

**PROPERTIES OF PARTICLEBOARD FROM
DRIED LEAVES AND *Eucalyptus pellita***

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**This 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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ABSTRACT

PROPERTIES OF PARTICLEBOARD FROM DRIED LEAVES AND *Eucalyptus pellita*

Properties of particleboard from dried leaves and *Eucalyptus pellita* in relation to temperature and ratio bounded with phenol formaldehyde was evaluated. The particle board manufacturing was made with three temperature setting 160°C, 170°C and 180°C with 3 different types of ratio which are 70% dried leaves and 30% *Eucalyptus pellita*, 50% dried leaves and 50% *Eucalyptus pellita*, 30% dried leaves and 70% *Eucalyptus pellita*. 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 320mm × 50mm × 12mm. The optimum properties of board derived from 170°C and ratio of 30% dried leaves and 70% *Eucalyptus pellita* with IB of 0.58 MPa, MOR of 5.86 MPa, MOE of 849.83, TS 2 hours of 12.19%, TS 24 hours of 24.01%, WA 2 hours of 72.03%, and WA 24 hours of 89.01%.

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