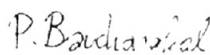


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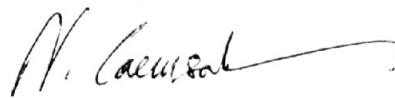
This research studied properties of medium density fiberboard (MDF) made by *Dendrocalamus hamiltonii* from Ang Khang Royal Project Station and *Dendrocalamus latiflorus* from Pang-Da Royal Project Station with various age levels of 1, 2, 3, 4 and 5 years old.

The experiment processed with 3 different urea formaldehyde (UF) contents (6%, 10% and 14% based on dry weight of fiber) and was conducted using 2x5x3 Factorial experiment in Completely Randomized Design (CRD) with three replications. Properties of boards were tested by TISI 966-2547 and JIS A 5906- 1994. The data gathered were analyzed by using the SPSS software package.

The results demonstrated that nearly all mechanical properties of boards at 10% and 14% UF content were above minimum requirements for MDF as specified in the TISI 966-2547 and JIS A 5906- 1994 standards. MDF made from *D. latiflorus* was better than MDF made from *D. hamiltonii* and 5 years old was suitable age for MDF producing board with 10% (based on dry weight of fiber) UF content. However, *D. latiflorus* less than 5 years old was suitable for MDF board production if increasing glue levels were used. In conclusion, bamboo was suitable as alternatives raw material for MDF manufacturing.



Student's signature



Thesis Advisor's signature

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