



## SILVICULTURE AND NURSERY MANAGEMENT OF BAMBOOS

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**ABSTRACT:** The most common and widely distributed of all, Indian bamboos, occur in deciduous forests throughout the greater part of India, except in northern and eastern forests throughout Burma. It is hardest of all Indian bamboos, thriving in regions suffering periodically from excessive drought. Its habitat is forest hardy. A densely tufted deciduous bamboo with strong thick walled or solid culms varies much in size according to locality, usually from 20 to 50 ft high and 1-3 inches in diameter. In dry localities, on poor soils, the culms, though small in size, are solid or nearly so, whereas in more fertile localities, although they reach larger dimensions, they are, as a rule, hollow. They commonly flower sporadically in isolated clumps or in small groups, almost every year. They also flower gregariously over large tract at long intervals – the gregarious flowering usually taking some years to complete and often progressing in a definite direction in successive years. Flowers in dense globular heads appear from November to February while the ripe seeds fall from April to June according to locality in the amount of 800-900 seeds to an oz. In years of abnormal drought, flowering and fruiting may occur earlier. Old leaves fall, from December to March and new foliage appears from April to June. New culms are produced in rainy season, in northern India and they do not attain full length until September, but further south they develop earlier. In years of favorable rainfall, as many as twenty new culms may be produced from fair sized clumps. Usually, bamboos are propagated through the culm cuttings or rhizomes but they can also be propagated through the seeds, which are very rarely available. Bamboo seedlings are basically raised in nursery beds and for a year or so they are allowed to grow on poly-pots. Later the seedling is transferred into the main field. In the rhizome planting method, culms of 1 year along with roots should be dug and cut into 1-meter size and be planted in the rainy season. Manure and fertilization are important when the seedling is transplanted in the field. Potassium and Nitrogen are vital components of the fertilizer due to which the bamboo trees respond and grow well. Also, you must apply green manures, organic compost, wood ash and chemical fertigation. The harvesting can be started from fifth year onwards. On the other hand, in case of commercial farming, harvesting must be done from the sixth year. In the first harvest – sixth year, 6 culms can be harvested followed by 7 culms in the seventh year and so on. Bamboos are extensively used for building, furniture, lance shafts, walking sticks, mats, basket work, axe handles and numerous other purposes.

**Keywords:** *Clumps, culms, glaucous, lance shafts, rhizome, tufted*

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### INTRODUCTION

Bamboo is one of the most productive and fastest growing plants on the planet belonging to the family of Poaceae and is present world-wide. It is a versatile and multipurpose forest produce that has immense potential in the industrial and domestic applications. Bamboo is one of the fastest growing species with

unique rhizome dependent system. It is sufficiently cheap and plentiful to meet the vast needs of human populace from the “child cradle to the dead man's bier”. That is why sometimes it is known as “poor man's timber” (Diver, 2001).

The two general patterns for the growth of bamboo are “clumping” (sympodial) and “running” (monopodial)