

THE EFFECTS OF Dioscorea hispida Schlusser CRUDE EXTRACT
ON Papilio demoleus L. LARVAE WITH NOTES ON THE
DEVELOPMENTAL STAGES OF Papilio demoleus L.
(Lepidoptera : Papilionidae)

A Graduate Thesis
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University of San Carlos
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of the Requirements for the Degree
Master of Science in Biology

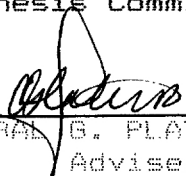
by


Alexie B. Banaag
March 1991

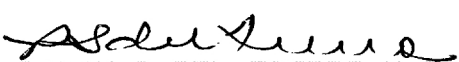
APPROVAL SHEET


This thesis entitled "THE EFFECTS OF Dioscorea hispida Schlusssel CRUDE EXTRACT ON Papilio demoleus L. LARVAE WITH NOTES ON THE DEVELOPMENTAL STAGES OF Papilio demoleus L. (LEPIDOPTERA:PAPILIONIDAE)" prepared and submitted by Alexie B. Banaag in partial fulfillment of the requirements for the degree in Master of Science in Biology has been examined and is recommended for acceptance and approval for ORAL EXAMINATION.

Thesis Committee


CRISTOBAL G. PLATEROS, M.S.
Adviser



HUMAIDA A. JUMALON, M.S.
Member



RAMON S. DEL FIERRO, M.S.
Member

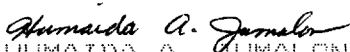

MONTANA C. SANIEL
Member

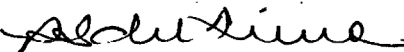
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Approved by the Committee on Oral Examination with a grade of Passed.


MONTANA C. SANIEL, PH.D.
Chairman


CRISTOBAL G. PLATEROS, M.S.
Adviser


HUMAIDA A. JUMALON, M.S.
Member


RAMON S. DEL FIERRO
Member

Accepted and approved in partial fulfillment of the requirements for the degree in Master of Science in Biology.

Comprehensive Examinations Passed: December 19, 1989

Date of Oral Examination: March 14, 1991


MONTANA C. SANIEL, Ph.D.
Dean, Graduate School

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ABSTRACT

This study deals with the determination of the effectivity of the crude extract of Nami (Dioscorea hispida Schlusset) on Papilio demoleus L. larvae as to whether its action is a contact poison, antifeedant or as repellent. It also provides notes on the developmental stages on Papilio demoleus L. Lethal dose 50 was determined as the basal concentration to obtain subconcentrations. Lethal Dose 50 concentrations are as follows: 30%, 40%, 45%, 53% and 60% for instars 1, 2, 3, 4 and 5, respectively. Two controls were used, endrin for positive and water for the negative controls.

Results showed the effectivity of the crude extract resulting to the death of the larvae through contact application. Higher concentration of the extract is highly significant compared to the negative control; however, positive control was always highly significant compared to other concentrations. Antifeedant activity was significantly observed on wet method which indicates that the crude extract contains substance that would deter or reduce feeding resulting to the death of the larvae which might be due to starvation or by stomach poison. Repellent action was also observed only on wet leaves for two hours which indicated that the extract contains a substance that is highly volatile.

Papilio demoleus L. takes 44 1/2 days to complete its entire life cycle. Length of the organism was measured and found out to slightly differ from the study of Apas and Domo, 1990.

TABLE OF CONTENTS

	PAGE
TITLE PAGE	i
APPROVAL SHEET	ii
ACKNOWLEDGEMENT	iii
ABSTRACT	v
TABLE OF CONTENTS	vi
LIST OF TABLES	viii
LIST OF FIGURES	ix
CHAPTER I. THE PROBLEM AND ITS SCOPE	
Introduction	1
Review of Related Literature	4
Statement of the Problem	7
Significance of the Study	8
Scope & Limitations of the Study	8
Definition of Terms	9
CHAPTER II. MATERIALS AND METHODS	
Materials	
Plant Description & Collection	10
Collection of <u>Papilio demoleus</u> L.....	11
Description of <u>Citrus aurantium</u> L. as Food Plant	12
Methods	
Preparation of the Crude Extract	13
Application of the Crude Extract to the Larvae	14
Statistical treatment of the Data	18

CHAPTER III. RESULTS AND DISCUSSIONS

Effects of the Crude Extract of <u>Dioscorea hispida</u> Schlusssel on <u>Papilio demoleus</u> L.	
As Contact Poison	19
As Antifeedant	24
As Repellent	26
Developmental Stages of <u>P. demoleus</u> L.	
Egg	28
Larva	29
Prepupa	34
Pupa	35
Adult	36

CHAPTER IV. SUMMARY, FINDINGS, CONCLUSION, AND
RECOMMENDATION

Summary	38
Findings	38
Conclusion	40
Recommendation	40

BIBLIOGRAPHY

APPENDIX

CURRICULUM VITAE

LIST OF TABLES

TABLE	TITLE	PAGE
1	Percentage mortality of the larvae by contact application of the crude extract of <u>D. hispida</u> Schlusssel first instar	22
2	Percentage mortality of the larvae by contact application of the crude extract of <u>D. hispida</u> at the second instar	22
3	Percentage mortality of the larvae by contact application of the crude extract of <u>D. hispida</u> at the third instar	23
4	Percentage mortality of the larvae by contact application of the crude extract of <u>D. hispida</u> at the fourth instar	23
5	Percentage mortality of the larvae by contact application of the crude extract of <u>D. hispida</u> at the fifth instar	24
6	Feeding of <u>P. demoleus</u> larvae on <u>C. aurantum</u> leaves treated with <u>D. hispida</u> crude extract by dry method	25
7	Feeding of <u>P. demoleus</u> larvae on <u>C. aurantum</u> leaves treated with <u>D. hispida</u> crude extract by wet method	25

LIST OF FIGURES

FIGURE	TITLE	PAGE
1	Structural formula of dioscorine	6
2	<u>Dioscorea hispida</u> Schlusssel showing the fleshy rhizomes, stems and leaves.....	10
3	An improvised rearing cage for <u>P. demoleus</u>	11
4	Feeding of adult <u>P. demoleus</u> L. with 15% sugar solution	12
5	<u>Citrus aurantium</u> L. (kahel) used as food plant for <u>P. demoleus</u>	13
6	Materials used in obtaining the extract	14
7	Grated(left) and ungrated(right)	14
8	Application of the crude extract to the larvae	16
9	Application of the crude extract to the leaf squares by dry method	17
10	Application of the crude extract to the leaf squares by wet method	17
11	Larva showing its osmeterium reaching the dorsal side of its body	20
12	Color comparison before and after the treatment at the ventral side of the fifth instar larvae	27
13	Newly laid egg of <u>P. demoleus</u> L.	28
14	Egg of <u>P. demoleus</u> L. as it nearly reaches the hatching stage	29
15	The first instar larva of <u>P. demoleus</u>	30
16	The second instar larva of <u>P. demoleus</u>	31
17	Third instar larva of <u>P. demoleus</u>	32
18	Fourth instar larva of <u>P. demoleus</u>	33

19	Fifth instar larva of <u>P. demoleus</u>	33
20	Prepupal stage of <u>P. demoleus</u>	34
21	Pupal stage of <u>P. demoleus</u>	35
22	Imago emerges from the pupa	36
23	Adult <u>P. demoleus</u> showing the dorsal side	37
24	Adult <u>P. demoleus</u> showing the ventral side	37