

## Supplementary Material

**Tab. S1** - Taxonomic classification, relative abundance, GenBank Accession Number, and previous references of its association with *D. kuriphilus* galls of the fungal species identified. (ITS): Inter-transcribed spacer; ( $\beta$ -tub): Beta-tubulin; (EF1 $\alpha$ ): Elongation factor 1-alpha; (Hist): Histone.

Fungus			No. isolates	Relative abundance (%)	GenBank Accession No.				Reference
Species	Phylum	Family			ITS	$\beta$ -tub	EF1 $\alpha$	Hist	
<i>Abortiporus biennis</i>	Basidiomycota	Podoscyphaceae	1	0.32	PP660989				-
<i>Alternaria alternata</i>	Ascomycota	Pleosporaceae	1	0.32	PP660990				Addario & Turchetti (2011), Meyer et al. (2015), Tosi et al. (2015)
<i>Aspergillus sp.</i>	Ascomycota	Aspergillaceae	1	0.32		PP681431			Vannini et al. (2017)
<i>Botryosphaeria dothidea</i>	Ascomycota	Botryosphaeriaceae	4	1.3	PP666813				Fernandez-Conradi et al. (2019), Meyer et al. (2015)
<i>Botrytis cinerea</i>	Ascomycota	Sclerotiniaceae	1	0.32	PP660991				Meyer et al. (2015)
<i>Clonostachys rosea</i>	Ascomycota	Bionectriaceae	22	7.14	PP660992				Ruocco et al. (2016), Tosi et al. (2015)
<i>Clonostachys sp.</i>	Ascomycota	Bionectriaceae	3	0.97	PP660993				Muñoz-Adalia et al. (2019)
<i>Colletotrichum fioriniae</i>	Ascomycota	Glomerellaceae	17	5.52	PP660994	PP681432			-
<i>Cryphonectria parasitica</i>	Ascomycota	Cryphonectriaceae	1	0.32	PP660995				Meyer et al. (2015), Pérez-Sierra et al. (2020), Prospero & Forster (2011), Vannini et al. (2018), Vannini et al. (2017)
<i>Diaporthe amygdali</i>	Ascomycota	Diaporthaceae	4	1.3				PP681435	Ruocco et al. (2016)
<i>Diaporthe eres</i>	Ascomycota	Diaporthaceae	4	1.3				PP681436	-
<i>Diaporthe phaseolorum</i>	Ascomycota	Diaporthaceae	1	0.32				PP681437	-
<i>Diaporthe phillipsii</i>	Ascomycota	Diaporthaceae	1	0.32				PP681438	-
<i>Diplodia corticola</i>	Ascomycota	Botryosphaeriaceae	2	0.65	PP666814				-
<i>Diplodia mutila</i>	Ascomycota	Botryosphaeriaceae	3	0.97	PP666815				-
<i>Diplodia sapinea</i>	Ascomycota	Botryosphaeriaceae	5	1.62	PP666816				-
<i>Diplodia seriata</i>	Ascomycota	Botryosphaeriaceae	2	0.65	PP666817				Fernandez-Conradi et al. (2019)
<i>Dothiorella iberica</i>	Ascomycota	Botryosphaeriaceae	1	0.32	PP666818				-
<i>Epicoccum nigrum</i>	Ascomycota	Didymellaceae	1	0.32	PP660996				Fernández et al. (2018), Meyer et al. (2015), Muñoz-Adalia et al. (2019)
<i>Fusarium acuminatum</i>	Ascomycota	Nectriaceae	2	0.65	PP660997				-
<i>Fusarium avenaceum</i>	Ascomycota	Nectriaceae	11	3.57	PP660998		PP726199		Fernández et al. (2018), Meyer et al. (2015)

