

Table S1. Outputs from the Permanova statistical analysis (Anderson 2008), with significant differences highlighted.

PERMANOVA

Permutational MANOVA

Resemblance worksheet

Name: Resem1

Data type: Similarity

Selection: All

Transform: Square root

Resemblance: S17 Bray Curtis similarity

Sums of squares type: Type III (partial)

Fixed effects sum to zero for mixed terms

Permutation method: Permutation of residuals under a reduced model

Number of permutations: 999

Factors

Name	Abbrev.	Type	Levels
method	me	Fixed	2
species	sp	Fixed	7
week	we	Fixed	4

PERMANOVA table of results

Source	df	SS	MS	Pseudo-F	P(perm)	Unique perms
me	1	6.9239	6.9239	0.10299	0.809	999
sp	6	2592.8	432.13	6.4277	0.001	999
we	3	1505	501.65	7.4619	0.001	999
mexsp**	2	227.94	113.97	1.6953	0.173	999
mexwe**	2	400.83	200.41	2.9811	0.05	998
spxwe**	16	633.49	39.593	0.58892	0.916	999
mexspxwe**	4	205.84	51.459	0.76543	0.566	999
Res	37	2487.5	67.229			
Total	71	9357.5				

** Term has one or more empty cells

Details of the expected mean squares (EMS) for the model

Source	EMS
me	1*V(Res) + 13.463*S(me)
sp	1*V(Res) + 7.4246*S(sp)
we	1*V(Res) + 13.354*S(we)
mexsp	1*V(Res) + 4.5552*S(mexsp)
mexwe	1*V(Res) + 4.4907*S(mexwe)
spxwe	1*V(Res) + 2.2614*S(spxwe)
mexspxwe	1*V(Res) + 1.5215*S(mexspxwe)
Res	1*V(Res)

Table S2. Comparison of costs and effort required for commonly used orchid propagation methods (prices in 2009 Australian dollars).

Description	Asymbiotic	Symbiotic	Alginate Beads	Soil Baiting	Seed packets	Fungal isolations
Containers						
Petri dishes	\$80 for 500	\$80 for 500				\$80 for 500
Autoclavable screw top jars			\$200 for 500			\$200 for 500
Plastic food containers					\$3 for 8	
Square petri plates				\$150 for 500		
Millipore filter paper				\$30 per box (#leaves/box)		
Interfacing fabric			\$3 for 10 meters	\$3 for 10 meters	\$3 for 10 meters	
Plastic food containers	\$3 for 8	\$3 for 8	\$3 for 8	\$3 for 8	\$3 for 8	
Flowerpots	20c per pot	20c per pot	20c per pot	20c per pot	20c per pot	
Media						
Culture media (W3)	\$7/L (makes 40 plates)					
agar jelly		\$97/kg (use 8g/L)				\$97/kg (use 8g/L)
trace elements, sugars etc.		negligible				negligible
CaCl ₂ chips			\$30 /500g			
alginate solution			\$30 /300mg			
oats		\$3/750g (2.5g/L)				\$3/750g (2.5g/L)
60g banana	\$0.50 per 40 plates					
Growth substrates						
sand				\$7/15kg (30g/plate)	\$7/15kg	
coir					\$16/4kg compact	
sheoak needles (<i>Allocasaurina</i>)					free	
organic matter from field				free	free	
Other Facilities Required	autoclave	autoclave	autoclave		heat sealer	autoclave
Laboratory	laminar flow	laminar flow	laminar flow			laminar flow
Equipment	glassware	glassware	glassware			glassware
Incubation	CT room	CT room		CT room	Incubator	CT room
Incubator rent	\$21/ month	\$21/ month	\$21/ month	\$21/ month	\$21/ month	
greenhouse rent	\$5/ month	\$5/ month	\$5/ month	\$5/ month	\$5/ month	
Approximate Total Cost (excluding greenhouse and incubator rent)	72c per plate	94c per plate	86c per pouch	72c per plate	70c per container	24c per plate
Typical yield (seedlings per container#)	19			66	54	
Cost per 100 seedlings	\$ 3.79			\$ 1.09 (move to FORGE)	\$ 1.30	

Asymbiotic assumes 50% failed plates, 3 squares per plate x 22 per square for seed baiting, 2 packets per tub x 27

