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TE GKU ZURAM BURT TE GKU AHMAD

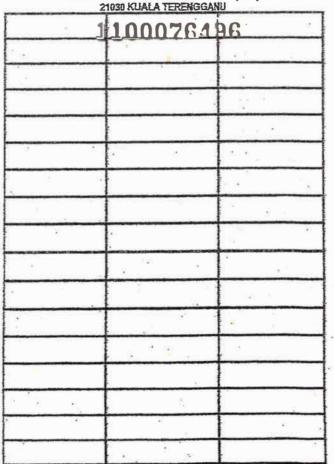
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Effects of packaging material on quality of tomatoes (Lycopersicon esculentum) stored under two storage conditions / Tengku Zuraini Tengku Ahmad.

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



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EFFECT OF PACKAGING MATERIAL ON QUALITY OF TOMATOES (Lycopsicon esculentum) STORED UNDER TWO STORAGE CONDITIONS

By Tengku zuraini Binti Tengku Ahmad

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

Depertment of Agrotechnology
FACULTY OF AGROTECHNOLOGY AND FOOD SCIENCE
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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:
Effect of backsging material on quality
of tomates (luopasican esculentum) stored
undo two Storage Conditions
oleh Tengku Zuraini bt Tengku AhmadNo. Matrik UKIYO8Y telah
liperiksa dan semua pembetulan yang disarankan telah dilakukan. Laporan ini
likemukakan kepada Jabatan
ebahagian daripada keperluan memperolehi Ijazah Sarjana Muda
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DECLARATION

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

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ABSTRACT

The effect of different materials of packaging namely polyvinyl chloride (PVC) shrink film, polyethylene (PE) plastic and unpacked was evaluated for storage of tomatoes. The samples were stored at ambient temperature and 10°C. Changes in fruit quality were evaluated at interval 2 days. Observations were made on weight loss, surface colour development, firmness, and total soluble solid (TSS) contents. The percentage at weight loss of unpacked tomatoes was significantly (p<0.05) increased during storage at ambient temperature and temperature 10°C. It caused faster dehydration. This occurrence can be prevented by using PVC shrink film and PE plastic packages. Tomatoes packages in PE film softened and not firm which might be due to condensation of water vapour from respiration and low O₂ content in packages in both the storage conditions. Surface calour development of tomatoes during storage shows that the temperature at 10°C had effectively inhibited the senescence of the fruit compare the fruit stored at ambient temperature. The storage life of tomatoes stored in ambient temperature can be maintained for 10 days. However, at temperature 10^oC the product can be stored for 14 days. PVC shrink film can be used foe commercial packaging of tomatoes at ambient temperature and 10°C compared to PE film and unpacked tomatoes.