شبكة المعلومات الجامعية

بسم الله الرحمن الرحيم

شبكة المعلومات الجامعية

شبكة المعلومات الجامعية

التوثيق الالكتروني والميكروفيلم

شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الالكتروني والميكروفيلم

قسم

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

يجب أن

تحفظ هذه الأفلام بعيداً عن الغبار

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

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

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بالرسالة صفحات

لم ترد بالأصـــل

بعض الوثائق الأصلية تالفة

MOLECULAR GENETIC VARIATIONS OF DIFFERENT POPULATIONS OF *AEDES CASPIUS*(PALLAS) FROM DIFFERENT GEOGRAPHICAL HABITATS .

A THESIS

PRESENTED TO THE FACULTY OF SCIENCE
AIN SHAMS UNIVERSITY

FOR THE AWARD OF THE Ph. D. DEGREE

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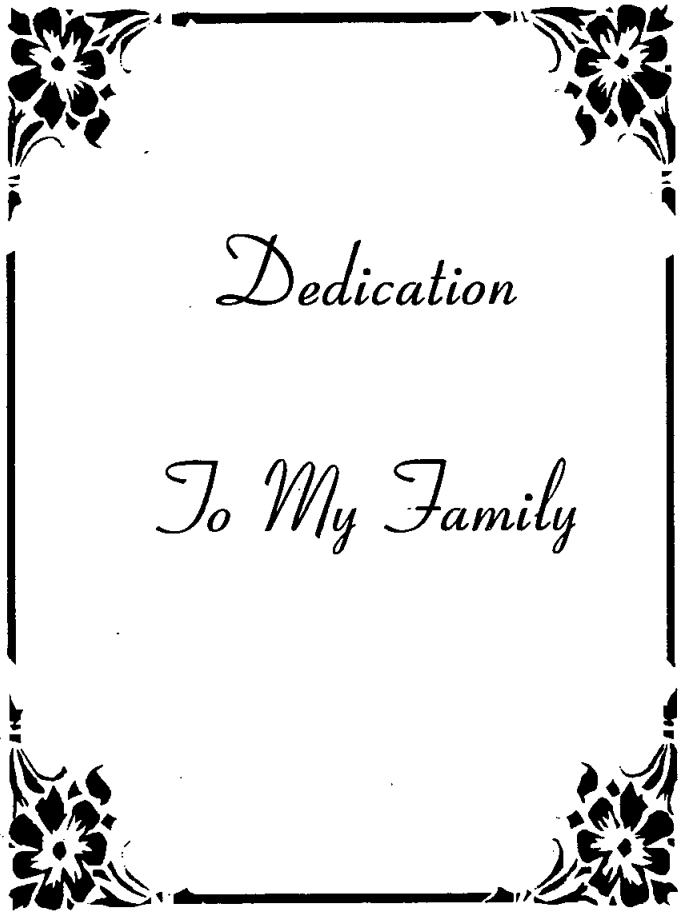

Dedication

To My Family

AKNOWLEDGMENTS

I would like to express my thanks to **Dr. Ahmed Hassan Kaschef**, Professor of Entomology, Faculty of Science, Ain Shams University, for his supervision and valuable comments and advice throughout this study.

Special deep thanks and sincere gratitude to **Dr. Ahmed Shoukry Abdel Aziz,** Professor of Entomology, Faculty of Agriculture, President of the Suez Canal University for his supervision, and for his kind encouragement and continual support for this Thesis.

Warmest gratitude to **Dr. Belal Ahmed Soliman**, Assistant Professor of Entomology, Faculty of Education, Suez Canal University for suggesting the point of research, and direct supervision, advice in collecting samples, reading and correcting the manuscript.

I also wish to extend my thanks to **Dr. Mohamed Sayed Salama**, Assistant Professor of Entomology, Faculty of Science, Ain Shams University because of his valuable guidance, sharing the point of research suggestion and his kind encouragement throughout the preparation of this work.

Also my deepest appreciation to **Dr. Mir S. Mulla**, Professor of Entomology, **Dr. Thomas Miller**, Professor of Molecular Genetics, **Dr. Peter Atkinson**, Associate Professor of Molecular Genetics, **Dr. Mark Robertson** and **Dr. Steve Thibolt**, Assistants at Molecular Genetic Laboratory, Department of Entomology, College of Agricultural and Natural Science, University of California, Riverside, U.S.A., as collaborators in directing the scope of this Thesis and Data Analysis during my current research in the U.S.A.

ABSTRACT

Genetic variability was examined for five populations of *Aedes* (*Ochlerotatus*) *caspius* (Pallas) representing different geographical isolated areas of Egypt; Fayoum, Ismailia, Qalioubiya, Red sea and Sinai. Two Molecular genetic techniques were used; firstly, Random Amplified Polymorphic DNA Polymerase Chain Reaction (RAPD-PCR). A screen of 19 random decamer oligonucleotide primers revealed three primers OPA-01, -04 and -09 which were chosen to discriminate the population frequencies of RAPD fragments. The three primers produced thirteen unique and shared bands which enable the differentiation of genetically distinct *Ae. caspius* populations. Secondly, variations in the nucleotide sequences of the second internal transcribed spacer (ITS2) of nuclear ribosomal DNA (rDNA) were used based on the PCR to distinguish the five *Ae. caspius* populations. Two specific primers of 28 oligonucleotides were used; the forward primer CP-P1A was derived from a sequence in the 5.8S RNA gene and CP-P1B primer derived from a sequence in the 28S RNA gene. Amplified DNA fragments used as a template with labeled deoxynucleotides (dNTPs) through the direct sequence and as an insert through the cloning technique. Many clones of ITS2 of 5 *Ae. caspius* populations are obtained using two vectors; P Blue Script II sk (+) plasmid and T-Easy vector. Sequence analysis of ITS2 clones revealed wide genetic diversity between *Ae. caspius* populations.