



**ECOLOGICAL AND TAXONOMIC STUDIES OF FAMILY  
GRYLLIDAE ( ORTHOPTERA ) IN EGYPT .**

A thesis  
Submitted in Partial Fulfilment of the  
Requirements for the Award of the  
degree of master of Science  
( Entomology )

**BY**  
**SALAH EL-DIN ANWAR EL-AZAB**  
B.SC ( Entomology -Chemistry )

Supervisors

595.72  
S.E.  
Prof. Dr. SALWA K. MOHAMED  
Professor of Taxonomy,  
Faculty of Science  
Ain Shams University

Dr. HASAN H. FADL  
Assistant Professor of Taxonomy  
Faculty of Science  
Ain Shams University

Dr. AHMED S. ABU ZAID  
Lecturer of Entomology  
Faculty of Science  
Ain Shams University

Entomology Department  
Faculty of Science  
Ain Shams University

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## Dedication

There is always a great woman in the life of any successful man . I owe my mother my success and progress , she is the great woman in my life . Also my success is presented to my father's soul . Now his dream for me has been fulfilled .



## BIOGRAPHY

Date and place of Birth : 5 - 10 - 1966, Cairo

Date of Graduation : Sep., 1988

Degree Awarded : B.Sc. ( Entomology - Chemistry )

Grade : Good

Occupation : Assistant Researcher, Plant Protection  
Research Institute, Dokki, Giza .

Date of Appointment : 1990

Date of Registration : March, 1991



**COURSES ATTENDED BY THE CANDIDATE IN PARTIAL  
FULFILMENT OF THE REQUIREMENTS FOR THE ( M.SC. )**

**DEGREE :**

**Entomology Courses :**

- Comparative anatomy
- Insect Taxonomy
- Population dynamics
- New approaches to insect control
- Radiobiology
- Chemistry of pesticides
- Advanced insect physiology
- Pheromones
- Hormones
- Microbiology

**Other Courses :**

- Instrumental analysis
- Histochemistry
- Genetics
- Pollution
- Computer

**Examination passed on : Sep., 1990 .**

**English language for postgraduate students .**

**Examination passed on : Oct., 1991 .**



## SUPERVISORS

Prof. Dr. Salwa K. Mohamed

Professor of Insect taxonomy, Faculty of Science, Ain Shams University .

Dr. Hasan H. Fadi

Asistant professor of Insect taxonomy, Faculty of Science, Ain Shams  
University .

Dr. Ahmed S. Abu Zaid

Lecturer of Entomology, Faculty of Science, Ain Shams University .



## ABSTRACT

The purpose of the present work is to study the survey, population density and external morphology, with recent taxonomic studies of family Gryllidae (gryllid crickets) that is considered secondary pests of wide scale of plants and weeds.

Twelve species belonging to ten genera in four subfamilies of family Gryllidae were collected showing the prevalence in twenty localities in Upper and Lower Nile, Coastal strip, Eastern and Western deserts, Sinai and Gabal Elba regions. Population density in El-Noubariya region (El-Beheira governorate) indicated that these gryllid crickets were most active during September, October and November.

The external morphology of the most common species, *Gryllus bimaculatus* De Geer, was studied; its male and female characteristics were carefully investigated and illustrated.

Taxonomic study of family Gryllidae, its subfamilies, genera and species were determined. Keys, synonyms and diagnostic characters of twenty four species, including two new records: *Tartarogryllus theryi* Serville and *Gryllomorpha brevicauda* Bolivar are reported in addition to their geographical distribution. Illustrations of all adult species were made.

**Key words:** Ecology, Taxonomy, Gryllidae and Population density.



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