

**MANUFACTURING OF THERMOPLASTICS COMPOSITE FROM  
KARAS (*AQUILARIA MALACCENSIS*) POLYPRPYLENE (PP)**

**BY**

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## **ABSTRACT**

### **MANUFACTURING OF THERMOPLASTIC COMPOSITE FROM KARAS (*AQUILARIA MALACCENSIS*) POLYPROPYNENE (PP)**

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In this study Thermoplastic Composite from the species of *Aquilaria malacensi* with the 180µm of particles size was produced with polypropylene as the matrix. The samples that were produced were for bending, tensile, thickness swelling and also water absorption. Percentage of wood used was 10%, 30% and lastly 50%. From the tests 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 the thickness swelling and water absorption showed that the percentage of 10% got the lowest result among the other two samples. Normally, with using the 10% of the species of aquilaria wood dust (180µm) mixture with PP is the most suitable quantity to make a high quality and strength thermoplastic composite.