

SUPPLEMENTARY INFORMATION

Table 1a. Reference taxa with sequences obtained from GenBank used in phylogenetic analysis of *Acremonium* and related organisms. Collection and GenBank numbers are indicated. Dashes indicate missing data in the two-gene analysis.

Species name	Collection#	nuLSU	nuSSU	Notes
<i>Albertiniella polyporicola</i>	CBS 457.88	AF096185	AF096170	
<i>Albosynnema elegans</i>	GB3101	AF193226		
<i>Ambrosiella xylebori</i>	CBS 110.61	DQ470979	DQ471031	
<i>Aniptodera chesapeakeensis</i>	ATCC 32818	U46882	U46870	
<i>Annulatascus triseptatus</i>	SMH 2359	AY346257	–	
<i>Anthostomella torosa</i>	JK 5678E	DQ836902	DQ836895	
<i>Apiognomonia errabunda</i>	AR 2813, CBS 109747	AF408334	DQ862045	
<i>Apiosordaria verruculosa</i>	F-152365	AY346258	–	
<i>Apiospora montagnei</i>	CBS 212.30	DQ471018	–	
<i>Balansia henningsiana</i>	GAM 16112	AY489715	AY489683	
<i>Beauveria bassiana</i>	IFO4848	AB027382		
<i>Bertia moriformis</i>	SMH 4320	AY695260		
<i>Bionectria grammicospora</i>	GJS 85-218	AF193238		
<i>Bionectria ochroleuca 1</i>	CBS 193.74	U00750		
<i>Bionectria ochroleuca 2</i>	AFTOL 187	DQ862027	DQ862044	
<i>Bionectria pityrodes</i>	ATCC 208842	AF193239		
<i>Blistum tomentosum</i>	Arsef 5353	AY259545		
<i>Bombardia bombardia</i>	AFTOL 967	DQ470970	DQ471021	
<i>Botryotinia fuckeliana</i>	OSC 100012	AY544651	AY544695	
<i>Bulbithecium hyalosporum</i>	CBS 318.91	AF096187		
<i>Calonectria morgani</i>	ATCC 11614	U17409		
<i>Camarops amorphia</i>	SHM 1450	AY780054	–	
<i>Camarops microspora</i>	CBS 649.92	AY083821	DQ471036	
<i>Camarops tubulina</i>	SMH 4614	AY346266	–	
<i>Camarops ustulinoides</i>	DEH 2164	DQ470941	DQ470989	
<i>Cephalotheca sulfurea</i>	CBS 135.34	AF096188	AF096176	
<i>Ceratocystis fimbriata</i>	TCH C89	U17401	U32418	
<i>Cercophora newfieldiana</i>	SMH 2622	AF064642	–	
<i>Cercophora striata</i>	SMH 4036	AY780066	–	
<i>Cercophora terricola</i>	ATCC 200395	AY780067	–	
<i>Ceriosporopsis halima</i>	JK 5473F	U47844	U47843	
<i>Chaetosphaerella phaeostroma</i>	SMH 4585 (a)	AY346274	–	
<i>Chaetosphaeria aterrima</i>	MR 871	AF178565		
<i>Chaetosphaeria ovoidea</i>	SMH 2605	AF064641	–	
<i>Chalara aurea</i>	CBS 729.69	AF222449	AF222503	
<i>Chaunopycnis alba 1</i>	G. Bills 5123	AF245296		
<i>Chaunopycnis alba 2</i>	Merck GB5123	AF245296		
<i>Chaunopycnis pustulata</i>	MF5368LR	AF373282		
<i>Chromendothia citrina</i>	AR 3445	AF408335	DQ862046	
<i>Chrysosporthe cubensis</i>	CBS 101281	AF408338	DQ862047	
<i>Cladobotryum rubrobrunnescens</i>	CBS 176.92	AF160228		
<i>Claviceps purpurea</i>	GAM 12885	AF543789	AF543765	
<i>Clypeosphaeria phillyreae</i>	–	AF452043		
<i>Coniochaeta discoidea</i>	SANK 12878	AY346297	–	
<i>Coniochaeta ostrea</i>	CBS 507.70	DQ470959	DQ471007	
<i>Coniochaeta savoryi</i>	TRTC 51980	AY346276	–	

Table 1. (Continued).

