

**PROPERTIES OF HOMOGENEOUS AND THREE LAYERS
UREA FORMALDEHYDE PARTICLEBOARD FROM
PETAI BELALANG (*Leucaena leucocephala*)**

By

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**Final Project Submitted in Partial Fulfillment for the Diploma in Wood Industry,
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April 2007

ACKNOWLEDGEMENT

We would like to express our deepest appreciation and sincere gratitude to my supervisor, Prof Madya Dr Jamaludin Kasim for his unfailing help, support and guidance throughout the study.

Our appreciation also forwarded to thanks for library services of Al-Bukhari (UiTM Pahang). We also wish to thanks all my friends who in one way or another contributed invaluable support and encouragement towards the completion of this study.

Finally, we deepest and special appreciation goes to our beloved parents for theirs moral and financial support throughout the years of our study. May Allah S.W.T bless us.

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Abstract

In this study, particles of Petai Belalang were used. Urea formaldehyde resin was used as binder. Three percentage of resin urea-formaldehyde (UF) that are 8%, 10% and 12% are use on homogeneous particleboard. For three layer particleboard, face particles (0.5 mm) was sprayed with 10% and 12%, while core particles (1.0mm) was maintained at 10% resin content. A one percent wax was also added on board weight. Mechanical and physical properties of the particleboard determined. Increasing percentages of resin used and wax are affected all the properties of the board. All homogenous board surpassed the minimum requirements of the BS 5669 Standard for general purpose particleboard. For three layer particleboard, only particleboard with 12% resin content meets the standards.