

**EFFECT OF DIFFERENT NURSERY MEDIA AND HORMONE ON
ROOTING OF MINIATURE ROSE (*Rosa chinensis minima*) STEM
CUTTINGS**

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ABSTRACT

Miniature roses (*Rosa chinensis minima*) have high demand in the local market and production of plants in large scale is a problem due to poor rooting of cuttings. Therefore, evaluation of rooting ability of miniature roses in response to different formulations of nursery media and hormone application is important to guide growers on commercial production. The main objective of this study was to identify the best nursery media and effect of hormone application on rooting of miniature roses using stem cuttings. Three different nursery media, Sand:coir dust (1:1), Sand:top soil (1:2) and Gravel mix soil medium with rooting hormone (Rapid Root - Indole 3- butric Acid, 0.3%) and without rooting hormone were used. Complete randomized Design (CRD) was used with two factors with ten replicates per each treatment. Survival percentage, number of roots per cutting, root length (cm), root dry weight (g) and shoot dry weight (g) were recorded four weeks after establishment of cuttings. There was no any significant interaction between nursery media and hormone application on rooting of stem cuttings. Results revealed that highest survival percentage and highest root dry weight were recorded in the gravel mix soil medium while highest root length was observed in hormone treated cuttings. Therefore, among three nursery media, gravel mix soil medium can be recommended as the best nursery medium for rooting of miniature rose stem cuttings.

Keywords: Miniature rose, Stem cuttings, Gravel mix soil, Rooting hormone, Survival percentage