

**EXTRACTION OF FEMALE CRUDE SEX PHEROMONE OF ONION
ARMYWORM *Spodoptera exigua* HÜBNER (LEPIDOPTERA:
NOCTUIDAE) AND ITS ATTRACTANCY EFFECT**

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ACCEPTANCE SHEET

This undergraduate manuscript entitled “**EXTRACTION OF FEMALE CRUDE SEX PHEROMONE OF ONION ARMYWORM *Spodoptera exigua* HÜBNER (LEPIDOPTERA: NOCTUIDAE) AND ITS ATTRACTANCY EFFECT,**” prepared and submitted by **RYAN ALEXIS P. BAUTISTA**, in partial fulfillment of the requirements for the degree of **BACHELOR OF SCIENCE IN AGRICULTURE (CROP PROTECTION)**, is hereby accepted:



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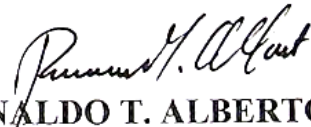


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The author is the first child of four children of Reysie Bautista-Okamoto. He was born on January 27, 1996 at Mandaluyong General Hospital. He finished his kindergarten at Our Lady of the Sacred Heart Academy (OLSHA) at Guimba, Nueva Ecija in the year 2002. He studied at the same school for elementary education and finished in year 2008. He finished his high school education at Our Lady of the Sacred Heart College (OLSHCO) at year 2012. He took up Bachelor of Science in Animal Husbandry in Central Luzon State University (CLSU) Science City of Munoz Nueva Ecija but he shifts to another course Bachelor of Science in Agriculture Major in Crop Protection with field of specialization in Entomology.

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TABLE OF CONTENTS

	PAGE
LIST OF TABLES	ix
LIST OF FIGURE	x
LIST OF APPENDICES	xi
ABSTRACT	xiii
INTRODUCTION	
	2
Importance of the Study	3
Statement of the Problem	4
Objectives of the Study	4
Scope and Limitations of the Study	5
Time and Place of the study	
REVIEW OF RELATED LITERATURE	
Distribution of <i>Spodoptera exigua</i>	6
Migration of <i>Spodoptera exigua</i>	6
Biology of <i>Spodoptera exigua</i>	
Egg	7
Larva	7
Pupa	7
Adult	8
Damage of <i>Spodoptera exigua</i>	8
Host of <i>Spodoptera exigua</i>	9
Kinds of Pheromones	10
Sex Pheromone as Monitoring Tool for IPM	13
Advantage and Disadvantage of Sex Pheromone Traps	14
Extraction of Crude Sex Pheromones	14
Methodology of Sex Pheromone Application	15
METHODOLOGY	
Collection of Onion Armyworm	17
Mass Rearing of Onion Armyworm	17
Extraction of Crude Pheromone	20

Evaluation of Extracted Crude Sex Pheromone	
Laboratory Condition	22
Field Condition	24
Data Gathered	
Under Laboratory Condition	28
Under Field Condition	28
Statistical Analysis	29
RESULTS AND DISCUSSION	
Laboratory Condition	
Percentage Attractancy	31
Field Condition	
Brgy. Dolores Sto. Domingo, Nueva Ecija	35
Brgy. San Fabian Sto. Domingo, Nueva Ecija	35
Brgy. San Francisco Sto. Domingo Nueva Ecija	36
Number of Armyworm Larva and Damage Rating	40
SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS	
Summary	42
Conclusions	42
Recommendations	42
LITERATURE CITED	43
APPENDICES	46

LIST OF TABLES

TABLE		PAGE
1	Crop susceptible to armyworm	9
2	Different solvent used in extracting crude sex pheromone of onion armyworm	20
3	Geographic location in three Brgys. of Sto. Domingo, Nueva Ecija used for trapping site for male armyworm moth	24
4	Damage rating used for armyworm	28
5	Average percent attractancy of male moth using different solvent in no choice method	32
6	Number of trapped male moth onion armyworm moth in onion field at Barangay Dolores Sto. Domingo, Nueva Ecija using crude pheromone extract and live virgin female moth	37
7	Number of trapped male moth onion armyworm moth in onion field at Barangay San Fabian Sto. Domingo, Nueva Ecija using crude pheromone extract and live virgin female moth	38
8	Number of trapped male moth onion armyworm moth in onion field at Barangay San Francisco Sto. Domingo, Nueva Ecija using crude pheromone extract and live virgin female moth	39
9	Number of larva and damage rating of armyworm monitored in three Brgys. of Sto. Domingo, Nueva Ecija monitored during the trapping	41