Species name	Collection#	nuLSU	nuSSU	Notes
<i>Cordyceps cardinalis</i>	OSC 93609	AY184962	AY184973	
<i>Cordyceps militaris</i>	NRRL 28021	AF049166		
<i>Cordyceps ramosopulvinata</i>	–	AB027372		
<i>Corollospora maritima</i>	JK 4834	U46884	U46871	
<i>Cosmospora episphaeria</i>	GJS 88-29	AY015625		
<i>Cosmospora vilior</i>	ATCC 16217	U57348		
<i>Cryphonectria parasitica</i>	ATCC 38755	–	DQ862048	
<i>Cryptodiaporthe aesculi</i>	CBS 109765	DQ836905	DQ836899	
<i>Cryptosporella hypoderma</i>	CBS 171.69	DQ862028	DQ862049	
<i>Cylindrocarpon cylindroides</i>	CCFC 226722	AY283551		
<i>Dematiocladium cellidis</i>	CBS 115994	AY793438		
<i>Diaporthe eres</i>	CBS 109767	AF408350	DQ471015	
<i>Diaporthe phaseolorum</i>	NRRL 13736	U47830	L36985	
<i>Diatrype disciformis</i>	CBS 197.49	DQ470964	DQ471012	
<i>Didymostilbe echinofibrosa</i>	AR 2824	AY489706		
<i>Didymostilbe matsushimae</i>	CCFC 54984	AY283545		
<i>Doratomyces stemonitis</i>	CBS 127.22	DQ836907	DQ836901	
<i>Echinodothia tuberiformis</i>	JF. White s.n.	U57083		
<i>Elaphocordyceps capitata</i>	OSC 71233	AY489721	AY489689	
<i>Elaphocordyceps longisegmentis</i>	OSC 110992	EF468816		
<i>Elaphocordyceps ophioglossoides</i>	OSC 106405	AY489723	AY489691	
<i>Emericellopsis terricola</i>	CBS 120.40 T	U57082		
<i>Endothia gyrosa</i>	CBS 112915	DQ470972	DQ836898	
<i>Epichloe typhina</i>	KCetCV188-1	U17396	U32405	
<i>Eutypa lata</i>	CBS 208.87	DQ836903	DQ836896	
<i>Fragosphaeria purpurea</i>	CBS 133.34	AF096191	AF096176	
<i>Fusarium dimerum</i>	IP 1516	AF130378		
<i>Fusarium domesticum</i>	CBS 434.43	AY230194		
<i>Fusarium falciforme</i>	CBS 475.67	AY097319		
<i>Fusarium lichenicola</i>	CBS 109048	AY097324		
<i>Fusarium oxysporum</i> 1	NRRL 13307	U34542		
<i>Fusarium oxysporum</i> 2	NRRL 22902	U34537		
<i>Fusarium solani</i>	CBS 102556	AY097317		
<i>Fusarium verticillioides</i>	NRRL 22172	U34526		
<i>Gelasinospora tetrasperma</i>	CBS 178.33	DQ470980	DQ471032	
<i>Geosmithia lavendula</i>	IFO 7729	D88325	D14405	
<i>Geosmithia putterillii</i>	IFO 31131	AB047215	AB031390	
<i>Glomerella cingulata</i>	HKUCC 9036	AY083820	AF543762	
<i>Gnomonia gnomon</i>	CBS 199.53	AF408361	DQ471019	
<i>Graphium penicillioides</i>	CBS 506.86	AF027384	DQ471038	
<i>Graphostroma platystoma</i>	CBS 270.87	DQ836906	DQ836900	
<i>Halosphaeria appendiculata</i>	CBS 197.60	U46885	U46872	
<i>Hapsidospora irregularis</i>	ATCC 22087	AF096192		
<i>Haptocillium sinense</i>	CBS 131.95	AF339546		
<i>Haptocillium zeosporum</i>	CBS 335.80	AF339540		
<i>Heleococcum japonicum</i>	ATCC 18157	U17429		
<i>Heliscus lugdunensis</i>	NRRL 20592	U88128		
<i>Hydropisphaera erubescens</i> 1	ATCC 36092	AF193229	AY545722	

Table 1. (Continued).

