

**PHYTOCHEMICAL SCREENING AND ANTIOXIDANT ACTIVITY
OF DRIED STEM OF *PAEDERIA FOETIDA***

AFIQAH NASUHA BINTI SAMSUDIN

**BACHELOR OF SCIENCE (Hons.) CHEMISTRY
FACULTY OF APPLIED SCIENCES
UNIVERSITI TEKNOLOGI MARA**

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TABLE OF CONTENTS

	Page
ACKNOWLEDGEMENTS	iii
TABLE OF CONTENTS	iv
LIST OF TABLES	vi
LIST OF FIGURES	vii
LIST OF ABBREVIATIONS	viii
ABSTRACT	ix
ABSTRAK	x
CHAPTER 1 INTRODUCTION	1
1.1 Background of study	1
1.2 Problem statement	3
1.3 Significance of study	3
1.4 Objectives of study	4
CHAPTER 2 LITERATURE REVIEW	5
2.1 Medicinal Plants	5
2.1.1 Traditional use of medicinal plants	6
2.1.2 Commercial use of medicinal plants	8
2.2 Phytochemical compounds	9
2.2.1 Phenolics	10
2.2.2 Flavonoids	13
2.3 Antioxidants	15
2.3.1 Antioxidant from plants	16
2.3.2 Antioxidant Assays	17
2.4 Methods of Extraction	19
2.4.1 Maceration	19
2.4.2 Decoction	19
2.4.3 Hot Continuous Extraction (Soxhlet)	20
2.5 <i>Paederia foetida</i>	21
2.5.1 Traditional and Commercial uses of <i>Paederia foetida</i>	22
2.5.2 Previous studies on <i>P. Foetida</i>	23
CHAPTER 3 METHODOLOGY	26
3.1 Materials	26
3.2 Extraction of plant	27
3.3 Phytochemical screening	27
3.3.1 Phenols	28
3.3.2 Glycosides	28

3.3.3	Saponins	28
3.3.4	Flavonoids	28
3.3.5	Alkaloids	28
3.3.6	Tannins	29
3.3.7	Terpenoids	29
3.4	Fourier Transform Infra Red Analysis	29
3.5	Total Phenolic Content	29
3.6	Total Flavonoid Content	30
3.7	DPPH Assay	31
CHAPTER 4 RESULTS & DISCUSSION		32
4.1	Extraction	32
4.2	Phytochemical Screening	33
4.3	Fourier Transform Infrared Spectrophotometer Analysis	37
4.4	Total Phenolic Content	39
4.5	Total Flavonoids Content	44
4.6	DPPH Radical Scavenging Activity	48
CHAPTER 5 CONCLUSION & RECOMMENDATIONS		52
5.1	Conclusion	52
5.2	Recommendations	53
REFERENCES		55
APPENNDICES		66
CURRICULUM VITAE		80

LIST OF TABLES

Table	Table Caption	Page
2.1	Medicinal plants with therapeutic uses.	7
2.2	Type of modern drug and its medicinal uses.	8
2.3	Types of flavonoids and their functions.	14
4.1	The percentage yields of various extract of the dried stem of <i>P. foetida</i> .	32
4.2	Phytochemical analysis of <i>P. foetida</i> stem extracts.	33
4.3	The infrared wavenumber of the <i>P. foetida</i> stem from the IR spectrum.	37
4.4	IC ₅₀ value of ascorbic acid (standard) and three extracts of dried stem of <i>P. foetida</i> .	50

ABSTRACT

PHYTOCHEMICAL SCREENING AND ANTIOXIDANT ACTIVITY OF DRIED STEM OF *PAEDERIA FOETIDA*

This study is conducted to determine phytochemical constituents and antioxidant activity in various extracts of dried stem of *P. foetida*. Many studies quantified amount of chemical compounds from the leaves, root and some used the whole plant of *P. foetida*, but very limited research has been reported to analyse amount of active compounds in dried stems of *P. foetida* independently. Total flavonoid content was measured by the aluminium chloride colorimetric assay and total phenolic content was estimated by Follin-Ciocalteau method. The present study reveals that saponin, phenolic, glycoside, alkaloids, tannins and terpenoids were found in all three different extracts which are methanol, ethanol and hexane extracts. Methanol extract had the richest content of both phenolics and flavonoids which was 0.0636 mg GAE/g and 0.00175 QE/g respectively and hexane extracts was the least, 0.0103 mg GAE/g and 0.00134 QE/g. The radical scavenging activity (IC_{50}) for methanol, ethanol and hexane extract are 2.8 mg mL⁻¹, 16.88 mg mL⁻¹ and 23.15 mg mL⁻¹, respectively. This study justifies the use of these plants as a traditional remedy and can be as the promising plant species for natural source of antioxidant with potential value for treatment of many life threatening diseases. Therefore, the utilization of this plants will be an advantage to human.

Keywords: Antioxidant, Flavonoid, *Paederia foetida*, Phenolic, Phytochemical.