ثبكة المعلومات الجامعية

بسم الله الرحمن الرحيم

شبكة المعلومـــات الجامعية

التوثيق الالكتروني والميكروفيلم

شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الالكتروني والميكروفيلم

قسم

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

INTERACTION BETWEEN *Meloidogyne incognita* AND *Sclerotium rolfsii* ON PEPPER AND TOMATO

BY

MOHAMED MOHAMED YOUSSEF YOUSSEF
B. Sc. Agric. (Plant Pathology), Ain Shams Univ., 1994

A thesis submitted in partial fulfillment
of
the requirements for the degree of

MASTER OF SCIENCE

in

Agricultural Science

(Plant Pathology)

Department of Plant Pathology

Faculty of Agriculture

Ain Shams University

2001

Approval Sheet

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Date of examination: 30 / 6 / **2001**

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ABSTRACT

Mohamed Mohamed Youssef Youssef. Interaction between *Meloidogyne incognita* and *Sclerotium rolfsii* on pepper and tomato. Unpublished M.Sc. Thesis, Department of Plant Pathology, Faculty of Agriculture, Ain Shams University, Cairo, Egypt (2001)

Isolation and identification methods revealed that four aggressive isolates of *S. rolfsii* namely, Sr-1, Sr-2, Sr-3 and Sr-4 were markedly differed. The two isolates, Sr-1 and Sr-3 proved to be more pathogenic against the tested pepper and tomato plants, respectively. Pathogenicity tests of *S. rolfsii* and *M. incognita* for both hosts were realized. The interaction between the two pathogens was measured on disease symptom development, i.e., disease incidence, disease severity and nematode root-galling. Some interactions revealed a considerable synergism in the presence of: nematode galled-roots, high inoculum levels of fungus, soil amendments such as turnip residues, young seedlings and high temperature degrees. On the contrary, the other interactions reflect adequate antagonism as influenced by: low ambient temperature, some plant residues such as alfalfa and cabbage, soil microflora and antagonistic bacteria (*Bacillus subtilis*). Such antagonistic interactions may result in less disease incidence and more plant survival. These inhibitors could be of a considerable merit in integrated programs of fungus-nematode-management.

Key words: *Meloidogyne incognita*, *Sclerotium rolfsii*, *Bacillus subtilis*, Amendments, plant age, temperature, soil microflora, photosynthesis pigments, pepper and tomato.

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