

A preliminary study on sulfate pulping of bamboo grass.

PREECHA KAITGRAJAI , PRATUANG PUTHSON

and WEENA ICHAROJ.

Thai J. For. 8:171-190 (1986), 1986.

ABSTRACT

Sulfate pulping of bamboo grass, *Arundinaria pusilla*, was made from 2 to 5 mm stem diameter. The sample was taken from Sakaerat Environmental Research Station in Nakhon Ratchasima province. The pulping condition were 12 – 16% active alkali, 25 % sulfidity, 4:1 liquor to wood ratio, and 30 to 90 minutes for cooking time at 170° C.

The pulping yield, kappa No. and refining energy depended on amount of active alkali. The yield and kappa No. were among 36 to 47% respectively. Strength properties of handseets mainly depended on pulp freeness, which was more effective than the amount of active alkali. The handsheets from 350 ml CS were better strength than 500 ml CS. Average properties of handsheets from 350 ml CS of all cooking conditions were as follows ; 0.13 mm thickness, 54.2 g/m² stretch, 28.0 burst factor, 152 tear factor and 16 folding endurance.