



شبكة المعلومات الجامعية

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ





شبكة المعلومات الجامعية



شبكة المعلومات الجامعية

التوثيق الالكتروني والميكرو فيلم

جامعة عين شمس

التوثيق الالكتروني والميكرو فيلم

قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها
علي هذه الأفلام قد اعدت دون أية تغيرات



يجب أن

تحفظ هذه الأفلام بعيداً عن الغبار

في درجة حرارة من 15 – 20 مئوية ورطوبة نسبية من 20-40 %

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بعض الوثائق الأصلية تالفة



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بالرسالة صفحات
لم ترد بالأصل

**"TAXONOMICAL AND ECOLOGICAL STUDIES
ON FRESHWATER FLEAS(CRUSTACEA)
IN QENA GOVERNORATE"**

A THESIS

Submitted for The Award of
The Ph.D. Degree

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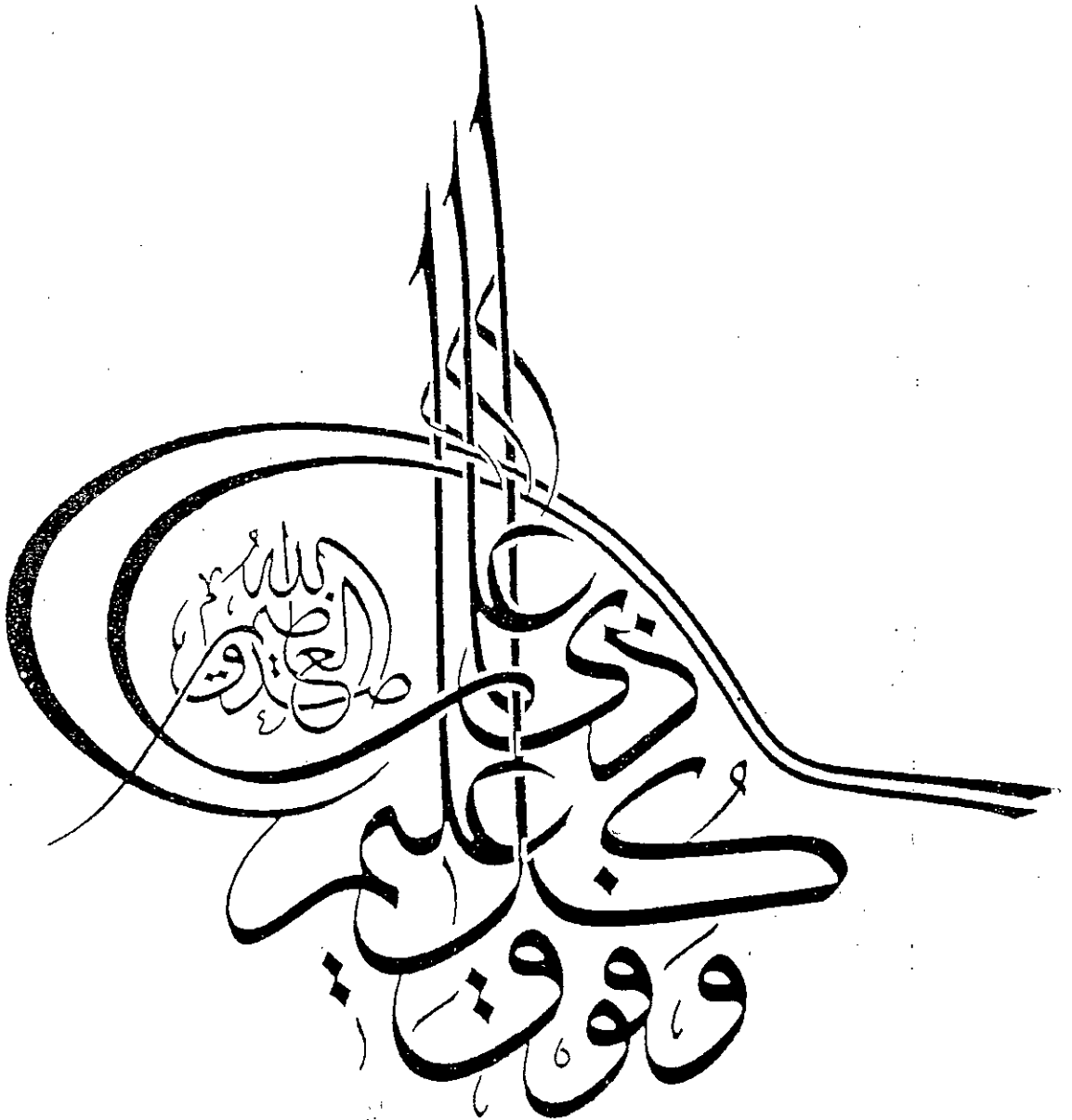
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(سورة يوسف ، آية ٧٦ ك)

