

[10.1071/BT23076](https://doi.org/10.1071/BT23076)

Australian Journal of Botany

Supplementary Material

Impact of *Phytophthora dieback* on a key heathland species *Xanthorrhoea australis* (Asphodelaceae) (austral grasstree) and floristic composition in the eastern Otways, Victoria

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Table S1. List of all species identified within the study, including family name, life form code and *P. cinnamomi* susceptibility rating. Life form codes were sourced from EVC/Bioregion Benchmarks (Victorian Government Department of Sustainability and Environment 2004). FR = Field resistant (or tolerant); S = Susceptible; LS = Low susceptibility; HS = Highly susceptible (McDougall 2005).

Species	Family	Life Form Code	Susceptibility Rating
<i>Acacia longifolia</i>	Mimosaceae	T	
<i>Acacia paradoxa</i>	Mimosaceae	MS	
<i>Acacia pycnantha</i>	Mimosaceae	T	
<i>Acacia suaveolens</i>	Mimosaceae	MS	
<i>Acrotriche serrulata</i>	Ericaceae	PS	S
<i>Allocasuarina misera</i>	Casuarinaceae	MS	S
<i>Amperea xiphoclada</i>	Euphorbiaceae	SS	S, FR
<i>Argentipallium (Styphelia) humifusa</i>	Ericaceae	SS	
<i>Argentipallium obtusifolium</i>	Asteraceae	MH	S
<i>Austrostipa mollis</i>	Poaceae	LTG	
<i>Banksia marginata</i>	Proteaceae	MS	S
<i>Billardiera mutabilis</i>	Pittosporaceae	SC	
<i>Brunonia australis</i>	Goodeniaceae	SH	
<i>Burchardia umbellata</i>	Colchicaceae	MH	
<i>Caladenia carnea</i>	Orchidaceae	SH	
<i>Caladenia transitoria</i>	Orchidaceae	SH	
<i>Caladenia venusta</i>	Orchidaceae	SH	
<i>Caleana major</i>	Orchidaceae	SH	
<i>Cassytha glabella</i>	Lauraceae	SC	
<i>Cassytha pubescens subsp.</i>	Lauraceae	SC	
<i>Chamaescilla corymbosa</i>	Asphodeliaceae	SH	S, FR
<i>Chrysocephalum baxteri</i>	Asteraceae	MH	
<i>Comesperma calymega</i>	Polygalaceae	LH	
<i>Comesperma ericinum</i>	Polygalaceae	SS	
<i>Comesperma volubile</i>	Polygalaceae	SC	
<i>Conospermum mitchellii</i>	Proteaceae	MS	
<i>Corybas incurvus</i>	Orchidaceae	SH	
<i>Daviesia brevifolia</i>	Fabaceae	SS	S
<i>Dianella longifolia</i>	Asphodelaceae	LNG	
<i>Dillwynia cinerascens</i>	Fabaceae	SS	
<i>Dillwynia glaberrima</i>	Fabaceae	SS	S, HS
<i>Dillwynia sericea</i>	Fabaceae	SS	S, HS
<i>Drosera abberans</i>	Droseraceae	SH	
<i>Drosera auriculata</i>	Droseraceae	MH	
<i>Drosera pygmaea</i>	Droseraceae	SH	
<i>Epacris impressa</i>	Ericaceae	MS	S, LS
<i>Eucalyptus aromaphloia</i>	Myrtaceae	T	
<i>Eucalyptus baxteri</i>	Myrtaceae	T	
<i>Eucalyptus obliqua</i>	Myrtaceae	T	S, LS
<i>Eucalyptus tricarpa</i>	Myrtaceae	T	
<i>Eucalyptus willisii</i>	Myrtaceae	T	S
<i>Euryomyrtus ramosissima subsp. prostrata</i>	Myrtaceae	PS	
<i>Gahnia radula</i>	Cyperaceae	LNG	
<i>Glossodia major</i>	Orchidaceae	SH	
<i>Gompholobium ecostatium</i>	Fabaceae	SS	

