

**PROPERTIES OF WOOD PLASTIC COMPOSITE FROM *Azadirachta
excelsa***

NUR BALQIS ASHRAF BINTI RAMLY

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By:

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ABSTRACT

Sentang (*Azadirachta excelsa*) are formerly known as village tree and can be found in central and northern parts of Peninsular Malaysia. These studied was conducted to investigate the manufacturing of composite panels from unscreened particle (15%, 25% and 35%) of sentang mixed with polypropylene (PP) and also Maleic Anhydride Polypropylene (MAPP). The panels produced were then assessed for the mechanical strength properties (bending and tensile) and physical properties (water absorption and thickness swelling) in accordance with the ASTM Standards. Result revealed that the percentage of sawdust gave significant difference on thickness swelling (TS) and water absorption (WA). Assessments on mechanical strength tests indicated that there are significant difference on bending (MOE and MOR) and tensile (MOE). On the other hand, addition of MAPP on composite panels shows significant difference on bending (MOE and MOR), tensile (MOE) and WA but no significant difference on TS. Thus, it can be concluded that application of MAPP is required in the making process of wood plastic composite and higher amount of sawdust is not suitable in wood plastic composite.