PROPERTIES OF PARTICLEBOARD FROM *EUCALYPTUS PELLITA* AND COCONUT HUSK FIBER

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ABSTRACT

PROPERTIES OF PARTICLEBOARD FROM *EUCALYPTUS PELLITA* AND COCONUT HUSK FIBER

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This research was carried out to study the properties of hybrid particleboard from *Eucalyptus pellita* and coconut husk fiber in relation to density and ratio bounded with melamine urea formaldehyde (MUF). The fixed parameters used for particleboard making in this study were thickness of the board (12 mm), type of resin (MUF) and resin content (12%). The particleboards were manufactured with 500kg/m³ and 700kg/m³ density of board and fiber ratio is 50:50, 70:30 and 100:0 (*Eucalyptus pellita* : coconut husk fiber). The board were evaluated for bending test (Modulus of Elasticity and Modulus of Rupture), internal bonding (IB), thickness swell (TS) and water absorption (WA) according to Malaysian Standard (MS). Board with higher density and ratio 70:30 (*Eucalyptus pellita* : coconut husk fiber) shows better properties of board among all. This study found that hybrid coconut husk fiber and *Eucalyptus pellita* can be an alternative in particleboard production.

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