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



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ECOLOGICAL AND BIOLOGICAL STUDIES ON CERTAIN TERRESTRIAL GASTROPODS IN DAKAHLIA GOVERNORATE

BY

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A thesis submitted in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

in Agricultural Science (Agricultural Zoology)

Department of Plant Protection Faculty of Agriculture Zagazig University

2002

BACIT



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Recently, terrestrial gastropods have increased greatly in economic importance in Dakahlia Governorate. The objective of this thesis is to throw light on ecology, biology and control of gastropod pests. It was found that, 13 species belonging to order Stylommatophora were identified in Dakahlia Governorate. Host plants infested with these species in 25 localities, representing five districts were listed. On the other hand, population density of nine snail species and four slug species were determined. Seasonal population behavior of *Monacha cartusiana* and *Deroceras reticulatum* in relation to temperature and relative humidity were studied in certain field and vegetable crops in Dakahlia Governorate. Land snails and slugs were arranged descendingly according to their prominence value.

Life cycle, number of clutches, clutch size and total number of eggs for certain slug species i.e. *D. reticulatum*, *D. laeve* and *Limax flavus* were determined under laboratory condition. On the other hand, life cycle, breeding season, oviposition and aestivation period for *M. cartusiana* were studied under field conditions.

Finally, molluscicidal activity of certain pesticides were tested on eggs and adults of *D. reticulatum* using different application methods under laboratory conditions Furthermore, carbofuran and metaldehyde were applied against *D. reticulatum* under field conditions.

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