

PROPERTIES OF WOOD PLASTIC COMPOSITE FROM 16 YEARS OLD PETAI
BELALANG (*Leucaena leucocephala*)

By

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PROPERTIES OF THERMOPLASTIC COMPOSITE FROM 16 YEARS OLD PETAI
BELALANG (*Leucaena leucocephala*)

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ABSTRACT

Thermoplastic Composites was produced from sawdust of Petai Belalang (*Leucaena leucocephala*) mixed with Polypropylene (PP). to investigate the effect of 5%, 10% and 15% filler loading on the mechanical and physical properties of Thermoplastic Composites. The results show that the strength decreased when filler loadings increase. The flexural modulus increases at higher filler loadings while the tensile modulus was lowest at 15% filler loading. The physical properties, an increase in the filler loadings resulted in high water absorption and thickness swelling. In conclusion, Petai Belalang sawdust can be used as filler in the manufacture Thermoplastic Composite where strength factor is not necessity.