

**PROPERTIES OF PARTICLEBOARD USING TREATED AND
UNTREATED SUGARCANE BAGASSE**

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In the name of Allah, the Most Beneficent and the Most Merciful

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ABSTRACT

PROPERTIES OF PARTICLEBOARD USING TREATED AND UNTREATED SUGARCANE BAGASSE

The main objective of this study is to investigate some of applied properties of experimental particleboards made with sugarcane bagasse, as an alternative fibrous raw material. Modulus of elasticity (MOE), modulus of rupture (MOR), internal bonding (IB), and thickness swelling (TS) of the sample were evaluate. Mats with target board density 700 kg/m^3 were formed by using 7% resin content of phenol formaldehyde. Variable factor were a sugarcane bagasse particle size (1.0mm, 2.0mm, mix 1.0mm+2.0mm) and treated and untreated sugarcane bagasse. The treatment are made by soaking the sugarcane bagasse at warm water for 24 hours. From the result, particleboard made from treated sugarcane bagasse had the highest MOR and MOE result.