

**Table S1.** Gene regions, respective primers, PCR protocols and references used in the study.

Gene	Primers	PCR conditions:(Annealing temp. in bold)	References
ITS	ITS5 ITS4	(95 °C: 30 s, <b>59 °C</b> :50 s, 72 °C: 90 s) × 35 cycles	White et al.(1990)
<i>tefl-α</i>	728F 986R	(94 °C: 30 s, <b>54 °C</b> : 30 s, 72 °C: 30 s) × 35 cycles	Carbone and Kohn (1999)
<i>β-tubulin</i>	T1 Bt 2b	(94 °C: 6 min, <b>56 °C</b> : 60 s, 72 °C: 45 s) × 35 cycles	O'Donnell and Cigelnik (1997) Glass and Donaldson (1995)

**Table S2.** Strains/isolates and their accession numbers used in phylogenetic analyses.

Species	Isolate	ITS	<i>tefl-α</i>	<i>β-tubulin</i>
<i>Campylocarpon fasciculare</i>	CBS 112613	AY677301	JF735691	AY677221
<i>C.fasciculare</i>	KARE1889	MK400278	MK409922	MK409845
<i>C.fasciculare</i>	KARE1890	MK400279	MK409923	MK409846
<i>C.fasciculare</i>	KARE1891	MK400280	MK409924	MK409847
<i>C.fasciculare</i>	KARE1892	MK400281	MK409925	MK409848
<i>C.fasciculare</i>	KARE1893	MK400282	MK409926	MK409849
<i>C.fasciculare</i>	KARE1894	MK400283	MK409927	MK409850
<i>C.fasciculare</i>	KARE1895	MK400284	MK409928	MK409851
<i>C.fasciculare</i>	<b>JZB 3300001</b>	<b>OK605034</b>	<b>OK595364</b>	<b>OK595362</b>
<i>C.fasciculare</i>	<b>JZB 3300002</b>	<b>OK605035</b>	<b>OK595365</b>	<b>OK595363</b>
<i>C.pseudofasciculare</i>	CBS 112679	AY677306	JF735692	AY677214
<i>Dactylonectria alcacerensis</i>	CBS 129087	JF735333	JF735819	AM419111
<i>D.alcacerensis</i>	Cy133	JF735331	JF735817	JF735459
<i>D.alcacerensis</i>	KARE413	MK400304	MK409948	MK409871
<i>D.amazonica</i>	MUCL55430	MF683706	MF683664	MF683643
<i>D.amazonica</i>	MUCL55433	MF683707	MF683665	MF683644
<i>D.anthuriicola</i>	CBS 129085	JF735302	JF735768	JF735430
<i>D.ecuadoriensis</i>	MUCL55424	MF683704	MF683662	MF683641
<i>D.ecuadoriensis</i>	KARE2108	MK400316	MK409960	MK409883
<i>D.estremocensis</i>	CBS 129085	JF735320	JF735806	JF735448
<i>D.estremocensis</i>	CPC 13539	JF735330	JF735816	JF735458
<i>D.hispanica</i>	CBS 142827	KY676882	KY676870	KY676876
<i>D.hispanica</i>	Cy228	JF735301	JF735767	JF735429
<i>D.macrodidyma</i>	CBS 112615	AY677284	JF735833	AY677229
<i>D.macrodidyma</i>	Cy123	JF735341	JF735837	JF735470
<i>D.macrodidyma</i>	Cy139	AM419071	JF735839	AM419106
<i>D.macrodidyma</i>	KARE423	MK400300	MK409944	MK409867
<i>D.novozelandica</i>	CBS 113552	JF735334	JF735822	AY677237

<i>D. novozelandica</i>	Cy115	JF735335	JF735823	JF735460
<i>D. polyphaga</i>	MUCL55209	MF683689	MF683647	MF683626
<i>D. polyphaga</i>	MUCL54802	MF683698	MF683656	MF683635
<i>D. torresensis</i>	CBS 129086	JF735362	JF735870	JF735492
<i>D. torresensis</i>	Cy118	JF735354	JF735859	JF735483
<i>D. valentina</i>	CBS 142826	KY676881	KY676869	KY676875
<i>D. valentina</i>	KARE2111	MK400314	MK409958	MK409881
<i>D. vitis</i>	CBS 129082	JF735303	JF735769	JF735431
<i>Ilyonectria capensis</i>	CBS 132815	JX231151	JX231119	JX231103
<i>I. capensis</i>	KARE1920	MK400330	MK409974	MK409897
<i>I. crassa</i>	CBS 139.30	JF735275	JF735723	JF735393
<i>I. destuctans</i>	CBS 264.65	AY677273	JF735695	AY677256
<i>I. europaea</i>	CBS 129078	JF735294	JF735756	JF735421
<i>I. liriodendri</i>	CBS 110.81	DQ178163	JF735696	DQ178170
<i>I. mors-panacis</i>	CBS 306.35	JF735288	JF735746	JF735414
<i>I. palmarum</i>	CBS 135754	HF937431	HF922614	HF922608
<i>I. robusta</i>	CBS 308.35	JF735264	JF735707	JF735377
<i>I. venezuelensis</i>	CBS 102032	AM419059	JF735760	AY677255
<i>Nectria balansae</i>	CBS 125119	HM484857	HM484848	HM484874
<i>N. cinnabarina</i>	A.R. 4477	HM484548	HM484527	HM484606
<i>Neonectria californica</i>	KARE1838/CBS145774	MK400332	MK409976	MK409899
<i>N. ditissima</i>	CBS 226.31	JF735309	JF735783	DQ789869
<i>N. lugdunensis</i>	CBS 125485	KM231762	KM231887	KM232019
<i>N. major</i>	CBS 240.29	JF735308	JF735782	DQ789872
<i>N. neomacrospora</i>	CBS 324.61	JF735312	HM364352	DQ789875
<i>N. obtusispora</i>	CBS 183.36	AM419061	JF735796	AM419085
<i>N. ramulariae</i>	CBS 151.29	JF735313	JF735791	JF735438
<i>Thelonectria acrotyla</i>	G.J.S. 90-171	JQ403329	JQ394751	JQ394720
<i>T. amamiensis</i>	MAFF 239819	JQ403337	KJ022348	JQ394727
<i>T. aurea</i>	KARE1830/CBS 145584	MK400285	MK409929	MK409852
<i>T. blackeriella</i>	BF142	KX778711	-	KX778702
<i>T. diademata</i>	A.R. 4765	NR137784	JQ394736	JQ394700
<i>T. gongylodes</i>	G.J.S. 04-171	JQ403318	JQ394744	JQ394710
<i>T. nodosa</i>	G.J.S. 04-155	JQ403317	JQ394743	JQ394709
<i>T. olida</i>	CBS 215.67	KJ021982	-	KM232024
<i>T. stemmata</i>	C.T.R. 71-19	JQ403312	JQ394739	JQ394704
<i>T. torulosa</i>	A.R. 4764	JQ403309	KJ022389	JQ394701
<i>T. trachosa</i>	CBS 112467	KF569842	KF569860	KF569869
<i>T. truncata</i>	G.J.S. 04-357	JQ403319	JQ394745	KJ022324
<i>T. truncata</i>	MAFF241521	JQ403339	KJ022325	JQ394757
<i>T. veuillotiana</i>	G.J.S. 92-24	JQ403335	JQ394755	JQ394725