Figure S1. Protocorm growth rates

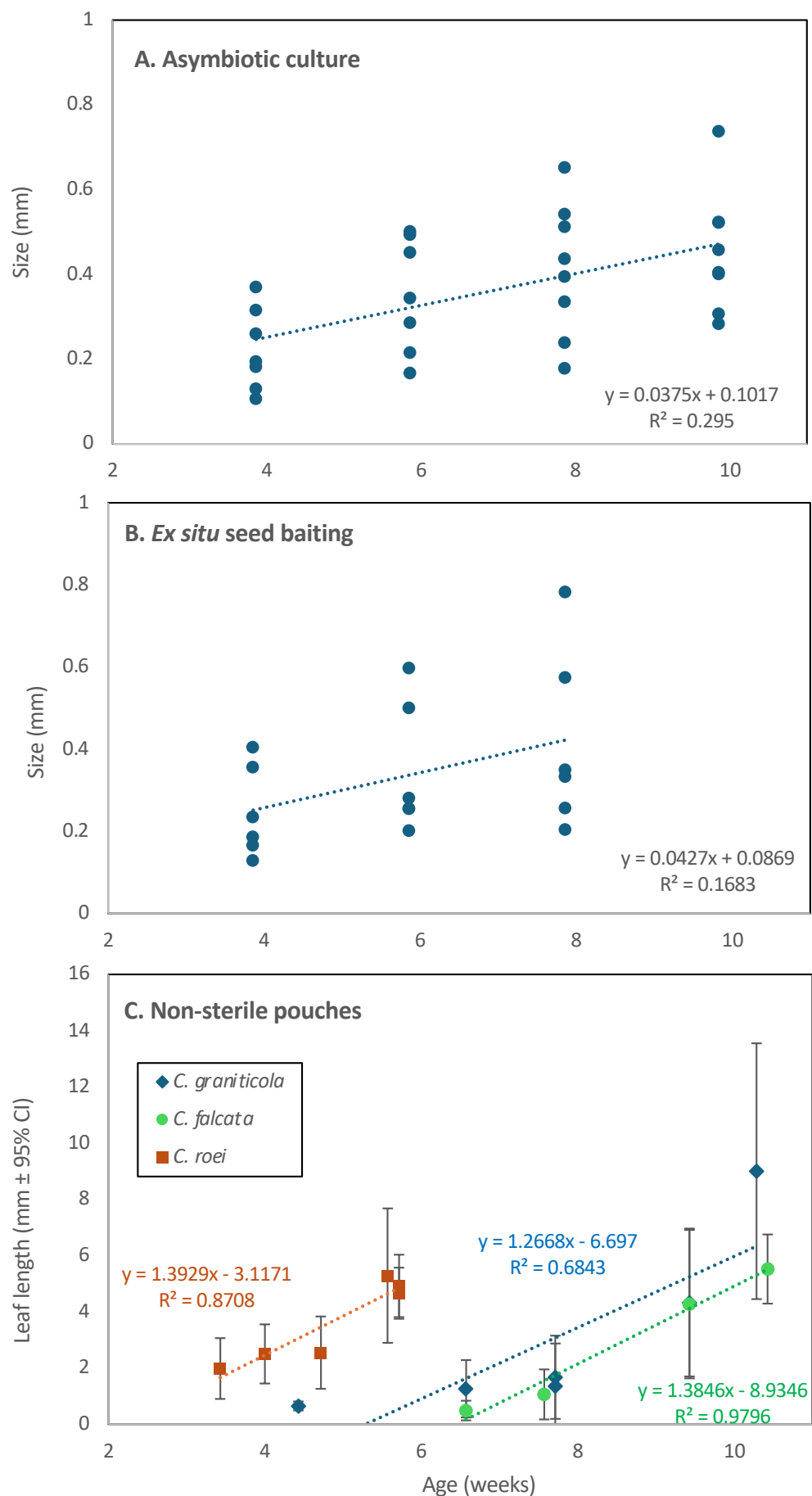


Figure S1. Growth rate comparisons for germination methods using linear regressions for combined data for all *Caladenia* species (A, B), or for separate species using averages (C).

