



Propagating Bamboo through Branch Cuttings

Ethiopia | Madagascar | Tanzania



INTRODUCTION Branch cutting is a non-destructive method of propagating bamboo, mainly employed for bamboo species with swollen branch base, aerial roots, and prominent branching. This method, using primary branches and secondary branches is effective for thick-walled bamboo species such as *Dendrocalamus Spp* and *Bambusa Spp*. The most ideal time to practice this method is early monsoon (after pre-monsoon showers or within three months of the onset of monsoon).

PROPAGATION MEDIUM: It is advised to propagate branch cuttings in sand bed because sand is locally available, chemically inert and comparatively cheap. Sand accelerates drainage, improves aeration, allows easy rooting and rhizome formation, minimizes damage of roots and rhizome while transplanting. Alternatively, branch cutting propagation can also be carried out in well-drained sandy soils.

SAND BED: Use three layers of bricks to hold the sand. The size of sand bed could be (Height = ~ 20 cm; Width = 1.2 m; Length = 5-10 m or more (based on requirement))

A QUICK GUIDE TO THE PROCESSES INVOLVED IN MAKING BAMBOO FURNITURE



Select bamboo culms with prominent branches (1 to 3 years old bamboo stems).
Check for swollen branch base, it will look similar to rhizome of bamboo (aerial roots, buds, leaves).



Cut the branches with swollen branch base with hacksaw. Do not split the swollen base. Secondary branches with same characteristics of the primary branches (swollen base, buds and leaves) can also be used.



Keep 3 to 5 nodes from the swollen base with viable buds. Trim all tertiary branches, leaves after cutting the branches from the main culm (to avoid water loss). Use hacksaw to cut big branches and secateurs for pruning the smaller branches and leaves.



During transit collected branch cuttings should be wrapped with wet rice sacks or wet rice straw to avoid drying. Transport the cuttings to nursery site as soon as possible.

NURSERY PROCESS

Dip or immerse the cuttings in rooting hormone solution (Indolebutyric acid, concentration - 200 ppm or Naphthalene Acetic Acid (NAA)) for a few hours (preferably overnight). Soaking helps in better root formation and higher survival. If propagation is carried out during pre-monsoon season, there is no need of rooting hormones.



Before planting, dip the cut ends of the branch cuttings in fungicide (1 ml / gram per liter of water) for 5 minutes.



Place the swollen branch base inside the sand propagation bed (make holes by hand).



Use cow dung or sticky clay cap on cut end to minimize drying and water loss. Sand bed should be established in partial sunlight.



Shower water on the bamboo cuttings at least 3 to 4 times a day. Check for roots and rhizome formation. Remove the branch cuttings from the bed without damaging roots.



Sprouting of branch buds happens in 10 to 20 days. Depending on the species of bamboo and season of branch cutting collection, the root formation ranges from 25 to 90 days.



Transplant the rooted cuttings into poly bags (size - 15 cm X 20 cm or bigger) filled with the potting medium (soil, sand and manure; 1:1:1 or soil and compost; 3:1).

After transplanting, plants must be regularly watered and kept in partial shade for the initial one month, before shifting them to direct sun light. Bamboo saplings will be ready for planting in the field after four to six months.



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For further information, please contact:

For further information, please contact:
INBAR secretariat:
No. 8, Fu Tong Dong Da Jie, Wang, Jing Area, Chaoyang District, Beijing
100102, P.R. China
Telephone: +86-10-6470 6161, +86-10-8471 3337, +86-10-6471 7108
Fax: +86-10-6470 2166 | Email: info@inbar.int

