

**ISOLATION OF ANTIOXIDATIVE CONSTITUENTS OF *GYNURA
PROCUMBENS* STEM (SAMBUNG NYAWA) AND ITS
ANTIBACTERIAL POTENCY AGAINST PLANT PATOGEN**

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TABLE OF CONTENTS

	Page
ACKNOWLEDGEMENTS	iii
TABLE OF CONTENTS	iv
LIST OF TABLES	vii
LIST OF FIGURES	viii
LIST OF ABBREVIATIONS	ix
ABSTRACT	xi
ABSTRAK	xii
CHAPTER 1 INTRODUCTION	
1.1 Background of Study	1
1.2 Problem Statement	3
1.3 Significance of Study	3
1.4 Objective	4
CHAPTER 2 LITERATURE REVIEW	
2.1 Family Asteracea	5
2.2 Gynura Species	6
2.2.1 <i>Gynura divaricata</i> sp.	6
2.2.2 <i>Gynura bicolor</i> sp.	7
2.2.3 <i>Gynura scandens</i> sp.	7
2.2.4 <i>Gynura valeriana</i> sp.	7
2.2.5 <i>Gynura procumbens</i> sp.	8
2.3 Secondary metabolites of <i>G. procumbens</i>	8
2.4 Antimicrobial activity of <i>G. procumbens</i>	11
CHAPTER 3 METHODOLOGY	
3.1 Materials	17
3.1.1 Raw materials	17
3.1.2 Chemicals	17
3.2 Apparatus and instruments	18
3.3 Phytochemical Screening Test	19
3.3.1 Test for alkaloids	19
3.3.2 Test for tannins	19
3.3.3 Test for saponins	19
3.3.4 Test for steroids and triterpenoids (Liebermann-Burchard)	19
3.3.5 Test for cardiac glycosides	20

3.3.6	Test for flavonoids	20
3.4	Extraction process-consecutive soaking	20
3.5	FTIR	21
3.6	Thin layer chromatographic (TLC) analysis	21
3.6.1	Preparing TLC developing container	21
3.6.2	TLC development	21
3.7	Preparation of spraying reagents for phytochemicals detection	22
3.7.1	Dragendorff's reagent (to detect the presence of alkaloids)	22
3.7.2	Ferric chloride spraying reagent (to detect the presence of phenolic compounds)	22
3.7.3	Vanillin/H ₂ SO ₄ spraying reagent (to detect the presence of terpenoid compounds)	22
3.7.4	DPPH spraying reagent (to detect the presence of antioxidants)	23
3.8	Isolation of compounds from plant species	23
3.8.1	Preparing the TLC plate	23
3.8.2	Developing the plate	23
3.8.3	Isolating the product	24
3.9	Nuclear Magnetic Resonance (NMR)	24
3.10	Disk diffusion method	25
3.10.1	Preparation of standardize bacteria solution	25
3.10.2	Serial dilutions	25
3.10.3	Antibacterial activity assay	26

CHAPTER 4 RESULTS AND DISCUSSION

4.1	Phytochemical screening	27
4.2	TLC phytochemical analysis	28
4.2.1	Petroleum ether extract	29
4.2.2	Ethyl acetate extract	31
4.2.3	Methanol extract	32
4.3	FTIR analysis	34
4.4	Isolation of antioxidative compound of C7 and C9 using preparative TLC	36
4.4.1	Isolation of compound C7 from PE extract ($R_f = 0.9250$)	36
4.4.2	Isolation of compound C9 from EA extract ($R_f = 0.2250$)	38
4.5	Proton NMR interpretation of compound C7 and C9 from <i>Gynura procumbens</i>	40
4.5.1	Compound C7 of PE extract	40
4.5.2	Compound C9 of EA extract	41
4.6	Antimicrobial activity analysis	43

CHAPTER 5 CONCLUSION AND RECOMMENDATIONS 48

LIST OF TABLES

Table	Caption	Page
3.1	Positive Observations for Various Visualizing Methods/Reagents	23
4.1	Phytochemical analysis	27
4.2	Phytochemicals analysis of petroleum ether extract	30
4.3	Phytochemicals analysis of ethyl acetate extract	31
4.4	Phytochemicals analysis of methanol extract	33
4.5	IR spectrum for all crude extract and interpretations	34
4.6	In vitro antibacterial activity for each crude extract of <i>G.procumbens</i>	45

ABSTRACT

ISOLATION OF ANTIOXIDATIVE CONSTITUENTS OF *Gynura procumbens* STEM (SAMBUNG NYAWA) AND ITS ANTIBACTERIAL POTENCY AGAINST PLANT PATOGEN

The study was carried out on the stem of *Gynura procumbens*, belongs to the Astereceae family to isolate the antioxidative compounds and its antibacterial potency against plant pathogen. In isolating the antioxidant properties, several methods were conducted. The stem of *G.procumbens* was extracted using three different polarities of solvents such as petroleum ether, ethyl acetate and methanol. The methodology used were the phytochemical analysis from the methanol extract, phytochemical screening on TLC using certain spraying reagent, FTIR and ¹H NMR analysis, as well as disc diffusion method were conducted to assume the antioxidative compound and antibacterial potency of *G.procumbens*. The phytochemical analysis give the results that from methanol extract of *G.procumbens* stems it shows the presence of tannins, saponins, steroids and triterpenoids, cardiac glycosides and flavonoids. From phytochemical screening on TLC, it shows that *G.procumbens* has the antioxidative terpenoids and alkaloids from PE and EA extract respectively. The isolated compound that was labelled as C7 from PE extract was alkaloid at Rf = 0.9250 and compound C9 from EA extract was terpenoid at Rf = 0.2250. The antioxidative compound C7 and C9 from petroleum ether and ethyl acetate extract might be aromatic alkaloid glycosides and terpenoid glycosides respectively proven by FTIR and ¹HNMR spectrum interpretation supported by the previous study. The most effective extract to inhibit the growth of *E.crysanthemii* sp. was petroleum ether extract because it has the biggest inhibition zone which was 8.5 mm at concentration 400 mg/ml.