PROPERTIES OF PARTICLEBOARD FROM OIL PALM TRUNK IN RELATION OF BOARD DENSITY, RESIN CONTENT AND WAX ADDITION

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ABSTRACT

Oil palm (*Elaeis quineensis jacq*) has now becoming one of the most important raw materials in wood industries in Malaysia. However its important for production of reconstituted wood based products and furniture can be future enhance through research and development. This study examined the physical and mechanical properties of particle board made from 1mm oil palm particle in various density and percentage of resin. The result show that the strength properties of particleboard namely the Modulus of Rupture (MOR), Modulus of Elasticity (MOE) and Internal Bonding (IB) will be affect when increasing and decreasing of additives. From this study, the good particleboards are with the high density, resin content, and with wax addition. in this project, the good variation for oil palm particleboard is the board with 700 kg/m^3, 10% resin content, and with wax additives.