

**PROPERTIES OF ORIENTED STRAND BOARD MADE
FROM BANANA PSEUDO STEM (*Musa acuminata colla* (AA
Group) cv. 'Lacatan')**

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JANUARY 2013

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ABSTRACT

PROPERTIES OF ORIENTED STRAND BOARD MADE FROM BANANA PSEUDO STEM (*Musa acuminata colla* (AA Group) cv. 'lacatan')

In this study, three resin contents of urea formaldehyde (UF) of 8%, 10% and 12% were mixed with the strand size of approximately 50.8 mm banana pseudo stem (*Musa acuminata Colla* (AA Group) cv. 'Lacatan'). A single layer of oriented strand board (OSB) was produced after the resin was cured at 165⁰c. Unscreened technique was used to produce the board and the target density of the board was 500kg/m³. The properties of the board were determined by physical and mechanical properties through bending strength (MOR and MOE), internal bonding and thickness swelling tests. All board properties only achieved 7-9% requirements of the EN standards. Oriented Strand Board made from banana pseudo stem with 12% of resin content produced MOR (3.66 MPa), MOE (382.11 MPa), IB (0.14 Mpa) and TS (69.50 %). While the 10% resin content produced MOR (2.13 MPa), MOE (229.77 MPa), IB (0.10 MPa) and TS (88.10%) the 8% content produced MOR (1.72 MPa), MOE (170.80 MPa), IB (0.04 MPa) and TS (118.03 %). The results showed that each additional adhesive the mechanical and physical properties of OSB made from banana pseudo stem will be increased.