

Chemical Free Hand Made Paper From Date-Palm (*Phoenix Dactylifera-L*) Levaes

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ABSTRACT

Date-Palm leaf (sustainable agri-residue) is an excellent raw material for making pulp and paper of various grades due to the presence of high alpha cellulose (50-55%), hemi cellulose (26-30%) and ultimate fibre-length (1.25 to 2.50 mm). The presence of high amount of hemi cellulose in the pulp is found to be effective in the beating operation and formation of bonds between the fibres in the paper sheet. Hemi cellulose and alpha cellulose contribute immensely towards tensile strength, bursting strength, tear strength & folding endurance to the paper sheet without using any natural and synthetic polymer or any additive.