

Supplement to:

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Effect of different mechanical seed scarification methods on germination and emergence dynamics of baobab (*Adansonia digitata* L.)

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Supplement A:

Table SA1: Asymptotic General Independence Tests / Ordinal Chi-Square test results of damage categories by different factors for both experiments (damage data was pooled).

Factor	P value	maxT
Hilum side	1.375e-05	4.5628
Tool	0.01597	2.7578
Treatment	1.615e-06	5.3515
Experiment	0.01281	2.8323

Table SA2: ANOVA F & p values of parametric emergence variables by treatment for the first experiment (Control, T01, T02, T03, T04).

Factor	p	F
TEP	0.00395	7.845
MET	0.0531	3.74
Es	0.0729	3.256
El	3.46e-08	14.7
Eini	3.15e-09	16.33
Eini (without control)	4.86e-09	19.45
Survival percentage	0.0538	3.381
Viability of ungerminated	5.21e-10	22.21

Table SA3: Kruskal-Wallis Chi-squared and p values of non-parametric emergence variables by treatment for the first experiment (Control, T01, T02, T03, T04).

Factor	p	Chi-squared
E1st	0.1086	7.5719
E50	0.2034	5.9441

Table SA4: ANOVA parameters of emergence variables by treatment for the second experiment (T05, T06, T07).

Factor	p value	F value
TEP	0.00106	26.41
MET	0.459	0.889
Es	0.00645	13.12
El	0.0118	4.789
Eini	0.154	1.926
Survival percentage	0.422	1
Viability of ungerminated	NA (no variation)	NA (no variation)

Table SA5: Kruskal-Wallis Chi-squared and p values of non-parametric emergence variables by treatment for the second experiment (T05, T06, T07).

Factor	p	Chi-squared
E1st	0.05992	5.6296
E50	0.2765	2.5714

Table SA6: Student's t test of chamber temperatures by experiment.

Factor	p	t
Mean temperature	2.2e-16	-20.705

Table SA7: ANOVA of emergence variables by damage category for the first experiment.

Factor	p value	F value
Eini	0.0286	3.763
El	5.1e-07	18.98

Table SA8: ANOVA of emergence variables by damage category for the second experiment.

Factor	p value	F value
Eini	0.0311	3.678
El	0.16	1.894

Supplement B:

Table SB1: Relative proportions of damage categories by treatment.

Factor	Damage category	Relative proportion in factor
Control	0	1
	1	0
	2	0
T01	0	0.25
	1	0.46875
	2	0.28125
T02	0	0.4
	1	0.2
	2	0.4
T03	0	0
	1	0.368421052631579
	2	0.631578947368421
T04	0	0
	1	1
	2	0
T05	0	0
	1	0.684210526315789
	2	0.315789473684211
T06	0	0.181818181818182
	1	0.545454545454545
	2	0.272727272727273
T07	0	0.636363636363636
	1	0.333333333333333
	2	0.030303030303030

Table SB2: Relative proportions of damage categories by tool type.

Factor	Damage category	Relative proportion in factor
Saw	0	0.343434343434343
	1	0.393939393939394
	2	0.3
File	0	0.066666666666667
	1	0.633333333333333
	2	0.262626262626263

Table SB3: Relative proportions of damage categories by side of seed scarified.

Factor	Damage category	Relative proportion in factor
Hilum	0	0.522727272727273
	1	0.386363636363636
	2	0.090909090909090
Opposite hilum	0	0.152941176470588
	1	0.482352941176471
	2	0.364705882352941