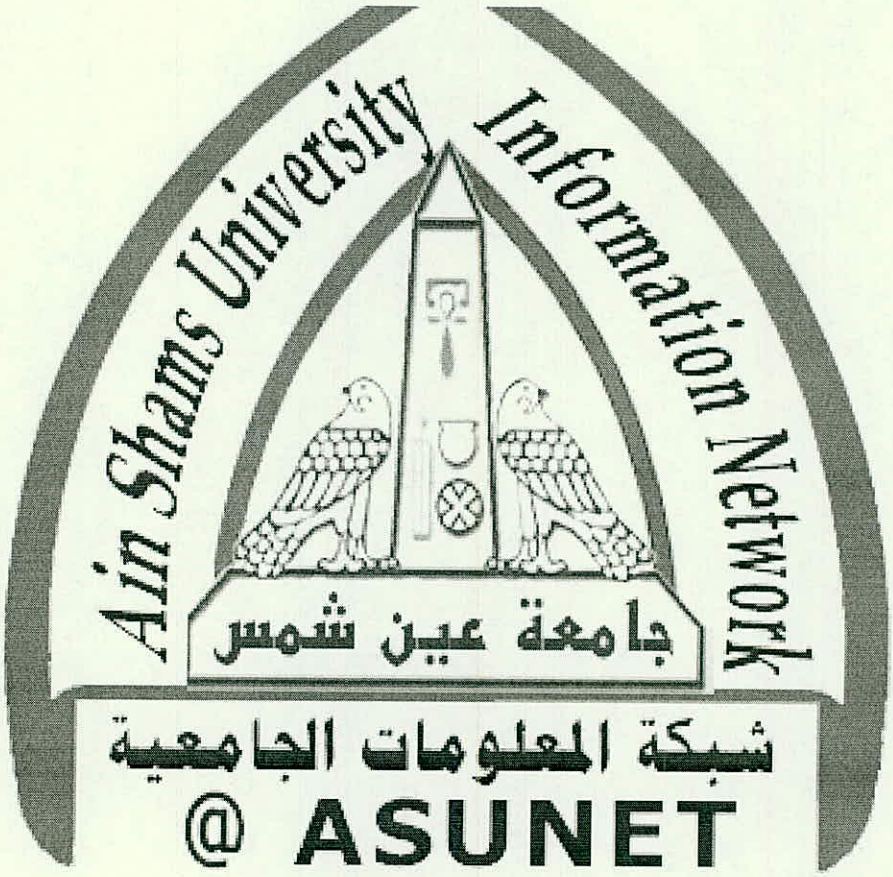
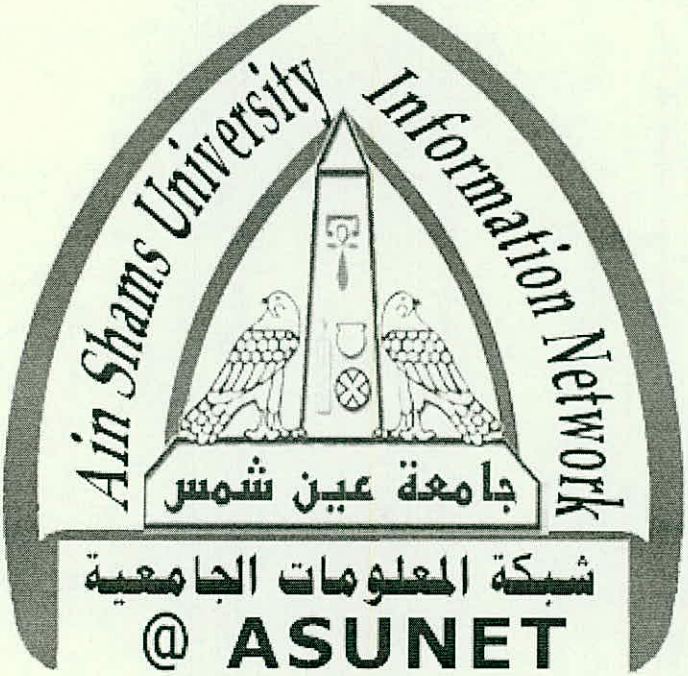
شبكة المعلومات الجامعية

بسم الله الرحمن الرحيم





شبكة المعلومـــات الجامعية

التوثيق الالكتروني والميكروفيلم

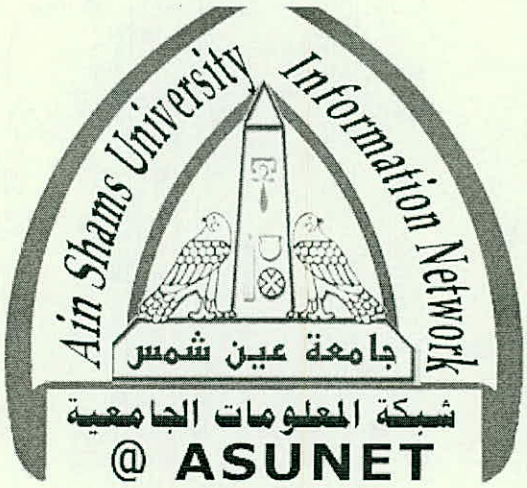
شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الالكتروني والميكروفيلم

قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها
علي هذه الأفلام قد اعدت دون آية تغيرات

