



شبكة المعلومات الجامعية

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ



شبكة المعلومات الجامعية  
@ ASUNET



# شبكة المعلومات الجامعية التوثيق الالكتروني والميكروفيلم





شبكة المعلومات الجامعية

# جامعة عين شمس

التوثيق الالكتروني والميكرو فيلم

## قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها  
علي هذه الأفلام قد أعدت دون أية تغيرات



## يجب أن

تحفظ هذه الأفلام بعيدا عن الغبار

في درجة حرارة من ١٥-٢٥ مئوية ورطوبة نسبية من ٢٠-٤٠%

To be Kept away from Dust in Dry Cool place of  
15-25- c and relative humidity 20-40%

# بعض الوثائق الأصلية تالفة

# بالرسالة صفحات لم ترد بالاصل





# **STUDIES ON SOME INSECT PESTS IN NEWLY RECLAIMED AREAS**

**BY**

***EL-SAYED AIY HASSAN SHERIEF***

**A thesis Submitted in partial Fulfillment  
of  
the Requirements for the Degree of  
DOCTOR OF PHILOSOPHY**

**In**

**Agricultural Science  
(Economic Entomology)**

**Department of Plant Protection  
Faculty of Agriculture  
Zagazig University**

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B.Sc Zagazig Agriculture High institute (General Branch), 1966

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## Approval sheet

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1871

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1873

## Abstract

In the Arab Republic of Egypt, many insect pests attack both fruit trees and field crops in newly reclaimed areas. Family Scarabaeidae comprises several representative species more or less injurious to agriculture. In recent years, the population of *Tropinota squalida* Scop. outbreaked and have caused great damage to various plantations. The following points were taken in consideration as follows:

- 1- Survey and seasonal fluctuations: Twelve host plants were examined in this work during the flowering period, from January until April, 1-3 peaks of flight activity were recorded. The period of flowering and infestation on different hosts lasted about 12 weeks, the longest one were on broad bean, lupine and rocket.
- 2- Colour and host preference: The broad bean flowers are more preferable followed by wild mustard. The preference of flower colour spectrum was white and yellow, while the preferable colour of pan and funnel of traps was blue.
- 3- Flight distance and direction of *T. squalida* adults. The flight distance of marked and released adults were, 61.4% for 50m., 36% for 100 m., and 2.6% for 170 m.. Females fly to longer distances than males. Female were more attracted in descending order to western, southern, S /W & S/ E directions.
- 4- Damage assessment and estimation of injure levels (DTL): Percentage of damage in flowers and mean number of adults/plant per each host. The DTL 22.8% (apple), 27.6%



(pear), 22.2% and 0.73 adults/m<sup>2</sup>/tree (sour orange), 11.8% and 8.167 adults/m<sup>2</sup> (broad bean), the infestation percentage in flowers of other fields crops, and weeds were recorded.

5- **Non-chemical control methods** : This study was undertaken to evaluate three methods (blue traps, plant traps, NeemAzal formulation) on the capturing of adults and to suppress infestation safely without harm.

6- Anatomy of male and female reproductive systems were conducted and drown. Tests areas, percentage of both capturing and maturation eggs in dissected females captured in traps were estimated.