



REGIONAL-CUM-FACILITATION CENTRE SOUTHERN REGION

(NATIONAL MEDICINAL PLANTS BOARD,
MINISTRY OF AYUSH, GOVERNMENT OF INDIA)



Protocol for
Macropropagation of
***Saraca asoca* (Ashoka) using stem cuttings**

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Protocol for

Macropropagation of *Saraca asoca* (Ashoka) using stem cuttings

Collect terminal branches that can yield two to three pieces of two nodal cuttings (no problem if more nodes are present) of 15 to 20 cm length in the morning hours from the field and transport to nursery without desiccation.

Stem cuttings from one year old nursery/field seedlings can also be used.

Prepare the two nodal cuttings (more nodes, if present, are OK) taking care to see that the bottom slanting cut is at 1 to 2 cm below the node.

Remove half of the leaf blade from each leaf using sharp scissors to minimise rate of transpiration.

Treat all the stem cuttings with systemic fungicide 1% Bavistin (Carbendazim 50% WP) solution for 15 minutes as prophylactic treatment.

Simultaneously, prepare 5000 ppm talc-based IBA powder. For preparing 100 grams of the rooting hormone mixture of 5000 ppm, take 0.5 gram of IBA powder and mix thoroughly with 99.5 grams of talc powder and make it homogenous using a homogeniser mixer.

Dip (quick dip) about 3 cm basal portion of the cuttings in the hormone powder, and plant the treated stem cuttings in root trainers or trays filled with vermiculite. Keep the cuttings under intermittent misting inside the mist chamber maintained at 75-80 % RH and 28-30°C temperature.

Sprouting of buds may or may not be visible in all cases, but rooting starts after 15 days.

Rooting and survival of above 90% can be obtained during June-October.

Transfer 1.5 months old rooted cuttings to containers filled with nursery potting mixture having an adequate proportion of sand, soil and farmyard manure, and maintain for 4.5 months under 50% shade, and irrigation.

Transfer the container plants to open condition for hardening for about 4 to 5 months under limited irrigation. The plants ready for planting attain 50 to 60 cm height and 7 to 10 mm collar diameter in 12 months.



Selection of cuttings



Pruning of leaves



Fungicide treatment



Hormone application



Cuttings in root trainers



Cuttings in mist-chamber



With vermiculite plug



Rooted cuttings



Rooted cuttings transplanted in containers



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