FIBER MORPHOLOGY OF DATES FROND

(*PHOENIX DACTYLIFERA)*

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ABSTRACT

The research was carried out to study to determine the fiber morphology of dates fronds in mature trees. The characteristic of dates frond fiber that we measure to get the avarege of four characteristic. That is the fiber diameter, runkle ratio and fiber length and felting power. The maceration technique has been used to separate the fiber. The fiber length, fiber diameter, and lumen diameter were determinded using digital microscope. The main objective of this study, to determine the morphogical characteristic of the dates frond to know wherever this dates frond suitable for papermaking. To know the quality of paper compare to fiber morphology of oil palm dates. To determine the type of paper that can be develop by the dates frond. Generally, the results on the fiber properties of *phoneix dactylifera* is suitable for paper making with high strength and quality. The fiber morphology of the dates frond is also better than the fiber morphology of oil palm frond.