

THE EFFECT OF SPERMIDINE POLYMERISE SOLUTION DIPPING  
TREATMENT ON THE SHEEP LIFE OF SAMANA var. BERANGAN

WATI ASTI BINTI ZINHAL

FAKULTY OF AGRICULTURE AND FOOD SCIENCE  
UNIVERSITI MALAYSIA TERENGGANU

2008



## ACKNOWLEDGEMENTS

First and foremost, I would like to thank my supervisor, Prof. Madya Dr. Mohamed Senawi Bin Mohamed Tamin, for his supervision, comments, helps and guidance that enables me to come out with and run this project smoothly. Besides, I also wanted to thank Dr. Chuah Tse Seng for briefing me and my classmates about how to write a good thesis.

Then, my appreciation goes to my parents for all their supports and understanding me while doing this project. Not forgotten to Pakcik Jaafar, FASM's driver, which enables me to get my samples in Pulau Pinang. Thank you so much.

For all my friends, thanks for helping in giving brilliant ideas, guidance and spiritual support for me while doing this project. Thank you so much. I hope that God will always bless you all.

## ABSTRACT

Banana (*Musa acuminata*) is a perishable fruit subjected to anthracnose, crown rot and blossom end rot at the postharvest stage. The present study focused on developing a method to control postharvest diseases of banana by dipping the banana in the lab grade sodium hypochlorite solution. Under ambient temperature and dipping in sodium hypochlorite solution for ten minutes were tested for their ability to control diseases and their influence on postharvest quality parameters such as ripening index, microbial analysis, soluble solid concentration and pH value. Dipping the bananas for ten minutes in these concentrations (1%, 3% and 5%) of sodium hypochlorite solution reduced the incidence of banana fruit rot (compared with the untreated fruits) 18 days after harvest. High concentration of sodium hypochlorite solution used may produce phytotoxic effects on the banana itself even though it is completely inhibited the fungal growth. This consumption may cause health problem to human. Therefore, T1 is chosen to be the most effective treatment to control banana postharvest pathogen diseases besides being safe for human consumption.