EFFECTS OF *Basilia rubra* (ALUGBATI) LEAVES EXTRACT ON THE BLOOD LIPID PROFILES OF

Mus musculus (ALBINO MICE)

An Undergraduate Thesis Presented to

The Faculty of the Biological Sciences Department

College of Science

De La Salle University – Dasmariñas

Dasmariñas, Cavite

In Partial Fulfillment of the Requirements for the Degree of Bachelor of Science Major in Human Biology

IVY P. DELA CRUZ LORRAINE S. ESCOBIDO

February 2007

ABSTRACT

This study determined the effects of different concentrations of alugbati leaves extract on the total cholesterol, triglyceride, low-density lipoprotein (LDL) and high-density lipoprotein (HDL) levels of albino mice. The study also served as a proof that tapping local plants is important in achieving advancement in science and health. The treatments were used as follows. Treatment I (25% alugbati leaves extract), Treatment II (50% alugbati leaves extract) and Treatment III (75% alugbati leaves extract). Negative control treatment (distilled water and pellets) and positive control treatment (distilled water and buttered pellets) were also included in this study. Determination of the measurement of total cholesterol level, triglyceride, LDL and HDL levels of albino mice were conducted after acclimatization, administration of high fat diet and different concentrations of the treatments on albino mice using Lipid profile test. The results gathered from the experiment showed that in the presence of higher concentration of alugbati leaves extract, there was a higher reduction in the total cholesterol level, triglyceride and LDL levels of albino mice. Also, in the presence of higher concentration of alugbati leaves extract, there was a higher buildup in the HDL levels of albino mice.

TABLE OF CONTENTS

Title Page	1
Approval Sheet	2
Abstract	3
Acknowledgement	4
Table of Contents	5
CHAPTER 1 INTRODUCTION	
1.1 Background of the Study	7
1.2 Conceptual Framework	9
1.3 Statement of the Problem	9
1.4 Scope and Limitations	10
1.5 Significance of the Study	11
1.6 Definition of Terms	12
CHAPTER 2 LITERATURE REVIEW	
2.1 Conceptual Literature	14
2.2 Related Studies	26
CHAPTER 3 METHODOLOGY	
3.1 Research Design	29
3.2 Research Setting	29

3.3 Research Procedure	30
3.4 Data Gathering and Statistical Analysis	36
CHAPTER 4 RESULTS AND DISCUSSIONS	
4.1 Results	37
4.2 Discussions	43
CHAPTER 5 SUMMARY, CONCLUSIONS AND RECOMMEND	ATIONS
5.1 Summary	50
5.2 Conclusions	51
5.3 Recommendations	51
CITED REFERENCES	53
APPENDICES	
APPENDIX A	57
APPENDIX B	61
APPENDIX C	77
APPENDIX D	85
CURRICULUM VITAE	90