

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

Thesis

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Parasitology

By

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INTRODUCTION

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

In August and September last year *P. alfieri* 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.

This study is aimed to throw more light on *P. alferii*, 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.

AIM & PLAN OF THE WORK

