

**EFFECT OF PARTICLE SIZE, FILLER LOADING AND MAPP ADDITION ON  
KERUING BELIMBING THERMOPLASTIC COMPOSITE**

By

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## **ABSTRACT**

### **EFFECT OF PARTICLE SIZE, FILLER LOADING AND MAPP ADDITION ON KERUING BELIMBING THERMOPLASTIC COMPOSITE**

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The research has been done to study about the effect on thermoplastic composite from Keruing Belimbing sawdust. The test for bending, tensile and thickness swelling and water absorption been done for make sure Keruing Belimbing is suitable in making thermoplastic composite. 10%, 30% and 50% of Keruing Belimbing follows the making of thermoplastic composite from Keruing Belimbing wood fiber. The result showed the 40 mesh of particle size for 10% of wood fibers of Keruing Belimbing are suitable. This is because the bending test showed that the 10% of wood fibers is very strength compared to 30% and 50%. Using more polypropylene (PP) can give chance to the fiber bonded with wood fiber together. Besides that, using MAPP as a coupling agent may increase the strength of the thermoplastic composite.