

PROPERTIES OF *EUCALYPTUS PELLITA* . UF . PARTICLEBOARD

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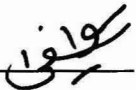
**This Final Year Project Submitted in Partial Fulfillment of the
Requirements for the Bachelor of Science (Hons.) Furniture Technology in the
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CANDIDATE'S DECLARATION

I declare that the work in this thesis was carried out in accordance with the regulations on Universiti Teknologi MARA. It is original and is the result of my own work, unless otherwise indicated or acknowledge as reference work. This thesis has not been submitted to any other academic institution or non-academic institution for any other degree or qualification.

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ABSTRACT

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This research was carried out to study the properties of homogenous particle from *Eucalyptus pellita* in relation to press-time and density bounded with urea formaldehyde (UF). There are several fixed parameters used like 340mm x 340mm x 12mm board size, 12% of resin content and heating temperature at 165°C. The particleboards were manufactured with 500kg/m³, 600kg/m³ and 700kg/m³ density of board and 4,5 and 6 minutes press-time. 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 high press-time produced better properties of board. This study found that *Eucalyptus pellita* can be an alternative new raw material in particleboard production.

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