

**MANUFACTURE OF THERMOPLASTIC COMPOSITE USING
RUBBERWOOD SAWMILL WASTE.**

By

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ABSTRACT

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