

Properties of Wood Cement Bonded Particleboard from 8 years old of

Petai Belalang (*Leucaena leucocephala*)

by

Nor Iszuani Ishak

Nor Azima Shuhada Binti Abdul Razak

Final Project Paper Submitted in Partial Fulfillment for the Diploma in Wood

Industries,

Faculty of Applied Science,

Universiti Teknologi MARA

October 2007

ACKNOWLEDGEMENTS

We would like to express our deepest appreciation and sincere gratitude to the following parties or individuals who in one way or another have helped in making this project successful:

En. Sardey Idris

En. Shahril

Department of Wood Industries, Faculty of Applied Science,
Universiti Teknologi MARA, Jengka, Pahang Darul Makmur

En. Shaikh Abdul Karim Yamani

En. Marzuki b Abdul Rahman

Prof. Madya Dr. Jamaludin Kasim

Project Supervisor

Above all to Allah we surrender and bow in prayer, glorifying and thanking Him for making this project a reality. May God bless you all.

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**PROPERTIES OF WOOD CEMENT BONDED PARTICLEBOARD (CBPB)
FROM 8 YEARS OLD LEUCEANA LEUCOCEPHALA**

By:

NOR ISZUANI BINTI ISHAK

NOR AZIMA SHUHADA BINTI ABDUL RAZAK

OCTOBER 2007

ABSTRACT

Cement bonded particle board (CBP) from *Leuceana leucocephala* trees was examined and manufactured for their suitability as a construction material under laboratory conditions. For this study, *leuceana leucocephala* at the age eight years old were used to produce at 1:7.5, 1:2.0, 1:2.25 and 1:2.5 of wood cement ratio have been produced and their mechanical and physical properties were evaluated and the Malaysian Standard is used as standard requirement. The treatment on the particles during mixing using 0%, 2%, 4% of sodium silicate as an catalyst. The earlier results show that 1:2.5 wood cement ratio are potential to pass the minimum standard requirement for modulus of rupture (MOR), modulus of elastic (MOE), internal bonding (IB), thickness swelling (TS) and water absorption meet and pass the requirement of the Malaysia Standard (MS 544:2001).