INFLUENCE OF COIR DUST ON GROWTH OF CUTTINGS OF SHOE FLOWER (Hibiscus rosasinensis)



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ABSTRACT

This study was aimed to find out the influence of coir dust on growth of cuttings of Hibiscus rosasinensis (shoe flower) and also to select the proper proportion of coir dust and potting mixture for the growth of cuttings of Hibiscus rosasinensis. Polythene bags were filled with different proportions of potting mixture and coir dust (1:0, control), 3:1, 6:1, 9:1, 12:1) for the planting of cuttings of Hibiscus rosasinensis. Potting mixture incorporated with sand: top soil: cowdung (1:1:1 v/v/v). Single node cutting was planted in each bag and kept in green house. Observation was made daily. Growth parameters as well as soil pH, temperature and soil moisture were measured at regular intervals. The results showed that the addition of coir dust to the soil increase the organic matter content of soil and change the physical and chemical properties of soil. Thus coir dust improved the soil properties and the plant growth characteristics such as number of leaves, shoot length, fresh and dry weight of leaves, shoot and root, leaf area and root length in Treatment 4. Low pH and moisture content were recorded in treatment 1(control) whereas high in Treatment 5 after planting of cuttings. It is clearly evident that coir dust absorbs large amount of water thus increase the moisture content of soil considerably. At the end of 12th week Treatment 4 (potting mixture: coir dust-9:1) attained favourable growth than others in this experiment.

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