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## **ABSTRACT**

### **MACHINING PROPERTIES (PLANING, BORING AND MORTISING) OF SESENDUK (*endospermum diadenum*)**

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Sesenduk (*Endospermum Diadenum*) have been extensively growth in the secondary forest in Malaysia and others country in the world such as Thailand, Brunei, Indonesia and Philippine. The trees are simply growth in our forest or in secondary forest. The trees were harvested from UiTM Jengka forest research as sample materials. Diameter at breast height (dbh) ranged within 35 cm. the purpose of this study was to evaluate the machining properties of sesenduk wood. ASTM D 1666 – 87 (2004) as a required standard to conducting machining test of wood and wood base material. The physical study showed that the green sesenduk had an average moisture content (green) of 78% and density under oven dried condition of  $0.66\text{g/m}^3$ . The mechanical properties parallel to grain equal to 20.8 MPa, MOR 39 MPa when it green, MOE 8500 MPa and shear strength 5.4 MPa. Result indicated that sesenduk was satisfactory and moderately easy to produce a satisfactory surface quality. Planing, boring and mortising test showed good quality.