MACHINING PROPERTIES OF TREATED OIL PALM LUMBER
(*Elaeis guineensis Jacq*.)

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ABSTRACT

MACHINING PROPERTIES OF TREATED OIL PALM LUMBER (OPL)

Shortage of wood supply from natural and plantation forest is one of the main problems in order to ensure the existing of furniture industry in the future. Many researches have been done to commercialize non-timber resources such as the oil palm trunk (OPT) to the industry. The purpose of this study was to evaluate the machining properties of Oil Palm Lumber (OPL) by using different drying treatment(untreated and ethanol treated) at three different layer of the trunk, there are near bark, centre and near pith. The testing was conducted based on grading method according to ASTM D 1666-87. Results indicated that *Elaeis guineensis Jacq* was 'good' easy to produce a satisfactory surface quality. Planing, boring, mortising, turning, sanding and moulding test showed good quality for both treatments (Grade: 2 or mean 2.24 and 2.27) results. The result also indicate treated OPL had good machining quality compare to untreated, and L1(near bark) shows much better at mean 2.3 grade machining properties compare the other's layers. A potential of ethanol as drying treatments shows a great potential because this technique can reduce machining defect and also drying defect.