

**PROPERTIES OF PARTICLEBOARD FROM FRESH AND DEGRADED  
ACACIA WOOD**

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**ABSTRACT**

The shortage of wood supply as raw material has forced wood-based industries to find alternative raw materials. This study was undertaken to determine the properties of particleboard from degrade Acacia and fresh Acacia wood of different mix ratio (100%D, 70%D30%F, 50%D50%F, 70%F30%D,100%F). Experimental particleboard from degrade Acacia and fresh Acacia were bonded with urea formaldehyde (UF) with fix resin content 10 percent. The physical and mechanical properties were accessed. The result shows that the mixture ratio degrade Acacia and fresh Acacia wood improves some properties of particleboard to surpassed the standard, such as bending strength, internal bonding strength except thickness swelling. The panels with ratio content of 50%D50%F showed past standard of MOR, MOE and good in internal bonding as compared to 100 percent degrade Acacia and fresh Acacia wood. Thickness swelling rate decreased when the degrade Acacia content increased.