Rooting of Salad Cucumber (*Cucumis sativus* L.) Cuttings as Affected by Cutting Position and Growing Media

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Abstract

An experiment was conducted at the Faculty of Agriculture, University of Ruhuna, Sri Lanka to evaluate the effect of cutting position and growing media on the rooting of salad cucumber lateral branches. The study was carried out in a 2 x 3 factorial completely randomized design with four replicates. The two factors were cutting position (basal end and terminal end of the lateral branch) and growing media (coir dust, coir dust: sand(1:1), and sand). One month after planting, data were recorded as the weight of cutting, length of cutting, number of roots per cutting, length of the longest root, fresh weight of roots, and dry weight of roots. Data were analyzed using ANOVA, and means were separated by least significant difference (LSD) at a 5% probability level using SAS software. Results revealed that there is an interaction effect of the weight of cutting, length of cutting, and fresh weight of roots. The highest significant weight(13.500 g) and length of cutting(46.125 cm) were observed from terminal end cuttings planted in coir dust media, while the highest significant fresh weight of roots (0.507 g) was obtained from basal end cuttings planted in coir dust media. The length of the longest root and the dry weight of the roots was significantly influenced by the cutting position and growing media. Basal end cuttings planted in coir dust media recorded the highest significant length of the root (3.432 cm) and dry weight of roots (0.109 g). Coir dust and coir dust: sand media (1:1) recorded a significantly higher number of roots per cutting (3.530). Since salad cucumber is a short-duration crop and produces fruits from nodes of the vine, increasing the length of the vine results in better yield than increasing the number and weight of roots. Thereby, it can be concluded that the terminal ends of salad cucumber lateral branches can be used for rooting successfully in coir dust media to obtain planting materials for the next crop cycle.

Keywords: Cutting Position, Lateral Branches, Salad Cucumber.

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