



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 %



شبكة المعلومات الجامعية



بعض الوثائق الأصلية تالفة



شبكة المعلومات الجامعية



بالرسالة صفحات
لم ترد بالأصل

Effect of some agricultural practices on faba bean infestation with certain insect pests

By

Rasha Aly Abd-El-Maksoud El-Hosary

B. Sc. Agric. Sci. plant protection Faculty of Agric.,
Moshtohor, Benha Branch, Zagazig University 1997

Thesis

Submitted in partial fulfillment
of the Requirements For the Degree of
MASTER of SCIENCE

In

Economic Entomology
Plant protection Department
Faculty of Agriculture
Moshtohor Benha Branch
Zagazig University

2001





Supervision sheet

Name : Rasha Aly Abd-EL-maksoud EL- Hosery

**Title: Effect of Some agricultural practices on faba
bean infestation with certain insect pests**

Under the supervision of :

Dr. Faris Amin Mohamed EL- Lakwah

Professor Econ. Entomology plant protec. Dept. Faculty of Agriculture,
Moshtohor, Zagazig University

Dr. Abd-El-Rahman Ahmed El- Berry

Professor of Econ. Entomology plant protec., Dept. Faculty of
Agriculture, Moshtohor, Zagazig University

Dr. Ezzat Farag El- Khayat

Professor of Econ. Entomology plant protec. Dept. Faculty of
Agriculture, Moshtohor, Zagazig University

APPROVAL SHEET

Zagazig University (Benha Branch)

Faculty of Agriculture, Moshtohor.

Department of plant Protection

Name: *Rasha Aly Abd- EL- maksoud EL- Hosary*

**Title: EFFECT OF SOME AGRICULTURAL PRACTICES
ON FABA BEAN INFESTATION WITH CERTAIN
INSECT PESTS.**

**Thesis submitted for the Degree of master of Agric. Science In
plant protection (Economic Entomology)**

Approved by:

Prof. Dr: *Sami A. EL-Dessouki* ... *S. A. EL-Dessouki*

Professor of Econ. Entomology: Head of plant protec. Dept.

Faculty of Agriculture, ALAzhar University

Prof. Dr: *EL-Sayed H. Abd el- Kariem* ... *Abdel Kariem*

Professor of Econ. Entomology plant protec. Dept.

Faculty of Agriculture, Moshtohor, Zagazig University

Prof. Dr: *Faris A. M. EL- Lakwah* ... *Faris... EL- Lakwah*

Professor of Econ. Entomology plant Protec. Dept. Faculty of

Agriculture, Moshtohor, Zagazig University.

