



شبكة المعلومات الجامعية

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ





شبكة المعلومات الجامعية



# شبكة المعلومات الجامعية

## التوثيق الالكتروني والميكرو فيلم

# جامعة عين شمس

التوثيق الالكتروني والميكرو فيلم

## قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها  
علي هذه الأفلام قد اعدت دون أية 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 %



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# بعض الوثائق الأصلية تالفة



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بالرسالة صفحات  
لم ترد بالأصل

# **ECOLOGICAL AND BIOLOGICAL STUDIES ON DIFFERENT APHID SPECIES INFESTING SOME LEGUME PLANTS IN EGYPT**

**By**

**Shehab Ahmed Hossni**

*B. Sc. Agric. Plant Protection,*

*Fac. of Agric. Zagazig University, Benha Branch, 1982*



**A Thesis**

**Submitted in Partial Fulfillment of  
The Requirements for the Degree of**

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**in**

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

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**APPROVAL SHEET**  
**ECOLOGICAL AND BIOLOGICAL STUDIES ON**  
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## ABSTRACT

Shehab A. Hossni. " Ecological and biological studies on different aphid species infesting some legume plants in Egypt" Unpublished M. Sc. Thesis, Zagazig University, Benha Branch, Fac. of Agric., Department of Plant Protection, 2004.

The present work was carried out at Sids A.R.S., Beni-Suef Governorate during a period from 1998/99 to 2001/2002 growing seasons.

Different species of aphids were surveyed in five cool-season food legumes including faba bean, lentil, chickpea, fenugreek and peas. Six aphid species were surveyed on faba bean plants *Aphis craccivora*, *A. fabae*, *A. gossypii*, *Acyrtosiphon pisum*, *Myzus persicae*, *Smynturodes betae*. Four aphid species were found to infest lentil plants, being *Aphis craccivora*, *A. pisum*, *A. fabae*, *S. betae*. Only two species of aphid were recorded on chickpeas were *A. craccivora* and *Acyrtosiphum pisum*. Three aphid species were sheltered fenugreek plants *A. craccivora*, *A. fabae* and *A. pisum*. Three species of aphids were recorded on pea plants namely *A. craccivora*, *A. fabae* and *Acyrtosiphon pisum*.

Population density and seasonal abundance of cowpea aphid, *Aphis craccivora* and their associated predators on faba bean were estimated throughout two successive seasons 1999/2000 and 2000/2001.

Some agricultural practices, such as effect of plant distribution and densities, planting dates and crop variety on the population abundance of *A. craccivora* infesting faba bean and its ability yield production were studied throughout two successive seasons of 1999/2000 and 2000/2001.

Different biological aspects of *A. craccivora* reared on faba bean; cowpea and common bean were carried out for three generations under insectary conditions ( $24 \pm 2^\circ\text{C}$  and  $55 \pm 5\%$  R.H.), during 2002.

The potential applications of four rates of Gaucho (Imidacloprid) a novel systemic insecticide used as seed coated before crop cultivation in order to suppress early aphid attack and crop yields potentiality were carried out during 2000/2001 and 2001/2002 growing seasons.

**Key words:** Survey, Ecology, Biology, Aphids, Faba bean, Lentil, Chickpea, Fenugreek, Pea, Cowpea and Common bean.

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