PROPERTIES OF PARTICLEBOARD FROM ADMIXTURE KENAF (*Hibiscus cannabinus L.*) CORE AND OIL PALM TRUNK (OPT)

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ABSTRACT

PROPERTIES OF PARTICLEBOARD FROM KENAF (*Hibiscus* cannabinus L.) CORE AND OIL PALM TRUNK (OPT)

In this study, oil palm trunk particles were mixed with kenaf core particles with ratio 100:0, 90:10 , 80:20 , 70:30 , 60:40 and 50:50 and produced into particleboard with a resin content of 11% using phenol formaldehyde. The target board density was 700kgm. From this study it was shown the mixing ratio between oil pal trunk and kenaf core particles significantly affected the physical and mechanical properties of particleboard. Board without any addition of kenaf core showed the highest result for both mechanical and physical properties while boards with addition 50% kenaf core had the lowest results. All boards made from kenaf core and oil palm trunk at all mixing ratio fully satisfied the minimum requirement for the mechanical properties based on European Standards (EN310). However all boards failed to meet the minimum requirement for the thickness and swelling (TS) value of 12 %.

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