THERMOPLASTIC COMPOSITE FROM *MACARANGGA HOSEII* – POLYPROPYLENE WITH MAPP

by

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The research for thermoplastic composite from ***Macarangga hoseii*** been done. The test for bending, tensile and thickness swelling and water absorption been done for make sure ***Macarangga hoseii*** is more comfortable in making thermoplastic composite. The making of thermoplastic composite from ***Macarangga hoseii*** is followed from 5%, 10%, and 15% of wood dust from ***Macarangga hoseii***. The result showed that 10% of wood dusts of Macarangga hoseii are most suitable. This because from bending test showed that 10% of wood dust is very strength compare to 5% and 15%. Using more polypropylene (PP) can give chance to the fiber bound each other with PP. The thickness swelling (T/S) and water absorption showed that the water absorb into 5% lower than 10% and 15%. Otherwise, using MAPP as a coupling agent may increase the strength of the thermoplastic. Generally, using 10% of ***Macarangga hoseii*** is the most suitable quantity for mix with PP to make the thermoplastic composite.