

Efficiency of different pre-treatment on *Prosopis africana* seed dormancy

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Abstract

Seed dormancy is one of the factors challenging reforestation programs. The focus of this study is to compare the efficiency of different pretreatments methods in breaking seed dormancy in *Prosopis africana*. The seeds were screened for viability using floating method before being introduction to fourteen different pretreatment. The following pretreatments were applied: physical scarification, HCL (30%, 60%, 90%), H₂SO₄ (30%, 60%, 90%), Hot water 5 minute (30°C, 60°C, 90°C) and cold water for 2 minutes (0°C, 5°C, 10°C) and control. Each treatment was replicated 10 times. Sterilized beach sand in perforated bags were used. Percentage germination data were analyzed using ANOVA and mean separated Duncan mrt at 5% probability level . Physical scarification showed highest germination (92%) while control showed least germination (0%) at 2 WAS.