# MECHANICAL PROPERTIES OF BAMBOO STRIP COMPOSITE BY DIFFERENT PORTION OF Bambusa blumeana FOR ARCHERY LIMB PRODUCTION

#### By:

MOHAMMAD HASIF BIN ABDULL LATIF

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Sign of Candidate

Name Of Candidate : Mohammad Hasif Bin Abdull Latif

Candidate's Matric ID: 2014427836

Program : Bachelor Of Science (Hons.) Furniture Technology

Faculty : Applied Sciences

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#### **ABSTRACT**

## Mechanical Properties of Bamboo Strip Composite By Different Portion of Bambusa Blumeana for Archery Limb Production

This study focus on the mechanical properties of the bamboo species *Bambusa blumeana* and its utilization potential to manufacture limb archery or laminated bamboo strip composite. The mechanical properties such as shear and static bending were corelated to the portion of the bamboo and the culm thickness. The mechanical properties are increased with age, height, density and fibre wall thickness. Dry bamboo culm of *B. blumeana* from three portion namely bottom, middle and top were processed into thin laminae and cold press using epoxy resin to produce laminated bamboo composite. The sample testing are varied by it portion and sample thickness. Result testing for bending and tensile test is then compared to achieve suitable stiffness for an archery's limb production. Futhermore, test results and comparison to wood base composite from previous researcher's result clearly show that laminated bamboo composite are suitable for archery's limb production material.

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