

بسم الله الرحمن الرحيم



HOSSAM MAGHRABY



شبكة المعلومات الجامعية التوثيق الالكتروني والميكرو فيلم



HOSSAM MAGHRABY

جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها
على هذه الأقراص المدمجة قد أعدت دون أية تغيرات



يجب أن

تحفظ هذه الأقراص المدمجة بعيدا عن الغبار

HOSSAM MAGHRABY



بعض الوثائق الأصلية تالفة



HOSSAM MAGHRABY



بالرسالة صفحات

لم ترد بالأصل



HOSSAM MAGHRABY

Histological and immunological studies on intermediate host of some trematods

Thesis

B1EES

**Submitted to Faculty of Science, Tanta University in
partial fulfilment of the requirements for the degree
of Master of Science (Zoology)**

by

Gihan Mahmoud Abou El-Yazid El-khodary

B . sc (Zoology, Tanta University 1992)

Supervisors

PROF. DR.

Mohamed Hassan Mona

*Prof of invertebrates, Zoology Department,
Faculty of Science, Tanta university*

PROF. DR.

Ibrahim Bakr Helal

*Ass . Prof . of immunoparasitology
Faculty of Science
Tanta university*

DR.

Samia Hanem Hameem Eissa

*Lecturer of invertebrates
Faculty of Science
Tanta university*

**Zoology Department , Faculty of Science
Tanta University**

A . R . E

1995



TO
My Parents, My Grandmother ,
And
My Brothers, Wael and Ahmed

Tanta University
Faculty of Science

To whom it my concern

This is to certify that Gihan Mahmoud Abou El-yazid El-khodary
had attended and passed successfully the following post graduate
Courses as a partial fulfilment of the requirements for degree of
Master Science (Zoology) during the Academic year 1993 - 1994 .

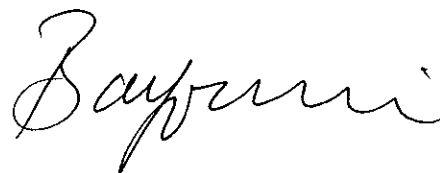
- 1 - Fresh water ecology
- 2 - Marine ecology
- 3 - Physiology
- 4 - Biological statistics
- 5 - German Language .

This certificate is issued at her own request .

Head of Zoology Department

Prof . Dr .

Bayoumi Mohamed Bayoumi



ACKNOWLEDGMENT

I am deeply indebted and grateful to **Prof. Dr. Bayoumi Mohamed Bayoumi**, Head of Zoology Department , Faculty of Science , Tanta University, For his continuous encouragement .

My deeps gratitude to **Prof. Dr. Mohamed Hassan Mona**, Prof. of Invertebrates, Zoology Department , Faculty of Science, Tanta University for suggesting the point of research , his continuous guidance, honest supervision and for his fruitful criticism . He provided all the facilities all over the work .

My best thanks to **Prof. Dr. Ibrahim Baker Helal**, Assist. Prof.. of Immunoparasitology, Zoology Department , Faculty of Science, Tanta University for his sharing in suggesting the point of research, his supervision and his valuable help and guidance .

I am greatly indebted to **Dr. Samia Hanem Hameem Eissa**, Lecturer of Invertebrates, Faculty of Science , Tanta University for her effective supervision , perfect help in the laboratory work and constructive criticism during reading the manuscript .

Finally, many thanks are expressed to the staff of Zoology Department, Faculty of Science, Tanta University who kindly help me in producing his achievement .

Supervisors .

1 - Prof . Dr . Mohamed Hassan Mona

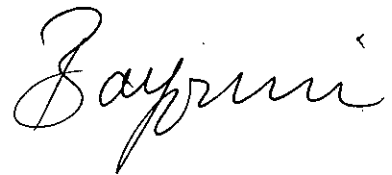
Prof of invertebrates Zoology ,
Zoology Department ,
Faculty of Science ,
Tanta University

2 - Prof Dr . Ibrahim Bakr Helal

Ass . prof of immunoparasitology ,
Zoology Department ,
Faculty of Science ,
Tanta University .

3 - Dr . Samia Hanem Hameem Eissa

Lecturer of invertebrate ,
Zoology Department ,
Faculty of Science ,
Tanta university .



Curriculum Vitae

Name : Gihan Mahmoud Abou Elyazid Elkhodary

Date of Birth : 11 / 2 / 1971

Locality : Tanta , Gharbia , Egypt .

Nationality : Egyptian

Primary School : Notre Dam Diza Potr , Tanta

Preparatory School : Notre Dam Diza Potr , Tanta

Secondary School : Kasem Amien School , Tanta

Qualifications : B . Sc . , in Zoology , May , 1992 with a Final grade

“ Very Good ” Faculty of Science , Tanta University . Attended and passed successfully the post graduate Courses in partial fulfilment of M . Sc . , 1994 .

Bayomi

Content

Introduction	1
Aim of the work	7
Materials and methods	
1- Histological and histochemical studies	9
2- Physiological and immunoparasitological studies.	11
Part I :	
Effect of larval trematodes on the hermaphrodite glands of freshwater snails, <i>Biomphalaria</i> <i>alexandrina</i> and <i>Bulinus truncatus</i> .	
Introduction :	18
Results :	26
Discussion :	33
Part II :	
Effect of larval trematodes on the neurosecretory cells of freshwater snails, <i>Biomphalaria</i> <i>alexandrina</i> and <i>Bulinus truncatus</i> .	
Introduction :	35
Results :	39
Discussion :	49
Part III :	
Effect of larval trematodes on the glycogen content, hemolymph total protein and agglutination titres of freshwater snails, <i>Biomphalaria alexandrina</i> and <i>Bulinus truncatus</i> .	
Introduction :	52
Results :	59
Discussion :	69
Summary and conclusion	73
References	77
Arabic summary	

INTRODUCTION

Introduction

Phylum mollusca constitutes one of the major divisions of the animal kingdom and is of unusual interest both in regards to diversity of organization and in the multitude of living species, conservatively estimated to be 47, 000 (Boss, 1971).

All of the existing higher taxa have been recognized since the Pre-Cambrian and this stability reflects, in part, the ability of the molluscs to cope successfully with the repeated insults imposed by pathogens and parasites. Members of class gastropoda (Snails & Slugs), at least numerically, are the most successful members of molluscs and are of special economic concern in that they serve as intermediate and paratenic hosts for helminth parasites causing diseases in man and his domesticated animals .

In Egypt, two species of snails are very important from the parasitological point of view : *Biomphalaria alexandrina* & *Bulinus truncatus* (order :Basmmatophora, Family : Planorbidae) which being the intermediate hosts of *Schistosoma mansoni* and *Echinostoma* sp .

It is worthy to mention that, the distribution of *Biomphalaria alexandrina* is limited to Delta region whereas *Bulinus truncatus* is widely spread all over the Nile Valley, irrigation channels , drains and in many places in the River Nile (Leiper and Gordon Thomson , 1918) . The absence of *B. alexandrina* from upper Egypt was likewise, recorded by