

Cellulose Derivatives from Jute Stick, An Agrowaste

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ABSTRACT

A study for making cellulose derivatives from jute stick has been carried out for utilization of large amount of jute stick available after extraction of golden jute fibre. For obtaining cellulose with high purity from jute stick, two stage pulping process was followed i.e. prehydrolysis followed by Kraft pulping. Different prehydrolysis and Kraft pulping conditions were used to produce pulp with different -Cellulose content to be used for different possible uses. Jute stick pulp containing 93% -Cellulose was to produce cellulose derivatives like CMC-Na and Microcrystalline Cellulose. Characterization of jute stick pulp was done. High -Cellulose containing jute stick cellulose pulp was compared with different standard commercial cellulose pulps available in the market. Specification for Microcrystalline Cellulose obtained from jute stick cellulose has also been listed.