PROPERTIES OF THREE LAYER PARTICLEBOARD FROM BATAI SPP (*Paraserianthes Falcataria*)

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ABSTRACT

The properties of phenol- bonded three layer particleboard produced from Batai species (*Paraserianthes falcataria*) were studied. Batai or also known (*Paraserianthes falcataria*) is one of the most fast growing species that have much usage for wood based composite. In this study, results showed, for particle sizes 1.0mm, increasing the resin content of surface from 9% to 11% and also for core from 7% to 9% showed no significant effect on all the mechanical properties of MOR, MOE and IB. The WA and TS values were significantly affected by the resin content. Increasing the surface and core resin content from 9% to 11% and 7% to 9% respectively, improve al the WA and TS values. Particle sizes 2.0mm show result for MOR, MOE and IB were found to increase with higher resin content. However the increase was found to be not significant. The WA and TS values improve as the resin content was increase. The results show that with higher resin loading the value in TS and WA was found to be not significant improved.