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APMP WHEAT STRAW AND MISCANTHUS PULP FOR TISSUE MAKING

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ABSTRACT

The traditional raw material for tissue making is wood fiber pulp. Current public perceptions and purchasing habits create an opportunity to introduce non-wood fibers in markets where wood pulp has been dominant so far. This work evaluates wheat straw and miscanthus fibers obtained through alkaline peroxide mechanical pulping (APMP). Different chemical charges were evaluated, followed by a two-step high-consistency refining. Handsheets containing BEK, NBSK, and different degrees of non-wood fibers were made to evaluate mechanical properties. Results showed increased water absorbency, bulk, and tensile index by introducing APMP wheat straw and miscanthus fibers into the furnish.

Keywords: Alternative Fibers, Sustainability, Non-Wood Fibers, Tissue, Mechanical Pulping.