### DENDROCALAMUS ASPER (BULUH BETONG) AS RAW MATERIAL TO MANUFACTURE WOOD PLASTIC COMPOSITE (WPC)

### NUR FARHANA BINTI MOHD ZAILANI

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

JANUARY 2013

#### ACKNOWLEDGEMENTS

Alhamdulillah... All praise be to ALLAH for giving me the strength and patience to finish this thesis, without the blessing from ALLAH it is impossible to me to finish this project. So, thank you ALLAH. Also I would like to express my gratitude and sincere thanks to my beloved advisor Madam Siti Zalifah Bt Mahmud for her advice, guidance and encouragement that have helped me a lot to complete this thesis. She has sacrificed a lot of her time to spend with me in discussing this thesis.

A million thanks go to Prof. Dr. Jamaludin Bin Kasim my co-advisor and the Head of Furniture Technology Programme for his thoughts and guiding me in writing this thesis. He has guided me from the basics to the detail of writing thesis. Special thanks also go to Miss Mufidah Bt Husin for helping me and being my reference during the absence of my advisor. She did her best to be my guidance, thank you Miss Mufidah.

Besides that, lots of thanks to the entire workshop's staff for their commitment in helping me to complete this thesis especially Mr. Rudaini and Mr. Shahril who have helped me handling the machinery in the workshop. Also to all my friends who helped me to complete this thesis, thank you from the bottom of my heart.

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#### ABSTRACT

Bamboo has been recognized as the second importance non- timber forest product by Malaysian Government. It can be a good substitute for timber in producing high value added products. For this reason, this study used *Dendrocalamus asper* as raw material to manufacture wood plastic composite. This study focused on the effect of particle size and the effect of Maleic Anhydride Grafted Polypropylene (MAPP) additive on physical and mechanical properties of wood plastic composite filled with 10 percent of *Dendrocalamus asper* sawdust. Three different particle size was been used which were 150µm, 180µm and 425µm in size. Particle size showed a significant influenced on physical and mechanical properties of the wood plastic composite board while the addition of 3 percent MAPP enhanced the physical properties and almost overall mechanical properties of wood plastic composite for the wood plastic composite for the addition of 3 percent MAPP enhanced the physical properties and almost overall mechanical properties of wood plastic composite for the wood plastic properties and almost overall mechanical properties of wood plastic composite board while the addition of 3 percent MAPP enhanced the physical properties and almost overall mechanical properties of wood plastic composite