M.J. Carbone, R. Reyna, P. Mondino, S. Alaniz (2023). Black foot in nursery grapevines in Uruguay caused by *Dactylonectria* and *Ilyonectria*. *Phytopathologia Mediterranea* 62(2): 199–211. doi: 10.36253/phyto-14498

Supplementary Table 1. Accession numbers of DNA sequences obtained from GenBank and used for the phylogenetic analyses in this study (ex-type strains are indicated in bold).

Genus	Species	Strain number	Host	Country	GenBank accession No.		
					TUB2	HIS3	TEF
Campylocarpon	***C. fasciculare***	**CBS 112613**	*Vitis vinifera*	South Africa	AY677221	JF735502	JF735691
	C. pseudofasciculare	**CBS 112679**	*Vitis vinifera*	South Africa	AY677214	JF735503	JF735692
Dactylonectria	***D. alcacerensis***	**CBS 129087**	*Vitis vinifera*	Portugal	AM419111	JF735630	JF735819
	D. alcacerensis	Cyl-01	*Vitis vinifera*	Spain	-	MG745823	-
	D. alcacerensis	Cy133	*Vitis vinifera*	Spain	JF735459	JF735628	JF735817
	D. amazonica	**MUCL55430**	*Piper* sp.	Ecuador	MF683643	MF683685	MF683664
	D. amazonica	MUCL55433	*Piper* sp.	Ecuador	MF683644	MF683686	MF683665
	D. anthuriicola	**CBS 564.95**	*Anthurium* sp.	Netherlands	JF735430	JF735579	JF735768
	D. ecuadoriensis	**MUCL55424**	*Piper* sp.	Ecuador	MF683641	MF683683	MF683662
	D. ecuadoriensis	MUCL55425	*Piper* sp.	Ecuador	MF683642	MF683684	MF683663
	D. estremocencsis	**CBS 129085**	*Vitis vinifera*	Portugal	JF735448	JF735617	JF735806
	D. estremocencsis	Cy135	*Vitis vinifera*	Portugal	AM419105	JF735615	JF735804
	D. hispanica	**CBS 142827**	*Pinus halepensis*	Spain	KY676876	KY676864	KY676870
	D. hispanica	Cy228	*Ficus* sp.	Portugal	JF735429	JF735578	JF735767
	D. hordeicola	**CBS 162.89**	*Hordeum vulgare*	Netherlands	AM419084	JF735610	JF735799
	D. macrodidyma	**CBS 112615**	*Vitis vinifera*	South Africa	AY677233	JF735647	JF735836
	D. macrodidyma	STE-U 9098	*Olea europaea* subsp. *Europaea*	South Africa	-	MT309058	-
	D. macrodidyma	Cy15UFSM	*Vitis vinifera*	Brazil	-	KF633159	-
	D. macrodidyma	Cy175	*Vitis vinifera*	Portugal	JF735473	JF735652	JF735841
	D. macrodidyma	CBS 112594	*Vitis vinifera*	South Africa	AY677231	JF735643	JF735832
	D. macrodidyma	CBS 112605	*Vitis vinifera*	South Africa	AY677230	JF735646	JF735835
	D. novozelandica	**CBS 113552**	*Vitis* sp.	New Zealand	AY677237	JF735633	JF735822
	D. novozelandica	CBS 112608	*Vitis vinifera*	South Africa	AY677235	JF735632	JF735821
	D. novozelandica	CBS 112593	*Vitis vinifera*	South Africa	AY677236	JF735631	JF735820
	D. novozelandica	Cy115			JF735460	JF735634	JF735823
	D. palmicola	**MUCL55426**	*Euterpe precatoria*	Ecuador	MF683645	MF683687	MF683666
	D. pauciseptata	**CBS 120171**	*Vitis* sp.	Slovenia	EF607066	JF735587	JF735776
	D. pauciseptata	BV-1354	*Vitis vinifera*	Spain	MK602798	MK579256	MK602813
	D. pinicola	**CBS 173.37**	*Pinus laricio*	United Kingdom	JF735447	JF735614	JF735803
	D. pinicola	Cy200	*Vitis vinifera*	Portugal	JF735445	JF735612	JF735801
	D. riojana	**BV-1396**	*Vitis* sp.	Spain	MK602811	MK602831	MK602826
	D. riojana	BV-1397	*Vitis* sp.	Spain	MK602812	MK602832	MK602827
	D. torresensis	**CBS 129086**	*Vitis vinifera*	Portugal	JF735492	JF735681	JF735870
	D. torresensis	CBS 112598	*Vitis vinifera*	South Africa	JF735479	JF735662	JF735851
	D. torresensis	CBS 188.49	*Abies nordmanniana*	Netherlandas	AM419087	JF735658	JF735847
	D. valentina	**CBS 14826**	*Ilex aquifolium*	Spain	KY676875	KY676863	KY676869
	D. valentina	STE-U 9105	*Olea europaea* subsp. *europaea*	South Africa	-	MT309072	-
	D. vitis	**CBS 129082**	*Vitis vinifera*	Portugal	JF735431	JF735580	JF735769
Ilyonectria	***I. capensis***	**CBS 132815**	*Protea* sp.	South Africa	JX231103	JX231135	JX231119
	I. capensis	CBS 132816	*Protea* sp.	South Africa	JX231112	JX231144	JX231128
	I. coprosmae	CBS 119606	*Metrosideros* sp.	Canada	JF735373	JF735505	JF735694
	I. crassa	**CBS 139.30**	*Lilium* sp.	Netherlandas	JF735393	JF735534	JF735723

