

**PROPERTIES OF PARTICLEBOARD FROM ADMIXTURE
PETAI BELALANG (*Leucaena leucocephala*) AND KENAF
CORE (*Hibiscus cannabinus*)**

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ABSTRACT

PROPERTIES OF PARTICLEBOARD FROM ADMIXTURE PETAI BELALANG (*Leucaena leucocephala*) AND KENAF CORE (*Hibiscus cannabinus*)

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The objective of this study is to determine the properties of particleboard from mix Kenaf Core and Petai Belalang in four different ratios, (100:0), (10:90), (30:70) and (50:50). The particleboard was produced in homogenous board with the size of each particle between 2.0 mm until 0.5mm. The density target of the board was 700 kg/m³. The board was bonded using Urea Formaldehyde (UF) as the resin content with 7%. The properties of bending strength (MOE & MOR), internal bonding (IB), and thickness swelling (TS) were evaluated based on European Standards (EN 310). Results of this study show that mixing ratio had significant effect on MOR, MOE, IB and TS. All of the mix samples with 90% and 100% of Petai Belalang passed the minimum standard of EN Standard. However, in thickness swelling, all samples were failed to pass the EN Standard.

Keywords: Particleboard, Mixed Petai Belalang and Kenaf Core, UF