PROPERTIES OF THREE LAYER PARTICLEBOARD FROM KELEMPAYAN

(*Neolamarckia cadamba*)

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Final Year Project Report Submitted In

Partial Fulfillment of The Requirements For The

Degree of Bachelor of Science (Hons.) Furniture Technology

In the Faculty Applied Science

UniversitiTeknologi Mara, Pahang

JULY 2014

ABSTRACT

PROPERTIES OF THREE LAYER PARTICLEBOARD FROM KELEMPAYAN

(*Neolamarckia cadamba*)

Particleboard is a panel product made by compressing small particles of wood while simultaneously bonding them with an adhesive. The objective of the study to investigate the mechanical and physical properties of three layer particleboard from Kelempayan (*Neolamarckia cadamba*) at different proportion level and properties were evaluated based on Japanese Industrial Standard. Variables factor were as density (500 kg/m^3, 600 kg/m^3 and 700 kg/m^3) and resin content of urea formaldehyde (8%, 10% and 12%). The mechanical and physical properties were presented and analyzed using Software Package Used for Statistical Analysis (SPSS) to determine the significant different of variables. The result collected shows that all the variables for mechanical properties were significant different and the better result was 700 kg/m^3 of density when using 12% of resin content. For physical properties, the strength of board decrease since the board has no water repellent.

TABLE OF CONTENT

LIST OF FIGURES