

**TOTAL FLAVONOID AND PHENOLIC CONTENT IN
Catharanthus roseus AND *Clitoria ternatea* LEAVES EXTRACT**

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TABLE OF CONTENT

	PAGE
ACKNOWLEDGEMENT	iii
TABLE OF CONTENT	iv
LIST OF TABLES	vi
LIST OF FIGURES	vii
LIST OF ABBREVIATION	viii
ABSTRACT	ix
ABSTRAK	x
CHAPTER 1: INTRODUCTION	
1.1 Background of Study	1
1.2 Problem Statement	2
1.3 Significant of Study	3
1.4 Objective of Study	4
CHAPTER 2: LITERATURE REVIEW	
2.1 <i>Clitoria ternatea</i>	5
2.2 <i>Catharanthus roseus</i>	6
2.3 Ethanol	7
2.4 Phytochemical	8
2.4.1 Phenolic	9
2.4.2 Flavonoid	11
2.5 Cancer	13
2.5.1 Chemotherapy	14
CHAPTER 3: METHODOLOGY	
3.1 Material	16
3.1.1 Raw materials	16
3.1.2 Chemicals	16
3.1.3 Apparatus	16
3.2 Sample Collection	17
3.3 Sample Preparation	17
3.4 Ethanol Extraction	17
3.5 Qualitative Test	18
3.5.1 Ferric Chloride Test	18
3.5.2 Shinoda Test	19
3.6 Quantitative Test	20
3.6.1 Preparation of Standard Curve Calibration	20

	PAGE
3.6.2 Phytochemical Screening	20
3.6.2.1 Total Phenolic Content (TPC)	20
3.6.2.2 Total Flavonoid Content (TFC)	21
3.7 Statistical Analysis	22
CHAPTER 4: RESULT AND DISCUSSION	
4.1 Preliminary Qualitative Phytochemical Screening	23
4.1.1 Ferric Chloride Test for Phenolic	24
4.1.2 Shinoda's Test for Flavonoid	26
4.2 Quantitative Phytochemical Screening	27
4.2.1 Total Phenolic Content (TPC)	27
4.2.2 Total Flavonoid Content (TFC)	29
4.2.3 T-test Analysis	32
CHAPTER 5: CONCLUSION AND RECOMMENDATIONS	34
CITED REFERENCE	36
APPENDICES	42
CURRICULUM VITAE	50

ABSTRACT

TOTAL FLAVONOID AND PHENOLIC CONTENT IN *Catharanthus roseus* AND *Clitoria ternatea* LEAVES EXTRACT

In this research, the total flavonoid and phenolic content in *Catharanthus roseus* and *Clitoria ternatea* leaves extract have been identified and compared. The dried leaves of *Catharanthus roseus* and *Clitoria ternatea* were extract using 90% ethanol and crude extract acquired by using rotary evaporator. The extract of *Catharanthus roseus* and *Clitoria ternatea* were then used in phytochemical screening qualitative and quantitative screening. The qualitative test used are Ferric chloride test and Shinoda's test. Ferric Chloride test proved the presence of phenolic in the extract when the colour of *Catharanthus roseus* and *Clitoria ternatea* leaves extract changed from green to dark green while Shinoda's test proved the presence of flavonoid in the extract when the of colour of *Catharanthus roseus* and *Clitoria ternatea* leaves extract change from green to dark red. Next, the Quantitative test for total flavonoid and phenolic was conducted and its concentration where determined by using spectrophotometer. Folin-Ciocalteu assay was used for total phenolic content and aluminium chloride assay was used for total flavonoids content. The result for total flavonoids for *Catharanthus roseus* and *Clitoria ternatea* are 77.22867 ± 0.113161 and 73.70833 ± 0.98150 respectively while total phenolic content for *Catharanthus roseus* are 36.33600 ± 0.935313 and *Clitoria ternatea* are 7.35767 ± 0.046188 . Total flavonoid content and total phenolic content in *Catharanthus roseus* are higher than *Clitoria ternatea*. Independent t-test was conducted to compare the total phenolic and total flavonoid content between *Catharanthus roseus* and *Clitoria ternatea*. The test shows that there are significance difference between *Catharanthus roseus* and *Clitoria ternatea* ($p < 0.05$)