

**PROPERTIES OF ORIENTED STRAND BOARD FROM MIX SESENDUK
AND ACACIA AT 5% PF RESIN CONTENT WITH DENSITY OF 700 kg/m³**

By

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ABSTRACT

PROPERTIES OF ORIENTED STRAND BOARD FROM MIX SESENDUK (*Endospermum malaccense*) AND ACACIA (*Acacia mangium*) AT 5% PF RESIN CONTENT WITH DENSITY OF 700 kg/m³

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Oriented Strand Board (OSB) evolved from the product called ‘wafer board’. OSB is made from strands of wood sliced from small diameter logs. OSB usually made of strand from lightwood or softwood to become high strength properties of board than before. The strands were arranged alternately to each layer. For this study, the mix species from Sesenduk (*Endospermum malaccense*) and Acacia (*Acacia mangium*) were used to produce the OSB with the density of 700 kg/m³ at 5% PF resin content. Sesenduk and Acacia have potential for commercialize in OSB productions. OSB from mix Sesenduk and Acacia are also has the high value of MOE and MOR in bending test and appropriates for many uses. OSB with 700 kg/m³ at 5% PF resin content shows the high percentage of thickness swelling and water absorption. Base on mechanical strength, this new panel product is able to improve their properties and have a good potential to substitute to other panel products such as Particleboard and MDF.