

**FIBER MORPHOLOGY AND ANATOMICAL PROPERTIES OF MENDONG
WOOD (*Elaeocarpus spp.*) IN MALAYSIA.**

By:

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ABSTRACT

The scientific name of Mendong is *Elaeocarpus spp.* This species have the potential to be used in wood composite product for furniture industry and wood plastic composite product. However, information about these *Elaeocarpus spp.* is still inadequate especially those related to the fiber morphology and anatomical properties. In this study, fiber morphology is carried out because of its importance to determine its fiber length, fiber diameter and lumen width towards different portion and distance. Runkel ratio and felting power are also calculated. For anatomical properties, these studies are carried out to determine its frequency of fiber and fiber diameter towards different portions. In fiber morphology, the highest average recorded for fiber length is 1.63 mm, 27.92 μm for fiber diameter and 19.33 μm for lumen width. The highest runkel ratio and felting power recorded for *Elaeocarpus spp.* is 2.9 and 62.98 percent. The result shows this species is not suitable for paper making. In anatomical properties, the highest vessels frequency is 11 and 132.4 μm for vessels diameter.

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