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

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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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