WOOD PLASTIC COMPOSITE FROM KELEMPAYAN

(Athocephalus chinensis)

BY

NOR FAEZA BINTI ZA'ABAH SITI HABSHAH BINTI MOHAMED NOOR FANIDA BINTI AHMAD BAKRI NIK SUAIDASALMA BINTI NIK HUSSIN

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ABSTRACT

The properties of wood plastic composite from kelempayan with different amount of particle geometry and filler loading to the board already ascertained. The sizes of sawdust used were 425µ, 250µ and 150µ while the amounts of filler loading for this project were 10%, 20% and 30%. Determination of the physical properties had been from water absorption testing and thickness swelling. Tensile, bending and impact testing also determine the mechanical properties of board. The mechanical and physical properties of WPC from kelempayan sawdust were influence with both particle geometry and filler loading ratio respectively. This project determines the suitability of kelempayan to be used as filler in the production of thermoplastic composite. Hence, kelempayan sawdust has a great potential as an alternative raw material to produce the WPC. Therefore further study should undertaken to determine more properties of this material.