LUDAI (*Sapium buccatum*) - POLYPROPYLENE COMPOSITE: EFFECT OF FILLER LOADING

By

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Final Project Submitted in Partial Fulfillment for the Diploma in Wood Industries, Faculty of Applied Science, Universiti Teknologi MARA, Jengka Branch.

September 2002

ACKNOWLEDGEMENTS

I would like to express my deepest appreciation sincere gratitude to my advisor, Prof. Madya Dr. Jamaludin Bin Kasim for his encouragement and guidance in designing and implementing this project.

Sincere thanks are also due to En. Wan Mohd. Nazri Bin Abd. Rahman, our lecturer of WTE 375 that has gave me the guideline to make this thesis.

Last but not least, thanks are also due to my beloved parents and my brothers for their moral and financial support throughout the years study. Also my best friends, you are the best.

Thank you.

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ABSTRACT

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This study was conducted to determine the suitability of Ludai sawdust as filler in the manufacturing of thermoplastic composite using Polypropylene plastic. The samples were made to test the strength of thermoplastic composite. Based on the results of the experiments conducted, it was found that at the higher percentage of filler loading the mechanical properties (tensile, elongation at break and modulus of rupture) decreases. However, dimensional properties of water absorption and thickness swelling were found to increase according to the increase in filler percentage. It is thus concluded that Ludai sawdust is suitable material to be use as filler in the manufacture of thermoplastic composite.