Appendix A

Additional results from: generalized linear mixed models for survival and growth of *A. peglerae* seedlings one, two, and three years after being transplanted (Table A1), generalized linear mixed models for non-cumulative survival and growth of *A. peglerae* seedlings one, two, and three years after being transplanted (Table A2), generalized linear mixed models for non-cumulative survival and growth of *A. peglerae* seedlings one, two, and three years after being transplanted (Table A3), VIF analysis of predictor variables included in the analysis of survival one, two, and three years post-translocation (Table A4), VIF analysis of predictor variables included in the analysis of growth one, two, and three years post-translocation (Table A5), VIF analysis of predictor variables included in the non-cumulative analysis of survival one, two, and three years post-translocation (Table A6), VIF analysis of predictor variables included in the non-cumulative analysis of growth one, two, and three years post-translocation (Table A7), and the Tukey's Honest Significant Difference (HSD) test on year planted based on the effect on seedling growth (Table A8).

Table A1. Detailed results from generalized linear mixed models for survival and growth of *Aloe peglerae* seedlings one, two, and three years after being transplanted. $n_{Survival}$ = the number of seedlings that were initially planted and could potentially have survived 1-, 2- or 3-years post-translocation; $n_{Growth\ rate}$ = the number of seedlings across the three planting years that survived and for which the growth rates could be measured (see Table 1 for details).

					Fixed effect predictor variables									
Response variable	**Time post-translocation**	**n**	**Model conditional R^2 (%)**	**Model p-value**	**Year planted**		**Light exposure**		**PS treatment**		**Fire exposure**		**Starting volume**	
					χ^2	**P-value**	**χ^2**	**P-value**	**χ^2**	**P-value**	**χ^2**	**P-value**	**χ^2**	**P-value**
Survival	1 year	192	49.4	**<0.001**	4.688	0.096	**12.430**	**<0.001**	0.010	0.920	1.608	0.205	**4.155**	**0.042**
	2 years	128	30.7	**<0.001**	0.076	0.783	**9.872**	**0.002**	0.032	0.857	2.193	0.139	3.260	0.071
	3 years	64	43.3	**<0.001**	NA	NA	**12.025**	**<0.001**	0.051	0.822	1.140	0.286	0.549	0.459
Growth rate	1 year	158	28.9	**<0.001**	**17.129**	**<0.001**	0.817	0.366	**4.684**	**0.030**	**5.677**	**0.017**	NA	NA
	2 years	98	22.7	0.335	2.318	0.128	0.034	0.853	1.092	0.296	1.921	0.166	NA	NA
	3 years	34	8.34	0.568	NA	NA	0.029	0.864	0.953	0.329	0.500	0.481	NA	NA

Table A2: Results from generalized linear mixed models for non-cumulative survival and growth of *A. peglerae* seedlings one, two, and three years after being transplanted. Categorical predictors are ranked according to their coefficients, with significant predictors indicated in bold. PS= Potassium silicate applied to seedlings. NT= no Potassium silicate applied to seedlings. Shade= aloes shaded by a grass tuft. Sun= aloes in full sunlight.

					Fixed effect coefficients				
Response variable	**Time post-translocation**	**n**	**Model conditional R^2 (%)**	**Model p-value**	**Year planted**	**Light exposure**	**PS treatment**	**Fire exposure**	**Starting volume**
Survival	1 year	192	49.4	**<0.001**	2021> 2022> 2020	**Shade > Sun**	NT> PS	Yes > No	**0.097**
	2 years	108	96.2	**0.003**	2020> 2021	**Shade > Sun**	PS>NT	No > Yes	0.036
	3 years	43	96.3	**0.001**	NA	**Shade > Sun**	PS>NT	Yes > No	0.035
Growth rate	1 year	158	28.9	**<0.001**	**2021> 2020 = 2022**	Shade > Sun	**PS > NT**	**No > Yes**	NA
	2 years	98	42.4	**<0.001**	**2020> 2021**	Shade > Sun	PS > NT	**No > Yes**	NA
	3 years	34	12.1	0.235	NA	Shade > Sun	PS > NT	No > Yes	NA

Table A3: Detailed results from generalized linear mixed models for non-cumulative survival and growth of *A. peglerae* seedlings one, two, and three years after being transplanted. Significant predictors indicated in bold.