To

My Parents

My Husband ; Yahia

My Sons ; Tamer, Basim and Mahmoud

My Daughter ; Dalia

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LIST OF CONTENTS

	Page
1. Introduction-----	1
2. Materials and Methods -----	7
3. Results and Discussion -----	12
3.1. Description of the collecting sites -----	12
3.1.1. Description of Qena sites -----	12
3.1.1.1. Site (1) -----	12
3.1.1.2. Site (2) -----	13
3.1.1.3. Site (3) -----	15
3.1.1.4. Site (4) -----	16
3.1.2. Naga-Hammadi site (5) -----	17
3.1.3. Esna site (6) -----	18
3.2. Diagnostic characters of Cladocera and its classification -----	20
3.2.1. Diagnostic characters of Cladocera -----	20
3.2.2. Classification of Cladocera -----	22
3.2.3. Presentation of the recorded species -----	23
3.3. Morphological and ecological studies -----	25
3.3.1. <i>Diaphanosoma mongolianum</i> Uneo, 1938 -----	26
3.3.1.1. Description of Parthenogenetic female -----	26
3.3.1.2. Discussion -----	32
3.3.1.3. Ecology of <i>Diaphanosoma mongolianum</i> Uneo, 1938 -----	34
3.3.2. <i>Bosmina longirostris</i> (O.F. Müller, 1785) -----	36
3.3.2.1. Description of parthenogenetic female -----	36
3.3.2.2. Discussion -----	40
3.3.2.3. Ecology of <i>Bosmina longirostris</i> (O.F. Müller, 1785) -----	42
3.3.3. <i>Alona bukobensis</i> Weltner, 1896 -----	44
3.3.3.1. Description of parthenogenetic female -----	44
3.3.3.2. Discussion -----	47
3.3.3.3. Ecology of <i>Alona bukobensis</i> Weltner, 1896 ---	49

	Page
3.3.4. <i>Chydorus sphaericus</i> (O.F. Müller, 1785) -----	51
3.3.4.1. Description of Parthenogenetic female -----	51
3.3.4.2. Discussion -----	56
3.3.4.3. Ecology of <i>Chydorus sphaericus</i> (O.F. Müller, 1785) -----	58
3.3.5. <i>Ceriodaphnia reticulata</i> (Jurine, 1820) -----	60
3.3.5.1. Description of parthenogenetic female -----	60
3.3.5.2. Discussion -----	66
3.3.5.3. Ecology of <i>Ceriodaphnia reticulata</i> (Jurine, 1820) -----	68
3.3.6. <i>Daphnia longispina</i> (O.F. Müller, 1785) -----	70
3.3.6.1. Description of parthenogenetic female -----	70
3.3.6.2. Discussion -----	78
3.3.6.3. Ecology of <i>Daphnia longispina</i> (O.F. Müller, 1785) -----	80
3.3.7. <i>Simocephalus exspinosus</i> (Koch, 1841) -----	82
3.3.7.1. Description of parthenogenetic female -----	82
3.3.7.2. Discussion -----	83
3.3.7.3. Ecology of <i>Simocephalus exspinosus</i> (Koch,1841)	84
3.3.8. <i>Simocephalus vetulus</i> (O.F. Müller, 1776) -----	86
3.3.8.1. Description of parthenogenetic female -----	86
3.3.8.2. Discussion -----	92
3.3.8.3. Ecology of <i>Simocephalus vetulus</i> (O.F. Müller, 1776) -----	94
3.3.9. <i>Macrothrix laticornis</i> (Jurine, 1820) -----	96
3.3.9.1. Description of Parthenogenetic female -----	96
3.3.9.2. Discussion -----	101
3.3.9.3. Ecology of <i>Macrothrix laticornis</i> (Jurine,1820)	103
3.3.10. <i>Moina micrura</i> (Kurz, 1874) -----	105
3.3.10.1. Description of parthenogenetic female -----	105
3.3.10.2. Discussion -----	110
3.3.10.3. Ecology of <i>Moina micrura</i> (Kurz, 1874) -----	111
3.4. Comments on morphology -----	113
3.5. Ecological observations -----	115

