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Studies on Vegetative Propagation of Exotic Pepper SPP using Different Cutting types, Potting Media and Rooting Hormones

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Abstract

Pepper plants belong to the family Piperaceae. There are several types of piper species such as Piper aduncum, P. betle, P. longum, P. nigrum, P. futokudsura, P. kudsura etc. Piper species have a tropical distribution, and are most commonly found in the understory of lowland tropical rainforests. The objective of this research was to study of the vegetative propagation of exotic pepper. Three different potting media of sand, coir dust, sand: coir dust (1:1) was used for the experiment. The medium were sterilized by using mini autoclave and filled in plastic trays. Piper vines were cut separately as top cuttings and semi hard wood cuttings. 50% of the cuttings were treated with IBA hormone and balance 50% were not treated with IBA hormone. Cuttings planted in plastic trays were covered with transparent polythene for four weeks. The Experiment was conducted according to completely randomized design with six replicates. Data were analyzed using SAS computer package. Number of roots and root volume were affected significantly (p≤0.05) by all the experimental factors which include potting medium, cutting type and hormones. Maximum number of roots was recorded in semi hard wood stem cuttings planted in 1:1 sand: coir dust medium treated with IBA hormone. Number of shoots was significantly affected (p≤0.05) by only in potting medium and not affected significantly (p>0.05) in cutting type and hormone treatment.

Keywords: Piper nigram, potting media, rooting hormone, vegetative propagatio