

ثبكة المعلومات الجامعية

# Cierla Territa Cierta Coi





ثبيكة المعلومات الجامعية



شبكة المعلومات الجامعية

التوثيق الالكتروني والميكروفيلم



# جامعة عين شمس

التوثيق الالكتروني والميكروفيلم



نقسم بللله العظيم أن المادة التي تم توثيقها وتسجيلها علي هذه الأفلام قد اعدت دون آية تغيرات



يجب أن

تحفظ هذه الأفلام بعيداً عن الغبار فى درجة حرارة من 15 - 20 منوية ورطوبة نسبية من 20-40 %

To be kept away from dust in dry cool place of 15 – 25c and relative humidity 20-40 %



ثبكة المعلومات الجامعية



بعض الوثائق الأصلية تالة ت



ثبيكة المعلومات الجامعية





#### FOOD CONSUMPTION, ASSIMILATION

#### AND GROWTH OF SOME TERRESTRIAL ISOPOD

#### SPECIES IN QENA REGION

#### A THESIS

Submitted to the Faculty of Science, Qena,

South Valley University

Presented as apartial fulfillment for

the award of the degree of M. Sc.

(Zoology)

Bv

Mohey El-Dein Zein El-Abdein Abd El-Latif

Demonstrator in Zoology Department

Faculty of Science, Qena

South Valley University

Supervised by

Prof. Dr. M. A. Hussein

Prof. Dr. A. N. Kayed

Department of Zoology

Department of Zoology

Faculty of Science

Faculty of Science

**Assiut University** 

Alexandria University

Dr. A. S. M. Moustafa

Department of Zoology

Faculty of Science, Qena

South Valley University

VIL

M:1.  $(v_{ij}) = \frac{1}{2} \left( \frac{1}{2} \ln n + \frac{1}{2} \ln n \right) = \frac{1}{2} \frac{1}{2}$ 

## **CONTENTS**

ACKNOWLEDGEMENT	Page
CHAPTER I	
GENERAL INTRODUCTION	1 - 7
CHAPTER II	
PALATABILITY	
II-1 Introduction	8 - 13
II-2 Materials and Methods	14 - 21
II-3 Results	22 - 24
II-4 Discussion	25 - 29
II-5 Tables	30 - 33
II-6 Figures	34
CHAPTER III	
FOOD CONSUMPTION	
III-1 Introduction	35 - 42
III-2 Materials and Methods	43 - 46
III-3 Results	47 - 52
III-4 Discussion	53 - 56
III-5 Tables	57 - 79
III-6 Figures	80 - 83
CHAPTER IV	
FOOD ASSIMILATION	
IV-1 Introduction	84 - 87
IV-2 Materials and Methods	88
IV-3 Results	89 - 91

04 - SV

57 - 192

Lin - Cr

811 - 61

901 - 01 701 - 1. .

SEE - 81

4<del>81</del> - 1

46. - 1

305 - 179

281 481

€-1

IV-4 Discussion	92 - 96
IV-5 Tables	97 - 102
IV-6 Figures	103 - 114
CHAPTER V	
GROWTH	
V-1 Introduction	115 - 118
V-2 Materials and Methods	119 - 120
V-3 Results	121 - 127
V-4 Discussion	128 - 130
V-5 Tables	131 - 154
V-6 Figures	155 - 164
CHAPTE VI	
REFERENCES	165 - 179
SUMMARY	180 - 182
SUMMARY IN ARABIC	1 - 3

**i** 1967)

er the alogy, of Soll

rusiofa Valiev

्रवी प्रके स्ट्रीती से १९७३

, deer z ano ork.

สองกรระ

in for

end of Valley A and

1891 m

#### **ACKNOWLEDGEMENT**

First of all thanks to the name of Allah to whom I related any success in my life.

This work was proposed and carried out under the supervision of Prof. Dr. M. A. Hussein, Professor of Zoology, Assiut University, Prof. Dr. A. N. Kayed, Professor of Soil Ecology, Alexandria University and Dr. A. S. M. Moustafa Lecturer of Zoology, Faculty of Science, Qena, South Valley University.

To Prof. Dr. Hussein, I wish to express my gratitude for continuous guidance and encouragement, and without his expert assistance and invaluable efforts, it would have been difficult to complete the present work.

To Prof. Dr. Kayed, I am deeply indebted for his deep interest, continued guidance, advice and encouragement and constructive criticisms throughout different stages of this work.

To Dr. Moustafa, my deep thanks for his deep interest, continued advice and encouragement and time he offered.

My sincere thanks to Professor Dr. H. Mansour, Dean of the Faculty of Science, Qena, South Valley University for continuous help and encouragement.

My sincere thanks to Prfessor Dr. M. Z. Yousif, Head of Zoology Department, Faculty of Science, Qena, South Valley University for his continuous help and ecouragement and facilities he offered during this work.

I wish to express my deep appreciation to all members of the Department of Zoology, Faculty of Science, Qena for their encouragement. .

### CHAPTER I

GENERAL INTRODUCTION

```
Bother
 navç
 varr'
 Hisari
 80 P.C
 \mathbb{E}_{\mathcal{A}_{i}^{\mathrm{reg}}(x_{i})} \rightarrow
 5.34
 tu bir
>1111
່ ເກືອກ.
 10 m m
 zəlörer
 th the
 vd sga-
 hogom
 10 8%
 busines:
 DHE GIFE
 उन्ते स्थान
 : 12 :
 -la brie
 vulee}...
 SARE
 (1991)
 bus ating
 the plant material accd wood and decaying leaves
 then the main diet of the examined species. Most terrestrial
```

in mi Solo Vi by