

**THE EVALUATION AND COMPARISON OF PROPERTIES OF
PARTICLEBOARD MADE FROM KENAF**

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ABSTRACT

THE EVALUATION AND COMPARISON OF PROPERTIES OF PARTICLEBOARD MADE FROM KENAF (*Hibiscus cannabinus L.*)

This project was carried out to evaluate and compare the properties of particleboard made from kenaf. Boards are prepared for mechanical and physical tests. Results were summarized and analyses using ANOVA. The target board density was 600kg/m^3 and resin content of Phenol Formaldehyde that used is 7% and 11%. The experimental panels were evaluated by determine the modulus of ruptured (MOR) , modulus of elasticity (MOE), internal bonding strength (IB), water absorption (WA) and thickness swelling (TS) based on British Standard (BS). The test result for mechanical properties showed that the MOE, MOR and IB values did not meet standard requirements but it is still can improve it. As a conclusion, the kenaf core can be used as a raw material for particleboard manufacturing.

ABSTRAK