

**POTTING MEDIA AND THE PROPAGATION METHODS
IMPROVE THE YIELD AND GROWTH OF**

Rhynchoglossum gardneri



BY

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ABSTRACT

The *Rhynchosyris gardneri* is a small genus in the family Gesneriaceae native to Sri Lanka. This is wild flora but has aesthetic foliage and flowering structure. This research study was conducted as two experiments. This study was conducted to evaluate the effect of different potting media and propagation methods on the growth and development of *R. gardneri*. Four different potting media including Leaf mold + Sand (1:1), Leaf mold + Topsoil + Sand (1:1:1), Coir pith + Sand (1:1) Clay and two propagation methods including Stem-cutting propagation and Leaf-cuttings propagation were used for growing *R. gardneri*. At present no study has been done on suitable potting media and, propagation methods for enhancing the growth of *R. gardneri*. The experiment was laid out in Complete Randomized Design (CRD) with five replicates. It was found that potting media ($p > 0.05$) significantly affected the number of leaves, number of axillary branches, the average height of plants per week, the number of roots, the average length of roots, and, the fresh weight of the plant after one month removing of propagators. The number of leaves was reduced significantly in stem-cuttings plants and leaf-cutting plants also reduced. The number of auxiliary branches was reduced significantly in stem-cuttings plants and leaf-cutting plants also reduced. The average height of shoots was reduced significantly in stem-cuttings plants and leaf-cutting plants also reduced. The number of roots was reduced significantly in stem-cuttings plants and leaf-cutting plants also reduced. The average length of roots was reduced significantly in stem-cuttings plants and leaf-cutting plants also reduced. Fresh

weight was reduced significantly in stem-cuttings plants and leaf-cutting plants also reduced. Coir pith + Sand (1:1) for stem-cuttings and Leaf mold + Topsoil + Sand (1:1:1) for leaf- cuttings can be recommended for improving the yield and growth of *Rhynchoglossum gardneri* plants.

Keywords: *Rhynchoglossum gardneri*, Potting media, Propagation, Yield, Growth

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