					Fixed effect predictor variables									
Response variable	**Time post-translocation**	**n**	**Model conditional R^2 (%)**	**Model p-value**	**Year planted**		**Light exposure**		**PS treatment**		**Fire exposure**		**Starting volume**	
					χ^2	**P-value**	**χ^2**	**P-value**	**χ^2**	**P-value**	**χ^2**	**P-value**	**χ^2**	**P-value**
Survival	1 year	192	49.4	**<0.001**	4.688	0.096	**12.430**	**<0.001**	0.010	0.920	1.608	0.205	**4.155**	**0.042**
	2 years	108	96.2	**0.003**	2.577	0.108	**5.033**	**0.025**	0.0000	0.990	0.000	0.999	1.804	0.179
	3 years	43	96	**0.001**	NA	NA	**6.358**	**0.012**	1.267	0.260	0.000	0.999	2.1258	0.145
Growth rate	1 year	158	28.9	**<0.001**	**17.129**	**<0.001**	0.817	0.366	**4.684**	**0.030**	**5.677**	**0.017**	NA	NA
	2 years	98	42.4	**<0.001**	**12.391**	**<0.001**	0.311	0.577	0.041	0.840	**11.451**	**<0.001**	NA	NA
	3 years	34	12.1	0.235	NA	NA	0.261	0.610	0.418	0.518	2.907	0.088	NA	NA

Table A4: VIF results of predictor variables included in the analysis of survival one, two, and three years post-translocation. VIF<3 was considered as an indication of low correlation.

	VIF		
	Time post-translocation		
Fixed effect predictor variable	**1 year**	**2 years**	**3 years**
Year planted	1.74	2.73	NA
Light exposure	1.07	1.05	1.05
PS treatment	1.01	1.01	1.05
Fire exposure	1.33	1.07	1.06
Starting volume	1.46	2.76	1.05

Table A5: VIF results of predictor variables included in the analysis of growth one, two, and three years post-translocation. VIF<3 was considered as an indication of low correlation.

	VIF		
	Time post-translocation		
Fixed effect predictor variable	**1 year**	**2 years**	**3 years**
Year planted	1.56	1.04	NA
Light exposure	1.01	1.01	1.02
PS treatment	1.00	1.00	1.11
Fire exposure	1.55	1.05	1.11

Table A6: VIF results of predictor variables included in the non-cumulative analysis of survival one, two, and three years post-translocation. VIF<3 was considered as an indication of low correlation.

	VIF		
	Time post-translocation		
Fixed effect predictor variable	**1 year**	**2 years**	**3 years**
Year planted	1.74	1.34	NA
Light exposure	1.07	1.03	1.39
PS treatment	1.01	1.01	1.23
Fire exposure	1.33	1.00	1.00
Starting volume	1.46	1.37	1.29

Table A7: VIF results of predictor variables included in the non-cumulative analysis of growth one, two, and three years post-translocation. VIF<3 was considered as an indication of low correlation.

	VIF		
	Time post-translocation		
Fixed effect predictor variable	**1 year**	**2 years**	**3 years**
Year planted	1.56	1.42	NA
Light exposure	1.01	1.02	1.05
PS treatment	1.00	1.00	1.13
Fire exposure	1.55	1.42	1.17

Table A8: Results of the Tukey's Honest Significant Difference (HSD) test on year planted, comparing 2020, 2021, and 2021 to each other, based on their effect on seedling growth. Results are averaged over the levels of the three other predictor variables included in the analysis of growth, namely light exposure, PS treatment, and fire exposure. Significant predictors indicated in bold.

Contrast	Estimate	SE	df	t-ratio	p-value
2020 - 2021	-16.13	4.73	150	-3.410	**0.002**
2020 - 2022	-1.51	4.34	150	-0.349	0.9351
2021 - 2022	14.62	3.90	150	3.752	**<0.001**