

THERMOPLASTIC COMPOSITE FROM ARA (*FICUS SP.*) WOOD DUST

By

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ABTRACT

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This is a research of producing thermoplastic composite from Ara (*Ficus sp.*) wood dust. Thermoplastic composite from Ara (*Ficus sp.*) is follwed from 10%, 20%, and 30% of wood dust. Tests such as bending, tensile, thickness swelling and water absorption are carried out. The results showed that 10% of composite is most suitable. This is because from bending test showed that composite is very strength compare to the other percentage. By using more Polypropylene (PP) can give chance to the wood dust bounded each other with PP. The results of thickness swelling and water absorption showed that the water could absorb into 10% lower than the other percentage. Generally, using 10% of wood dust is the most suitable quantity to mix with PP for making the best thermoplastic composite from Ara (*Ficus sp.*).