PROPERTIES OF THERMOPLASTIC COMPOSITE FROM ARAUCARIA HUNSTENII

By

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

April 2002

ACKNOWLEDGEMENT

First of all, I would like to take this opportunity to express my special thanks to God for His Blessing and Strength rendered to me to complete my final project entitle "Properties of Thermoplastic Composite from *Araucaria hunstenii*". I would like to offer my special thanks to my beloved parents who always give me advices and moral support.

I would like to offer my special thanks to my project advisor, Mr. Amran b. Shafie because of his guide and lesson and also helping me at every phase of the study. He is so generous in lending me helping hands and showing me the correct ways of forming my tasks. I would like to express my most sincere thanks to him. Also special thanks to all my beloved friends for their continuous support and helping me to finish this project paper.

Lastly, I also to extend my appreciation to those who are involved either directly or indirectly in completing this project. I believe, without their helps, I would not be able to complete this final project. May god bless you.

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ABSTRACT

THERMOPLASTIC COMPOSITE FROM ARAUCARIA HUNSTENII

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MARCH 2002

The research has been done to study about the properties of thermoplastic composite from *Araucaria hunstenii*. The test for bending, tensile and thickness swelling and water absorption been done for make sure *Araucaria* is more suitable in making thermoplastic composite. The making of thermoplastic composite from *Araucaria* is followed from 5%, 10%, and 15% of *Araucaria* wood fiber. The result showed that 10% of wood fibers of Araucaria are suitable. This because from bending test showed that 10% of wood fiber is very strength compared to 5% and 15%. Using more polypropylene (PP) can give chance to the fiber bound each other with PP. Otherwise, using MAPP as a coupling agent may increase the strength of the thermoplastic. Generally the suitable percentage fillers is 10% mixed with PP.