

**PENGARUH KADAR PEREKAT TERHADAP SIFAT
PAPAN PARTIKEL BAMBU**
(Effect of resin portion on bamboo particleboard properties)

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ABSTRACT

The objective of the study was to determine the effects of resin portion on bamboo particleboard properties. Strand-like bamboo particles of *Dendrocalamus asper* were used as raw material for the manufacture of bamboo particleboards using urea formaldehyde resin. Laboratory scale bamboo particleboards at various resin portions (8%; 9%, 10%, 11% and 12% of dry weight bamboo particles) were manufactured with targeted density of 0.70 g/cm³. Results indicated that physical and mechanical properties of bamboo particleboard were significantly affected by the resin portion. The higher resin portion gave better physical and mechanical properties of bamboo particleboards. Resin portion of 11% was the minimum level in manufacturing bamboo particleboard with adequate strength and dimensional stability, to meet the Indonesian Standard requirements.

Keywords : Bamboo, particleboard, resin portion, physical and mechanical properties

ABSTRAK

Penelitian ini bertujuan untuk mengetahui pengaruh kadar perekat terhadap sifat papan partikel bambu. Bambu yang digunakan adalah bambu betung (*Dendrocalamus asper*), sedangkan perekatnya adalah urea formaldehida (UF) cair. Bentuk partikel bambu yang digunakan adalah untai. Papan partikel bambu skala laboratorium dibuat dengan target kerapatan 0,70 g/cm³ dengan kadar perekat bervariasi yaitu 8%, 9%, 10%, 11% dan 12% dari berat kering partikel bambu. Hasil penelitian menunjukkan bahwa sifat fisis dan mekanis papan partikel bambu sangat dipengaruhi oleh kadar perekat yang digunakan. Semakin tinggi kadar perekat semakin baik sifat papan partikel bambu yang dihasilkan. Penggunaan kadar perekat minimum 11% dari berat kering partikel bambu menghasilkan papan partikel bambu yang cukup kuat dan stabil serta memenuhi persyaratan Standar Nasional Indonesia.

Kata kunci : Bambu, papan partikel, kadar perekat, sifat fisis dan mekanis