FIBER MORPHOLOGY OF *ACACIA MANGIUM* BETWEEN SAPWOOD AND HEARTWOOD ACCORDING TO HEIGHT PORTIONS

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ABSTRACT

FIBER MORPHOLOGY OF *ACACIA MANGIUM* BETWEEN SAPWOOD AND HEARTWOOD ACCORDING TO HEIGHT PORTIONS

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Fiber morphology of *Acacia mangium* between sapwood and heartwood according to height portion were ascertained. The maceration technique has been used to separate the fiber. The fiber length, fiber diameter, and lumen diameter were determined using digital microscope. The objective of this study are to find the different within the wood fiber of the sapwood and heartwood. The average fiber of the sapwood are longer (1.06 mm) than the fiber of heartwood that is 0.936 mm. The runkel ratio is decreased 47.4% for sapwood and increased 68% for heartwood according to height portions. The felting power is decreased 5.05% for sapwood and increased 28.3%for heartwood according to height portions. The coefficient of suppleness is increased 35.9% for sapwood and decreased 22.3% for heartwood according to height portions. Generally, the results on the fiber properties of *Acacia mangium* were achieved the target and standard equipments as Softwood.