ECOLOGICAL, BIOLOGICAL AND TOXICOLOGICAL STUDIES ON RODENTS SPECIES AT THE NEWLY RECLAIMED LANDS

By

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THESIS

Submitted in Partial Fulfilment of the Requirements for the Degree of

53552

632.69323
A A

MASTER OF SCIENCE

In

ENVIRONMENTAL SCIENCE

Department of Agriculture Science

INSTITUTE OF
ENVIRONMENTAL STUDIES AND RESEARCHES
AIN SHAMS UNIVERSITY

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B.Sc. Agric. Sci. Ain Shams University,

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Abstract

Abd El-Raoof Ahmed Mourad : Ecological, Biological and Toxicological Studies on Rodents Species at the Newly Reclaimed Lands. Master of Science, Ain Shams University. Institute of Environmental Studies and Researches.

Rodents are harmful animals that cause damage to agricultural crops. stored products and exacerbates problems of malnutrition in developing countries resulting in an additional public health. In Egypt, the horizontal expansion through reclamation of desert lands is a vital necessity part of government agricultural development policy to increase the production of cereal crops, yet the problem posed by grain eating rodents in these newly reclaimed lands. So the rodents problems should be given consideration whenever new reclaimed desert areas are planned in Egypt.

The present study investigates the survey and population dynamics of rodent species existed in different newly reclaimed lands to different seasons. Configuration of burrows belonging to some desert rodent were sectioned and investigated. The damage caused by rodent species to the main field crops was examined in different locations. Added to these the reproduction activities of some rodent species were studied throughout the whole year months. Also. the ectoparasites associated to rodent species as fleas, lice and mites were examined. Moreover, the efficacy of some rodenticides against the predominant rodent in these areas were evaluated under laboratory and field conditions to establish integrated rodent pest management.

Key words : Survey and population dynamics
Newly reclaimed lands
Ectoparasite
Configurations of burrows
Rodent species
Rodenticides

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ACKNOWLEDGEMENT

I would like to express my deep gratitude and thanks to **Prof.Dr. Zidan Hindy Abd El-Hamid**, Prof. of Pesticides Chemistry and Vice Dean for Graduate Studies and Research, Faculty of Agriculture, Ain Shams University for his valuable supervision, kind help and encouragement during the achievement of this work and reviewing the manuscript.

I would like also to thank **Prof.Dr. Hassan Ebrahim El-Deeb**, Head of Harmful Animals of Agriculture Department, Plant Protection Research Institute, Dokki, Cairo for his helpful suggestions and valuable assistance during the preparation of this manuscript and for contributing an enormous amount of time in supervising this work.I am indebted to him for his patience and keen valuable guidance and help.

I express my thanks and gratitude to **Prof.Dr. Nabila Mahmoud Ebaid**, Prof. of Agricultural Zoology, Plant Protection Department, Faculty of Agriculture, Ain Shams University for her supervision, kind encouragement and guidance in the progress of this work.

Thanks are also due to **Dr. Fatma Abd-El-Halim Mohamed**, Researcher at Parasitology Department, Animal Health Research Institute, Dokki, Cairo, for her help and kind advice in identifying ectoparasites.

Finally, I greatly acknowledge the valuable help of **Dr. Nadia El-Hawashy, Dr. Helmy Zidan** and all the staff members of Harmful Animals of Agriculture Department, Plant Protection Research Institute, Agricultural Research Center, ministry of Agriculture.

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