



شبكة المعلومات الجامعية

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ



شبكة المعلومات الجامعية
@ ASUNET



شبكة المعلومات الجامعية التوثيق الالكتروني والميكروفيلم



شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الالكتروني والميكرو فيلم

قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها
علي هذه الأفلام قد أعدت دون أية تغيرات



يجب أن

تحفظ هذه الأفلام بعيدا عن الغبار

في درجة حرارة من ١٥-٢٥ مئوية ورطوبة نسبية من ٢٠-٤٠%

To be Kept away from Dust in Dry Cool place of
15-25- c and relative humidity 20-40%

بعض الوثائق الأصلية تالفة

بالرسالة صفحات لم ترد بالاصل

YVL

STUDIES ON STALK ROT DISEASE OF MAIZE

By

Medhat Saeed Abd Rabboh

B.Sc. Agric. Science, Plant Pathology, 1995.

Minufiya Univrsity

THESIS

Submitted In Partial Fulfilment For The Requirement

For The Degree

Of

MASTER OF SCIENCE

IN

PLANT PATHOLOGY

Department of Agricultural Botany

Faculty of Agriculture

Minufiya University

2000

SUPERVISION COMMITTEE

**STUDIES ON STALK ROT
DISEASE OF MAIZE**

By

Medhat Saeed Abd Rabboh

B.Sc. Agric. Science, Plant Pathology, 1995

For

M.Sc. IN PLANT PATHOLOGY, 2000

Supervision Committee :

Dr. M.Z. El Shanawani



Professor of plant pathology, Faculty of Agric. Culture
Minufiya University, Shebin el-Kom, Egypt.

Dr. M.A. Awad



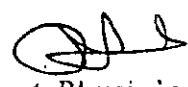
Professor of Plant Pathology, Faculty of Agriculture
Minufiya University, Shebin el-Kom, Egypt.

Dr. E.M. El Assiuty



Head Researcher of Plant Pathology, Plant Pathology
Research Institute, Giza, Egypt.

Dr. A.H. Selim



Assoc. Professor of Plant Physiology, Faculty of Agriculture
Minufiya University, Shebin el-Kom, Egypt.

APPROVAL SHEET

STUDIES ON STALK ROT DISEASE OF MAIZE

BY

Medhat Saeed Abd Rabboh

B.Sc. Agric. Science, Plant Pathology, 1995

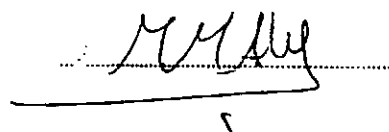
For

M.Sc. IN PLANT PATHOLOGY, 2000.

Thesis has been approved by :

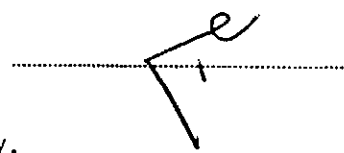
Dr. : *Madih Mohamed Ali*

Professor of Plant Pathology, Faculty of
Agriculture, Ain Shams University.



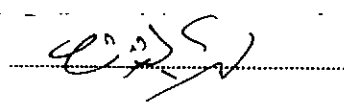
Dr. : *Mohamed Nazim Sayed Ahmed*

Professor of Plant Pathology and Vice-Dean of
the Faculty of Agriculture, Minufiya University.



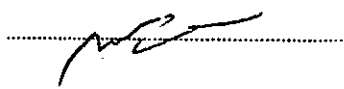
Dr. : *Mohammadi Zaki El-Shanawani*

Professor of Plant Pathology, Faculty of
Agriculture, Minufiya University.



Dr. : *Mohamed Ahmed Awad*

Professor of Plant Pathology, Faculty of
Agriculture, Minufiya University.



Committee in charge

Date / /2000

CONTENTS

	Page
I. INTRODUCTION.....	1
II. REVIEW OF LITERATURE.....	5
III. MATERIALS AND METHODS	31
IV. EXPERIMENTAL RESULTS	47
1. Frequency of the isolated fungi	47
2. Pathogenicity test	50
3. Methods of Inoculation	53
4. Response of maize genotypes to <i>Fusarium</i> <i>moniliforme</i>	55
5. Biological control	55
5.a. Biocontrol agents <i>in vitro</i>	55
5.b. Plant extracts <i>in vitro</i>	60
6. Effect of biocontrol agents and some plant extracts on stalk rot disease incidence in greenhouse	63
7. Effect of plant extracts with different solvents on germination and seedling growth characters	66
7.1. Germination percentag	66
7.2. Seedling growth characters	68
7.2.1. Root length	68
7.2.2. Shoot length	69
7.2.3. Root / shoot ratio	69
8. Effect some plant extracts and some biocontrol agents on growth and some physiological aspects	70

8.1. Vegetative growth characters	70
8.1.1. Stem length	70
8.1.2. Root length	73
8.1.3. Root size	74
8.1.4. Number of leaves	74
8.1.5. Leaf length	75
8.1.6. Leaf width	76
8.1.7. Leaf area	76
8.1.8. Leaf area index	77
8.2. Fresh and dry weights of plant organs	78
8.3. Shoot / root ratio	83
8.4. Some physiological and biochemical aspects	83
8.4.1 Photosynthetic pigments	83
8.4.2. Some characters of water relations	89
8.4.3. Enzyme activity	91
9. Phytochemical screening of the obtained plant extracts.	94
V. DISCUSSION	98
VI. SUMMARY	113
VII. REFERENCES	118
VIII. ARABIC SUMMARY	

