

# Dendrocalamus stocksii (Oyimula)

Economically important spe cies, non-thorny, culms up to 6-9m tall, internodes 15-30cm long and 2.5-4cm broad. Propagation through culm cuttings. Seeds are non-viable.

Uses: Furniture, handicrafts, edible shoots, farm implements.

Spacing for cultivation: 4×4m

# Dendrocalamus strictus (Kallan mula)

Culms 7-30m high, 2.5-8cm diameter, internodes 30-45 cm long, thick-walled. Propagation through seeds.

Uses: Building, construction, furniture, pulp and paper industry, agricultural implements, musical instruments, edible shoots.

Spacing for cultivation: 3×4m





# Ochlandra travancorica (Eetta)

Reed like, gregarious bamboo with culm 2-6m high, grayish-green, 2.5-5cm diameter; internodes usually 45-60cm. Propagation through seeds and culm cuttings

Uses: Handicrafts, pulp and paper industry, flute making, baskets, bamboo ply

#### Site Preparation and Planting

Site preparation is necessary to ensure better survival and faster growth, as well as to provide optimal conditions for the performance of plantation. This includes removal of weeds, fencing to control access for cattle and necessary soil amendments like biochar, flyash, compost or farmyard manure to improve soil nutrition and quality. The size of the pit should be 60×60×60 to 100×100×100cm for planting rhizomes and 30×30×30 to 45×45×45cm for culms and seedlings. In the case of lateritic or coastal areas, it is advisable to plant bamboo in 2 feet pits enriched with fertile soil, compost and green manure. Early rainy season is the ideal time for bamboo planting. In summer conditions, irrigation must be done regularly. Proper maintenance such as cleaning, pruning, thinning to reduce clump congestion and soil amendments, including organic (cow dung, compost, farmyard manure, ash) and inorganic fertiliser (NPK) should be applied to ensure productivity. Similarly, soil loosening from the plant to a distance of at least a 1m radius, up to a depth of 15cm will improve soil moisture and ensure better growth of rhizome.

#### Harvesting

The ideal season for harvesting is in the post-monsoon season extending through the winter especially from January to May. All older or matured bamboo culms should be harvested (three years + after planting). At least a minimum of six culms over one-year-old, spaced uniformly over the clump, should be retained. It is to be noted that the number of harvestable culms should not exceed the number of poles that emerged in the last year. The age of the culm can be easily determined by marking the culms with different colour paints. It is also not profitable to keep culms older than two years.

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# **Bamboo Cultivation**



# Bamboo Technical Support Group (South Zone)









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# Bamboo: Potential resource for **Eco-restoration and Plantation**

Bamboos are fast - growing flowering plants belonging to the grass family Poaceae. There are 1642 species under 121 genera in the world and 144 species under 6 subspecies in India. Bamboos provide a wide range of sustainable products, livelihood options and ecosystem services. The role of bamboos in ecological functions, its use in the construction sector, paper and textile industries, as well as its prospective use as a source of energy is well known. The range of bamboo products and its demand is increasing every year which includes furniture, handicrafts, edible shoots, charcoal, agarbati sticks, wall cladding, decking, flooring, panels and beams etc. So, in short, by planting this magnificent grass has immense environmental benefits because its role as carbon sinks, produce oxygen, control soil erosion, provide organic matter, regulate water levels in watersheds, beautify the landscape, and essentially contribute to the purification and regulation of the environment.

# **Bamboo Technical Support Group** KFRI (BTSG - KFRI)

Established in 1975, KFRI is envisioned as a Centre of Excellence in Tropical Forestry to provide scientific support for decision making on matters related to forestry, with particular emphasis on conservation, sustainable utilization and scientific management of natural resources. The Bamboo Technical Support Group (BTSG - South Zone) operates at the KFRI Peechi Campus with funding from the National Bamboo Mission, Govt. of India. The main objectives are to provide knowledge and support to farmers, students and other entrepreneurs about bamboo selection, propagation, species plantations, marketing, processing, handicraft, product development, to organise seminars, workshops, training programmes, and also to conduct research on various topics related to the bamboo sector.

#### **ECONOMICALLY IMPORTANT BAMBOOS**



#### Bambusa bambos (Mullu mula)

Thorny bamboo, culm up to 30m high, 6-12cm diameter, internodes 20-40cm, propagation through seeds.

Uses: Building, handicraft, construction purposes, paper and pulp industry.

Spacing for cultivation: 6×6m.

#### Bambusa tulda

Bamboo with culms 7-23m high and 5-10cm in diameter, internode 40-70cm with whitish ring. Propagation through seeds

Uses: Construction, furniture, handicrafts, scaffoldings; an important species in agarbatti industry.

Spacing for cultivation: 5×5m



# Bambusa balcooa (Assam mula)

Medium sized to large bamboo, culm up to 12-22m high, 6-15cm diameter, internodes 20-40cm, propagation through tissue culture and culm cuttings.

Uses: Building construction, edible shoots, handicrafts, paper and pulp industry.

Spacing for cultivation: 5×5m



# Dendrocalamus giganteus (Anamula)

Giant bamboo with culms 30-40m, 20-30cm diameter, internodes 35-40cm long, thick-walled Propagation through seeds and culm cuttings.

Uses: Building construction, edible shoots, handicrafts, paper and pulp.

Spacing for cultivation: 8×8m



# Bambusa polymorpha

Large evergreen, densely tufted bamboo, culm up to 15-25m, 8-15cm diameter, internodes 40-60cm. Young shoots brownish-green and turns yellow colour at maturity. Propagation through seeds

Uses: Building, construction, handicrafts, furniture, pulp and paper industry and edible shoots. Spacing for cultivation: 5×5m



Culms usually 20-24m high, young shoots are pale green and turns to grayish-green at maturity, nodes slightly swollen, internodes 25-60cm long, 6-10cm diameter Propagation through seeds. Uses: Pulp and paper industry, handicrafts, tooth picks. Spacing for cultivation: 5×5m



