FINISHING PROPERTIES OF ACID CATALYST LACQUER ON KELEMPAYAN (*Neomalarckia cadamba*) AND SESENDUK (*Endospermum* sp)

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ABSTRACT

FINISHING PROPERTIES OF ACID CATALYST LACQUER ON KELEMPAYAN (Neomalarckia cadamba) AND SESENDUK (Endospermum sp.)

Finishing is the final stage process involved in the manufacturing of furniture before being sold to the customer or exported. Through finishing it can help in enhancing the beauty of the finish products especially for the timber and it also can protect the wood surface from any dirt, scratches and other kind of damages. In this study, Kelempayan (Neomalarckia cadamba), a lesser known wood species and Sesenduk (Endospermum sp) are used as a new alternative of a raw material supply also to substitute the shortage of commercial timbers for furniture industry. The main objective of this study is to determine the finishing properties of AC lacquer using different finishing system which includes system A (1 sealer + 1 topcoat), system B (2 sealer + 1topcoat) and system C (2 topcoat). Besides that, it also determines the most suitable finishing system that can be applied on Kelempayan and Sesenduk woods. This study also compares the performance of AC on the different wood species, Kelempayan and Sesenduk. Four types of testing were carried out including pencil hardness test, resistance to household test, adhesion test (crosscut test) and cold check test according to ASTM D3363, ASTM D1308, ASTM D3359-09 and ASTM D1211-97. From the study, AC shows a high durability as it can resists in all testing conducted on both types of wood species. The performance of system B and C gives a good quality of finishing on Sesenduk and Kelempayan. The different wood species will give a different performance but Kelempayan shows the best performance against each testing conducted compared to Sesenduk.