

ABSTRACT - PLANT PHYSIOLOGY

EVALUATION OF GERMINATION DYNAMICS AND INITIAL GROWTH OF SEEDLINGS OF GUAPIRA OPPOSITA SEEDS

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Guapira opposita (Vell.) Reitz (Nyctaginaceae), or maria-mole, is a native species with great importance in the restinga forest. It acts as a nucleating plant, facilitating the establishment of other species in its proximity, forming nuclei of vegetation. This work aimed to evaluate the germination dynamics of *G. opposita* seeds, through vigor and viability tests and initial growth of seedlings evaluation. The fruits were collected in the Natural Monument of Lagoa do Peri, Florianópolis/SC, packed in a plastic box and stored in a refrigerator at 8 ± 2 °C for 7 days. At the laboratory, the fruits pulp were removed and then, seeds were disinfected with 70% alcohol and with 2% sodium hypochlorite solution, followed by three washings in autoclaved distilled water. Subsequently, they were sown in gerbox® boxes with filter paper moistened with distilled water and incubated in a BOD-type germinator with a photoperiod of 12 hours at 25°C for 30 days. The percentage and speed of germination were evaluated. The Germination Speed Index (GVI) was calculated using the Maguire formula. The germination test had a completely

randomized design with six replications of 25 seeds. After a period of 30 days, 10 random seedlings of each treatment were measured using a caliper. Germination started with the emergence of the radicle about 4 days after sowing. The seeds showed an average viability of $84 \pm 14\%$ of germination and their dynamics presented a high index, about 4.31 ± 0.89 . The seedlings presented an average of 3.3 ± 1.3 cm, being 1.2 ± 0.12 cm shoots and 2.1 ± 0.64 cm roots. These data provide information on germination physiology of the species and allow us to develop new strategies to improve seeds quality and consequently seedlings production for restoration in degraded areas purpose.