



# Macro- proliferation Cup Technique for Mass Multiplication of *Woodfordia fruticosa* (L.) Kurz (*Dhawai*) in Sub-humid Foothills of Eastern Himalaya

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**Abstract:** Vegetative propagation in *Woodfordia fruticosa* through shoot tip cuttings having 1-6 nodes with and without cutting aid (commercial growth hormone) was attempted in different seasons to analyze the effect of cutting aid, number of nodes and seasons on survival, rooting and growth of cuttings. Cuttings covered with transparent plastic cups after planting for a fortnight rooted profusely, while cuttings left uncovered dried immediately. Survival and growth performance of 2-3 node cuttings was significantly better than other cuttings. Entire cutting aid treated three node cuttings and entire untreated two node cuttings survived, while survival of others was 20-80 % lesser. Entire 2-3 node cuttings planted during monsoon survived, while survival of cuttings planted in other seasons was 7-60 % lesser. The survival of the cuttings was found significantly and positively correlated with relative humidity, while no relationship of cutting survival was found with temperature and rainfall. Healthy and uniform *Dhawai* planting materials in Terai region of West Bengal can be produced by following protocols like preparing fresh two-leaved shoot tip cuttings with two or three nodes during monsoon and post monsoon seasons, ridge planting the cuttings in rows and covered with transparent plastic cups (10 cm × 6 cm) for a fortnight and out-planting of four months healthy seedlings with root ball.

**Keywords:** *Dhawai*, Medicinal Plant, Macro-proliferation, Cup technique, Multiplication

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