

[Home](#) > [Vol 5, No 4 \(2010\)](#) > [Dutt](#)

STUDIES ON HIBISCUS CANNABINUS, HIBISCUS SABDARIFFA, AND CANNABINUS SATIVA FIBER AS A SUBSTITUTE FOR SOFTWOOD PULP- PART I: DELIGNIFICATION PROCESS

Dharm Dutt, J. S. Upadhyaya, C. H. Tyagi

Abstract

Hibiscus cannabinus, Hibiscus sabdariffa, and Cannabis sativa, which are natural fiber resources having characteristics similar to that of softwood (bast fibers) with hardwood (core fibers), gave higher pulp yield with good mechanical properties using an alkaline sulphite-anthraquinone (AS-AQ) pulping process rather than kraft pulping process and bleached more readily than kraft and soda pulps in a bleaching sequence. A comparison of properties of AS-AQ pulping processes with soda and kraft processes of H. cannabinus, C. sativa, and H. sabdariffa was made. All of the mechanical properties were better than soda and kraft pulps except tear index. All of the mechanical properties of handsheets of AS-AQ pulp improved except tear index. Therefore, the