

**A STUDY ON ANTIOXIDANT ACTIVITIES OF PALM PUREE
EXTRACTS**

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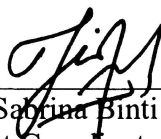
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This Final Year Project Report entitled “**A Study on Antioxidant Activities of Palm Puree extracts**” was submitted by Mawardi Bin Hassan, in partial fulfillment of the requirements for the Degree of Bachelor of Science (Hons.) Applied Chemistry, in the Faculty of Applied Sciences, was approved by



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TABLE OF CONTENTS

	Page
ACKNOWLEDGEMENTS	iii
LIST OF TABLES	vii
LIST OF FIGURES	viii
ABSTRACT	ix
ABSTRAK	x
CHAPTER	
1.0 INTRODUCTION	1
2.0 LITERATURE REVIEW	3
2.1 The oil palm (<i>Elaeis guineensis</i>)	3
2.1.1 Characteristics of palm oil	7
2.1.2 Nutritional properties of palm oil and its components	7
2.1.3 Palm-pressed mesocarp fibre	8
2.2 Antioxidant	11
2.2.1 Types of antioxidant	13
2.2.1.1 Natural antioxidant	13
2.2.1.2 Synthetic antioxidant	15
2.2.2 Mechanisms of antioxidants activity	16
2.2.3 Free radical scavenging activity	18
2.3 Total phenolic	19
2.3.1 The chemistry of phenolic compounds	20
2.3.2 Food sources of phenolic compounds	23
2.3.3 Phenolic compounds from agro-industrial by-products	24
3.0 MATERIALS AND METHODS	27
3.1 Materials	27
3.1.1 Extraction	27
3.2 Methods	
3.2.1 Determination of total phenolic content	28
(a) Preparation of standard curve	28
(b) Determination of the total phenolic for sample	28
3.2.2 Determination of total antioxidant activity	
(a) Determination of Free radical-scavenging activity	29
(b) Determination of Ferric Reducing Antioxidant Power	30

ABSTRACT

A STUDY ON ANTIOXIDANT ACTIVITIES OF PALM PUREE EXTRACTS

This study was conducted on palm puree that derived from oil palm fruit to investigate their antioxidant activities. The extracts of palm puree using two types of solvents such as water and ethanol were analysed for total phenolic content, ferric reducing antioxidant power (FRAP), and DPPH (1, 1-Diphenyl- 2- picrylhydrazyl) free radical scavenging activities. The ethanolic extract of palm puree showed the highest total phenolic content, reductive potential, and high percent in free radical scavenging as compared to the aqueous extract. Increasing the concentration of the extracts resulted in increased Fe^{3+} reducing antioxidant power for both of the extracts but the reductive potential of BHA/BHT (a synthetic antioxidant) was significantly higher than that of both of the palm puree extracts and vitamin C at all concentrations. In DPPH radical scavenging analysis, both of the palm extracts showed a dose-dependent antioxidant activity. The percent scavenging of BHA/BHT and vitamin C were remarkably higher than that of palm extracts at all concentrations. This shows the palm puree extracts showed weak reductive potential and radical scavenging as compared to BHA/BHT which gave a very strong reductive potential and also radical scavenging.