

STUDY ON THE EFFECT OF *Colletotrichum* INFECTION
ON THE POST-HARVEST QUALITY OF GREEN
BELL PEPPER

DIK SURAHMAN BINTU MARIAT - DIK MOHAMMAD

bpd
LP
16
FASM
2
2009

JURUSAN TEKNOLOGI DAN SAINS HAYATI
UNIVERSITAS SAMPUNG

2009

o/n. 7556

1100076536



bpd
LP 16 FASM 2 2009



1100076536
Study on the effect of Colletotrichum infection on the post
harvest quality of green bell pepper / Nik Nur Hanani Mamat @
Nik Mohamed.

PERPUSTAKAAN SULTANAH NUR ZAHIRAH
UNIVERSITI MALAYSIA TERENGGANU (UMT)
21030 KUALA TERENGGANU

1100076536		

Librarian's mark

HAK MILIK
PERPUSTAKAAN SULTANAH NUR ZAHIRAH UMT

**STUDY ON THE EFFECT OF *Colletotrichum* INFECTION ON THE POST
HARVEST QUALITY OF GREEN BELL PEPPER**


**By
Nik Nur Hanani Binti Mamat @ Nik Mohamed**

**Research report submitted in partial fulfillment of
the requirement for the degree of
Bachelor of Agrotechnology Science (Post Harvest Technology)**

**Department of Agrotechnology
FACULTY OF AGROTECHNOLOGY AND FOOD SCIENCE
UNIVERSITI MALAYSIA TERENGGANU
2009**

DECLARATION

I hereby declare that the work in this thesis is my own except for quotations and summaries which have been duly acknowledged.

Signature : 

Name : N. N. Hanani N. Mohamed

Matric No : UK 14250

Date : 22 / 4 / 09

ACKNOWLEDGEMENTS

First of all, I would like to thank my greatest supervisor, Prof Dr Abdul Rahman Abdul Razak for his supervision, assistance, comments, advises and guidance that enable this project run smoothly and successfully. Special thanks for my lovely parents, Nik Mohamed Nik Daud and Nik Azizon Wan Ali and also my siblings, Fahmi, Nurulhuda and Amalina for their spiritual supports and advices. Sincere thanks also to Mr. Nasir and Madam Norita, science officer from INOS laboratory for their advices and guidance on how to do dehydration process on the samples, conducting scanning electron microscope (SEM) and control point dryer (CPD) for my friends and I. Not forgotten, thanks to Mr. Mohammad Embong, lab assistance from Histology lab for his guidance especially on how to prepare the sample for the cutting ribbon, staining process and also allowed using of image analyzer microscope. Besides, my heartfelt gratitude goes to Madam Maizatul Akma, Mr. Hairi and also Mr. Fauzi, lab assistances from Post Harvest Lab (MTLT Lab) for their cooperation and permission to use all facilities in laboratory. Appreciation is extended to my course mates, especially Vicky, Sylviati and Shidah in giving me spiritual support. Finally, my appreciation goes to those who have contributed to this project.

ABSTRACT

The role of vegetables or fruits in the human diet has increases for several reasons. However, they are many challenges in vegetables or fruits production in order to provide high quality, disease-free produce that has extended shelf life. Disease like anthracnose, caused by the fungus *Colletotrichum* spp, is the commonly main post-harvest disease problem of the bell pepper that the farmers faced today around the world. Both immature and ripe fruit are subject to infection, through ripe fruit are more susceptible. Besides that, leaves and stems are also susceptible to this disease. One of the post harvest quality that should be consider is about the whole of skin appearance. This paper work is study about the comparison of green bell pepper's skin which infected by that fungus with non-infected skin through Scanning Electron Microscope (SEM) and image analyzer. This observation consists of topographic of skin surface and cross section of the bell pepper's skin. The outcome of this experiment, we can understands how the fungus penetrates into plant that caused anthracnose disease which can give effect to the quality of bell pepper.