Prof. Dr: *Abdel- Rahman A. EL- Berry* ... *A. A. EL- Berry*

Professor of Econ. Entomology plant Protec. Dept Faculty of

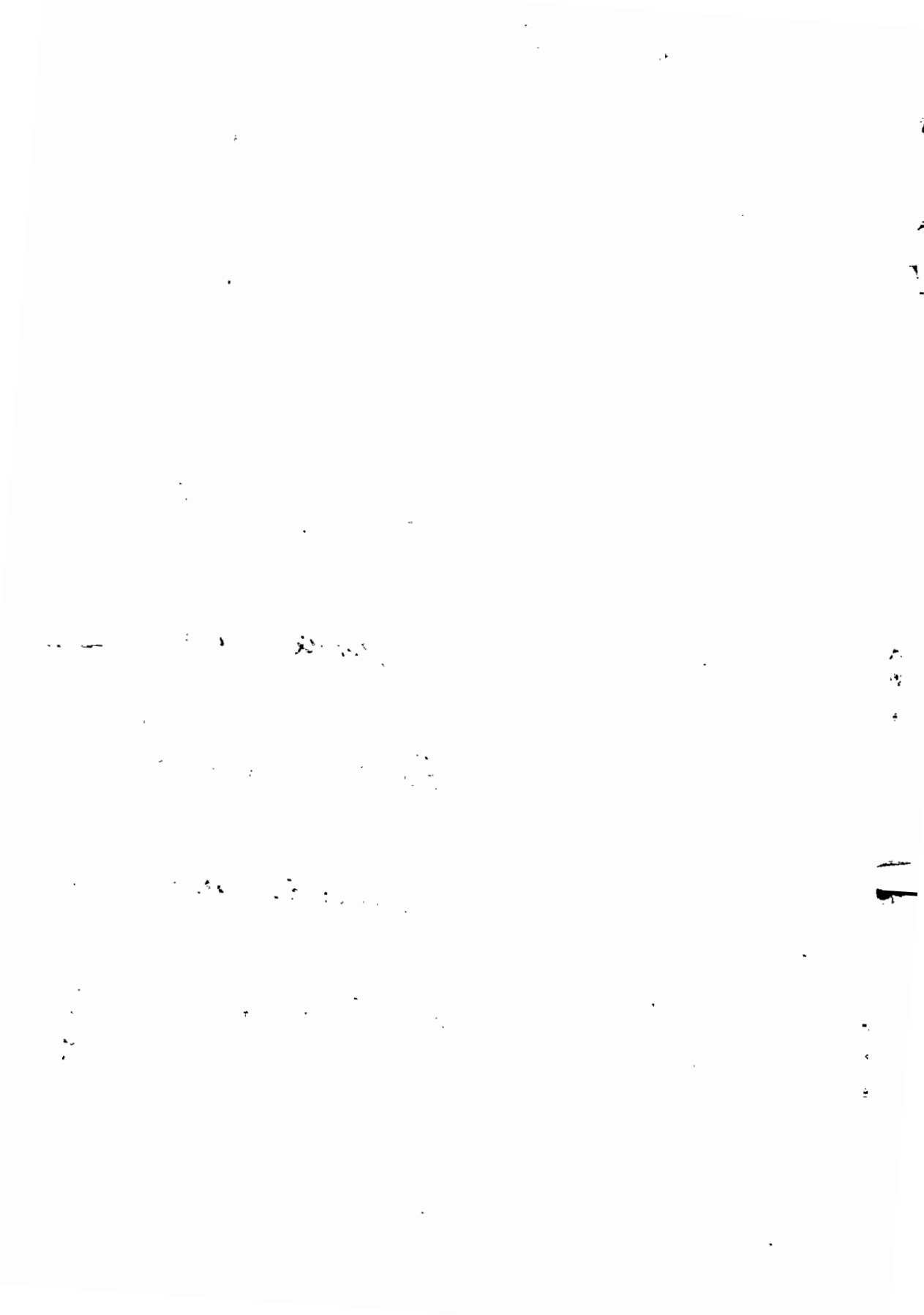
Agriculture, Moshtohor, Zagazig University.

Prof. Dr: *Ezzat F. EL- khayat* ... *E. F. EL Khayat*

Professor of Econ. Entomology plant Protec. Dept Faculty of

Agriculture, Moshtohor, Zagazig University.

Date: 28/7/2001.

