## EFFECTS OF MORINGA OLEIFERA (MALUNGGAY) LEAF CRUDE EXTRACT ON DIAZINON INDUCED TOXICITY IN CLARIAS GARIEPINUS (AFRICAN CATFISH)

An Undergraduate Research
Presented to
the Biological Sciences Department
College of Science
De La Salle University – Dasmariñas

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

Gayanilo, Arjay B. Nuñez, Jesse James B.

March 2009

## **ABSTRACT**

Diazinon ultimately finds their way into aquatic habitats such as rivers, lakes and ponds, and has been found to be highly toxic in aquatic organisms specifically to fishes. Malunggay is a plant that is widely cultivated in the Philippines, which is well-known for its benefits in providing different vitamins, minerals and as an antioxidant, in order to further explore the different uses of Malunggay, a test was done if it could remediate the harmful effects of diazinon to fishes.

After treating with  $T_1$  and  $T_2$  there are no significant changes in the physical attributes of the *Clarias gariepinus* (African Catfish). The *Clarias gariepinus* (African Catfish) damage was observable only in its internal parts, namely; the liver and the gills. Behavioral changes are seen upon applying  $T_1$  and  $T_2$  to *Clarias gariepinus* (African Catfish) such as the swimming pattern and breathing pattern. Histopathological changes in the gills and liver has recovered from the exposure to diazinon where among the two treatments  $T_2$  shows most effective as observed in the histopathological examinations. The shows full recovery as seen in the tissues of the gills and liver.

## **Table of Contents**

ABSTRACT		2
ACKNOWLEDGEMENT		4
1.0 INTRODUCTION		6
2.0 REVIEW OF LITERATURE		12
3.0 METHODOLOGY		21
4.0 RESULT AND DISCUSSION	E00#.	26
5.0 SUMMARY, CONCLUSION A	ND RECOMMENDATION-	39
Literature Cited	100/100	43
Certificate		45
Appendix		
Photo Documentation		51
Gantt chart		56
Budget proposal		58
Curriculum Vitae	Wigh.	59