

Valorization of Agricultural Waste †

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Abstract: The use of trees for paper production has contributed to deforestation with a radical negative impact on the environment. An increase in the demand and consumption of paper has also induced depletion of woods resources for paper production, thus resulting in limited availability of the raw materials. The non-wood raw materials are important fiber resources are limited. The current usage of non-wood plant fibers, like rice straw, corn stalks, cotton stalks, and bagasse, would play a chief role in increasing paper-making raw materials. Non-wood plants use fibers for pulping and paper-making methods for making paper. The pulping method involves various steps like cutting, soaking, cooking, and blending processes. Paper-making involves sheet formation and moisture removal. By performing the practicals, we can make a paper similarity looks like recycled paper.

Keywords: size minimization; different contents of minerals in raw materials; soaking & cooking process; black liquor removal.

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Some materials are used in the process, such as rice and wheat straw, bagasse, sodium hydroxide, sodium carbonate, etc., which are provided through our college.

Conflicts of Interest

The authors declare no conflict of interest.