Species name	Collection#	nuLSU	nuSSU	Notes
<i>Hydropisphaera erubescens</i> 2	ATCC 36093	AY545722		
<i>Hydropisphaera peziza</i> 1	GJS 92-101, CBS 102038	AF193232		
<i>Hydropisphaera peziza</i> 2	BPI 802846	AY489730		
<i>Hyperdermium bertonii</i>	–	AF242354		
<i>Hypocrea americana</i>	OSC 100005	AY544649	NG016487	
<i>Hypocrea koningii</i>	ATCC 64262	AF127149		
<i>Hypocrea lutea</i>	ATCC 208838	AF543791	AF543768	
<i>Hypomyces chlorinigenus</i>	G. Arnold i43	AF213027		
<i>Hypomyces subiculosus</i>	GJS 83-288, CBS 123056	AJ459309		
<i>Immersiella immersa</i>	SMH 4104	AY436409	–	
<i>Isaria javanica</i>	Arsef 322	AF339533		
<i>Isaria takamizusanensis</i>	NHJ 3582	EU369034		
<i>Kallichroma glabrum</i>	JK 5123	AF193233		
<i>Lanatonectria flavolanata</i> 1	CCFC 216608	AY281098		
<i>Lasiosphaeria hispida</i>	SHM 3336	AY436419	–	
<i>Lasiosphaeria ovina</i>	SMH 4605	AY436413	DQ836894	
<i>Lasiosphaeriella nitida</i>	SMH 1664	AY346289	–	
<i>Lecanicillium antillanum</i>	CBS 350.85	AF339536		
<i>Lecanicillium aranearum</i> T	CBS 726.73a	AF339537		Type of <i>Cephalosporium aranearum</i>
<i>Lecanicillium attenuatum</i>	CBS 402.78	AF339565		
<i>Lecanicillium dimorphum</i> T	CBS 363.86	AF339559		Type of <i>Aphanocladium dimorphum</i>
<i>Lecanicillium fusisporum</i> T	CBS 164.70	AF339549		Type of <i>Verticillium fusisporum</i>
<i>Lecanicillium lecanii</i>	CBS 101247	AF339555		
<i>Lecanicillium psalliotae</i> 1	IMI 163640	AF339557		
<i>Lecanicillium</i> aff. <i>psalliotae</i> 2	CBS 639.85	AF339561		
<i>Leotia lubrica</i>	OSC 100001	AY544644	AY544687	
<i>Leuconectria clusiae</i>	AR 2706	U17412		
<i>Leucostoma niveum</i>	AR 3413, CBS 109489	AF362558	DQ862050	
<i>Lignincola laevis</i>	JK 5180A	U46890	U46873	
<i>Lindra thalassiae</i>	JK 5090A	DQ470947	DQ470994	
<i>Linkosia fusiformis</i>	HKUCC 10824	DQ408571		
<i>Linocarpon appendiculatum</i>	ATCC 90499	AY346291	–	
<i>Lulworthia grandispora</i>	JK 4686	DQ522856	DQ522855	
<i>Mazzantia napelli</i>	AR 3498, CBS 109769	AF408368	DQ862051	
<i>Melanconis alni</i>	AR 3500, CBS 109773	AF408371	DQ862052	
<i>Melanconis marginalis</i>	AR 3442, CBS 109744	AF408373	DQ862053	
<i>Melanconis stilbostoma</i>	AR 3501, CBS 109778	AF408374	DQ862054	
<i>Melanochaeta hemipsila</i>	SMH 2125	AY346292	–	
<i>Melanopsamma pomiformis</i>	ATCC 18873	AY489709		
<i>Melanospora brevirostris</i>	ATCC 42427	AY015627		
<i>Melanospora tiffanii</i>	ATCC 15515	AY015630	AY015619	
<i>Melanospora zamiae</i>	ATCC 12340	AY046579	AY046578	
<i>Menispora tortuosa</i>	DAOM 231154	AY544682	AY544723	
<i>Metarhizium anisopliae</i> var. <i>frigidum</i>	Arsef 4606	AF339529		
<i>Microascus longirostris</i>	CBS 267.49	AF400865	DQ471026	
<i>Microascus trigonosporus</i>	CBS 218.31	DQ470958	DQ471006	
<i>Microglossum rufum</i>	OSC 100641	DQ470981	DQ471033	
<i>Mycocarachis inversa</i>	ATCC 22107	U00745		

