

TOXICITY EVALUATION OF SYNTHETIC MOLLUSCICIDES
ON EGGS OF *Pomacea Canaliculata*
(Lamarck)

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TABLE OF CONTENTS

	PAGE
ACKNOWLEDGEMENT	iii
TABLE OF CONTENTS	iv
LIST OF TABLES	vi
LIST OF FIGURES	vii
LIST OF ABBREVIATIONS	viii
ABSTRACT	ix
ABSTRAK	x
CHAPTER 1: INTRODUCTION	
1.1 Background of Study	1
1.2 Problem Statement	2
1.3 Significance of Study	3
1.4 Objectives of the Study	3
CHAPTER 2: LITERATURE REVIEW	
2.1 Background of <i>Pomacea canaliculata</i>	4
2.1.1 Ampullariidae family	4
2.1.2 The genus of <i>Pomacea</i>	5
2.1.3 Ecology	6
2.1.4 Reproduction	9
2.1.5 Population Dynamics	12
2.1.6 Invasive Characteristic	13
2.2 Type of pesticides	16
2.2.1 Metaldehyde	17
2.2.2 Niclosamide	18
2.3 Paddy	19
CHAPTER 3: METHODOLOGY	
3.1 Introduction	20
3.2 Materials	
3.2.1 Raw Materials	21
3.2.2 Chemicals and Solutions	21
3.2.3 Apparatus	21
3.3 Methods	
3.3.1 Sampling Location	22
3.3.2 Selection of Snails	22
3.3.3 Preparation of test solution	23
3.3.4 Selection of eggs	24
3.3.5 Contact Bioassay	25
3.4 Data Analysis	27

CHAPTER 4: RESULT AND DISCUSSION	
4.1 Effects of molluscicides on hatching of snail eggs	28
4.2 Effects of molluscicides concentration on snail eggs	32
CHAPTER 5: CONCLUSION AND RECOMMENDATIONS	35
CITED REFERENCES	37
APPENDICES	40
GANTT CHART	45
CURRICULUM VITAE	46

ABSTRACT

TOXICITY EVALUATION OF SYNTHETIC MOLLUSCICIDES ON EGGS OF *POMACEA CANALICULATA*

Nowadays synthetic molluscicides were used to kill adult form of snails and the substance was not design specifically to kill dormant stage of *Pomacea canaliculata*. *Pomacea canaliculata* also known as golden apple snails that can be found throughout the world. It was very serious pest towards agricultural such as paddy fields. The purposes of the study is to determine which molluscicides is more effective towards the eggs of golden apple snail and the effective concentration to inhibit the eggs. By using spot spraying method, the collected eggs were sprayed by Metaldehyde and Niclosamide with five different concentration. The amount of concentration tested was obtained from recommended rates by the farmers. From the research, it was found that Niclosamide is a better molluscicides compared to Metaldehyde in all concentration. All the concentration tested have significant effect towards the hatchability process but there was no effective concentration was found since there was no concentration is successfully inhibit more than 75% hatching process. This was due to protective covering of the eggs and the concentration used was still in low concentration. The concentration used was not yet effective, but it have the potential to become more effective with the right amount of concentration applied.

CHAPTER 1

INTRODUCTION

1.1 **Background of Study**

Pomacea canaliculata, Lamarck is native from South America. This organism belongs to Ampullariidae family (Teo, 2004). During 80's the golden apple snails were presented to Taiwan from South America which is for commercial production for their country (Cazzaniga, 2002). The golden apple snail was intended to bring an improvements to the living conditions of the living poor in the rural areas of the third world country during that time. Lacking of checking biological and economic importance of the golden apple snail, the organism brought negative impacts towards environment rather than give positives impact towards the farmer in both biological and economical value (Cowie, 2002).

Since then the economic value of the golden apple snail was decreasing and thus the demand declining, hence the farmer has no intention to make business and quickly abandoned their snails farming project at instances. Some of them did not kill the snails and some of the snails was managed to escape and attacked the paddy field crop and it is estimated paddy field