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Supplementary Material

Optimising conservation translocations of threatened *Caladenia* (Orchidaceae) by identifying adult microsite and germination niche

Noushka Reiter^{A,B,*}, and Myles H. M. Menz^{C,D,E,F}

^ARoyal Botanic Gardens Victoria, Science Division, Corner of Ballarto Road and Botanic Drive, Cranbourne, Vic. 3977, Australia.

^BEcology and Evolution, Research School of Biology, ANU College of Science, The Australian National University, RN Robertson Building, 46 Sullivans Creek Road, Canberra, ACT 2600, Australia.

^cCollege of Science and Engineering, James Cook University, Townsville, Qld 4811, Australia.

^DDepartment of Migration, Max Planck Institute of Animal Behavior, D-78315 Radolfzell, Germany.

^EDepartment of Biology, University of Konstanz, D-78547 Konstanz, Germany.

^FSchool of Biological Sciences, The University of Western Australia, Crawley, WA 6009, Australia.

*Correspondence to: Noushka Reiter Royal Botanic Gardens Victoria, Science Division, Corner of Ballarto Road and Botanic Drive, Cranbourne, Vic. 3977, Australia Email: noushka.reiter@rbg.vic.gov.au

Response variable	Explanatory	Planting	Est.	s.e.	df	χ^2	Р
	variable	year				λ	
Flowering	Intercept	2016					
second year	Soil temperature				1	0.039	0.844
	Mean moisture				1	0.024	0.876
	Leaf litter				1	1.570	0.210
	Cryptogam				1	0.511	0.475
	Graminoid				1	0.122	0.727
	Shrub				1	2.650	0.104
Leaf litter \times Mean moisture					1	1.150	0.284
Flowering	Intercept	2017					
second year	Soil temperature				1	2.127	0.145
	Mean moisture				1	3.072	0.080
	Leaf litter				1	3.132	0.077
	Cryptogam				1	0.407	0.524
	Graminoid				1	0.185	0.668
	Shrub				1	0.131	0.718
Leaf litter × Mean moisture					1	0.566	0.452
Flowering	Intercept	2018					
second year	Soil temperature				1	0.527	0.468
	Mean moisture				1	0.145	0.703
	Leaf litter				1	0.014	0.905
	Cryptogam				1	0.125	0.724
	Graminoid				1	0.576	0.448
	Shrub				1	0.014	0.919
Leaf litter × Mean moisture					1	0.348	0.555
Flowering after	Intercept	2017					
more than 2 years	Soil temperature				1	0.093	0.760
	Mean moisture				1	0.611	0.434
	Leaf litter				1	1.956	0.162
	Cryptogam				1	0.160	0.689
	Graminoid				1	0.439	0.508
	Shrub				1	1.104	0.299
Leaf litter × Mean moisture					1	0.066	0.789
Flowering after	Intercept	2018					
more than 2 years	Soil temperature				1	3.412	0.065
	Mean moisture				1	0.296	0.587
	Leaf litter				1	0.198	0.657
	Cryptogam				1	0.536	0.464
	Graminoid				1	0.049	0.824
	Shrub				1	-	-

Table S1. Results of binomial generalised linear models investigating the influence of microhabitat characteristics on the probability of flowering of *Caladenia colorata* in the first year after planting (16 months post planting) and after the second year (28 months, 40 months after planting).

Leat litter × Mean moisture10.6580.417Flowering was modelled separately for orchids planted in 2016, 2017 and 2018. Significance
of the explanatory variables is based on likelihood-ratio tests (χ^2) comparing models with and
without the variable of interest. Significant variables (P < 0.05) are in bold. Estimates (Est.)
and standard errors (s.e.) are presented for variables included in the final model. Shrub cover
was excluded from the 2018 model for flowering after more than two years, due to the very
low number of positive values (4 of 47).



Fig. S1. Rainfall on *Caladenia colorata* study sites 2015–2019 (BOM 2020). The area shaded in grey is the non-dormant period for *C. colorata*.



Fig. S2. Schematic showing the layout of the rewilding sites. *Caladenia colorata* were planted in $1-m^2$ units of five orchids, one on each corner and one in the middle. Each unit was separated from the next by 4 m.

Reference

Bureau of Meteorology (2020) Average annual, seasonal and monthly rainfall. Available at http://www.bom.gov.au/jsp/ncc/climate_averages/rainfall/index.jsp