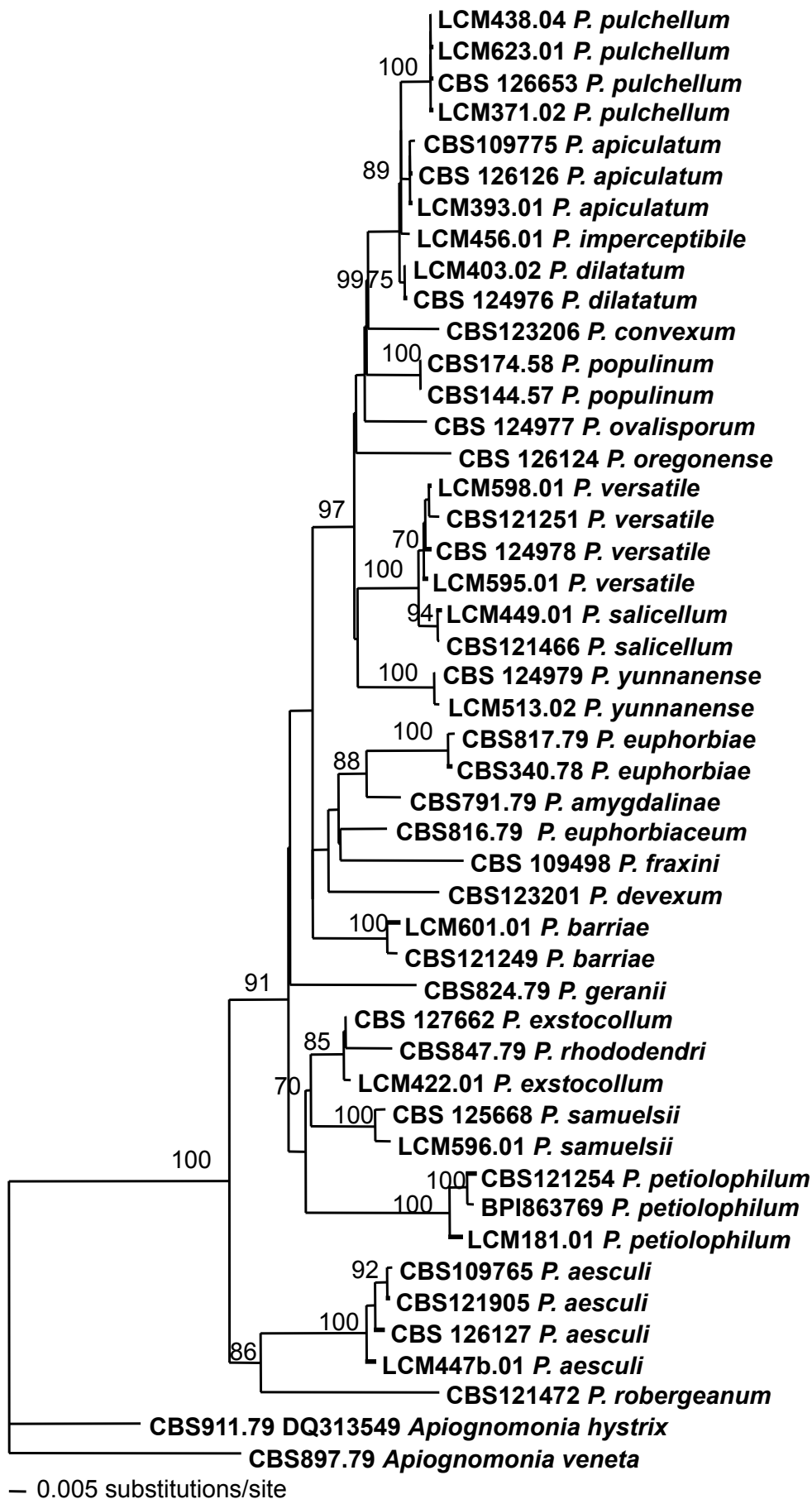
Table 1. (Continued).

