

**PROPERTIES OF KERUING BELIMBING (*Dipterocarpus grandiflorus*)
SAWDUST - POLYPROPYLENE THERMOPLASTIC COMPOSITE**

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ABSTRACT

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This study was conducted to determine the suitability of Keruing Belimbing sawdust as filler in the manufacture of thermoplastic composite using polypropylene plastic. The samples were made to test the strength and water absorption properties of thermoplastic composite. Test such as tensile, bending and water absorption are carried out. *Dipterocarpus grandiflorus* is more comfortable in making thermoplastic composite. Thermoplastic composite from *Dipterocarpus grandiflorus* followed from screened with mesh 40, 60 and fines and the percentages of wood dust are 10%, 30% and 50%. From the test that had been made, the result shows that the filler content of 10% gives the most strength compare to the other two percentages, 30% and 50%. For particle sizes, 40 meshes show the good result for uses in making thermoplastic that has high elastic. It is thus concluded that Keruing Belimbing sawdust is suitable material to be use as filler in the manufacture of thermoplastic composite.