

**PHYSICAL AND THERMOCHEMICAL PROPERTIES OF OIL PALM
TRUNK**

TUAN NORADILA BINTI TUAN SOH

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ABSTRACT

PHYSICAL AND THERMOCHEMICAL PROPERTIES OF OIL PALM TRUNK

The physical and thermochemical properties of *Elaies Guineensis* wood according to different fractions of tree were investigated. The oil palm trunks of 25 years old sample was taken according to the standard Technical Association of the Pulp and Paper Industry USA (TAPPI, 1996) from UiTM Jengka, Pahang plantation estate. The samples were categorized into core and peripheral parts from which were then segregated into top, middle and bottom portions. The ash and moisture content were determined by using conventional method while the calorific value was determined by using bomb calorimeter. Core part shows higher moisture content than peripheral part. The highest ash content is from the bottom in the core part whereas the peripheral shows a gradual decrease from top to bottom. For calorific value, The highest calorific value in the core part is from the middle portion while for the peripheral part the highest calorific value is from the bottom portion. Thus, *Elaies Guineensis* has a great potential to be a renewable energy source.