SOLVENT CONCENTRATION EFFECT ON ANTIOXIDANT ACTIVITY AND TOTAL PHENOLIC CONTENT OF MALAYSIAN HERBS

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Thesis is submitted in partial fulfilment of the requirements for the award of the degree of Bachelor of Chemical Engineering

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SUPERVISOR'S DECLARATION

We hereby declare that we have checked this thesis and in our opinion, this thesis is adequate in terms of scope and quality for the award of the degree of Bachelor of Chemical Engineering.

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STUDENT'S DECLARATION

I hereby declare that the work in this thesis is my own except for quotations and summaries which have been duly acknowledged. The thesis has not been accepted for any degree and is not concurrently submitted for award of other degree

Signature:Name: NURUL ATIKAH BT MOHD NAZIRID Number: KA13063Date: JANUARY 2016

Dedicated to my family, and my friends.

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TABLE OF CONTENTS

			Page
SUPE	RVISOR	'S DECLARATION	iv
STUD	DENT'S I	DECLARATION	V
ACK	NOWLEI	DGEMENT	vii
ABST	RACT		viii
ABST	RAK		ix
TABI	LE OF CO	ONTENTS	X
LIST	OF TAB	LES	xii
LIST	OF FIGU	URES	xiii
LIST	OF SYM	BOLS	xiv
LIST	OF ABB	REVIATIONS	xvi
		INTRODUCTION	1
		and of the Study	1
1.2	Motivatio	n	2
1.3	Problem	Statement	2
	Objective		2
	Scopes of	5	3
CHAI	PTER 2	LITERATURE REVIEW	4
2.1	Oxygen		4
	Free radi		4
2.3	Reactive	oxygen species (ROS)	5
2.4			6
2.5	Antioxid	ants	6
		Compounds	7
2.7	Herbs as	Antioxidants	8
2.8		ant capacity assay	9
2.9	Single ele	ectron transfer (SET)	9
			9
	2.9.2	Free radical scavenging activity for DPPH	10
2.10	Pandanu	s amaryllifolius (Daun pandan)	11
		ia odorata (Kesum)	12
2.12			14
CHAI	-	METHODOLOGY	16
3.1	Overall n		16
3.2			17
3.3			17
			18
3.5	Methodo		18
	3.5.1	Extraction of herbs plants	18
	3.5.2	Determination of Total Phenolic compound (TPC)	19
		Determination of antioxidant capacity of plants	19
	3.5.4	Statistical analysis	20
СНАТ		RESULTS AND DISCUSSION	21
4 .1		enolic contents	21
4.1		ng effect on 2, 2-diphenylhydrazyl radicals (DPPH)	21 22
		CONCLUSION AND RECOMMENDATION	22 25
	Conclusi		25 25
	Recomm		23
	REFERENCES 28		

Appendix

LIST OF TABLES

Table No.	Fitle	Page
Table 3.1: Details of the tested plant sample.		17
Table 3.2: Details of the chemical used.		17
Table 3.3: List of equipment and labwares.		18
Table 4.1: Total Phenolic Content in differen	t solvent concentration extract	21
Table 4.2: Antioxidant activity (as measured	by DPPH assay) of PA, PO and SA o	of
75% ethanolic extract	5 57 7	23
Table 5.1: Data for Gallic acid calibration cu	rve	34

xiii

Page

LIST OF FIGURES

Title

Figure No.

Figure 2.1: Pandanus amaryllifolius (Daun pandan)	12
Figure 2.2: Persicaria odorata (Kesum)	14
Figure 2.3: Sauropus androgynus (Cekur manis)	15
Figure 3.1: Workflow of experiment.	16
Figure 4.1: Total phenolic content of PO, SA and PA in different ethanol aqueous	
extracts; expressed in mg Gallic acid equivalent (GAE) per L extract sample. Assay	was
carried out triplicates with less 5% of standard deviation error	22
Figure 4.2: Percentage inhibition of DPPH scavenging activities of PA, PO and SA	
extracts in 75% ethanol extract. Assay was carried out triplicates with less 5% error	24
Figure 5.1: Calibration curve for Total Phenolic content	34
Figure 5.2: Filtration of the sample extraction	35
Figure 5.3: Filtration of the sample extraction	36
Figure 5.4: Sample dilution	36
Figure 5.5: Preparation for DPPH analysis	37
Figure 5.6: Absorbance measurement	38

LIST OF SYMBOLS

%	Percent
3	Dielectric constant
°C	Degree celcius
g	Gram
g/L	Gram over liter
h	Hour
L	Liter
Μ	Molar
ml	Milliliter
ml/min	Milliliter over minute
mg/ml	Milligram over milliliter
mm	Millimeter
nm	Nanometer
ppm	Part per million
w/w	Weight over weight
W/V	Weight over volume
µg/ml	Microgram over milliliter

xv

LIST OF ABBREVIATIONS

ANOVA	Analysis of variance
DNA	Deoxyribonucleic acid
DPPH	2, 2-diphenyl-1-picrylhydrazyl
EC50	The concentration to scavenge the 50% of initial free
	radicals.
FC	Folin-Ciocalteu
FRAP	Ferric reducing antioxidant power
GAE	Gallic acid equivalent
IC ₅₀	Inhibition concentration fifty
РА	Pandanus ammarylilfolius
РО	Persicaria odorata
ROS	Reactive oxygen species
SA TEAC	Sauropus androgynous Trolox equivalent antioxidant capacity
TPC UV-Vis	Total phenolic content Ultraviolet visible spectrophotometer