

Supplementary Material

Phytotoxic effects of extract and essential oil of *Eucalyptus saligna* (Myrtaceae) leaf litter on grassland species

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Table S1. Effects of changes in pH and osmolality of *Eucalyptus saligna* aqueous extract on seeds and seedlings of *Eragrostis plana*, *Paspalum notatum*, *Trifolium repens* and *Lotus corniculatus*

Control consisted in distilled water; pH control consisted in a solution of distilled water and 1 M HCl in the same pH of crude aqueous extract (10%); osmolality control consisted in a solution of water and polyethylene glycol in equal osmolality of crude extract. Evaluated parameters were germination rate, speed of germination, seedling shoot and root length, electrolyte leakage of seedling membranes and H₂O₂ levels in seedlings (expressed as total RGB - red, green and blue values). (-) Not evaluated parameter because no effect of the aqueous extract was observed; thus, establishing pH and osmolality controls was not necessary. The data are presented as mean ± standard deviation, with n = 4, except for total RGB, with n=6. Osmolality and pH control did not differ from control for any evaluated parameter in any recipient species, according to PERMANOVA, at p ≤ 0.05

	Control	pH control	Osmolality control
Germination rate (%)			
<i>E. plana</i>	-	-	-
<i>P. notatum</i>	76.8 ± 5.9	79.4 ± 10.1	74.5 ± 14.7
<i>T. repens</i>	-	-	-
<i>L. corniculatus</i>	-	-	-
Speed of germination			
<i>E. plana</i>	10.2 ± 0.2	10.4 ± 0.8	9.6 ± 1.3
<i>P. notatum</i>	4.2 ± 0.5	4.2 ± 0.1	4.2 ± 0.4
<i>T. repens</i>	15.5 ± 4.2	13.8 ± 1.8	17.1 ± 1.6
<i>L. corniculatus</i>	9.6 ± 0.9	7.6 ± 0.8	9.2 ± 0.8
Root length (cm)			
<i>E. plana</i>	2.1 ± 0.2	1.9 ± 0.3	1.9 ± 0.4
<i>P. notatum</i>	5.6 ± 0.7	5.8 ± 0.2	5.3 ± 0.4
<i>T. repens</i>	2.9 ± 0.3	2.6 ± 0.3	2.9 ± 0.6
<i>L. corniculatus</i>	1.5 ± 0.1	1.7 ± 0.2	1.5 ± 0.1

Shoot length (cm)			
<i>E. plana</i>	-	-	-
<i>P. notatum</i>	1.9 ± 0.1	1.9 ± 0.1	1.9 ± 0.2
<i>T. repens</i>	0.8 ± 0.1	0.9 ± 0.1	0.8 ± 0.6
<i>L. corniculatus</i>	0.5 ± 0.1	0.6 ± 0.1	0.6 ± 0.2
Total RGB			
<i>P. notatum</i>	250.3 ± 25.2	228.6 ± 26.9	289.3 ± 44.9
<i>T. repens</i>	466.0 ± 20.3	454.3 ± 35.6	504.7 ± 30.1
<i>L. corniculatus</i>	442.1 ± 31.9	418.2 ± 40.1	439.9 ± 52.5
Electrolyte leakage (relative %)			
<i>P. notatum</i>	10.1 ± 0.5	10.7 ± 1.1	10.0 ± 1.1
<i>T. repens</i>	4.9 ± 1.2	4.4 ± 0.6	5.3 ± 0.5
<i>L corniculatus</i>	8.4 ± 0.7	9.2 ± 1.6	10.2 ± 1.2