

Treatments for Overcoming Dormancy of *Leucaena* Seeds (*Leucaena leucocephala*)

Authors : Tiago Valente, Erico Lima, Bruno Deminiciis, Andreia Cezario, Wallacy Santos, Fabiane Brito

Abstract : Introduction: The *Leucaena leucocephala* known as leucaena is a perennial legume shrub of subtropical regions in which the forage shows favorable characteristics for livestock production. The objective of the study was to evaluate the influence of methods for overcoming dormancy the seeds of *Leucaena leucocephala* (Lam.). Materials and Methods: The number of germinated seeds was evaluated daily at the germination criterion radicle protrusion (growth, with about 2 cm long, the emerged seedlings of all). After the counting of the number of germinated seeds daily, the following characteristics were evaluated: Step 1: Germination count which represents the cumulative percentage of germinated seeds on the third day after the start of the test (Germ3); Step 2: Percentage of germinated seeds that correspond to the total percentage of seeds that germinate until the a seventh day after start of the test (Germ7); Step 3: Percentage of germinated seeds that correspond to the total percentage of seeds that germinate until the fifteenth day after start of the test (Germ15); Step 4: Germination speed index (GSI), which was calculated with number of germinated seeds to the nth observation; divided by number of days after sowing. Step 5: Total count of seeds do not germinate after 15 days (NGerm). The seed treatments were: (T1) water at 100 °C/10 min; (T2) water at 100 °C/1 min; (T3) Acetone (10 min); (T4) Ethyl alcohol (10 minutes); and (T5) intact seeds (control). Data were analyzed using a completely randomized design with eight replications, and it was adopted the Tukey test at 5% significance level. Results and Discussion: The treatment T1, had the highest speed of germination of seeds GSI, differed ($P < 0.05$). The T5 treatment (control) was the slowest response, between treatments until the seventh day after the beginning of the test (Germ7), with an amount of 20% accumulation of germinated seeds. The worst result of germination it was T5, with 30% of non-germinated seeds after 15 days of sowing. Acknowledgments: IFGoiano and CNPq (Brazil).

Keywords : acetone, boiling water, germination, seed physiology

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