POTENTIAL USE OF *MELASTOMA MALABATHRICUM* AS RAW MATERIAL FOR PARTICLEBOARD

NURUL ATIQAH BT HASBOLAH

This Final Year Project Research Submitted Partial Fulfillment of the Requirements for the Degree Bachelor of Science (Hons) Furniture Technology in the Faculty of Applied Sciences Universiti Teknologi MARA

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CANDIDATE'S DECLARATION

I declare that the work in this thesis was carried out in accordance with the regulation of University Teknologi MARA. It is original and is the results of my work, unless otherwise indicate or acknowledged as reference work. This thesis has not been submitted to any academic institution on non-academic institution for any other degree or qualification. In the event that if my thesis is found violates the condition mentioned above, I voluntarily waive the right of conferment of my degree and agreed to be subjected to the disciplinary rules and regulation of University Teknologi MARA.

Sign of Candidate : .....

Name of Candidate : Nurul Atiqah bt Hasbolah

Candidate Matrix ID : 2015278746

Program : Bachelor of Sciences (Hons.) Furniture Technology

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ABSTRACT

Potential Use of *Melastoma malabathricum* as Raw Material for Particleboard

Melastoma malabathricum is a lesser known species that has the potential to make raw materials for producing particleboard. This species is easy to find in logged-over-forest forest and is easy to replant. The main objective of this study is to identify the mechanical and physical characteristics of the particleboard produced by *Melastoma malabathricum* species and to determine the effect of glue content on the size of the particles used. Modulus of Rupture (MOR), Modulus of Elasticity (MOE), Internal Bond (IB), Thickness Swelling (TS) and Water Absorption (WA) have shown that *Melastoma malabathricum* species have the potential to be used as raw materials in the wood industry

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