Species name	Collection#	nuLSU	nuSSU	Notes
<i>Mycogone rosea</i>	TFC 96-62	AF213031		
<i>Mycopezom smithii</i>	SMH 1609	AF279400		
<i>Myrothecium cinctum</i>	ATCC 22270	AY489710		
<i>Myrothecium inundatum</i>	IMI 158855	AY489731		
<i>Myrothecium leucotrichum</i>	AR 3506, CBS 114052	AY489707		
<i>Myrothecium roridum</i> 1	ATCC 16297	AY489708	AY489676	
<i>Myrothecium roridum</i> 2	BBA 67679	AJ301995		
<i>Myrothecium verrucaria</i>	BBA 70749	AJ301999		
<i>Nalanthamala psidii</i>	CBS 912.85	HQ232161		
<i>Nalanthamala squamicola</i>	–	AF373281		
<i>Nalanthamala vermoesenii</i>	CBS 137.24	AY554260		
<i>Nectria cinnabarina</i>	GJS 89-107	U00748	U32412	
<i>Nectria haematococca</i>	GJS 89-70, CBS 114067	AY489729	AY489697	
<i>Nectria radialis</i>	AR 2553	U17415		
<i>Nectria rigidiuscula</i>	IFO 30918	AB084302		
<i>Nectria sesquicillii</i>	ATCC 66880	AF193241		
<i>Nectria zonata</i>	AR 1612	U17424		
<i>Nectriopsis sporangiicola</i>	ATCC 26542	U00753		
<i>Nectriopsis squamulosa</i> 1	AR 1464	U17423		
<i>Nectriopsis squamulosa</i> 2	AR 1464	U17423		
<i>Nectriopsis violacea</i>	MUCL 40056	AF193242		
<i>Neomunkia sydowii</i>	–	AY327047		
<i>Neurospora crassa</i>	MUCL 19026	AF286411	X04971	
<i>Niesslia exilis</i> 1	CBS 560.74	AY489720	AY489688	
<i>Niesslia exilis</i> 2	CBS 357.70	AY489718		
<i>Nigrosabulum globosum</i>	ATCC 22102	AF096195		
<i>Nimbospora effusa</i>	JK 5104A	U46892	U46877	
<i>Nohea umiumi</i>	JK 5103F	U46893	U46878	
<i>Ochronectria calami</i>	ATCC 46694	AF193244		
<i>Ophiocordyceps bispora</i>	KVL 606	AF009654		
<i>Ophionectria trichospora</i>	CBS 109876	AF543790		
<i>Ophiostoma piliferum</i> 1	CBS 158.74	DQ470955	DQ471003	
<i>Ophiostoma piliferum</i> 2	–	AF221010		
<i>Ophiostoma stenoceras</i>	CBS 139.51	DQ836904	DQ836897	
<i>Paecilomyces farinosus</i>	PFA 2169	AF172341		
<i>Paecilomyces lilacinus</i> 1	Arsef 2181	AF339534		
<i>Papulosa amerospora</i>	JK 5547F	DQ470950	DQ470998	
<i>Parasarcopodium ceratocaryi</i>	CBS 110664	AY425026		
<i>Peethambara spirostriata</i>	CBS 110115	AY489724	AY489692	
<i>Peethambara sundara</i>	CBS 646.77	AF193245		
<i>Petriella setifera</i>	ATCC 26490	U48421	DQ471020	
<i>Persiciospora africana</i>	ATCC 64691	AY015631		
<i>Phaeoacremonium aleophilum</i>	Harrington A207	AY249088		
<i>Plagiostoma euphorbiae</i>	CBS 340.78	AF408382	DQ862055	
<i>Plectosphaerella cucumerina</i>	FAU508/NRRL20430	U17399	AF176951	
<i>Pleurodesmospora coccorum</i>	CBS 101284	AF339564		
<i>Pochonia bulbilosa</i> 1	CBS 145.70	AF339542		
<i>Pochonia chlamydosporia</i> var. <i>catenulatum</i> T	CBS 504.66	AF339544		Type of <i>Diheterospora catenulata</i>

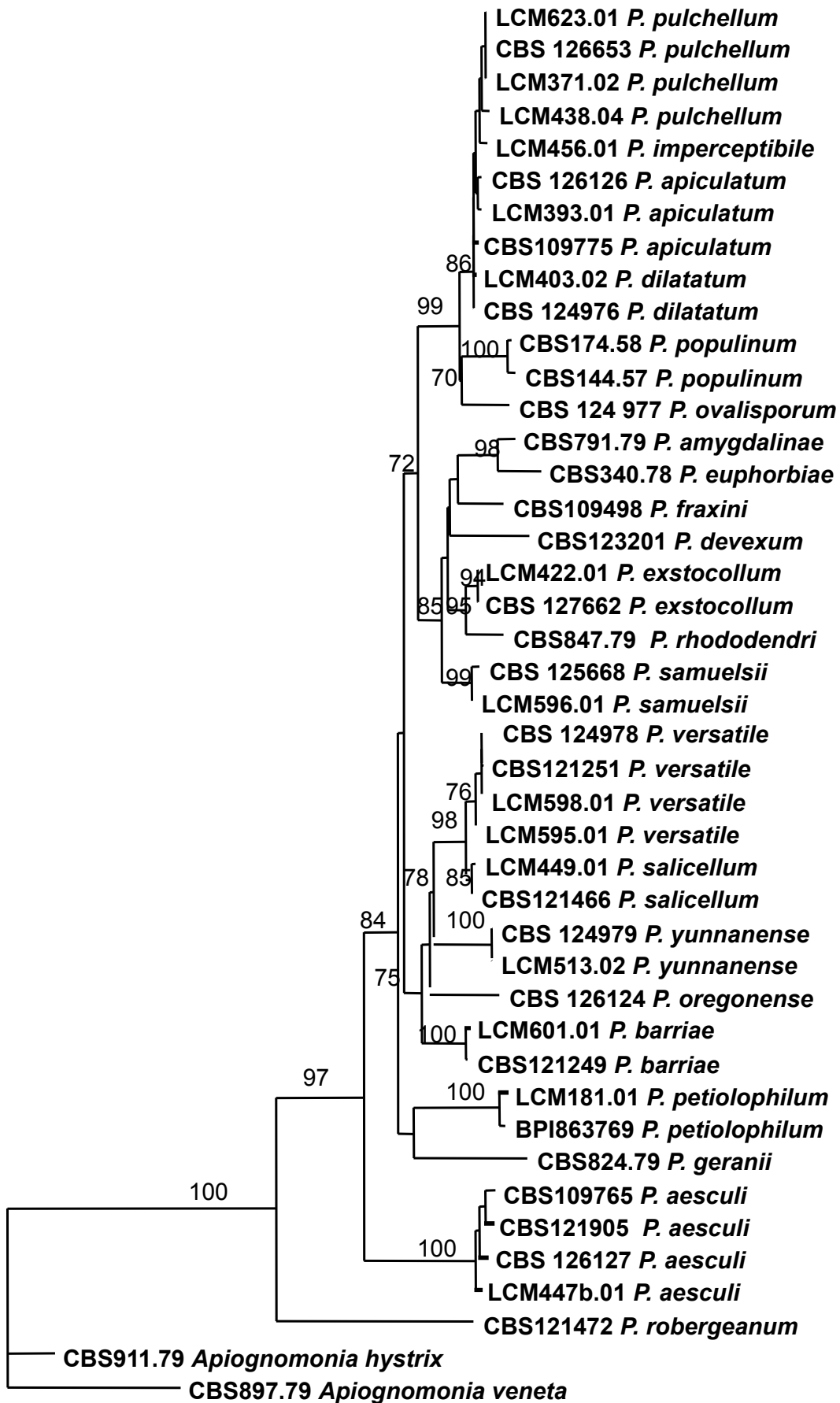
Table 1. (Continued).

