

TABLE OF CONTENTS

VALIDITY SHEET	i
STATEMENT OF RESEARCH AUTHENTICITY	ii
PREFACE.....	iii
ABSTRACT	v
ABSTRAK	vi
TABLE OF CONTENTS.....	vii
LIST OF FIGURE	ix
LIST OF TABLE	x
CHAPTER I INTRODUCTION.....	1
1.1 Research Background	1
1.2 Research Problem	4
1.3 Research Objectives.....	4
1.4 Research Benefits	4
1.5 Authenticity of Research	5
CHAPTER II LITERATURE REVIEW.....	7
2.1 Basic Theory.....	7
2.2 Theoretical Framework.....	19
2.3 Conceptual Framework.....	20
2.4 Hypothesis	20
CHAPTER III RESEARCH METHODOLOGY	21
3.1 Research Design	21
3.2 Research Time and Location	22
3.3 Population dan Sample	22
3.4 Research Variables	22
3.5 Variable Operational Definition	23
3.6 Research Materials.....	23
3.7 Ethical Clearance	24
3.8 Research Procedures.....	24
3.9 Data Analysis.....	29
3.10 Research Flowchart	30

3.11 Research Schedule	31
CHAPTER IV RESULT AND DISCUSSION.....	32
4.1 Extraction of Peanut Shells and Yield Calculation.....	32
4.2 Phytochemical Screening.....	34
4.3 Antidiabetic Activity of Ethanol Extract of Peanut Shells	35
CHAPTER V CONCLUSION AND RECOMMENDATIONS.....	43
5.1 Conclusion	43
5.2 Recommendations.....	43
REFERENCES	44
ATTACHMENTS	51
Attachment 1. Ethical Clearance	51
Attachment 2. Dose Conversion for Humans and Animals.....	52
Attachment 3. Maximum Volume Of Test Solution Administered To Various Animals	53
Attachment 4. Dosage Calculations.....	54
Attachment 5. Blood Glucose Levels of Rats Before and After Treatment ..	55
Attachment 6. Statistical Analysis Result of Blood Levels Test.....	56
Attachment 7. Research Documentation	59



LIST OF FIGURE

Figure 1. Peanut Plant.	8
Figure 2. Peanut Parts (shell/hull, skin and kernel).	9
Figure 3. Chemical Structure of Resveratrol.....	10
Figure 4. Chemical Structure of Luteolin.	11
Figure 5. A set of Reflux Apparatus.	16
Figure 6. A set of Soxhlet Apparatus.	17
Figure 7. Glucometer	29
Figure 8. Reaction of Flavonoid with NaOH.	35
Figure 9. Molecular Mechanism of Sulfonylurea Drugs.	39
Figure 10. Mechanism of Insulin Action.	40

LIST OF TABLE

Table 1. Originality of Research	5
Table 2. Composition in Peanut.	10
Table 3. Operational Definition of Variable	23
Table 4. Research Schedule	31
Table 5. Extraction Results of Peabut Shells	32
Table 6. Phytochemical Screening Result of Peanut Shell Extract.....	34
Table 7. Average Blood Glucose Levels in White Rats.....	36

