PROPERTIES OF PARTICLEBOARDS MADE FROM RUBBERWOOD (*hevea brasiliensis*) AND KENAF (*hibiscus cannabinus* L.) CORE

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ABSTRACT

PROPERTIES OF PARTICLEBOARDS MADE FROM RUBBERWOOD (*hevea brasiliensis*) AND KENAF (*hibiscus cannabinus* L.) CORE

This study investigates the potential of kenaf core as a substitute material to rubber wood for producing particleboard. By handling this investigation, the optimum ratio between rubber wood and kenaf core is determined as well as the physical and mechanical properties of the particleboard. Therefore, high quality of particleboard using partial kenaf and rubber wood that comparable to 100% rubber wood is produced. Investigation is done by preparing samples according to 6 types of ratios. Each ratio has 3 samples. The samples were tested by four different tests which are Modulus Of Rupture (MOR) in purpose to find the bending strength, Modulus Of Elasticity (MOE) in order to find its modulus of elasticity perpendicular to the plane, Internal Bonding (IB) to determine the tensile strength perpendicular to the plane of the test sample and finally Thickness Swelling. From the results obtained, it can be concluded that using kenaf core as substitute material to rubber wood in producing particleboard can be done. This is proven as all tested samples satisfied the EN standard for all tests except Thickness Swelling.