**253/D**

## Vegetative propagation of mangroves by propagule cuttings

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Mangrove forests are threatened world wide, because of intervention by man. Mass production of planting material and successful germination of seeds are essential to rehabilitate degraded mangrove areas. A propagule of *Rhizophora apiculata* was cut into 3-4 pieces and cuttings were treated with phenol removing solution and then they were treated with root promoting hormones. Root promoting hormones, Indol Butyric Acid (IBA), Naphthalene Acetic Acid (NAA) and combination of both were used to increase the efficiency of root initiation. Five concentrations (100 ppm, 500 ppm, 1000 ppm, 1500 ppm and 2000 ppm) of above hormones were tested by using six replicates for each concentration for efficiency. Root lengths were measured after one and two months of planting and shoot heights were recorded after shoot initiation in relation to hormone concentrations and it was found that IBA (1000 ppm) produced the maximum root length and shoot height among all three treatments. Vegetative propagation methods provide an alternative method of producing mangrove seed material in large scale. In the present study efficacy of producing seed material by propagule cutting of R. *apiculata* supported with root promoting hormones, Indol Butyric Acid (IBA), Naphthalene Acetic Acid (NAA) was investigated.

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