

**Chemical Composition of Kelempayan (*Neomalarckia cadamba*), Pulai (*Alstonia angustiloba*), and Sesendok (*Endospermum diadenum*)**

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## TABLE OF CONTENTS

CONTENT	PAGE
TITLE PAGE	-
APPROVAL SHEET	i
DEDICATION	ii
ACKNOWLEDGEMENTS	iii
TABLE OF CONTENTS	vi
LIST OF TABLES	vii
LIST OF FIGURES	viii
LIST OF PLATES	ix
LIST OF ABBREVIATIONS	x
ABSTRACT	xi
ABSTRAK	xii
 CHAPTER 1	
1.0 INTRODUCTION	
1.1 General	1
1.2 Problem Statement	2
1.3 Objectives	2
 CHAPTER 2	
2.0 LITERATURE REVIEW	
2.1 Physical properties	
2.1.1 Kelempayan	3
2.1.2 Pulai	5
2.1.3 Sesendok	7

## CHAPTER 3

### 3.0 MATERIALS AND METHODS

#### 3.1 Material Preparation

3.1.1	Determination of Moisture Content	10
3.1.2	Determination of Cold Water Solubility	11
3.1.3	Determination of Hot Water Solubility	12
3.1.4	Determination of Alcohol – Benzene Soluble Extractives	13
3.1.5	Determination of 1% NaOH Solubility	14
3.1.6	Determination of Lignin	15
3.1.7	Determination of Holocellulose	16
3.1.8	Determination of Ash Content	17

## CHAPTER 4

### 4.0 RESULTS AND DISCUSSION

4.1	Determination of Moisture Content	18
4.2	Determination of Cold Water Solubility	20
4.3	Determination Hot Water Solubility	21
4.4	Determination Alcohol - Benzene Solubility	23
4.5	Determination of Lignin	24
4.6	Determination of 1% NaOH Solubility	26

## ABSTRACT

A study on chemical composition of Kelempayan, Pulai and Sesendok was conducted. Fibres from all 3 species were ground in ball mills and screened to pass through a 60 mm mesh. The major chemical composition of fibres was determined. These include analyses of dispersed fibre in 1% of NaOH, extractive content, holocellulose, lignin content and ash content. Prior to the determination of extractive, holocellulose and lignin, extractive free material were prepared by using ethanol: benzene (1: 2 proportions) solvent mixture by extraction in a Soxhlet for a period 4 to 6 hours. The extractive free samples were then oven dried at  $103 \pm 2^{\circ}\text{C}$  overnight. The analyses were based on TAPPI (Technical Association of the Pulp and Paper Industries). Chemical composition studies showed that Pulai contained the highest percentage of extractive (73.9011%) and holocellulose (85.3300%). While for 1% NaOH solubility and lignin content were highest in Kelempayan (29.2394%) and Sesendok (31.2113%). Kelempayan exhibit the highest content of ash (1.9100%).