(Continued)

Supplementary Table 1. (Continued).

Genus	Species	Strain number	Host	Country	GenBank accession No.		
					TUB2	HIS3	TEF
	I. crassa	CBS 158.31	*Narcissus* sp.	Netherlandas	JF735394	JF735535	JF735724
	I. crassa	CBS 129083	*Panax quinquefolium*	Canada	JF735395	JF735536	JF735725
	I. cyclaminicola	**CBS 302.93**	*Cyclamen* sp.	The Netherlands	JF735432	JF735581	JF735770
	I. europaea	**CBS 129078**	*Vitis vinifera*	Portugal	JF735421	JF735567	JF735756
	I. europaea	CBS 102892	Stem	Germany	JF735422	JF735569	JF735758
	I. gamsii	**CBS 940.97**	Soil	The Netherlands	AM419089	JF735577	JF735766
	I. ilicicola	**CBS 142828**	*Ilex* sp.	Spain	KY676878	KY676866	KY676872
	I. ilicicola	Cy-FO-226	*Ilex* sp.	Spain	KY676879	KY676867	KY676873
	I. leucospermi	**CBS 132809**	*Leucospermum* sp.	South Africa	JX231113	JX231145	JX231129
	I. leucospermi	CBS 132810	*Protea* sp.	South Africa	JX231114	JX231146	JX231130
	I. liliigena	**CBS 189.49**	*Lilium regale*	Netherlands	JF735425	JF735573	JF735762
	I. liiligena	CBS 732.74	*Lilium* sp.	Netherlands	JF735426	JF735574	JF735763
	I. liriodendri	**CBS 110.81**	*Liriodedron tulipifera*	USA	DQ178170	JF735507	JF735696
	I. liriodendri	CBS 112596	*Vitis vinifera*	South Africa	AY677239	JF735511	JF735700
	I. lusitanica	**CBS 129080**	*Vitis vinifera*	Portugal	JF735423	JF735570	JF735759
	I. mors-panacis	**CBS 306.35**	*Pa. quinquefolium*	Canada	JF735414	JF735557	JF735746
	I. mors-panacis	CBS 124662	*Pa. ginseng*	Japan	JF735416	JF735559	JF735748
	I. palmarum	**CBS 135754**	*Howea forsteriana*	Italy	HF922608	HF922620	HF922614
	I. palmarum	CBS 135753	*Howea forsteriana*	Italy	HF922609	HF922621	HF922615
	I. panacis	**CBS 129079**	*Panax quinquefolium*	Canada	JF735424	JF735572	JF735761
	I. protearum	**CBS 132811**	*Protea* sp.	South Africa	JX231109	JX231141	JX231125
	I. protearum	CBS 132812	*Protea* sp.	South Africa	JX231117	JX231149	JX231133
	I. pseudodestructans	**CBS 129081**	*Vitis vinifera*	Portugal	AM419091	JF735563	JF735752
	I. pseudodestructans	CBS 117824	*Quercus* sp.	Austria	JF735419	JF735562	JF735751
	I. radicicola	**CBS 264.65**	*Cyclamen persicum*	Sweden	AY677256	JF735506	JF735695
	I. robusta	**CBS 308.35**	*Panax quinquefolium*	Canada	JF735377	JF735518	JF735707
	I. robusta	CBS 773.83	*Anodonta* sp.	The Netherlands	AY677254	JF735519	JF735708
	I. rufa	**CBS 153.37**	Dune sand	France	AY677251	JF735540	JF735729
	I. rufa	CBS 640.77	*Abies alba*	France	JF735399	JF735542	JF735731
	I. venezuelensis	**CBS 102032**	Bark	Venezuela	AY677255	JF735571	JF735760
	I. vredehoekensis	**CBS 132807**	*Protea* sp.	South Africa	JX231107	JX231139	JX231123
	I. vredehoekensis	CBS 132814	*Protea* sp.	South Africa	JX231110	JX231142	JX231126
	Ilyonectria sp.	STEU 8918	*Prunus persica* sp.	South Africa	-	MK765799	-

