

**MECHANICAL AND PHYSICAL PROPERTIES OF HYBRID
PARTICLEBOARD FROM BAGASSE AND *Eucalyptus pellita***

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**Final Year Project Report Submitted in
Partial Fulfilment of the Requirements for the
Degree of Bachelor of Science (Hons.) Furniture Technology
in the Faculty of Applied Sciences
Universiti Teknologi MARA
Jengka, Pahang**

January 2019

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Thesis Title : Mechanical and Physical Properties of Hybrid Particleboard from Bagasse and *Eucalyptus pellita*

Date : January 2019

ABSTRACT

MECHANICAL AND PHYSICAL PROPERTIES OF HYBRID PARTICLEBOARD FROM BAGASSE AND EUCALYPTUS PELLITA

Properties of particleboard from bagasse and *Eucalyptus pellita* in relation to fiber ratio and resin content bounded with urea formaldehyde has been studied. The particle board manufacturing was made with three fiber ratio 100% of bagasse, 50% bagasse mix with 50% *Eucalyptus pellita* and 100% of *Eucalyptus pellita* with 2 different percentage of resin content which is 10% and 14%. The boards produced were evaluated for its internal bonding (IB) testing, bending strength testing, thickness swelling (TS) and water absorption (WA) according to British Standard (EN312:1996). The measurement of internal bonding (IB), thickness swelling (TS) and water absorption (WA) IS 50mm × 50mm × 12mm while the measurement of bending strength (MOR and MOE) is 350mm × 50mm × 12mm.

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