

Pulping Qualities of Eucalyptus Hybrid (Mysore Gum, Mostly Teriticornis)

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The paper describes the results of pulping experiments on Eucalyptus hybrid (Mysore gum, mostly teriticornis) received from plantations raised in Bilaspur (M.P.), Arberi (W.B.) and Joshipur (Orissa).

Introduction

Large scale plantations of *Eucalyptus* hybrid (mysore gum mostly teriticornis) are being taken in various states in the country. It was felt that it would be useful to carry out an investigation on pulping qualities of *Eucalyptus* grown in different localities.

The present paper gives results of investigation on samples obtained from *Eucalyptus* hybrid plantations raised at Bilaspur (M.P.), Arberi (W.B.) and Joshipur (Orissa).

Experimental

The samples were debarked and chipped. 200 g (oven-dry) of chips were cooked using 14% (as Na₂O) chemicals (NaOH: Na₂S=3:1) in an autoclave of 3 litres capacity. The material liquor ratio was 1:4 and the maximum cooking temperature was 162°C. The period of digestion was 4 hours including 1½ hours to raise to maximum. After digestion, the pulp was washed and beaten to 250 ml. (CSF) freeness and standard

sheets of 60 g.s.m. were made. The sheets were tested for strength properties. The results are recorded in Table-I.

Discussion

The results recorded in Table-I

indicate that by increasing spacing of trees in plantations the strength properties and yield increase. By comparing the results with respect to yield and strength properties of the three localities, there is no significant difference.

TABLE I

Yield and Strength Properties of Pulp obtained from *Eucalyptus* hybrid

Sl. No.	State in which plantation is located	Spacing of trees in plantation	Unbleached pulp yield* %	Burst factor	Tear factor	Breaking length
		m.				m.
1.	M.P.	1.0×1.0	46.2	36.5	79	5010
2.	"	1.5×1.5	46.5	43.0	90	5610
3.	"	2.0×2.0	47.0	45.6	94	6050
4.	"	2.5×2.5	48.1	48.3	97	6140
5.	W.B.	1.0×1.0	45.5	40.4	83	5350
6.	"	1.5×1.5	46.3	41.5	89	6020
7.	"	2.0×2.0	47.1	44.9	92	6270
8.	"	2.5×2.5	47.7	52.4	99	6380
9.	Orissa.	2.0×2.0	46.7	38.3	83	5870
10.	"	2.5×2.5	47.0	34.5	78	5780

* On the basis of oven-dry raw material