



EFFECT OF DIFFERENT LENGTH OF CUTTING AND ANGLE OF PLANTING ON ROOTED CUTTING PRODUCTION OF SELECTED ORNAMENTAL PLANTS

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Abstract: Floriculture industry is popular throughout the world and it is high income generating agribusiness in Sri Lanka. The key floriculture product varieties exported from Sri Lanka are decorative foliage and rooted or unrooted cuttings. *Dracaena sanderiana*, *Polyscias balfouriana*, *Bambusa multiplex* are the most popular plants species, highly exported as rooted cutting across the world and from Sri Lanka. An experiment was conducted to evaluate the effect of different length of cutting and angle of planting on successful rooted cutting production of selected ornamental plants (*Dracaena sanderiana*, *Polyscias balfouriana*, *Bambusa multiplex*) at Faculty of Agriculture, Ariviyal Nagar, Kilinochchi. Two factor factorial experiment was carried out in Complete Randomized Design (CRD) with three replicates. In each species three different lengths of cuttings were selected (20 cm, 15 cm and 10 cm), planted in two different angles (90°) and (45°) angles for each of the species. Sprout length, number of leaves, number of roots, root length were measured as growth parameters and the data were subjected to analysis of variance (ANOVA) to determine their effect and interaction using SAS 9.1. Mean separation was done by using the Duncan method. In *Polyscias balfouriana*, 20 cm cutting, planted at 45° slant angle recorded higher sprout length (55.10 cm), root length (18.10 cm) and number of roots (14). In *Dracaena sanderiana*, 15cm length of cutting, planted at 45° angle showed higher sprout length (10.33 cm), root length (9 cm) and number of roots (13). In *Bambusa multiplex*, 20cm length of cutting planted in 45° angle of planting recorded higher in sprout length (37.00 cm), root length (19.40 cm) and number of roots (18). *Polyscias balfouriana* and *Bambusa multiplex*, 20 cm cuttings planted at 45° slant angle was observed as best and though, in *Dracaena sanderiana* 15 cm length of cutting, planted at 45° angle showed better performance.

Keywords: *Bambusa multiplex*, *Dracaena sanderiana*, *Polyscias balfouriana*, rooted cuttings