

**WOOD PLASTIC COMPOSITE FROM RESAM(*Dicranopteris linearis*):
EFFECT OF MAPP, FILLER LOADINGS AND PARTICLE GEOMETRY**

BY

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ABSTRACT

The properties of wood plastic composite from Resam with addition of MAPP, different amount of fillers and particle size loaded to the board was ascertained. The amount of MAPP added are 0%, 1.5% and 3.0%, the amount of fillers loaded are 5%, 10%, and 15% while particle size used are 250 μ m, 150 μ m, 75 μ m and fines. Tensile test, bending test, impact, water absorption and thickness swelling test had been carried out to determine the physical and mechanical properties and hence determine the suitability of Resam to be used as fillers in the production of thermoplastic composites. From the test done, it shows that higher amount of MAPP added will increase the property of the board while the less the fillers are loaded the stronger the board will be and finally board produced by 250 μ m particles will result in better properties.