

SODA PULPING USING *Acacia mangium* JUVENILE.

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ABSTRACT

SODA PULPING USING ACACIA (*Acacia mangium*) JUVENILE

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In this study, the research that had been done was carried out using Acacia juvenile (*Acacia mangium*). The purpose of this research is to study about the strength of the paper produced using different Active Alkali (AA) concentrations and also different beating revolution. The AA that had been used in this research were 16%, 18% and also 20%. The M.K digester was used for Soda Cooking. Several types of testing using TAPPI Standard will determine the properties of paper. After the testing, the results show the properties of paper according to the increasing of beating revolution. There was testing that evaluates the paper properties such as tensile test, tearing resistance test, and folding endurance test. From the study, it was shown that the Acacia juvenile are suitable for papermaking, which is good for printability. Increasing the beating revolution will also increase the mechanical properties of paper. Based on research that we conducted, it is proven that paper made from 20% AA concentration produced the best result and giving the highest yield of pulp. As for beating revolution, the paper made from 15000 beating revolution produce the highest results compared to zero