	Page
3.5.1. Abundance and seasonal distribution -----	115
3.5.2. Effect of ecological factors -----	118
3.6. Summary -----	122
3.7. References -----	128
Appendix -----	
3.8. List of tables -----	143
3.9. Tables -----	146
3.10. List of figures -----	188
3.11. List of abbreviations -----	194
3.12. Figures -----	197
3.13. List of Photos -----	267
3.14. Photos -----	272
3.15. Summary in arabic -----	-

I. INTRODUCTION

Among the freshwater zooplankton community, Cladocera represents one of the most common elements of pelagic populations. Being almost exclusively filter feeders and algae users and, at the same time, the favourite prey of invertebrate and vertebrate predators, Cladocera represents the most important group in the plankton community of lakes, as regards energy transfer along the food chain (Bernardi et al., 1987).

According to Frey (1982), serious taxonomic work on Cladocera began with O.F. Müller in 1776, and the next century was devoted almost exclusively to the fauna of Europe. Beginning essentially with E.A. Birge in 1878. Scientists studied Cladocera from other regions, and, seeing taxa that resembled those already described from Europe, gave them the same names. The idea quickly became accepted that many species of Cladocera are essentially cosmopolitan in distribution, but few attempts were made to ascertain if widely separated taxa bearing the same name are indeed the same. Recent studies of some examples of Cladocera have demonstrated that each of these wide-ranging taxa consists of a group or complex of species, no one of which by itself is cosmopolitan. It seems certain that many of the other "species", at least of chydorids, with claimed cosmopolitan distribution will likewise be found to consist of clusters of closely related species. Serious questioning of the con-

cept of cosmopolitanism began with a paper by Frey (1973) that established a new species of *Eurycerus* and defined three subgenera. Also, Frey (1987) indicated that from the studies he had published and from examination of hundreds of samples from different parts of the world, many taxa presently having the same names are really different. They look alike on a gross basis, but at the level of significant details they are different. They often are members of a species group of sibling species that as a group is widely distributed around the world, but the individual species of which are much more restricted. Frey also added that the present confusion in the taxonomy of Cladocera has arisen from accepting cosmopolitanism.

From the abovementioned concept of non cosmopolitanism of Cladocera, one can conclude the importance of local and national taxonomic studies on the Cladocera to fulfill the gap and to enlarge our knowledge about the confused taxonomy of these animals.

Accordingly, many taxonomic studies including revisions on some cladoceran genera of the world were carried out. It is worthy to mention in this regard the work of Frey (1975) who published work on the chydorid Cladocera and described a new species from northern Sweden. Hebert (1977) revised the taxonomy of genus *Daphnia* in South-eastern Australia. Paggi (1978) revised the Argentine species of genus *Diaphanosoma* Fischer. Korovchinsky (1981) worked on the taxonomic and