Figure S2. Glasshouse growth data

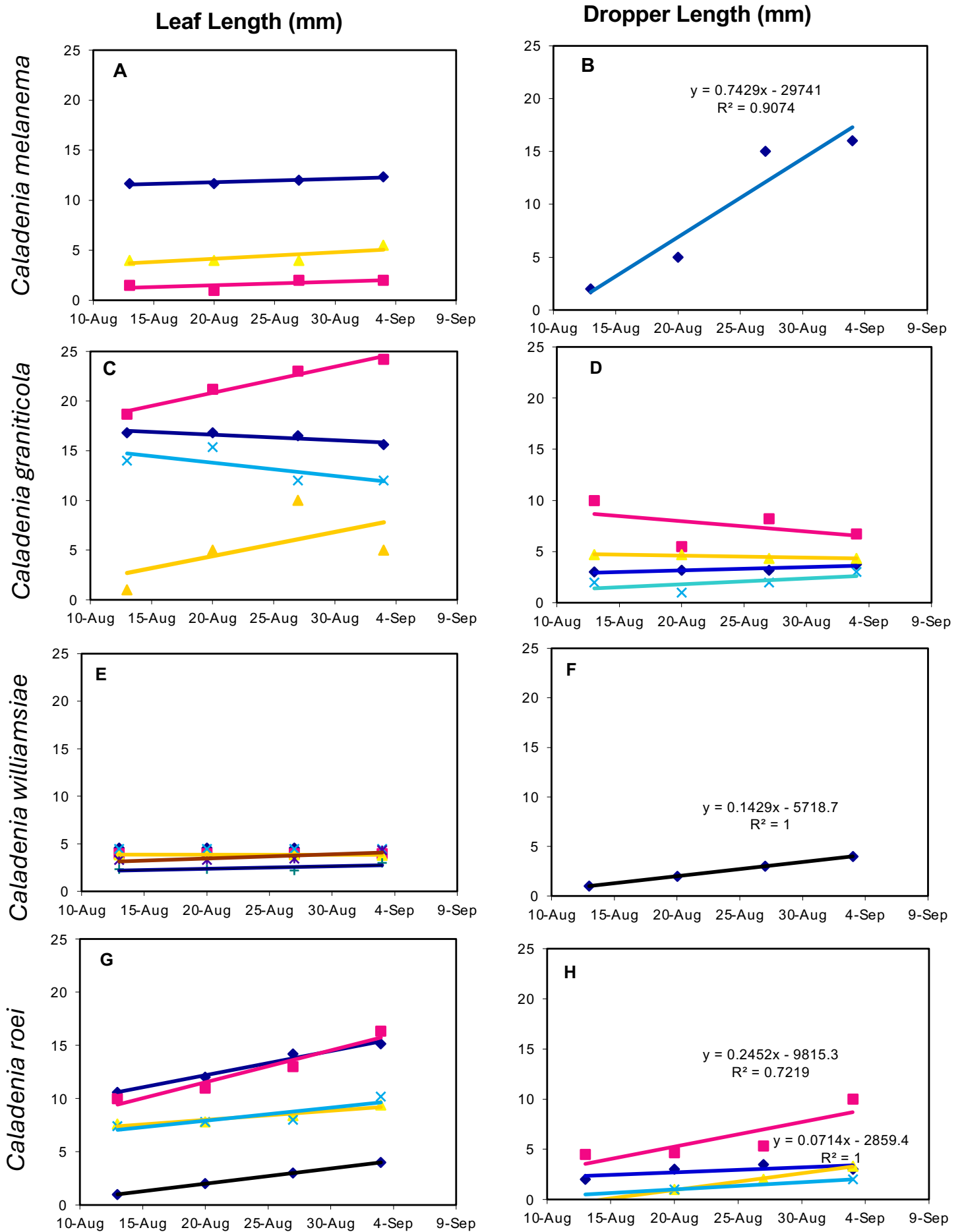


Figure S2. Greenhouse seedling growth data. Average leaf length per pot of *C. graniticola* (A), *C. williamsiae* (B) and *C. roei* (C). Average dropper growth rates for *C. falcata* (D), *C. graniticola* (E) and *C. williamsiae* (F).

Figure S3. Translocation trials



Figure S3. Translocation trials with cages (A), translocation pouches (B, C), emerging seedlings of *Caladenia melanema* the following year (D) and translocation of seedlings in natural habitats (E, F).