Supplementary Table 2. Uruguayan *Dactylonectria* and *Ilyonectria* isolates obtained from nursery grapevines plants with typical black foot symptoms.

Fungal species	Isolate name	Cultivar/rootstock	Year of collection	GenBank accession No.		
				HIS3	TUB2	TEF
Dactylonectria macrodydima	URU-VD-214	Tannat/101-14	2017	OQ990143	OQ990266	OQ990195
	URU-VD-215	Tannat/101-14	2017	OQ990144	OQ990267	OQ990196
	URU-VD-216	Tannat/101-14	2017	OQ990145	OQ990268	OQ990197
	URU-VD-218	Tannat/101-14	2017	OQ990146	OQ990269	OQ990198
	URU-VD-219	Tannat/101-14	2017	OQ990147	OQ990270	OQ990199
	URU-VD-220	Tannat/101-14	2017	OQ990148	OQ990271	OQ990200
	URU-VD-221	Tannat/101-14	2017	OQ990149	OQ990272	OQ990201
	URU-VD-222	Tannat/101-14	2017	OQ990150	OQ990273	OQ990202
	URU-VD-224	Tannat/101-14	2017	OQ990151	OQ990274	OQ990203
	URU-VD-225	Prosecco/SO4	2017	OQ990152	OQ990275	OQ990204
	URU-VD-226	Prosecco/SO4	2017	OQ990153	OQ990276	OQ990205
	URU-VD-227	Prosecco/SO4	2017	OQ990154	OQ990277	OQ990206
	URU-VD-228	Prosecco/SO4	2017	OQ990155	OQ990278	OQ990207
	URU-VD-229	Prosecco/SO4	2017	OQ990156	OQ990279	OQ990208
	URU-VD-230	M. de Hamburgo/Gravesac	2017	OQ990157	OQ990280	OQ990209
	URU-VD-231	Tannat/101-14	2017	OQ990158	OQ990281	OQ990210
	URU-VD-235	Prosecco/SO4	2017	OQ990159	OQ990282	OQ990211
	URU-VD-236	Prosecco/SO4	2017	OQ990160	OQ990283	OQ990212
	URU-VD-47	Merlot/101-14	2018	ON573132	OQ990254	OQ990183
	URU-VD-49	Merlot/101-14	2018	ON573133	OQ990255	OQ990184
	URU-VD-51	Merlot/101-14	2018	ON573134	OQ990256	OQ990185
	URU-VD-66	Tannat/1103P	2019	ON573135	OQ990257	OQ990186
	URU-VD-67	Tannat/1103P	2019	ON573150	OQ990258	OQ990187
	URU-VD-73	Albariño/101-14	2019	ON573136	OQ990259	OQ990188
	URU-VD-75	Albariño/Gravesac	2019	ON573137	OQ990260	OQ990189
	URU-VD-77	Albariño/Gravesac	2019	ON573138	OQ990261	OQ990190
	URU-VD-78	Albariño/Gravesac	2019	ON573139	OQ990262	OQ990191
	URU-VD-80 [a]	Tannat/1103P	2019	ON573140	OQ990263	OQ990192
	URU-VD-81	Tannat/1103P	2019	ON573141	OQ990264	OQ990193
	URU-VD-82	Tannat/1103P	2019	ON573142	OQ990265	OQ990194
	URU-VD-248	Albariño/Gravesac	2019	OQ990161	OQ990284	OQ990213
Dactylonectria novozelandica	URU-VD-58	Albariño/101-14	2019	ON573143	OQ990285	OQ990214
	URU-VD-60	Albariño/101-14	2019	ON573144	OQ990286	OQ990215
	URU-VD-61	Albariño/101-14	2019	ON573145	OQ990287	OQ990216
	URU-VD-62	Albariño/101-14	2019	ON573146	OQ990288	OQ990217
	URU-VD-63	Albariño/101-14	2019	ON573147	OQ990289	OQ990218
	URU-VD-64 [a]	Albariño/Gravesac	2019	ON573148	OQ990290	OQ990219
	URU-VD-65	Albariño/Gravesac	2019	ON573149	OQ990291	OQ990220
	URU-VD-68	Tannat/1103P	2019	ON573151	OQ990292	OQ990221
	URU-VD-69	Tannat/1103P	2019	ON573152	OQ990293	OQ990222
	URU-VD-70	Albariño/101-14	2019	ON573153	OQ990294	OQ990223
	URU-VD-71 [a]	Albariño/101-14	2019	ON573154	OQ990295	OQ990224
	URU-VD-72	Albariño/101-14	2019	ON573155	OQ990296	OQ990225
	URU-VD-74	Albariño/101-14	2019	ON573156	OQ990297	OQ990226
	URU-VD-76	Albariño/Gravesac	2019	ON573157	OQ990298	OQ990227

