

**PROPERTIES OF MIXED SPECIES LAMINATION PRODUCT FROM
Khaya ivorensis AND OIL PALM TRUNK**

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“ALMIGHTY ALLAH BLESS US”

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ABSTRACT

PROPERTIES OF MIXED SPECIES LAMINATION PRODUCT FROM *Khaya ivorensis* AND OIL PALM TRUNK

Mixed wood lamination is the combination of two or more layer from two or more different species to produce the furniture component. In this study, the species used are *Khaya ivorensis* and Oil Palm Trunk. The species are arranged alternately engaged for three and five layer using Poly Vinyl Acetate (PVAC) glue. The actual size for the both layer are 30mm × 30mm × 1000mm. The main purpose of this study is to determine the suitability mixed species lamination between *Khaya ivorensis* and oil palm trunk in different layer of lamination and the mechanical properties of *Khaya ivorensis* and oil palm trunk as a mixed species material. It is important to ensure either this two species suitable to be combined to become substitute material in furniture making. The sample was tested for mechanical properties which are bending and compression shear testing using British Standard (BS). According to the result of bending testing, three layer of lamination was more strength than the five layers for Modulus of Rupture (MOR). But it is become to vice versa for Modulus of Elasticity (MOE). Other than that, the result of compression shows slightly different between both layers but still the three layers has more strength than the five layers.