

TABLE OF CONTENTS

VALIDITY SHEET.....	i
ABSTRACT.....	ii
FOREWORD.....	iv
AUTHENTICITY STATEMENT.....	vi
TABLE OF CONTENTS.....	vii
TABLE LIST.....	x
IMAGE LIST.....	xi
CHART LIST.....	xii
APPENDIX LIST.....	xiii
CHART LIST.....	xiv
CHAPTER I INTRODUCTION.....	1
1.1 Background.....	1
1.2 Problem Formulation.....	3
1.3 Research Objectives.....	3
1.4 Research Benefits.....	3
1. Theoretical Benefits:.....	3
2. Practical Benefits:.....	3
1.5 Originality of Research.....	3
CHAPTER II LITERATURE REVIEW.....	5
2.1 Theoretical Foundations.....	5
1. Green Grasshopper.....	5
2. Extraction.....	7
3. Sunscreen.....	7
4. Gel.....	8
5. <i>Sun Protector Factor</i> (SPF).....	9
6. Uv-Vis Spectrophotometer.....	10
2.2 Material Monographs.....	11
1. HPMC.....	11
2. Glycerine.....	12

3.	Propilenglikol	12
4.	Methyl Paraben.....	13
5.	Aqua Destillata	13
2.3	Halal Product Analysis	13
2.4	Theoretical Framework	14
2.5	Conceptual Framework	15
2.6	Hypothesis	15
CHAPTER III	RESEARCH METHODS	16
3.1	Types and Design of Research	16
3.2	Time and Place of Research	16
3.3	Research Variables	16
3.4	Variable Operational Definition	16
3.5	Research Tools and Materials	18
3.6	Research Procedures.....	18
1.	Plant Determination.....	18
2.	Making Green Grasshopper Leaf Extract (<i>Cyclea barbata</i> . Miers)	18
3.	Phytochemical Screening	19
4.	Sunscreen Gel Formulation	19
5.	Physical Quality Test of Preparations	20
6.	SPF Value Determination Test	21
3.7	Data Analysis.....	22
3.8	Halal Product Analysis.....	23
3.9	Research Flow Diagram	23
3.10	Research Schedule.....	23
CHAPTER IV	RESULTS AND DISCUSSION.....	24
4.1	Research Results.....	24
1.	Extraction Results.....	24
2.	Phytochemical Screening Results.....	24
3.	Results of Physical Quality Test of Preparations	24
4.	Halal Analysis Results.....	30
4.2	Discussion.....	31

1. Determination	31
2. Extraction.....	32
3. Phytochemical Screening	33
4. Sunscreen Gel Formulation	34
5. Physical Quality Evaluation Test of Preparations	36
6. Halal Analysis.....	43
CHAPTER V CONCLUSIONS AND SUGGESTIONS.....	46
5.1 Conclusion.....	46
5.2 Advice.....	46
BIBLIOGRAPHY	47
ATTACHMENT.....	56