Species name	Collection#	nuLSU	nuSSU	Notes
<i>Pochonia gonioides</i>	CBS 891.72	AF339550		
<i>Pochonia rubescens</i>	CBS 464.88	AF339566		
<i>Podospora decipiens</i>	CBS 258.64	AY780073	–	
<i>Podospora fibrinocaudata</i>	TRTC 48343	AY780074	–	
<i>Pseudeurotium zonatum</i>	CBS 329.36	AF096198	DQ471040	
<i>Pseudonectria rousseliana</i>	AR 2716, CBS 114049	U17416	AF543767	
<i>Pseudonectria</i> sp.	AR 2721	U17420		
<i>Roumegueriella rufula</i>	CBS 346.85	U00754	DQ522561	
<i>Rubrinectria olivacea</i>	CBS 102268	AY554244		
<i>Scopinella solani</i>	CBS 770.84	AY015632		
<i>Selinia pulchra</i>	AR 2750	AF193246		
<i>Sesquicillium microsporum</i>	G. Bills 5311	AF245298		
<i>Seynesia erumpens</i>	SMH 1291	AF279410	AF279409	
<i>Simplicillium lamellicola</i> T	CBS 116.25	AF339552		Type of <i>Cephalosporium lamellicola</i>
<i>Simplicillium lanosoniveum</i>	CBS 704.86	AF339553		
<i>Sphaerostilbella aureonitens</i>	Poldmaa TFC 96-77	AF160246		
<i>Sphaerostilbella berkeleyana</i>	CBS 102308	U00756	AF543770	
<i>Sporophagomyces chrysostomus</i>	TFC 96-193	AF160235		
<i>Stachybotrys chartarum</i>	ATCC 9182/UAMH 6417	AF081468	AY489680	
<i>Stachybotrys subsimplex</i>	ATCC 32888	AY489711	AY489679	
<i>Stephanonectria keithii</i>	GJS 92-133, CBS 100005	AY89727		
<i>Stilbella fimetaria</i>	DAOM 229279	HQ232176		
<i>Stilbocrea macrostoma</i>	GJS 73-26, CBS 114375	AY489725		
<i>Stanjemonium grisellum</i>	NRRL 26548	AF049171		
<i>Strattonia carbonaria</i>	ATCC 34567	AY346302	–	
<i>Sypastospora parasitica</i>	IMI 255607	AY015634		
<i>Tilachlidium brachiatum</i>	CBS 506.67	HQ232177		
<i>Tolypocladium inflatum</i>	IFO 31669	AB044645		
<i>Torrubiella luteoestrata</i>	NHJ 12516	EF468849		
<i>Torrubiella petchii</i>	NHJ 6240	EU369038		
<i>Torrubiella pruinosa</i>	NHJ 12994	EU369041		
<i>Valetionellopsis laxa</i>	GJS 96-174, CBS 191.97	AY015635		
<i>Valsa ambiens</i>	AR 3516, CBS 109491	AF362564	DQ862056	
<i>Valsella salicis</i>	AR 3514, CBS 109754	AF408389	DQ862057	
<i>Varicosporina ramulosa</i>	RVG-113	U44092	U43846	
<i>Verticillium dahliae</i>	Typas 76/ATCC 16535	AF104926	AY489705	
<i>Verticillium epiphytum</i> 1	CBS 154.61	AF339548		
<i>Verticillium epiphytum</i> 2	CBS 384.81	AF339547		
<i>Verticillium incurvum</i>	CBS 460.88	AF339551		
<i>Verticillium pseudohepiterigenum</i>	Arsef 5687	AF339562		
<i>Xylaria acuta</i>	ATCC 56487	AY544676	AY544719	
<i>Xylaria hypoxylon</i>	OSC 100004	AY544648	AY544692	

