BENDING STRENGTH PROPERTIES OF ENGINEERED SLICE LUMBER FROM OPT MIXED WITH LOW DENSITY HARDWOOD

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ABSTRACT

The bending strength properties of Engineered Slice Lumber (slice cut) from Oil Palm Trunk (OPT) mixed with Low Density Hardwood are being determined. Low Density Hardwood such as Kelempayan (*Neolamarckia cadamba*), Sesenduk (*Endospermum malaccense*) and Acacia (*Acacia mangium*) has never been regarded as structural material due to their inferior strengths. The qualities of boards are evaluated by determining the bending strength properties that consist of modulus of elasticity (MOE) and modulus of rupture (MOR). The comparison of bending strength properties in different species, shows Acacia is suitable to be used in manufacturing of Engineered Slice Lumber (slice cut). On the other hand, the better design of arrangement shows that alternate design gave good properties of bending strength. The bending Strength properties were determined according to the British Standard (BS EN 373:1957), Method of Testing Small Clear Specimen of Timber.