Species	Family	Life Form Code	Susceptibility Rating
<i>Gonocarpus tetragynus</i>	Haloragaceae	MH	
<i>Goodenia geniculata</i>	Goodeniaceae	MH	
<i>Goodenia lanata</i>	Goodeniaceae	SH	S
<i>Hakea decurrens</i>	Proteaceae	MS	
<i>Hakea ulicina</i>	Proteaceae	MS	S
<i>Hibbertia fasciculata</i> var. <i>prostrata</i>	Dilleniaceae	SS	S
<i>Hibbertia riparia</i>	Dilleniaceae	SS	S
<i>Hibbertia sericea</i> s.l.	Dilleniaceae	SS	
<i>Hovea heterophylla</i>	Fabaceae	SS	
<i>Hypolaena fastigiata</i>	Restionaceae	MNG	
<i>Isolepis marginata</i>	Cyperaceae	MTG	
<i>Isopogon ceratophyllus</i>	Proteaceae	SS	
<i>Lasiopetalum baueri</i>	Malvaceae	MS	
<i>Laxmannia orientalis</i>	Asparagaceae	MTG	
<i>Lepidosperma filiforme</i>	Cyperaceae	MTG	
<i>Lepidosperma laterale</i>	Cyperaceae	MTG	
<i>Lepidosperma semiteres</i>	Cyperaceae	MTG	
<i>Leporella fimbriata</i>	Orchidaceae	SH	
<i>Leptospermum continentale</i>	Myrtaceae	MS	S
<i>Leptospermum myrsinoides</i>	Myrtaceae	MS	S
<i>Leucopogon ericoides</i>	Ericaceae	SS	
<i>Leucopogon glacialis</i>	Ericaceae	SS	
<i>Leucopogon virgatus</i>	Ericaceae	SS	S
<i>Lindsae linearis</i>	Lindsaeaceae	GF	
<i>Lomandra filiformis</i>	Asparagaceae	MTG	
<i>Lomandra micrantha</i>	Asparagaceae	MTG	
<i>Lomandra multiflora</i> subsp. <i>multiflora</i>	Asparagaceae	MTG	
<i>Microlaena stipoides</i>	Poaceae	TTG	
<i>Monotoca scoparia</i>	Ericaceae	MS	
<i>Opercularia varia</i>	Rubiaceae	SH	
<i>Pimelia humilis</i>	Thymeleaceae	SS	
<i>Pimelia linifolia</i> subsp. <i>linifolia</i>	Thymeleaceae	SS	
<i>Platylobium obtusangulum</i>	Fabaceae	SS	S
<i>Pultenaea mollis</i>	Fabaceae	MS	
<i>Pteridium esculentum</i>	Dennstaedtiaceae	GF	
<i>Pterostylis plumosa</i>	Orchidaceae	SH	
<i>Pyrorchis nigricans</i>	Orchidaceae	SH	
<i>Rytidosperma setaceum</i>	Poaceae	MTG	
<i>Sphaerolobium minus</i>	Fabaceae	SS	
<i>Spyridium parvifolium</i>	Rhamnaceae	MS	
<i>Tetratheca ciliata</i>	Elaeocarpaceae	SS	S
<i>Thelymitra antennifera</i>	Orchidaceae	SH	
<i>Thelymitra flexuosa</i>	Orchidaceae	SH	
<i>Thelymitra pallidiflora</i>	Orchidaceae	SH	
<i>Thelymitra rubra</i>	Orchidaceae	SH	
<i>Thysanotus patersonii</i>	Asparagaceae	SC	
<i>Viola cleistogamoides</i>	Violaceae	SH	
<i>Viola hederacea</i>	Violaceae	SH	
<i>Xanthorrhoea australis</i>	Ashodeliaceae	LTG	S, HS
<i>Xanthorrhoea minor</i> subsp. <i>lutea</i>	Ashodeliaceae	MTG	S, HS
<i>Xanthosia huegelii</i>	Apiaceae	PS	
<i>Xanthosia tasmanica</i>	Apiaceae	PS	

Table S2. SIMPER analyses results between treatment classes.

