

**THE EFFECTS OF *Brassica oleracea* (BROCCOLI) FLOWER  
EXTRACT IN THE BLOOD CLOTTING TIME OF  
60-DAY OLD *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 in Biology Major in Human Biology

**ALEX V. FERRER JR.**

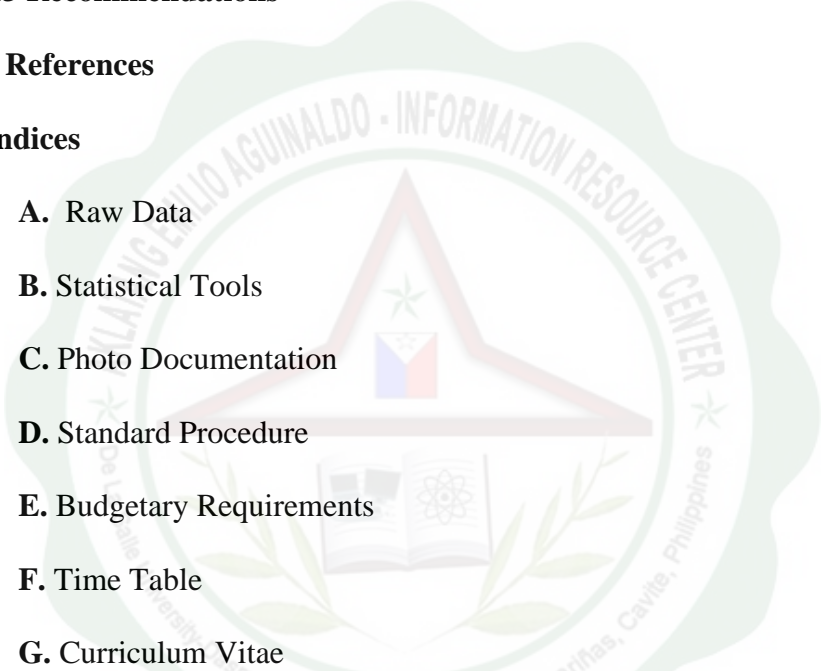
**JEZREEL PATRICK R. OBAL**

March 2008

## TABLE OF CONTENTS

<b>TITLE PAGE</b>	6
<b>ACKNOWLEDGEMENT</b>	8
<b>ABSTRACT</b>	8
<b>CHAPTER 1 INTRODUCTION</b>	
1.1 Background of the Study	9
1.2 Conceptual Framework	11
1.3 Statement of the Problem	11
1.4 Hypothesis	12
1.5 Scope and Limitation	12
1.6 Significance of the Study	12
1.7 Definition of Terms	13
<b>CHAPTER 2 LITERATURE REVIEW</b>	
2.1 Conceptual Literature	14
2.2 Related Studies	21
<b>CHAPTER 3 METHODOLOGY</b>	
3.1 Research Design	24
3.2 Research Setting	24
3.3 Researcher Procedure	25
3.4 Data Gathering and Statistical Analysis	27
<b>Chapter 4 Results and Discussion</b>	
4.1 Results	28

4.2 Discussion	30
<b>Chapter 5 Summary, Conclusions and Recommendation</b>	
5.1 Summary	33
5.2 Conclusions	34
5.3 Recommendations	35
<b>Cited References</b>	36
<b>Appendices</b>	
A. Raw Data	40
B. Statistical Tools	41
C. Photo Documentation	42
D. Standard Procedure	46
E. Budgetary Requirements	47
F. Time Table	48
G. Curriculum Vitae	49



## ABSTRACT

This study is about THE EFFECTS OF *Brassica oleracea* (BROCCOLI) FLOWER EXTRACT IN THE BLOOD CLOTTING TIME OF 60-DAY OLD *Mus musculus* (ALBINO MICE). The broccoli was purchased from Zapote Wet Market at Las Piñas City. The broccoli was chopped and separated from its stem and flower. The broccoli flower was weighed and steamed for five minutes. It was osteorized afterwards, until the mixture became liquid in form. The amount of water was based on 1:1 ratio. With the use of clean cheesecloth, the broccoli was extracted and subdivided into different concentrations. The concentrations comprised 30%, 60%, 90% concentrations extract. The extract was administered to the selected healthy albino mice using gavage method. The administration of the extract was done within 14 days. Blood clotting time was observed in the tail portion of albino mice using the pricking method. Stop watch was used in recording the clotting of the blood. The gathered raw data on blood clotting time were to test analyzed using the statistical tool which was One-way ANOVA to test if there was significant difference on the blood clotting time of albino mice. The Tukey method was also used to determine if there was significant difference on each of the concentrations. All statistical analysis was done at 0.5 probability level.