BENDING PROPERTIES OF FINGER JOINTED SESENDUK

(Endospermum diadenum)

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ABSTRACT

BENDING PROPERTIES OF FINGER JOINTED SESENDUK

(Endospermum diadenum)

This study is about to determine the bending properties of finger jointed Sesenduk (Endospermum diadenum). There are two different variables used in this study. The portion of tree was divided into three which are top, middle and bottom part. There are two different finger orientations involve in this study which are vertical and horizontal orientations. The adhesive used was polyvinyl acetate (PVAc) and the testing method used to test the strength was four point bending test. From this study, it shows that different portions (top, middle, and bottom) of Sesenduk tree gave effect to the bending properties of finger jointed Sesenduk, meanwhile there is no significant different for bending properties using different finger orientation (vertical and horizontal). The data analyzed shows that the bottom portion of Sesenduk tree had the highest value of modulus of rupture (MOR) and modulus of elasticity (MOE) which were 26.29 MPa and 7,488.64 MPa, respectively. Meanwhile, the vertical finger orientation had the highest value of MOR while horizontal orientation had the highest value of MOE which were 25.77 MPa and 7,234.76 MPa, respectively. However, the expected results did not achieve since finger orientation only influence the MOR value but not the MOE value because four point bending test was used.