BENDING PROPERTIES OF FINGER JOINTED MAHANG GAJAH

(*Macaranga gigantae*)

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CANDIDATE'S DECLARATION

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ABSTRACT

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(Macaranga Gigantae)

Recently, there are depleting supplies of hardwood for furniture industry. Wood jointing system might be applied to solve this situation. The objectives of this study are to determine the bending properties of finger jointed Mahang Gajah *(Macaranga gigantae)* at different portions (top, middle, and bottom) and at different finger orientations (vertical and horizontal). In this study, Mahang Gajah was used as a raw material. It was harvested from Hutan Pembelajaran UiTM, Cawangan Pahang. From the study, it shows that for different portions, it is highly significant difference for Modulus of Elasticity (MOE) but no significant difference for Modulus of Rupture (MOR). For different finger orientations, both MOE and MOR are highly significant. Meanwhile for portion interaction with finger orientation, both MOE and MOR are not significant. It can be conclude that Mahang Gajah is a suitable material for finger jointing and can be a new potential source for furniture industry.

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