Physico-mechanical properties of light red meranti (Shorea spp.) and kedondong (Canarium spp.) wood heat treated in convection oven

ABSTRACT

Physico-mechanical properties of light red meranti and kedondong wood heat treated in a laboratory at 160, 180 and 200 °C for 5, 7 and 9 h were investigated.Weight loss of the treated samples increased along with treatment severity. Heat treatment reduced the hygroscopicity of the wood where reduction in equilibrium moisture content and a positive moisture excluding efficiency was observed. Reduction in bending strength as function of increasing treatment temperature and time were also recorded.

Keyword: Equilibrium moisture content; Hygroscopicity; Bending strength; Moisture excluding efficiency; Thermal treatment