

**PROPERTIES OF WOOD PALSTIC COMPOSITE FROM
ACACIA MANGIUM SAPLING**

BY

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ABSTRACT

Wood plastic composite were produced from sawdust of *Acacia mangium* sapling mixed with polypropylene (PP). This research is to determine the mechanical and physical properties of WPC by adding 2% MAPP and without adding MAPP with 5%, 10%, 15%, 20% and 25% ratio of filler loadings. The results show that the board made from 5% filler loading has better properties in MOR, TEN and impact strength. FMOE and TMOE result shows that 25% filler loading has the higher value than the other percentage of filler loadings. The result that we get for WA and TS is inconsistent. Additional 2% MAPP in making WPC board improve the strength of board and less water absorption. The increase in MOR, TEN, FMOE and impact strength were probably due to the better adhesion occurring between components.