شبكة المعلومات الجامعية

بسم الله الرحمن الرحيم

شبكة المعلومـــات الجامعية

التوثيق الالكتروني والميكروفيلم

شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الالكتروني والميكروفيلم

﴿ قـسـم ﴾

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 %

بعض الوثائق الأصلية تالفة

بالرسالة صفحات

لم ترد بالأصـــل

NEW APPROACHES FOR CONTROLLING THE COTTON LEAFWORM AND BOLLWORMS IN RELATION TO ABUNDANCE OF PARASITOIDS AND PREDATORS

by

ERIAN SHEHATA MANSOUR

A thesis submitted in partial fulfillment

of

the requirements for the degree of

DOCTOR OF PHILOSOPHY

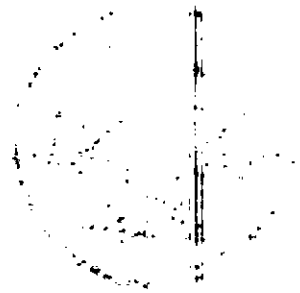
in

AGRICULTURAL SCIENCE

ECONOMIC ENTOMOLOGY

Department of Plant Protection
Faculty of Agriculture, Moshtohor
Benha Branch, Zagazig University,

2001



Approval Sheet

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ABSTRACT

Efficacy of a bioinsecticide (Xentari), a chemical insecticide (Baythroid), an IGR (Mimic) and a combination of Xentari +LC_{10} of Baythroid or Mimic was assayed on parasitised *Spodoptera littoralis* larvae by *Microplitis rufiventris*. Treated larvae showed lower mortality percentages, higher LC_{50} and longer LT_{50} than the unparasitised ones lowest concentration of Xentari ($4x10^4$ DBMU)+ LC_{10} of Baythroid caused 16.67 and 23.33 % mortalities among parasitised and unparasitised larvae, respectively, and the mixture showed potentiative effect. Also, the mixture of $4x\ 10^4$ DBMU of Xentari + LC_{10} of Mimic led to 30.00 and 33.33 % mortalities, respectively, and showed also potentiative effect. Two successive years (1998 and 1999) of field studies indicated the presence of 13 predaceous insect species, 6 *S. littoralis* parasitoids and 3 bollworm parasitoid species in cotton fields. Weekly estimations of populations of each species were made by sweeping net and true parasitism methods. Chemical insecticidal applications caused severest effect on entomophagous insects, while Xentari (Bacterial insecticide) and *Clerodendron inerme* extract were safe on these beneficial insects. Also, sex- pheromones had no harmful effect on predators and parasitoids. For *S. littoralis* and bollworms control. The lowest rate of damage caused by *S. littoralis* infestation to cotton leaves were (10.64 & 15.26 %) in chemical

insecticides treatments, opposed to (18.75 & 20.09 %) in control treatments for 1998 and 1999 cotton seasons, respectively. The mentioned bioinsecticide or *Clerodendron inerme* extract + sex–pheromones for attracting the males of these pest species may be recommended, as these materials do not cause any kind of pollution on the environment.