Treatment - Uninfested					
Average similarity: 53.41					
Species	Av.Abund	Av.Sim	Sim/SD	Contrib%	Cum.%
<i>Xanthorrhoea australis</i>	43.00	22.63	1.07	42.36	42.36
<i>Eucalyptus obliqua</i>	30.77	10.53	0.90	19.72	62.08
<i>Banksia marginata</i>	9.07	2.94	0.53	5.51	67.59
<i>Leptospermum myrsinoides</i>	9.03	2.94	0.81	5.50	73.08
Treatment - Infested					
Average similarity: 45.87					
Species	Av.Abund	Av.Sim	Sim/SD	Contrib%	Cum.%
<i>Eucalyptus obliqua</i>	27.77	12.90	0.70	28.13	28.13
<i>Spyridium parvifolium</i>	4.70	3.75	0.61	8.16	36.29
<i>Gahnia radula</i>	6.40	3.67	0.98	7.99	44.28
<i>Banksia marginata</i>	5.43	2.69	0.87	5.86	50.15
<i>Xanthorrhoea australis</i>	4.27	2.51	0.70	5.47	55.62
<i>Isolepis marginata</i>	4.33	2.25	0.74	4.92	60.53
<i>Lepidosperma semiteres</i>	4.80	2.02	0.65	4.40	64.93
<i>Acrotriche serrulata</i>	2.87	1.85	0.93	4.03	68.96
<i>Platylobium obtusangulum</i>	2.70	1.75	0.85	3.81	72.77
Treatment – Post-infested					
Average similarity: 46.50					
Species	Av.Abund	Av.Sim	Sim/SD	Contrib%	Cum.%
<i>Gahnia radula</i>	9.80	7.48	1.35	16.08	16.08
<i>Eucalyptus obliqua</i>	15.80	7.26	0.55	15.61	31.69
<i>Isolepis marginata</i>	8.77	7.02	0.88	15.09	46.78
<i>Leptospermum myrsinoides</i>	5.30	2.87	0.66	6.17	52.95
<i>Lepidosperma semiteres</i>	5.43	2.85	0.72	6.12	59.07
<i>Hypolaena fastigiata</i>	3.60	2.71	0.34	5.83	64.90
<i>Acrotriche serrulata</i>	2.77	1.67	0.61	3.58	68.48
<i>Spyridium parvifolium</i>	4.00	1.63	0.50	3.51	72.00

Table S3. SIMPER analyses results between sites.

Site 1 – Edwards Creek Track					
Average similarity: 48.75					
Species	Av.Abund	Av.Sim	Sim/SD	Contrib%	Cum.%
<i>Isolepis marginata</i>	10.17	6.77	0.79	13.90	13.90
<i>Eucalyptus obliqua</i>	21.00	5.39	0.51	11.05	24.95
<i>Lepidosperma semiteres</i>	11.63	5.20	1.28	10.67	35.62
<i>Banksia marginata</i>	12.07	4.74	0.90	9.73	45.35
<i>Leptospermum myrsinoides</i>	10.57	4.37	0.95	8.96	54.30
<i>Hypolaena fastigiata</i>	7.70	3.47	1.00	7.12	61.42
<i>Platylobium obtusangulum</i>	6.17	2.98	1.35	6.11	67.53
<i>Gahnia radula</i>	4.83	2.85	0.94	5.84	73.37

Site 2 – Hurst Rd 1					
Average similarity: 50.41					
Species	Av.Abund	Av.Sim	Sim/SD	Contrib%	Cum.%
<i>Xanthorrhoea australis</i>	21.03	12.19	0.60	24.17	24.17
<i>Eucalyptus obliqua</i>	24.20	11.68	0.91	23.17	47.34
<i>Gahnia radula</i>	11.27	6.86	1.05	13.60	60.94
<i>Spyridium parvifolium</i>	7.60	5.01	0.82	9.94	70.88

Site 3 – Hurst Rd 2					
Average similarity: 46.63					
Species	Av.Abund	Av.Sim	Sim/SD	Contrib%	Cum.%
<i>Eucalyptus obliqua</i>	29.13	13.62	0.72	29.22	29.22
<i>Xanthorrhoea australis</i>	20.67	10.58	0.62	22.68	51.90
<i>Gahnia radula</i>	5.60	4.28	1.70	9.18	61.09
<i>Hypolaena fastigiata</i>	3.62	2.67	0.33	5.72	66.81
<i>Isolepis marginata</i>	1.83	1.85	1.14	3.98	70.79