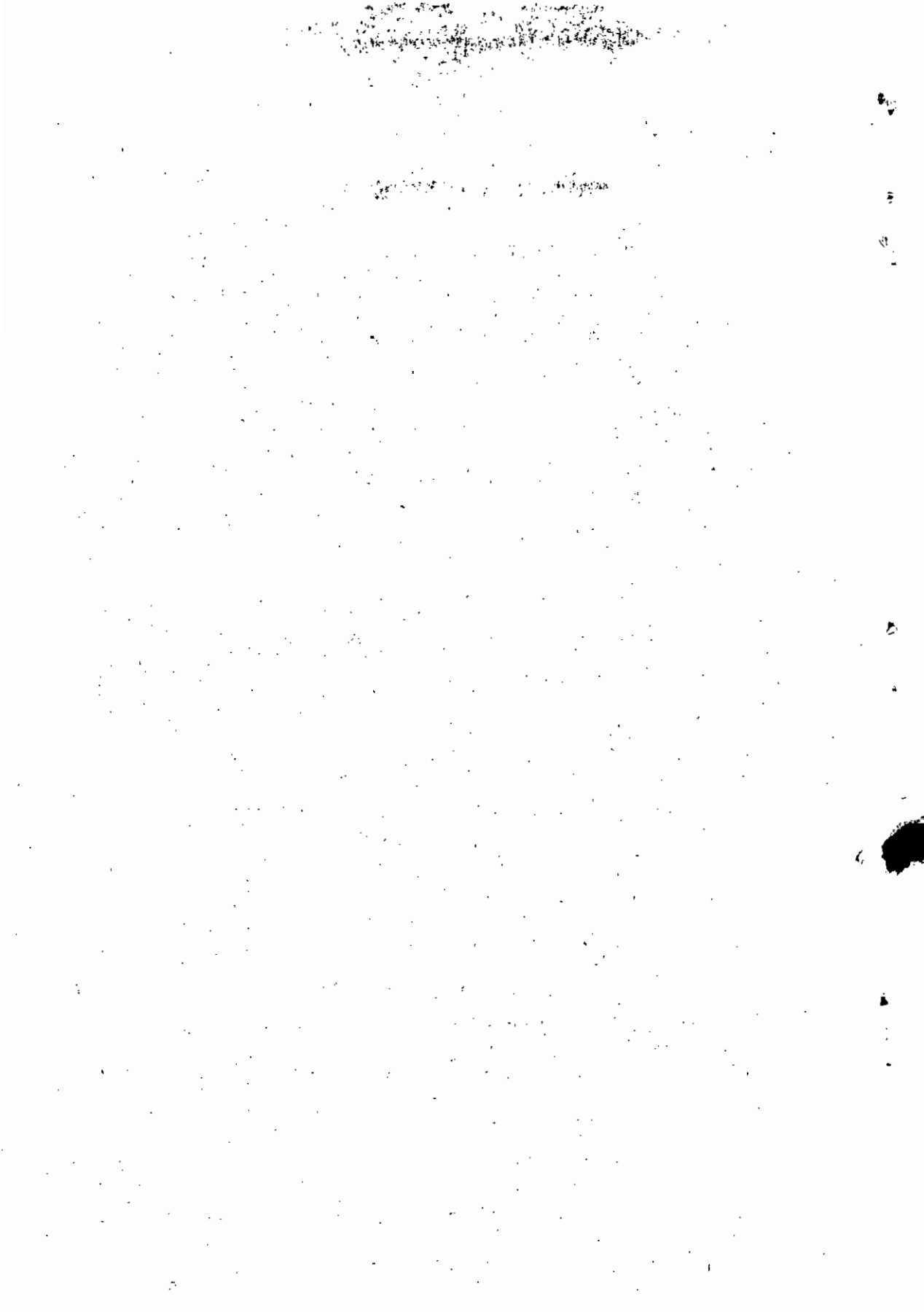


ACKNOWLEDGEMENT

I wish to express my deep thanks and gratitude to Dr. Faris Amin Mohamed EL-Lakwah professor of Economic Entomology at the Department of the Plant Protection, Faculty of Agriculture, Moshtohor, Benha Branch, Zagazig University; for his valuable guidance supervision of the present study also for his continuous kind encouragement.

My deep cordial thanks also extended to Dr. Abd-El-Rahman Ahmed El-Berry and Dr. Ezatt Farag El-Khayat professors of Economic Entomology at the Department of the Plant Protection Faculty of Agriculture, Moshtohor, Benha Branch, Zagazig University; for this kindly supervision and helpful advice during this work.

Finally, I would like to dedicate this work to my parents, my husband and his parents for their extended help, patient, and encouragement during the course of this study and throughout my entire life.



Contents	
INTRODUCTION.....	1
REVIEW OF LITERATURE.....	3
II. 1- Aphids	3
II-1.1. Effect of planting date.....	3
II-1.2.Effect of phosphorous fertilizer level on Aphid.	8
II- 1.3. Varietal performance:-.....	10
II-2. Leaf miner (<i>Liriomyza Congecta</i>):	19
II-2.1. Effect of planting date:.....	19
II-2.3. Varietal performance :.....	20
II-3.Relation between anatomy is characters of varieties leaves and infestation with aphids and leaf miner.	23
II-4.Relationship between chemical analyses components in faba bean leaves and infestation with aphids and leaf miner:	23
II-5. Yield and its components in field trials:.....	24
II-5.1. Effect of planting date :	24
II-5.2. Effect of phosphorous fertilizer level:	26
II. 5.3. Varietal performance:	27
II-6.Susceptibility and resistance of stored pulse seed and their varieties to bruchids infestation:.....	29
MATERIALS AND METHODS.....	34

RESULTS AND DISCUSSION.....	43
The first part :	43
A-Plant height.....	43
B-Aphids :-.....	50
C- The number of larvae and pupae of leaf miner.....	66
D- The infestation percentage of leaf miner.....	81
Relation between anatomy of P-fertilizer levels and Aphids infestation :-.....	97
Relationship between combination of faba bean cvs. And P-fertilizer levels and aphid (<i>Aphis craccivora</i>) infestation:.....	98
Relationship between leaf anatomy of P- fertilizer levels and leaf miner infestation:-.....	99
Relationship between anatomy of bean variety leaves and leaf miner infestation:-.....	100
Relationship between combination of faba bean CVs. and p- fertilizer levels and no. of leaf miner infestation	100
Relationship between phytochemical components as affected by P- fertilizer level and aphids.....	101
Relation between phytochemical components of faba been varieties and aphids infestation:-.....	112
Effect of interaction between varieties and phosphorous fertilizer levels.....	113