

## **Tensile properties of single oil palm empty fruit bunch (OPEFB) fibre.**

### **ABSTRACT**

The use of natural fibres obtained from plants and trees as reinforcing materials has attracted many researchers to widen their applications. Natural fibres are low cost, low density, have high specific properties, biodegradable and non-abrasive. Oil palm fibre (OPF) can be obtained directly from natural resource, it is cheap and also has advantages due to its renewable nature, low cost, and easy availability. In this study, the mechanical performances of single oil palm fibre are measured and evaluated. The diameter of OPF was in the range from 250 to 610  $\mu\text{m}$  while moisture content was between 2.2 to 9.5%. The average tensile properties obtained were tensile strength, 71 MPa, Young's modulus, 1703 MPa and elongation at break, 11%.

**Keyword:** Empty fruit bunch; Natural fibre; Tensile properties.