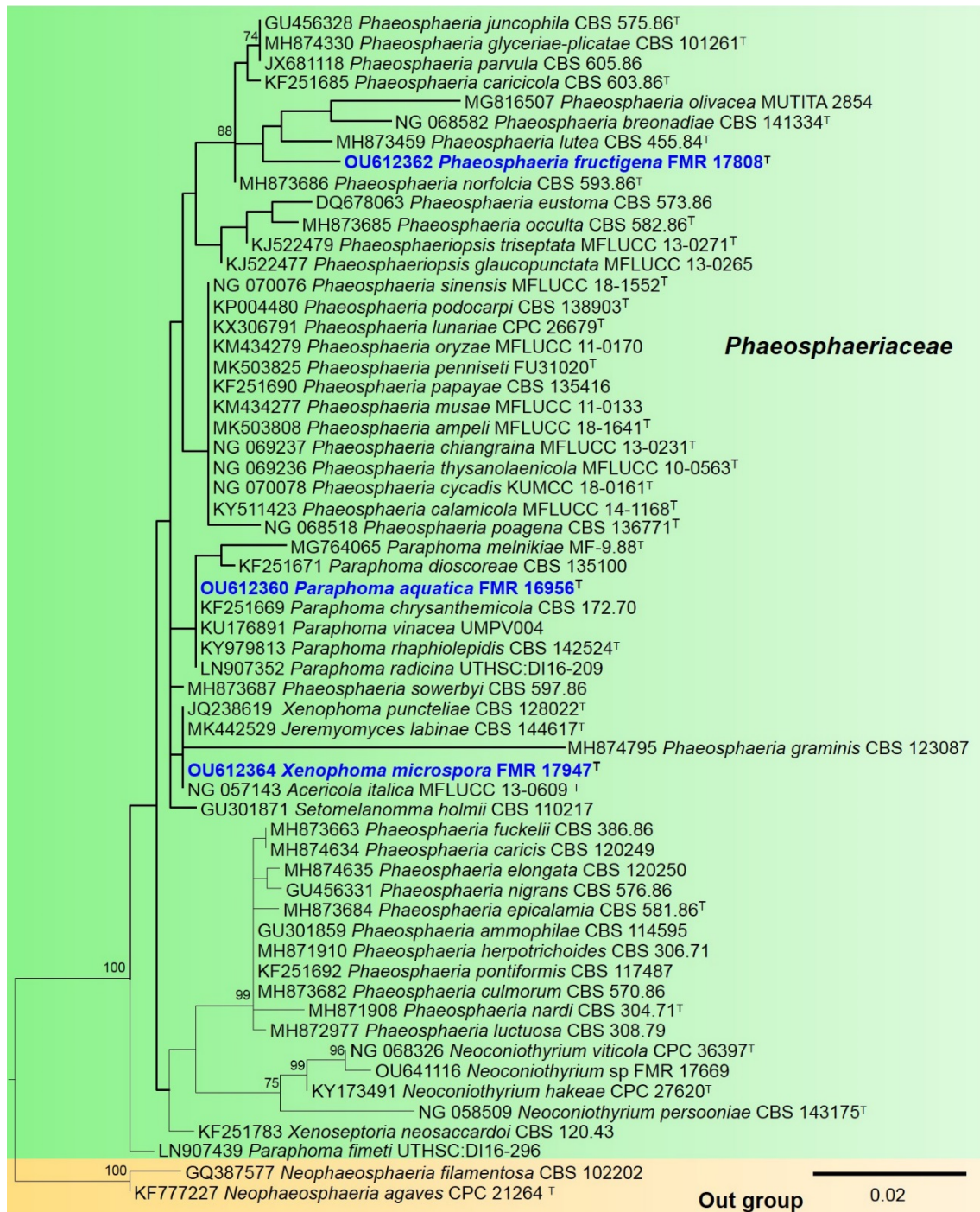


Figure S1 ML phylogenetics tree of *Phaeosphaeriaceae* inferred from the LSU sequences of 59 strains. Support in nodes is indicated above by bootstrap values of 70% or higher. The tree was rooted with *Neophaeosphaeria agaves* CBS 136429 and *Neophaeosphaeria filamentosa* CBS 102202. Alignment length 713 b.p. Newly proposed taxa are given in blue. Type strains are indicated by a superscript ^T.