

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

By

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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.