LIST OF FIGURES

FIGURE		PAGE
1	Rearing process of onion armyworm: a. collection of armywormegg and larva in the field, b. rearing of egg and larva on the container, c. mating of adult moth on hollow tube, d. newly hatched eggs.	18
2	Separation of male and female <i>Spodoptera exigua</i> : a. male pupa, b. female pupa, c. male moth, d. female moth	19
3	Extraction of crude sex pheromone: a. immobilized female armyworm, b. removal of female armyworm 2 abdominal segments containing the pheromone gland, c. Extracted crude sex pheromone	21
4	Diagram of the improvised cylinder used for laboratory test: a. entrance of the cylinder, b. bait, c. rubber septum	23
5	Improvised bait for no choice method	23
7	Point of trap placement in the onion field located at a. Dolores b. San Fabian c. San Francisco,Sto. Domingo, Nueva Ecija	25
8	Set-up of pheromone traps using: a. crude sex pheromone using treatment hexane 1:1 ratio and b. live virgin female moth	26
9	Trapping sites of armyworm in Sto. Domingo, Nueva Ecija: Barangay Dolores, b. Barangay San Fabian, C. Barangay San Francisco	27

LIST OF APPENDICES

APPENDIX		PAGE
1.1a	Square root transformed data of percent attractancy of male moth at 5 min	48
1.1b	Analysis of variance for square root transformed of percent attractancy of male moth at 5 min	48
1.2a	Square root transformed data of percent attractancy of male moth at 10 min	49
1.2b	Analysis of variance for square root transformed data of percent attractancy of male moth at 10 min	49
1.3a	Square root transformed data of percent attractancy of male moth at 15 min	50
1.3b	Analysis of variance for square root transformed data of percent attractancy of male moth at 15 min	50
1.4a	Square root transformed data of percent attractancy of male moth at 20 min	51
1.4b	Analysis of variance for square root transformed data of percent attractancy of male moth at 20 min	51
1.5a	Square root transformed data of percent attractancy of male moth at 25 min	52
1.5b	Analysis of variance for square root transformed data of percent attractancy of male moth at 20 min	52
1.6a	Square root transformed data of percent attractancy of male moth at 30 min	53
1.6b	Analysis of variance for square root transformed data of percent attractancy of male moth at 30 min	53
1.7a	Pooled mean of percent attractancy of male moth	54
1.7b	Analysis of variance for pooled mean of percent attractancy of male moth	54

1.8	Agrometeorological data in Sto. Domingo, Nueva Ecija during trapping of male moth	55
1.9	Number of larva and damage rating of sample plants monitored in three Brgys. of Sto. Domingo, Nueva Ecija monitored during the trapping	56

ABSTRACT

BAUTISTA, RYAN ALEXIS P., Department of Crop Protection, College of Agriculture, Central Luzon State University, Science City of Muñoz, Nueva Ecija, Philippines. September 2019. **EXTRACTION OF FEMALE CRUDE SEX PHEROMONE OF ONION ARMYWORM *Spodoptera exigua* HÜBNER (LEPIDOPTERA: NOCTUIDAE) AND ITS ATTRACTANCY EFFECT**

Adviser: Marilyn G. Patricio, Ph.D.

The study was conducted to evaluate different solvents in extracting crude sex pheromones in female onion armyworm to determine the attractancy effect of the crude sex pheromone to male armyworm moths under laboratory condition and to test the efficacy of the extracted crude pheromones hormones under field condition. The protocol for extraction was based on Cayabyab (1997). The eighth and ninth segments of the abdomen of the female armyworm consisting the pheromone gland were excised, then soaked in solvent (Acetone, Hexane and Ethanol), then placed with rubber septum and the crude pheromone was extracted. The attractancy test was done using no choice method and 20 active male moths (one to two day old) were used per replication. The percent attracted male moth was recorded at 5 min, 10 min, 15 min, 20 min, 25 min and 30 min after released. Treatment 3 (Hexane 1:1) was found significantly attractive on the male moth under laboratory condition after 30 min of observation time with 30% attractancy and Treatment 6 (Ethanol 1:2) was the least with 11.67% attractancy. Number of male moth caught per trap was monitored daily for one week. Also, number of armyworm larval and damage rating were recorded from 30 sample onion plants

Keywords: sex pheromone, attractancy effect, extraction, onion armyworm

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