

## Abstract

The potential for pulp production from Algerian wood waste (Aleppo pine, zeen oak and date palm rachis) was explored in this work. The effect of extraction processes (Kraft or organosolv) on fibers crystallinity was evaluated and related to the thermal behavior. From comparison to microcrystalline cellulose, it resulted that for date palm rachis the best cellulose characteristics were obtained by using organosolv pulping: high yield of  $\alpha$ -cellulose (33.66 %), high crystallinity (68.87 %) and decomposition temperature (357.97 °C) were obtained. On the other hand, Kraft pulping seems to be suitable for zeen oak and Aleppo pine