

**ANTIMICROBIAL EVALUATION OF *Hibiscus rosa sinensis* PLANT
EXTRACT AGAINST *Escherichia coli***

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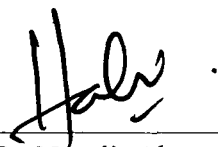
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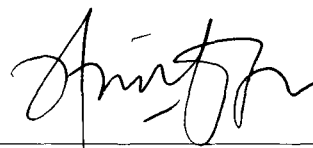
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TABLE OF CONTENTS

	PAGE
ACKNOWLEDGEMENT	ii
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 Background Study	1
1.2 Problem Statement	2
1.3 Significance of Study	3
1.4 Objective of the Study	3
 CHAPTER 2 : LITERATURE REVIEW	
2.1 Family Malvaceae	4
2.1.1 <i>Hibiscus rosa-sinensis</i>	4
2.2 Hibiscus as Medicinal Plant	5
2.3 Methanol extract	7
2.4 Microorganisms	8
2.4.2 <i>Escherichia coli</i> O157:H7	9
 CHAPTER 3 : METHODOLOGY	
3.1 Material	10
3.1.1 Raw materials	10
3.1.2 Chemicals	10
3.1.3 Apparatus	10
3.2 Methods	11
3.2.1 Collection of plant material	11
3.2.2 Plant extraction preparation	11
3.2.3 Plant extraction	12
3.2.4 Inoculation preparation	12
3.2.5 Antibacterial assay	12
3.2.5.1 Minimum inhibitory concentration (MIC)	12
3.2.5.1 Minimum bactericidal concentration (MBC)	13

CHAPTER 4 : RESULT AND DISCUSSION	15
CHAPTER 5 : CONCLUSION AND RECOMMENDATION	22
CITED REFERENCES	23
APPENDICES	27
CORICULUM VITAE	30

ABSTRACT

ANTIMICROBIAL EVALUATION OF *Hibiscus rosa sinensis* PLANT EXTRACT AGAINST *Escherichia coli*

Medicinal plant play many significant roleS in treating various kind of disease and act as antimicrobial agent as it claimed to have antimicrobial compounds in various parts of plant. The objective of this research is to compare the antimicrobial activity from flower, stem and leaves of *Hibiscus rosa sinensis* and to evaluate antimicrobial activity of methanol extracts of hibiscus towards food-borne pathogen *Escherichia coli* and *Escherichia coli* O157:H7. In this preliminary investigation, the crude extract was prepared through maceration of dried flower, leaf and stems of the plant by methanolic solution. The antibacterial activity was screened by using Minimum Inhibitory Concentration (MIC) broth microdilution in and Minimum Bactericidal Concentration (MBC). The antibacterial activity were assessed by the turbidity of inoculum in MIC and the reduce of 99.9% or more growth of bacteria on plate from the initial inoculum for MBC. All methanolic extract showed antibacterial activity towards both *Escherichia coli* and *Escherichia coli* O157:H7. The leaf extract of plant showed the highest antimicrobial activity against *Escherichia coli*, and the stem extract as the highest antimicrobial activity on *Escherichia coli* O157:H7.