PROPERTIES OF PARTICLEBOARD PRODUCED FROM ADMIXTURE OF *ACACIA MANGIUM* AND SENTANG (*Azadirachta excelsa*) AT DIFFERENT PARTICLE SIZE

SHUHAILA BINTI JOHAR

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PROPERTIES OF PARTICLEBOARD PRODUCED FROM ADMIXTURE OF *ACACIA MANGIUM* AND SENTANG spp. (*Azadirachta excelsa*) AT DIFFERENT PARTICLE SIZE

By:

Shuhaila Johar

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ABSTRACT

This study was conducted in order to find a new alternative of raw materials to substitute rubberwood in Malaysia since the source of this material was depleting. This study used fast growing species which were treated i.e: (1) 100% of *Acacia mangium spp.* (2) 100% of sentang spp and (3) 50% of sentang: 50 % of *Acacia mangium spp.* For particle size i.e: 1.0mm, 2.0mm and mixed particle size 1.0mm and 2.0mm were used. The objectives of this study were to evaluate and compares the properties of particleboard from single and mixed wood species and from different particle size of particleboard. The results showed that properties of particleboard increased as increase in wood density. Results from treatment of single species perform better strength properties as compared to mixed species of particleboard. Properties of particleboard also can be affected by particle size where the particleboard with larger particle size gives more strength properties.