

# **SEEMA BIOTECH**

## Bamboo Varieties -

In India there are about 134 bamboo varieties; from which Indian govt. has selected 15 varieties for commercial cultivation. Some of them are *Bambusa balcooa*, *Dendrocalamus stocksii*, *D. longisphatus*, *D. brandissi*, *B. tulda*, *B. nutans*, *D. asper* etc.

The details of the varieties are as follows –

## 1) Bambusa balcooa –

Originating from Northeast India but suitable for almost all soil type & climatic conditions in India. It grows well in higher temperature also.

It is a sterile variety; although flowering is seen occasionally, there is not seed formation. After plantation it may be yield up to 60-100 years.

#### Dimensions -

It is clumping, large, thick walled bamboo, grows vigorously up to 12-23 m, diameter is 8 -15 cm, internodes distance 20-40 cm, thick walled bamboo having wall thickness 1.9 to 2.5 cm.

# Planting spacing -

10 ft. x 10 ft. OR 12 ft. x 8 ft. OR 14 ft. x 08 ft

Uses – Useful for all cultural uses like agriculture, scaffolding, construction, weaving etc. As having high calorific value & low ash content suitable for energy generation, pellet production and substitute for coal etc. It is also suitable for

paper pulp, plywood industry, incense sticks, bio CNG and all types of industrial uses.

# 2) Dendrocalamus longispathus (Rupai Bamboo)

Naturally occurring at Bihar, Bangladesh, Myanmar, West Bengal, and North East India. Prefers a tropical humid climate. Grows best where temperature are within rang  $26^{\circ}$ c –  $27^{\circ}$ c but can tolerate  $15^{\circ}$ c -  $34^{\circ}$ c temperature.

It is clump forming, high yielding & fast growing bamboo. Steam grows to maximum height in first year of growth It is hallow, clean bamboo with low branching, easy to pruning, cleaning and harvesting.

#### **Dimensions** –

Culm grows up to 15-20 m height, diameter is 7-10 cm, hallow - uniform bamboo, internodes length is 25-60cm. Culm wall is 0.8 to 1.5 cm in thickness.

Plantation spacing – 7 ft x 12 ft, OR 10 ft x 10 ft, OR 5 ft x 12 ft

Uses – Uses for handicraft, basket making, mat making chicks for door, & furniture making, suitable for paper pulp, evergreen attractive bamboo which is suitable for gardening. As it is soft bamboo preferably used for production of good quality tooth picks.

# 3) Dendrocalamus brandisii

It is one of largest, tropical, dense clumping bamboo known as **Teddy bear bamboo** or **Burma bamboo**. Native in South East Asia, Manipur. Naturally grows in humid - evergreen tropical forest. It is straight growing, large size leaves. Bamboo grows at 1300m height from sea level. Flowering cycle is of 40-45 years. Clean and soft Bamboo with very low branching.

### **Dimensions** –

It grows up to 19-33m height with 13-30cm diameter. Thick walled bamboo, internodes are 30-38cm in length.

## **Plantation Spacing –**

Recommended plantation distance is 20 ft X 10 ft OR 20 ft X 7 ft. Ginger inter cropping is possible in the bamboo.

### Uses -

Traditionally used for ladders, basket weaving, fencing pole. Suitable for paper industries, handicraft and making chandraki for sericulture etc. It is one of the top edible bamboo species.

## 4) Dendrocalamus stocksii

It is locally know as Managa, Chiva in Maharashtra, Sime, Bidaru in Karnataka & Kondya in Goa. Naturally Occurs in Central western ghat from kerala to Maharashtra. It is firm, bulky bamboo. Developed steam is 'light – green' color elongated, stick is usually solid and the hollowness of the rod is more pronounced in the upper part.

This species of bamboo has wide adoptability, comes up well in tropical humid, sub humid & semi arid conditions, under black & red soil condition. The species usually has a sporadic flowering pattern; flowering is not in all clumps at same time.

#### **Dimensions** –

Grows up to 10-12m height, diameter is 2.5 to 6.0cm, an internodes length of 15 to 30cm Culm is strait, without many branches, loosely spaced in a clump. Thornless, solid bamboo with short branching, easy to pruning and harvesting.

## Plantation Spacing – 10 ft X 5 ft OR 12 ft X 05 ft

#### Uses -

It is multipurpose bamboo species in peninsular India. Extensively used in agriculture to support different fruit and vegetables crops. It is used for handicrafts, for scaffolding & making mats. It has non-prominent nodes hence useful for furniture making.

# 5) Dendrocalamus asper

D.asper bamboo is known as 'Rough Bamboo'. It is most widely globally accepted species for edible shoots. Young shoots are sweet & considered a delicious vegetable so asper bamboo also known as 'sweet bamboo'.

It is tropical & subtropical, dense clumping species. It is native to south east asia grows in humid & semiarid conditions but grows well in humid condition. Flowering cycle reported to be about every 60 -100 years.

Plantation spacing - 4 m. x 4 m. for edible shoots and 5 m x 5 m for timber.

### **Diamensions** -

Asper grows up to 15 - 20 m height. It is thick walled bamboo with 12cm - 20 cm diameter- Internodes length is 30 -40 cm, pale green bamboo covered with small brown hairs. Lower nodes show areal roots.

**Uses** – D. asper poles are used for building material, structural timber, for heavy constructions such as houses & bridges etc. Globally accepted species for edible shoots. It also used for crafts, furnitures, BIO – CNG and ply boards etc.











# Seema Biotech

Talasande, Tal- Hatakanangale,
Kolhapur, Maharashtra - 416112
9881547622 , 9604499599
www.seemabiotech.com,
www.seemateak.co.in