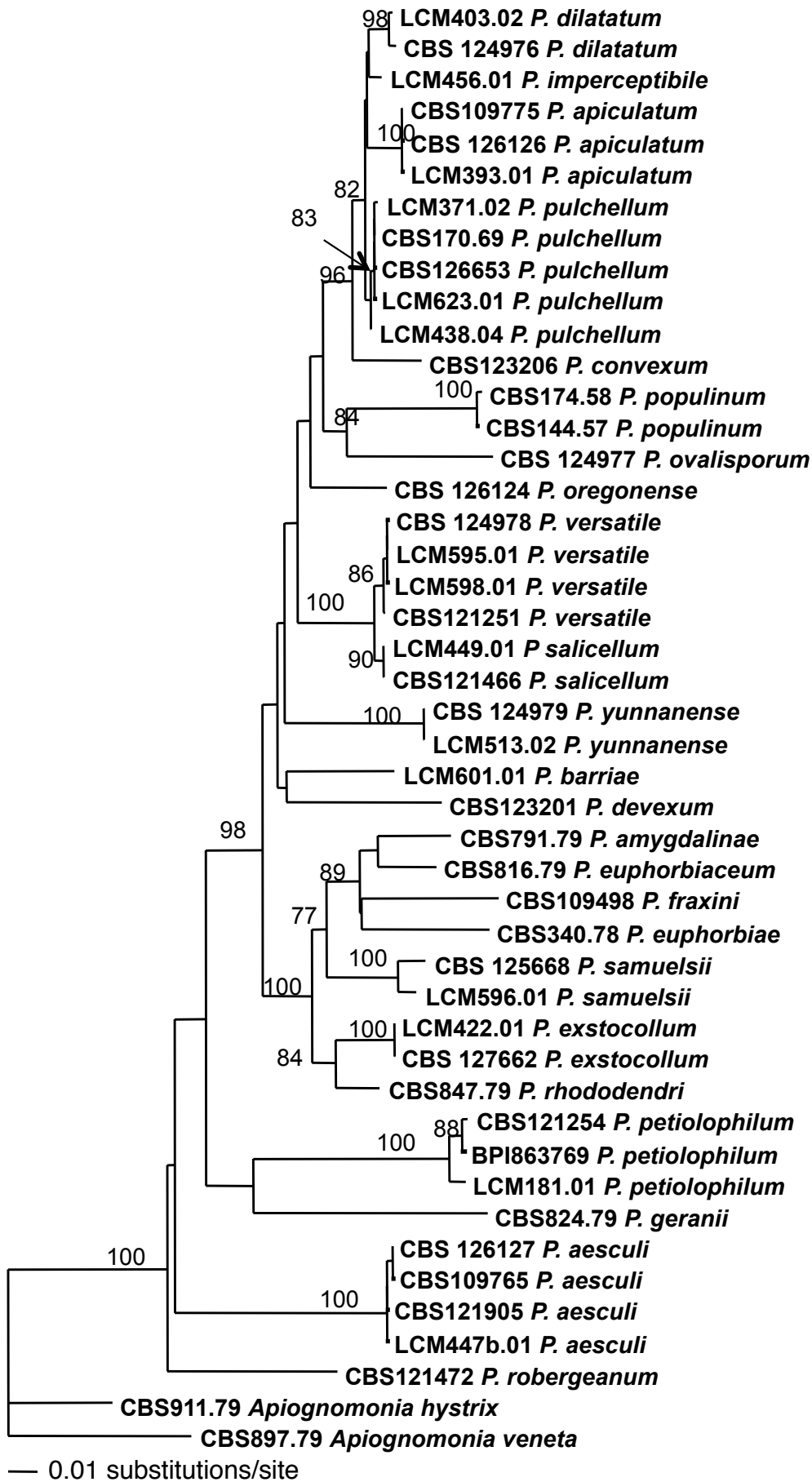
SUPPLEMENTARY INFORMATION



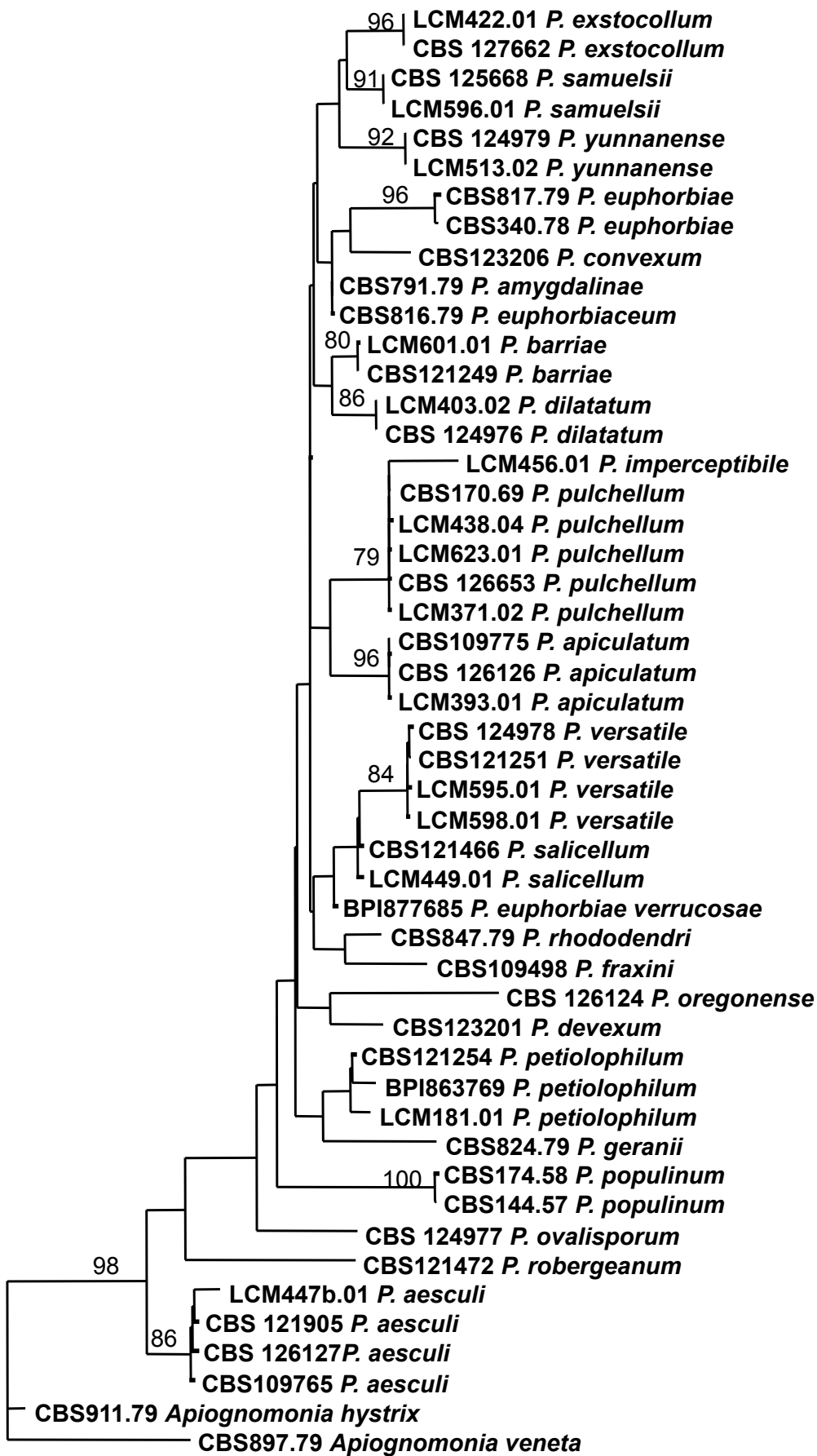
S.Fig. 1. β -tubulin tree for 24 species of *Plagiostoma* and two species of *Apiognomonia* generated using Neighbor Joining method with distance settings estimated by Modeltest v. 3.7 (Posada & Crandall 1998). Bootstrap values equal or greater than 70% are shown on top or to the left of branches.



S.Fig. 2. *rpb2* tree for 22 species of *Plagiostoma* and two species of *Apiognomonina* generated using Neighbor Joining method with distance settings estimated by Modeltest v. 3.7 (Posada & Crandall 1998). Bootstrap values equal or greater than 70% are shown on top or to the left of branches.



S.Fig. 3. *tef1- α* tree for 24 species of *Plagiostoma* and two species of *Apiognomonina* generated using Neighbor Joining method with distance settings estimated by Modeltest v. 3.7 (Posada & Crandall 1998). Bootstrap values equal or greater than 70% are shown on top or to the left of branches.



S.Fig. 4. ITS tree for 25 species of *Plagiostoma* and two species of *Apiognomonina* generated using Neighbor Joining method with distance settings estimated by Modeltest v. 3.7 (Posada & Crandall 1998). Bootstrap values equal or greater than 70% are shown on top or to the left of branches.