

**PROPERTIES OF LUDAI – POLYPROPYLENE (PP)
THERMOPLASTIC COMPOSITE**

By

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ABSTRACT

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The research has been done to study about the properties of Ludai (*Sapium buccatum*) in manufacture of thermoplastic composite. The making of thermoplastic composite from Ludai is followed from 10%, 30%, and 50% of Ludai wood waste. The test like tensile, bending, thickness swelling and water absorption test is to determine whether the species of Ludai is suitable for making in thermoplastic composite. The result from bending test showed that 10% of wood waste is suitable it because 10% have a highest value and this show 10% wood waste is strength. From this research, we can make the new uses of Ludai species especially now Ludai is suitable for making in thermoplastic composite. It not has strength only it also has a smooth and shining surface in manufacture thermoplastic composite. The strength depends on synthetic material that used that is Polypropylene (PP). Generally the suitable percentage filler loading is 10% mixed with PP.