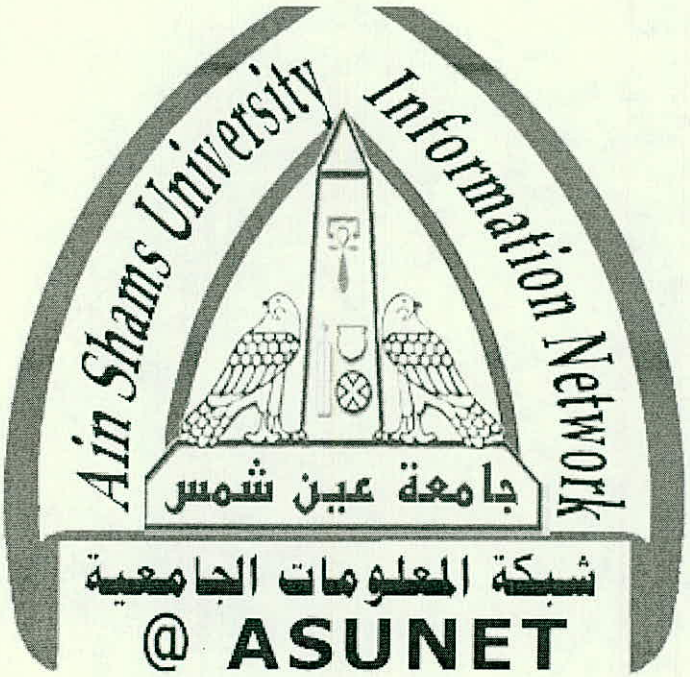


يجب أن

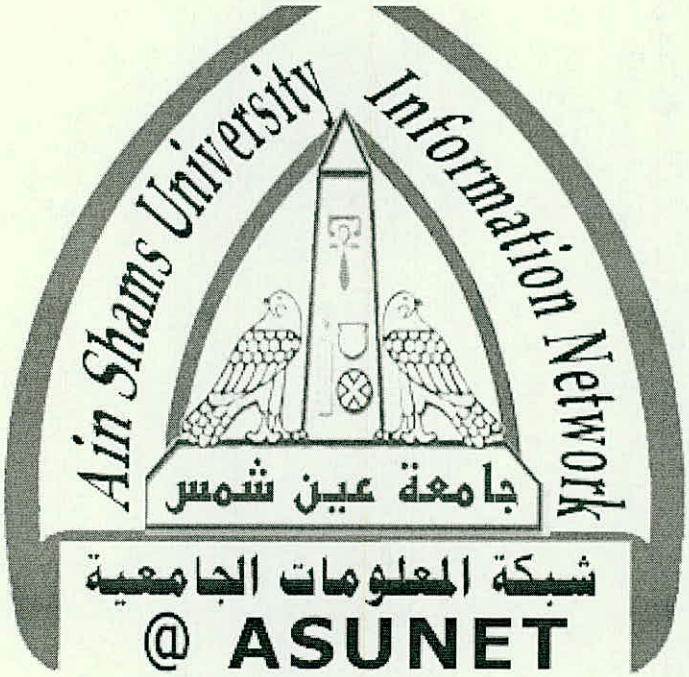
تحفظ هذه الأفلام بعيداً عن الغبار

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

RESISTANCE OF *RHIZOCTONIA SOLANI* TO CERTAIN FUNGICIDES AND THEIR IMPACT ON BENEFICIAL MICROORGANISMS

By

Sami Shafik Ramses

B.Sc. Agric.(Pesticides), Ain Shams University , 1980

Diploma in Environmental Sci., Ain Shams University ,1989

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A Thesis Submitted for Doctor of Philosophy

In

Environmental Science

Department of Agricultural Science

Institute of Environmental Studies & Research

Ain Shams University

2001

APPROVAL SHEET

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   Head of research, Central Agricultural Pesticides Laboratory

ABSTRACT

Name : Sami Shafik Ramses, Resistance of *Rhizoctonia solani* to certain fungicides and their impact on beneficial microorganisms. Unpublished Ph.D. Thesis in Environmental Science, Institute of Environmental Studies & Research, 2001.

The isolation trials of *Rhizoctonia solani* were carried out from soil from Gharbia and Kafr El-Sheikh governorates. That several isolates of both *R. solani* and *Fusarium monifilorme* were obtained and have been tested for their sensitivity to tested fungicides. One isolate (No2) from Kafer El-Sheikh showed high resistance to tolclofos-methyl. Acquired resistance was retained after five transfers on fungicide-free medium. The application of pencycuron, carboxin and tolclofos-methyl to media gave succifient inhibitional efficacy on mycelial growth of isolate (No1). The isolate No2 of *R. solani* exhibited high resistance to tolclofos-methyl, and grew with remarkable growth on PDA amended with series of conc. up to 1500 ppm and the EC_{50}. Stability of resistance of *R. solani* isolate No2 to high conc. of tolclofos-methyl was confirmed for five successive reculturing generations on PDA medium free – from fungicide application. Resistant isolate seemed to be less pathogenic at the early stage of plant growth. Data, also, indicate the selectivity of tolclofos-methyl between *R. solani* and *Trichodrama viride*. The potentiality of such resistant isolate in decomposing pectin at the point of active rate of

mycelial grwoth was confirmed. No clear effect of tolclofos-methyl applied to culture filtrates on enzymatic activities especially peroxidase in mycelia was recorded the protein content decreased as the growth stage of *R. solani* increased in the untreated mycelium in the two isolates.