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Fungus	Phylum		Family	No. isolates	Relative abundance (%)	GenBank Accession No.				Reference
						ITS	$\beta$ -tub	EF1 $\alpha$	Hist	
Species	Phylum	Family	No. isolates	Relative abundance (%)	ITS	$\beta$ -tub	EF1 $\alpha$	Hist	Reference	
<i>Fusarium culmorum</i>	Ascomycota	Nectriaceae	2	0.65	PP660999		PP726200		-	
<i>Fusarium foetens</i>	Ascomycota	Nectriaceae	3	0.97	PP661000		PP726201		-	
<i>Fusarium graminearum</i>	Ascomycota	Nectriaceae	7	2.27	PP661001		PP726202		-	
<i>Fusarium lateritium</i>	Ascomycota	Nectriaceae	2	0.65	PP661002		PP726203		Fernandez-Conradi et al. (2019), Muñoz-Adalia et al. (2019), Seddaiu et al. (2017)	
<i>Fusarium oxysporum</i>	Ascomycota	Nectriaceae	18	5.84	PP661003		PP726204		Bonsignore & Bernardo (2018), Fernández et al. (2018), Fernandez-Conradi et al. (2019), Meyer et al. (2015)	
<i>Fusarium proliferatum</i>	Ascomycota	Nectriaceae	3	0.97	PP661004		PP726205		Dorado-Reyes (2018), Meyer et al. (2015), Ruocco et al. (2016), Tosi et al. (2015)	
<i>Fusarium sambucinum</i>	Ascomycota	Nectriaceae	3	0.97	PP661005		PP726206		Meyer et al. (2015)	
<i>Fusarium solani</i>	Ascomycota	Nectriaceae	3	0.97	PP661006		PP726207		-	
<b><i>Fusarium sp.</i></b>	Ascomycota	Nectriaceae	2	0.65	PP661007		PP726208		Addario & Turchetti (2011), Fernández et al. (2018), Fernandez-Conradi et al. (2019), Meyer et al. (2015), Muñoz-Adalia et al. (2019), Vannini et al. (2017)	
<i>Fusarium sporotrichioides</i>	Ascomycota	Nectriaceae	18	5.84	PP661008		PP726209		-	
<i>Fusarium temperatum</i>	Ascomycota	Nectriaceae	1	0.32	PP661009		PP726210		-	
<i>Fusarium torulosum</i>	Ascomycota	Nectriaceae	1	0.32	PP661010		PP726211		-	
<i>Gnomoniopsis smithogilvyi</i>	Ascomycota	Gnomoniaceae	7	2.27	PP661011				Bonsignore & Bernardo (2018), Fernández et al. (2018), Fernandez-Conradi et al. (2019), Lione et al. (2016), Meyer et al. (2015), Muñoz-Adalia et al. (2019), Ruocco et al. (2016), Seddaiu et al. (2017), Vannini et al. (2018), Vannini et al. (2017), Vinale et al. (2014)	
<b><i>Gnomoniopsis sp.</i></b>	Ascomycota	Gnomoniaceae	5	1.62	PP661012				Dorado-Reyes (2018), Magro et al. (2010), Maresi et al. (2013), Meyer et al. (2015), Tosi et al. (2015)	
<i>Mucor hiemalis</i>	Mucoromycota	Mucoraceae	1	0.32	PP661013				Meyer et al. (2015)	
<b><i>Mucor sp.</i></b>	Mucoromycota	Mucoraceae	1	0.32	PP661014				Muñoz-Adalia et al. (2019)	
<i>Neofusicoccum eucalyptorum</i>	Ascomycota	Botryosphaeriaceae	1	0.32	PP666819				-	
<i>Neofusicoccum parvum</i>	Ascomycota	Botryosphaeriaceae	3	0.97	PP666820				Ruocco et al. (2016)	
<i>Neurospora crassa</i>	Ascomycota	Sordariaceae	1	0.32	PP661015				-	
<b><i>Nigrospora sp.</i></b>	Ascomycota	Apiosporaceae	1	0.32	PP661016				Meyer et al. (2015), Muñoz-Adalia et al. (2019)	
<i>Penicillium glabrum</i>	Ascomycota	Aspergillaceae	2	0.65	PP661017				Meyer et al. (2015), Muñoz-Adalia et al. (2019)	
<b><i>Penicillium sp.</i></b>	Ascomycota	Aspergillaceae	2	0.65	PP661018				Meyer et al. (2015), Muñoz-Adalia et al. (2019), Vannini et al. (2017)	
<i>Pestalotiopsis brachiata</i>	Ascomycota	Sporocadaceae	1	0.32		PP681433			-	
<i>Pestalotiopsis paeonicola</i>	Ascomycota	Sporocadaceae	1	0.32		PP681434			-	

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<i>Phlebia acerina</i>	Basidiomycota	Meruliaceae		16	5.19	PP661019				-
<i>Phlebia radiata</i>	Basidiomycota	Meruliaceae		1	0.32	PP661020				-
<b><i>Phlebia sp.</i></b>	Basidiomycota	Meruliaceae		1	0.32	PP661021				-
<i>Rhizopus microsporus</i>	Mucoromycota	Rhizopodaceae		2	0.65	PP661022				-
<i>Rhizopus arhizus</i>	Mucoromycota	Rhizopodaceae		1	0.32	PP661023				Tosi et al. (2015)
<i>Rosellinia corticium</i>	Ascomycota	Xylariaceae		2	0.65	PP661024				-
<i>Schizophyllum commune</i>	Basidiomycota	Schizophyllaceae		2	0.65	PP661025				-
<i>Sordaria fomicola</i>	Ascomycota	Sordariaceae		3	0.97	PP661026				Meyer et al. (2015)
<b><i>Sordaria sp.</i></b>	Ascomycota	Sordariaceae		1	0.32	PP661027				Fernandez-Conradi et al. (2019), Meyer et al. (2015)
<i>Talaromyces cecidicola</i>	Ascomycota	Trichocomaceae		2	0.65	PP661028				-
<b><i>Talaromyces sp.</i></b>	Ascomycota	Trichocomaceae		2	0.65	PP661029				-
<i>Trichoderma atroviride</i>	Ascomycota	Hypocreaceae		29	9.42	PP661030		PP726214		Muñoz-Adalia et al. (2019)
<i>Trichoderma citrinoviride</i>	Ascomycota	Hypocreaceae		15	4.87	PP661031		PP726215		Meyer et al. (2015)
<i>Trichoderma gamsii</i>	Ascomycota	Hypocreaceae		10	3.25	PP661032		PP726216		-
<i>Trichoderma harzianum</i>	Ascomycota	Hypocreaceae		26	8.44	PP661033		PP726217		Meyer et al. (2015)
<i>Trichoderma koningiopsis</i>	Ascomycota	Hypocreaceae		2	0.65	PP661034		PP726218		-
<b><i>Trichoderma sp.</i></b>	Ascomycota	Hypocreaceae		9	2.92	PP661035		PP726219		-
<i>Trichoderma viridarium</i>	Ascomycota	Hypocreaceae		2	0.65	PP661036		PP726220		Meyer et al. (2015)
<i>Trichoderma viride</i>	Ascomycota	Hypocreaceae		5	1.62	PP661037		PP726221		Meyer et al. (2015)

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