FIELD AND LABORATORY STUDIES OF *PAEDERUS* SPECIES IN NILE DELTA

Thesis

Submitted for partial fulfillment of the Master Degree in Parasitology

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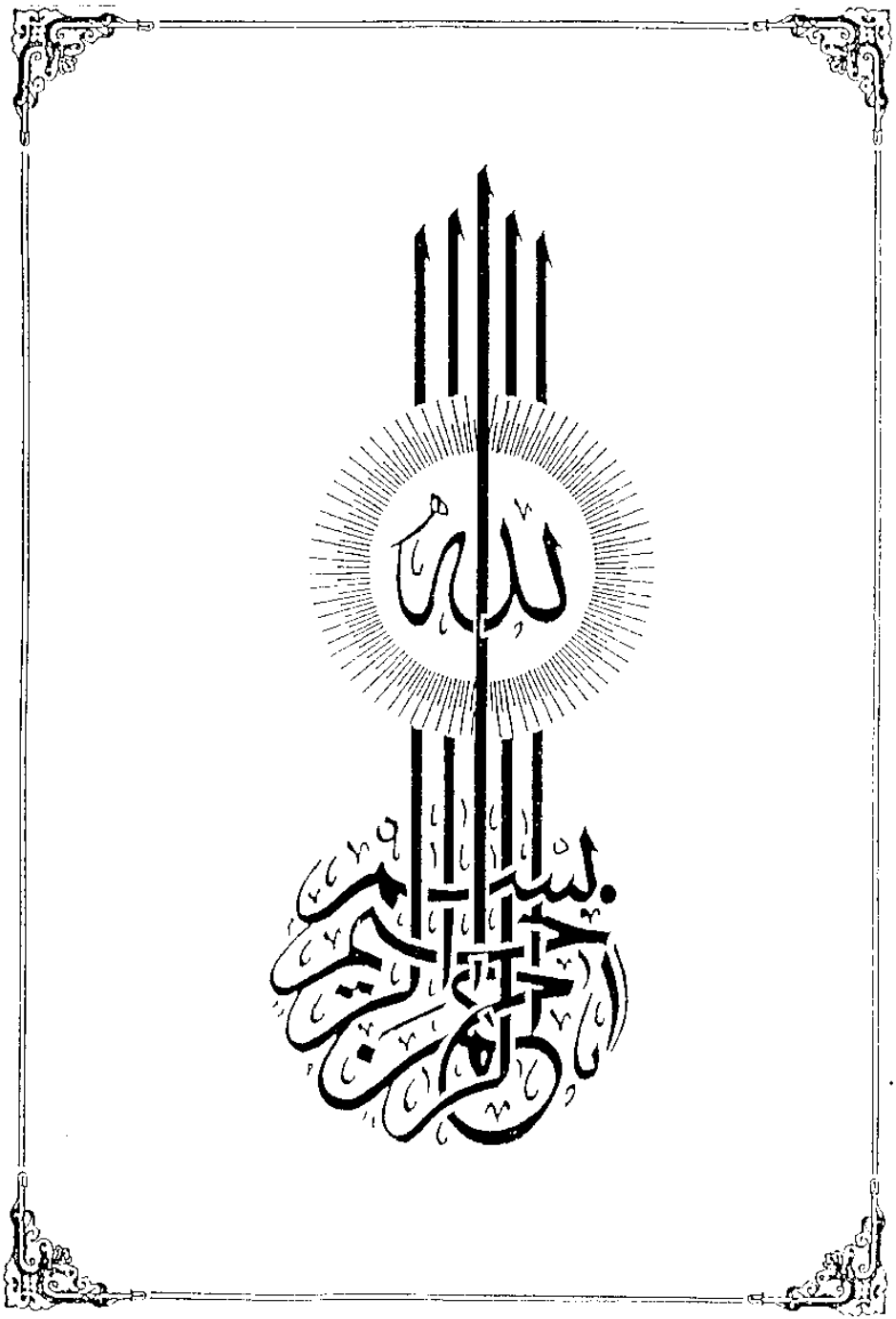

