

## **Evaluation of the Suitability of Different Rooting Media and Length of Cuttings on Growth and Yield Performance of Mint (*Mentha* spp.)**

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**Abstract:** Mint (*Mentha* spp.) is an aromatic perennial herb and it is popular in the world due to its specific aroma. Currently it is not cultivated commercially in Sri Lanka. An experiment was conducted to evaluate the suitability of different rooting media and length of cuttings on growth and yield performance of Mint at the Department of Agronomy, Faculty of Agriculture, Ariviyal Nagar, Kilinochchi during January to March in 2019. Two factor factorial experiment was carried out in Complete Randomized Design (CRD) with five replicates. Six potting media (M1 - Cattle manure + Top soil, M2 - Compost + Top soil, M3 - Coir dust + Top soil, M4 - Partial burnt paddy husk + Top soil, M5 - Goat manure + Top soil, M6 - Top soil) and four cutting lengths (L1 – 6 cm, L2 – 9 cm L3 – 12 cm and L4 – 15 cm ) were used as treatment combinations. Growth, yield parameters and chemical properties were recorded and data were analyzed using ANOVA procedure in SAS. The means were compared by using Duncan Multiple Range Test. Management practices were performed according to the farmer practices. There was a significance difference in growth parameters (Plant height, number of leaves, leaf area, branch number, root length and shoot length), yield parameters (fresh weight of shoot, fresh weight of root and number of stolon) and quality parameter (chlorophyll content of leaves) of mint among rooting media and length of cutting. There was an interaction effect between rooting media and length of cutting in all parameters. The plant height, leaf area, length of shoot, fresh weight of shoot and number of stolons were highest in goat manure medium. The leaf number, branch number, root length, fresh weight of root and chlorophyll content were highest in compost medium. A greater yield was recorded in both compost and goat manure media compared to others while goat manures gave more yield than the compost medium. Fifteen-centimeter length of cutting showed the best performance and gave the highest yield. It can be concluded that 15 cm length of mint cuttings in goat manure medium can be recommended for the production of mint under the tested conditions.