

**ALKALINE PEROXIDE BLEACHING PROCESS OF KENAF
PULP**

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ABSTRACT

ALKALINE PEROXIDE BLEACHING PROCESS OF KENAF PULP

Kenaf plant was chosen in this study because the bark and core of Kenaf fibre have a good in papermaking property. The objectives of this work are to study the effect of different ratio on pulp and paper properties of Kenaf and measure the brightness of the pulping process. The ratios that are used in the papermaking are 1:1, 2:1, 2:2, 4:2 and 4:4. From that, it was determined the best ratio for hydrogen peroxide and sodium hydroxide is ratio 4:4. The ratio 4:4 was bleaching with 4 different stages chemical where stage 1 with sodium hydroxide and hydrogen peroxide, stage 2 with acetic acid and hydrogen peroxide, stage 3 with sodium hydroxide and stage 4 with acetic acid and hydrogen peroxide. The bleaching process of Kenaf pulp took place in a water bath for 45 minutes at 70°C. FTIR result shows the presence of the functional group in the paper. The physical properties of paper were tested with the physical test such as brightness test, tear test, tensile index, burst test and thickness test. From the physical test result, the brightness of stage 4 shows the highest brightness percentage which is 68.9 % ISO brightness