PROPERTIES OF PARTICLEBOARD PRODUCED FROM ADMIXTURE OF ACACIA MANGIUM AND SENTANG (Azadirachta excelsa) AT DIFFERENT PARTICLE SIZE

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Final Year Project Report Submitted in Partial Fulfilment of the Requirement for the Degree of Bachelor of Sciences (Hons.) Furniture Technology in the Faculty of Applied Sciences Universiti Teknologi MARA

JULY 2012

ACKNOWLEDGEMENTS

Upon completion of this project, I would like to express my gratitude to many parties. First and foremost, a lot of gratitude to the Almighty Allah S.W.T because of His blessing, I'm able to complete this final project.

I would like to deeply to thank Dr Wan Mohd Nazri, my advisor, and Encik Rozaidi, my co-advisor for facilitating every single step that I had to take and every problem that I faced. He is the best leader, coordinator, and facilitator.

My deep gratitude to my husband and son for their continuous mental and spiritual supports, encouragement and dedication. Also my deepest appreciation to my sisters, Shuhaili Johar for her willingness to help in the successful completion of this project. A lot of thanks to my mom, siblings and other family members for their supports.

Special thanks to all my friends especially Ahmad Taufiq, Nur Balqis and Rahman. They always had a way to help, give point of views and their patience was my inspiration to finish this project. To my senior, Farahin who always gave me opinions and her knowledge in my needed time of need.

I am also grateful to Mr Shahril Ezanie Abdullah and Mr Rudaini who facilitate my requirements during this work and I amvery thankful for their contribution for me in finishing this project and their encouragements and continuous care throughout all along this project.

Finally, thanks to all who were involved directly and indirectly in completing this study.

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JULY 2012

ABSTRACT

This study was conducted in order to find a new alternative of raw materials to substitute rubberwood in Malaysia since the source of this material was depleting. This study used fast growing species which were treated i.e: (1) 100% of Acacia mangium spp. (2) 100% of sentang spp and (3) 50% of sentang: 50 % of Acacia mangium spp. For particle size i.e: 1.0mm, 2.0mm and mixed particle size 1.0mm and 2.0mm were used. The objectives of this study were to evaluate and compares the properties of particleboard from single and mixed wood species and from different particle size of particleboard. The results showed that properties of particleboard increased as increase in wood density. Results from treatment of single species perform better strength properties as compared to mixed species of particleboard. Properties of particleboard also can be affected by particle size where the particleboard with larger particle size gives more strength properties.