PROPERTIES OF THERMOPLASTIC COMPOSITE FROM ANTHOCEPHALUS CHINENSIS: INFLUENCE OF FILLER CONTENT

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ABSTRACT

THERMOPLASTIC COMPOSITE FROM KELEMPAYAN (ANTHOCEPHALUS CHINNENSIS)

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The study carried out is to determine the properties of Kelempayan as thermoplastic composite. This study was carried out using the unscreened mesh and mesh with size of 60 and 80. The study was also use different percentage of filler content (10%, 15&, 20%). From the study, 15% of filler content shows the highest value for flexural MOR, followed by 20% mesh 80. The best result should be 20% mesh 80. The same result goes to FMOE with the value of 1528.89 Mpa. For TMOR the highest result is 10% mesh 80 and for TMOR the highest result is 60 mesh 20%. While for water absorption the lowest value is 60 mesh 15% with the value of 0.254%. From the study, thermoplastic composite from Kelempayan can be produce but depend on the purpose and the uses of the product.