

بسم الله الرحمن الرحيم



HOSSAM MAGHRABY



شبكة المعلومات الجامعية التوثيق الالكتروني والميكرو فيلم



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جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

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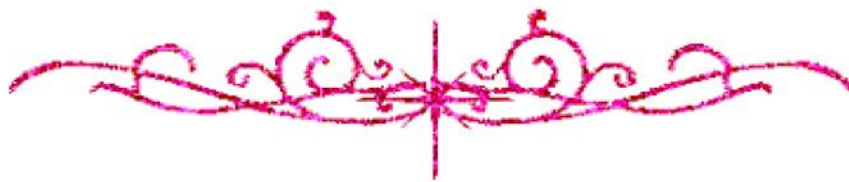
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جامعة القاهرة
معهد البحوث و الدراسات الأفريقية
قسم الموارد الطبيعية

دراسات بيئية علي بعض آفات الزراعات المحمية في شمال أفريقيا

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فتينة بيومي أحمد محمد

بكالوريوس في العلوم الزراعية (حشرات) كلية الزراعة جامعة عين شمس ١٩٩٣
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درجة الماجستير في الدراسات الأفريقية من قسم الموارد الطبيعية
(موارد حيوانية)

تحت إشراف

أ.د. فتحي عبد العزيز علي

أستاذ علم الحشرات الاقتصادية
قسم آفات خضر
معهد بحوث وقاية النباتات
مركز البحوث الزراعية

أ.د. وفاني زكي عازر ميخائيل

أستاذ علم بيئة الحيوان
قسم الموارد الطبيعية
معهد البحوث و الدراسات الأفريقية
جامعة القاهرة

Cairo University
Institute of African Research and Studies
Department of Natural Resources

**Ecological Studies on Some Pests of
Protected Cultivation in Northern Africa**

By

Fatina Baiomy Ahmed Mohammed

B. Sc.: Agric. Sci. (Entomology), Ain Shams University, 1993
Diploma of African Studies (Natural Resources), Cairo University, 1996

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Supervisors

Prof. Dr. Wafai Z. A. Mikhail
Dept. of Natural Resources
Inst. of African Research & Studies
Cairo University

Prof. Dr. Fathy A. Aly
Dept. of Vegetable pests
Inst. of Plant Protection
Agricultural Research Center

APPROVAL SHEET

Name: Fatina Baiomy Ahmed Mohammed

Titale: Ecological Studies on Some Pests of Protected Cultivation in Northern Africa

This Thesis has been approved by:

Prof. Dr. Mahmoud E. El-Naggar

Head, Plant Protection Research Institute, Agricultural Research Center

Mahmoud E. El-Naggar

Prof. Dr. Ahmed N. Kayed

Professor of Zoology, Faculty of Science, Alexandria University

A. N. Kayed

Prof. Dr. Fathy A. Aly

Professor of Vegetable Research Pests, Plant Protection Research Institute, Agricultural Research Center

F. A. Aly

Prof. Dr. Wafai Z. A. Mikhail

Professor of Animal Ecology, Institute of African Research & Studies, Cairo University.

W. Z. A. Mikhail

Date:

Committee in charge

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1. INTRODUCTION

Protected vegetable cultivation in the Northern africa has markedly flourished during the last two decades. Total area of vegetables grown under covers is estimated at present to be about 30000 hectares.

The protected cultivation industry in Egypt has started only during the last decade. The area is estimated at about 15000 hectares. Growers' interest in production of vegetables under covers is stimulated by the high productivity per unit area, which is usually ten to twenty times that of outdoor production, and with rewarding market prices. The high productivity is attributed to quasi-optimal production conditions for vegetable growth and productivity of high-yielding hybrids. Conditions must be maintained in the greenhouse to give a maximum rate of growth to the crop, and such conditions act as ideal predisposing factors for pests. Also, the continued cultivation of the greenhouse contributes to the bulid-up of soil pests population.

The above pest problems in the greenhouses results in invasion and infestation of protected vegetable crops.

Therefore, the present study aims to survey the main pests and predatores as well as soil fauna associated with vegetable crops under protected cultivation system (greenhouses).

2. REVIEW OF LITERATURE

Greenhouses are isolated units, cultivated particularly during the cold period of the winter season for summer crops and planted winter crops during summer season, and offer an excellent opportunity of climatic conditions to grow high quality products in large quantities on a small area to exportation or special consumption.

Van Ientern (1992) mentioned that, in the Netherlands only 0.5 % out of the area in used for agriculture was covered with greenhouses (9300 ha. out of 2million ha.). On this small acreage 17% of the total value of agricultural production was realized, i.e. 3.2 billion U. S. \$ in 1988.

Taher (1992) explained that the expansion of Greenhouses is due to: simplicity and affordable price of structures used, availability of high yielding cultivars, local and foreign demand for off season vegetables, and rewarding market prices. He added that pest problems emerge after few years of cultivation as a main limiting factor for profitable production. Pest problems are enhanced by repeated cultivation of the same or related crops and the type of structures used and favorable environmental conditions.

Benuzzi *et al.* (1992) found that there are differences in protected crop farming between the northern Europe and the Mediterranean basin. In the northern Europe greenhouses were built of glass and metal and often