

**STUDY ON THE CHEMICAL PROPERTIES OF JUVENILE *ACACIA*
*MANGIUM***

By

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ABSTRACT

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In line to develop substitute material in wood base industry, research had been carried out for new material. The objective of this study is to investigate the chemical properties of juvenile *Acacia mangium* and to evaluate its potential as a material to develop a wood product. Samples were taken from UiTM Jengka Forest Reserve. Seven chemical properties of juvenile *Acacia mangium* was determine, namely cold water solubility, hot water solubility, 1% NaOH solubility, percentage of lignin, holocellulose, cellulose and extractive. In this study, it shown that the cold water solubility was 11%, hot water solubility 12.5% and 1% NaOH 18.5%. The percentage of lignin was 25%, cellulose 13%, holocellulose 16.6% and extractive 20.7% respectively.