

Seed Germination of Kiribadu (*Ipomoea mauritiana*) as Influenced by Soaking Time and Sowing Media

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Abstract: Kiribadu (*Ipomoea mauritiana*) is a very important medicinal plant. Tuberous roots (yams) of Kiribadu use in indigenous medicine to treat various diseases and disorders. Kiribadu seeds contain hard seed coat therefore, takes long time for germination that is poor under natural condition. Objective of the present study was to find out a suitable seed treatment and sowing media to expedite the germination and seedling survival of *I. mauritiana*. For this purpose, two separate experiments were set up at the Department of Crop Science, University of Ruhana of Sri Lanka. In experiment-I, four different soaking times (i.e. 6, 12, 18, 24 hrs) were used to determine best soaking time for germination of *I. mauritiana* seeds. Numbers of germinated seeds were counted daily to determine germination % and days taken for germination was also recorded. In experiment-II, four different potting mixtures (i.e. sand, coir dust, top soil and coir dust: top soil 1:1) and five replicates were used to select the best sowing media for *I. mauritiana* seedling survival. Seeds soaked in water for period of 18 hours (best soaking period from experiment-I) were used for the purpose. Results revealed that the highest germination percentage (90%) and rapid germination were observed in seeds soaked in water for 18 hrs (in petri dishes). Seeds in control started to germinate at 5 days and it was recorded very poor germination percentage (13.6%). Fungus attack was observed in seeds soaked in 24 hrs. Coir dust media was shown rapid and higher germination (81%) followed by coir dust: top soil (1:1) media (78%). Therefore, seeds soaked in water for 18 hrs and planted in coir dust media appeared to be most promising treatments to obtain rapid and highest germination percentage of *I. mauritiana* seeds.

Keywords: *Ipomoea Mauritiana*, Medicinal Plant, Seed Germination, Sowing Media