

**STUDY ON GROWTH PERFORMANCES OF VANILLA AS
AFFECTED BY DIFFERENT CUTTING TYPES AND MEDIA
(*Vanilla fragrans*)**

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Vanilla is an orchid spice originated in Mexico. It is climbing, branching, and terrestrial orchid growing on trees and shrubs. There is good potential for the vanilla pods in Sri Lanka. At present, 1-2 m long mature Vanilla cuttings were used for propagation but demand cannot meet since it is used long cuttings (1-2m) as planting material. Therefore it is important to get more number of cuttings per unit length of the Vanilla to meet the existing demand. In this regard, present study was conducted to investigate the effect of cutting length and growing media on growth performances of Vanilla. In experiment 01 (Pot experiment), four potting media (coir dust, sand: coir dust 1:1, sand: coir dust: top soil 1:1:1, sand: topsoil: organic matter 1:1:1) and four cutting lengths (one noded cuttings, two noded cuttings, three noded cuttings, four noded cuttings) were used for the study in the nursery. Experimental design was factorial CRD with 4 replicates. In experiment 02 (field experiment), plants taken from the cuttings with two maturity stages (mature and immature) and three cutting lengths (one noded cuttings, two noded cuttings, three noded cuttings) were used for the field establishment. The experimental design was RCBD with six replicates. Data (Number of leaves, Number of roots and Leaf area) were measured once in three weeks in the nursery and once in four weeks in the field. Data were statistically analyzed by using ANOVA and means were separated by DMRT. In experiment 01, sand: top soil: organic matter 1:1:1 potting media gives good growth performances. Four noded cuttings are more suitable than others. Maturity and cutting length are significantly affected on growth of Vanilla. Mature cuttings with two nodes shows higher growth performance followed by mature cuttings with three nodes, mature cuttings with one node, immature cuttings with three nodes, immature cuttings with two nodes, and immature cuttings with one node. Therefore potting media of sand: top soil: organic matter 1:1:1 is suitable for filling the poly bags to grow vanilla cuttings in nursery and mature cuttings with two nodes are shown better growth performance in the field.