

Effect of type of cutting and frequency of watering on rooting of Masbedda (*Gymnema sylvestre*) stem cuttings

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Medicinal plants are now found growing sporadically in forests as well as in home gardens especially in rural areas. But due to lack of organized cultivation, and proper management, the number of plant species is decreasing at an alarming rate. Some of them are on the verge of extinction. Present investigation was carried out to study the effect of cutting type and watering frequency on rooting of *Gymnema sylvestre* stem cuttings.

Semi-hard wood, hard wood and soft wood cuttings with two leaves were planted in poly bags filled with a potting mixture of top soil, sand and compost (1:1:1) to determine the effect of cutting type on rooting. Cuttings were watered daily, once in two days and once in three days to assess the effect of watering frequency on rooting. Number of roots per cutting, mean root length and root biomass was recorded at 6, 10 and 14 weeks after planting. A Complete Randomized Design was used for the experiment with ten replicates.

Results showed that rooting of semi-hard wood cuttings were significantly ($p \leq 0.05$) better than the other two types of cuttings. At the end of six weeks, number of roots per cutting was highest in semi-hard wood cuttings followed by hard wood cuttings, whereas the soft wood cuttings exhibited the lowest number of roots. It was revealed from the results that watering once in two days gave the highest ($p \leq 0.05$) number of roots per cutting, longest roots ($p \leq 0.05$) and the largest root biomass ($p \leq 0.05$). Results revealed that semi hard wood cuttings watered once in 2 days gave the best performance in rooting in the experiment.

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