

# Selection of Alternate Raw Material Among the Locally Available Species

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## **ABSTRACT**

Paper manufacturing in India is increasing day by day to meet the demand. Hence raw-material shortage is getting acute. This is one of the reasons why Indian paper industries are going towards recycled fibers.

Due to stringent pollution control norms agro based pulping industries are being switched over to secondary fiber or compelled to shut pulping operation.

Hence search for alternate wood species suitable for prevailing cooking condition is inevitable to sustain in the integrated pulp & paper industries.

At Ballarpur Industries Ltd, Unit: Sewa, five locally available species namely Kadam (*Anthocephalus Chinensis*), Sema-Tuma (*Prosopis Juliflora*), Tad (*Borassus Flabelliformis*), Arjuna (*Terminalia Arjuna*) and Albizia (*Albizia Prosera*) have been evaluated for pulp and paper making. By analyzing the results, a hardwood species *Prosopis Juliflora* have been selected based on packing density, pulp yield, alkali consumption and suitability for mixing with other species in a common cooking schedule.

In this paper wood density, pulping and bleaching characteristics, fiber classification and strength properties has been discussed. The forestry and plantation characteristics of *Prosopis Juliflora* has also been talked about.