FIBER MORPHOLOGY PROPERTIES OF KEKABU
(Ceiba pentandra)

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Final Project Submitted in Partial Fulfillment For The Diploma In Wood Industry
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TABLE OF CONTENTS

Abstract of Final Project Paper Submitted in Fulfillment the Requirement for the Diploma In Wood Industry, Fakulty of Applied Science, Universiti Teknologi Mara.

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ABSTRACT

Fiber morphology of Kekabu (Ceiba Petandra) according to height level was ascertained. The variation of the fiber properties of Kekabu with different portion were also determines. The samples representing with Diameter Breast Height (DBH) known as bottom 20%, middle 50% and 80% for top portion. The results are indicated that the bottom of Kekabu showed the highest value in fiber length. The fibers were observed using the microscope to measure the fiber length, fiber diameter, cell wall thickness and lumen width. From the data the runkel ratio, Felting power and coefficient of suppleness value were determined. The longest length of fiber is obtained from bottom 20% height level with 2.01mm and the shortest is obtained from top 1.5284mm. The largest diameter of Kekabu fiber is found at top 80% height level with 35.73μm and the smallest is middle 50% with 30.57μm. For lumen width the highest value is obtained from top 80% with 24.85μm while the lowest is at bottom 20% with 18.44μm. The largest wall thickness from this species is found at bottom 20% height level with 6.34μm and the smallest is from top 80% with 5.49μm.