

EXTENDING BANANA SHELF LIFE BY USING TWO TYPES OF
PACKING MATERIALS AND STORED UNDER TWO
DIFFERENT STORAGE CONDITIONS

ZATIUL FARAH BINTI ZAHID

bpd
LP
40
FASM
2
2009

MULTI AGROTEKNOLOGI DAN SAINS HUKUM
UNIVERSITI MALAYSIA TERENGGANU

2009



bpd
LP 40 FASM 2 2009



1100076487
Extending banana shelf life by using two types of packaging
materials and stored under two different storage conditions /
Zatul Iffah Zainol.

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

1100076487

1100076487		

Lihat sebelah

HAK MILIK
PERPUSTAKAAN SULTANAH NUR ZAHIRAH UMT

1100076487

**EXTENDING BANANA SHELF LIFE BY USING TWO TYPES OF PACKAGING
MATERIALS AND STORED UNDER TWO DIFFERENT STORAGE
CONDITIONS**

**By
Zatul Iffah Binti Zainol**

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

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



**FALKULTI AGROTEKNOLOGI DAN SAINS MAKANAN
UNIVERSITI MALAYSIA TERENGGANU**

**PENGAKUAN DAN PENGESAHAN LAPORAN
PROJEK ILMIAH I DAN II**

Adalah ini diakui dan disahkan bahawa laporan ilmiah bertajuk:

Extending banana shelf life by using two types of packaging materials and stored under two types of storage conditions oleh **Zatul Iffah Binti Zainol** No. Matrik **UK13243** telah diperiksa dan semua pembeduan yang disarankan telah dilakukan. Laporan ini dikemukakan kepada **Jabatan Agroteknologi** sebagai memenuhi sebahagian daripada keperluan **memperolehi Ijazah Sarjana Muda Sains Agroteknologi (Teknologi Lepas Tuai)**, Fakulti Agroteknologi dan Sains Makanan, Universiti Malaysia Terengganu.

Disahkan oleh:

Penyelia Utama

Nama: PROF. MADYA HJ. ABDULLAH MD. ZAIN

Cop Rasmi: Pensyarah
Jabatan Agroteknologi
Fakulti Agroteknologi dan Sains Makanan
Universiti Malaysia Terengganu
21030 Kuala Terengganu

Tarikh: 26/10/20

Penyelia kedua (jika ada)

Nama:

Cop Rasmi:

Tarikh:.....

DECLARATION

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

Signature : *Zatul*
Name : Zatul Iffah Zainol
Matric No : UK 13243
Date : 25 April 2009

ACKNOWLEDGEMENT

Bismillahirrahmanirahim, in the name of Allah, the most Merciful and the most Gracious. Alhamdulillah, with the help of many, this thesis report was made possible.

My very special thanks go to the supervisor of this project, Assoc. Professor Haji Abdullah Bin Mohd Zain for giving me the most valuable opportunity of being under his supervision and guidance throughout the process of this final year educational project. I doubly thank him for his support and willingness in spending his time to teach and exposed me to a lot of valuable things regarding this project.

I thanked my family especially both of my beloved parents for their understanding and endless supports. Also, lots of thanks go to my friends, whose moral support has meant so much to me in the course of my work. Many thanks goes to lectures of Agrotechnology Department who helped a lot during the process of my project and willing to spend times to assists in most of my tasks here.

I cannot adequately convey how this work is possible without the aids of my friends Sylviati Sopirou, Nik Nur Hanani and Intan Nani as well as all the lab assistants of post harvest technology laboratory in handling the laboratory equipments.

Thousands and billions of thanks.

ABSTRACT

This study explores the efficacy of LDPE packaging and PVC stretch film in providing the protection that is essential in extending the shelf life of bananas. The relevance of appropriate storage condition applicable for bananas in the means of slowing down the rate of deterioration was also put into prominent consideration during the study. Fresh commodities such as bananas requires low temperature ranged from 13°C to 15 °C as to slow down the respiration rate and thus enhance the maintenance of the quality of bananas. The ability of bananas to be stored up to 16 days with the use of PVC stretch film and stored under chiller at 15 °C was managed to be discovered during the study. Although the application of LDPE packaging capable in effectively minimizing the loss of weight in bananas, the rapid decrease in texture firmness of bananas packed in this type of packaging gave an undesirable attribute which is redundant by most consumers. The quality indicators used for assessment for the study are the weight loss, texture firmness, color changes as well as the total soluble solid. These quality were accessed in every 2 days interval initiating on day 0 until day 16.