RATE AND HOMOGENITY OF BALANGO (LALLEMANTIA ROYLEANA) GRAIN GERMINATION UNDER TREATMENT OF GAMMA RAY

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Balangois belongs to the Lamiaceae family, including medicinal plants that contain many ingredients. The grains of Balangoce have several properties including heart tonic and housing [⁷]. Given the importance of genetic diversity in plant breeding, mutation breeding is an important method for inducing genetic diversity [⁷]. In this study the grains of Balango were irradiated with gamma rays at different doses (°, ° ₀. ₀, ° ₀. ₁, ° ₀. ₂, ° ₀. ₃, ° ₀. ₄, ° ₀. ₅, ° ₀. ₆, and ° ₀. ₇ Gray) through completely randomized design with four replications. The variance analysis of data showed differences among doses are statistical significant at % ₁ probability level for traits under study. Although the maximum germination rate was observed in doses °, ° ₀. ₁, ° ₀. ₂, ° ₀. ₃ Gray, but the difference among them were not statistically significant. The lowest germination rate was obtained in ° ₀. ₇ Gray. The germination homogeneity (GH) was not significant among doses ° ₀. ₅, ° ₀. ₆, ° ₀. ₇, ° ₀. ₉ Gray, although GH was highest in these doses. We concluded the doses from ° ₀. ₁ to ° ₀. ₃ Gray were suitable in mutation breeding of Balango.

References