WOOD PLASTIC COMPOSITE FROM SENDUDUK

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ABSTRACT

This is a study of producing wood plastic composite ot thermoplastic composite from Senduduk (*Melastoma malabathricum*). Wood plastic composite from Senduduk followed from the size of particle geometry consists 250μm 150μm, 75μm,and fines , filler loadings consists 5%,10%,and 15%, and amount of MAPP consists 0%,1.5%,and 3.0%. Test such as tensile,bending,and water absorption are carried out to determine either wood Senduduk is suitable as filler in making of wood plastic composite. The result showed that particle geometry 250μm is the strongest than 150μm, 75μm, and fines. While for the filler loadings, the result indicates that the board which contains more plastics is the strongest which means filler loadings 5% was the highest. Therefore, for MAPP, the strongest is MAPP 3.0% while the weakest is no MAPP at all. In generally, using 250μm size of particle, filler loadings 5% and MAPP 3.0% that all the sources from Senduduk is the most suitable quantity for being mixing with polypropylene to make wood plastic composite.