EFFICACY OF FUNGICIDES ON SCLEROTIUM ROLFSII THE CAUSAL AGENT OF STALK AND FRUIT ROT OF ROSELLE

BY

AMARARANI SELVANAYAGAM

A RESEARCH REPORT SUBMITTED IN PARTIAL FULFILMENT
OF THE REQUIREMENT OF THE ADVANCED

COURSE IN

PHYTO PATHOLOGY

FOR THE DEGREE OF

BACHELOR OF SCIENCE IN AGRICULTURE

OF

UNIVERSITY OF PERADENIYA

SRI LANKA

1985





.

- APPROVED BY -

A Dethionon thoragel

(SUFERVISOR)

Mr. K. Nithiantharajah

Co-ordinator

Agric. Biology Division

Faculty of Agriculture

Batticaloa University College

Sri Lanka

Date: 0.9/86.... 227

(Head of the Dept.)

Dr. S. Sandanam

Department of Agronomy,

Faculty of Agriculture

Batticaloa University College,

Vantharumoolai,

Sri Lanka

Date: .. 12 9 86 ..

PROCESSED

ABSTRACT

Sclerotium rolfsii has been attacking stalk and fruits of Roselle plant causing rots which is an unrecorded disease in Sri Lanka. It has been found that the growth of the colony and the production of sclerotia of S. rolfsii was more on calyces and leaves than on seeds and stalk. On PDA, Rice meal agar (Parboiled) and Rice meal agar (raw) the growth of colony was fast but on RMA (parboiled) media the production of sclerotia was nil.

better than Antracol. The highest concentration 200 ppm of Morut completely checked the growth of the colonywill 48 hours and Captan checked the growth till 24 hours. Antracol controlled the growth till 24 hours but next 2 days the growth was faster than Morut and Captan. Delsene showed no control on the growth of the sclerotia.

		CONTINUES	97%
AR	STRACT		Pag
		NATIONAL PROPERTY OF THE PROPE	
ACKNOWLEDGEMENTS			11
1.	INTRODUCTION		1
2.	REVEIW OF LITERATURE		
	2.1.	Host: Hibiscus sabdariffa	3
	2.2.	Pathogen	
		2.2.1. Fungi	6
		2.2.2. Taxonomy of pathogen	6
		2.2.3. Morphology of Sclerotium rolfsii	7
		2.2.4. Dispersal and disease spread	. 8
		of sclerotium rolfsii.	
	2.3.	Diseases and symptoms caused by S. rolfsii	10
	2.4.	Prevention of disease	12
	2.5.	Effect of fungicide on fungi	14
3.	MATER	IALS AND METHODS	
	3.1.	Collection of disease sample	17
	3.2.	Isolation of the pathogen	17
	3.3.	Suitable medium for the production of	18
		Sclerotium rolfsii inoculum	
	3.4.	Inoculation of the pathogen on host plant	19
	3.5.	Efficacy of fungicide	19
4.	RESUL	TS AND DISCUSSION	20
5.	CONCL	USION	29
REFERENCES			30
PIGURES			33
The state of			W. W.

APPENDIX

36