(Continued)

Supplementary Table 2. (Continued).

Fungal species	Isolate name	Cultivar/rootstock	Year of collection	GenBank accession No.		
				HIS3	TUB2	TEF
Dactylonectria torresensis	URU-VD-232	Cabernet Franc/3309	2017	OQ990139	OQ990250	OQ990179
	URU-VD-233	Cabernet Franc/3309	2017	OQ990140	OQ990251	OQ990180
	URU-VD-234 [a]	Cabernet Franc/3309	2017	OQ990141	OQ990252	OQ990181
	URU-VD-237	Tannat/101-14	2017	OQ990142	OQ990253	OQ990182
	URU-VD-48	Merlot/101-14	2018	ON573161	OQ990244	OQ990173
	URU-VD-50	Merlot/101-14	2018	ON573162	OQ990245	OQ990174
	URU-VD-53	Tannat/Gravesac	2018	ON573163	OQ990246	OQ990175
	URU-VD-55	Chardonnay/SO4	2018	ON573164	OQ990247	OQ990176
	URU-VD-56	Lácrima/1103P	2018	ON573165	OQ990248	OQ990177
	URU-VD-79 [a]	Albariño/Gravesac	2019	ON573166	OQ990249	OQ990178
Dactylonectria palmicola	URU-VD-247	Tannat/101-14	2017	OQ990138	OQ990243	OQ990172
	URU-VD-52	Tannat/Gravesac	2018	ON573158	OQ990241	OQ990170
	URU-VD-54 [a]	Chardonnay/SO4	2018	ON573159	OQ990242	OQ990171
Ilyonectria liriodendri	URU-VD-85	Cabernet Franc/3309	2017	ON573168	OQ990303	OQ990232
	URU-VD-86	Prosecco/SO4	2017	ON573169	OQ990304	OQ990233
	URU-VD-87	Tannat/101-14	2017	ON573170	OQ990305	OQ990234
	URU-VD-88	Prosecco/SO4	2017	ON573171	OQ990306	OQ990235
	URU-VD-241	Prosecco/SO4	2017	OQ990165	OQ990307	OQ990236
	URU-VD-242 [a]	Tannat/Gravesac	2018	OQ990166	OQ990308	OQ990237
	URU-VD-244	Albariño/Gravesac	2019	OQ990167	OQ990309	OQ990238
	URU-VD-245	Albariño/Gravesac	2019	OQ990168	OQ990310	OQ990239
	URU-VD-246	Tannat/1103P	2019	OQ990169	OQ990311	OQ990240
Ilyonectria sp.	URU-VD-84 [a]	Tannat/101-14	2017	ON573173	OQ990299	OQ990228
	URU-VD-238	Tannat/101-14	2017	OQ990162	OQ990300	OQ990229
	URU-VD-239	Tannat/101-14	2017	OQ990163	OQ990301	OQ990230
	URU-VD-240	Tannat/Gravesac	2018	OQ990164	OQ990302	OQ990231

[a] Isolates selected for morphological characterization and pathogenicity test.