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CONTENTS

	Page
Introduction	1
Aim and plan of the work	3
Review of literature	4
1- Classification and taxonomic position of *Paederus*	4
2- Natural history of *P. alfierii*	5
* Lifer cycle	5
3- Feeding habits, and agricultural importance	11
4- Bionomics	14
5- Natural enemies, and defenses	16
6- Medical importance	17
* Epidemics, and their cause	20
* Differential diagnosis	26
7- Pederin	27
* Analysis, synthesis & biochemical properties	27
* Mode of action, toxicology & pathology	30
8- Control of *Paederus* & dermatitis linearis	33
* Physical control	33
* Chemical control	33
9- Treatment of dermatitis linearis & ocular reaction	34
Materials and Methods	36
Results	45
Discussion	56
Conclusion	66
Summary	67
Recommendations	69
References	70
Arabic summary	98

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LIST OF TABLES, FIGURES AND PHOTOGRAPHS

	Page
Tables:	
(1) Showing the geographical distribution of dermatitis linearis	21
(2) Showing *Paederus* shown experimentally to be capable of causing dermatitis linearis	25
(3) Showing the seasonal distribution of *P. alfierii* in five Governorates during the year 1995	47
(4) Showing the results obtained in the three mice groups	48
Figures:	
(1) The egg of *P. alfierii*	6
(2) The 1st instar larva	7
(3) The 2nd instar larva	7
(4) The prepupa	8
(5) The pupa	9
(6) The adult	10
(7) The hand net	37
(8) The light trap	38
(9) The manual aspirator	38
Photographs:	
(1) The tissue homogenizer	39
(2) The shaved ventral abdominal skin	42
(3) The shaved abraded ventral abdominal skin	43
(4) The shaved dorsal skin	43

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Page

(5) The shaved abraded dorsal skin 44
(6) The adult *P.alfierii* 49
(7) The adult *P.alfierii* (male) 50
(8) The adult *P. alfierii* (female) 50
(9) The mouth parts 51
(10) The fore leg 51
(11) The mid leg 52
(12) The hind leg 52
(13) The fore wing (elytra) 53
(14) The hind wing 53
(15) The Mouse in Photo."2" two weeks later 54
(16) The mouse in Photo. "3" two weeks later 54
(17) The mouse in Photo. "4" two weeks later 55
(18) The mouse in Photo. :5" two weeks later 55

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INTRODUCTION

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Introduction

Staphylinids *(Coleoptera)* are known as predators of *Diptera* and other arthropods of medical and veterinary importance, but the genus *Paederus* has achieved greater notoriety **(Frank and Kanamitsu, 1987).**

Genus *Paederus* includes over 600 described species distributed in all temperate and tropical continents of which are *P. alfierii, P. fuscipes, P. memnonius, and P.sabaeus* **(Frank and Kanamitsu, 1987).**

P. fuscipes attracted the interest of many scientists due to its widespread existence and the contact of its adults to humans, especially in the tropics. Haemolymph is released when the insect is crushed on human skin (deliberately or accidentally), and can be introduced into the eyes. This haemolymph contains a potent toxin that causes dermatitis linearis and conjunctivitis in humans. Epidemics of dermatitis linearis are recorded for many tropical and some temperate countries **(Frank and Kanamitsu, 1987) .**

P. alfierii Koch is a common staphylinid beetle which was known in Egypt as *Paederus fuscipes Curtis.* **Koch (1934)** described *P. alfierii* as a new species, and gave the main characteristics which differentiate it from *P. fuscipes* **(Ahmed, 1957).**

In August and September last year *P. alfierii attacked* a factory in Tanta and about 40 workers suffered a severe type of contact dermatitis which necessitated hospitalization and surgical interference for complications such as abscesses.

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This study is aimed to throw more light on *P. alfierii*, its medical importance, and to clarify the previous reported case, and to draw the attention to its principle toxin (**Pederin**) as an important compound in cancer research and cellular biology.

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AIM & PLAN OF THE WORK

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