

EFFECTS OF CHITOSAN COATING AND PACKAGING
ON TOMATO (*Solanum lycopersicum*)
FOR SHELF LIFE EXTENSION

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**EFFECTS OF CHITOSAN COATING AND PACKAGING ON TOMATO
(*Solanum lycopersicum*) FOR SHELF LIFE EXTENSION**

**By
Zurafni binti Mat Daud**

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**FAKULTI AGROTEKNOLOGI DAN SAINS MAKANAN
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**PENGAKUAN DAN PENGESAHAN LAPORAN
PROJEK ILMIAH I DAN II**

Adalah ini diakui dan disahkan bahawa laporan ilmiah bertajuk:

Effects of Chitosan Coating and Packaging on Tomato (*Solanum lycopersicum*)
for Shelflife Extension

oleh Zurafni Binti Mat Daud, No.Matrik uk13895 telah diperiksa dan semua pembetulan yang disarankan telah dilakukan. Laporan ini dikemukakan kepada Jabatan Agroteknologi sebagai memenuhi sebahagian daripada keperluan memperoleh Ijazah Sarjana Muda Sains Agroteknologi (Teknologi Lepas Tuai), Fakulti Agroteknologi dan Sains Makanan, Universiti Malaysia Terengganu.

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DECLARATION

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

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ABSTRACT

Tomato is a climatic fruit that having its ripen process as fast rate if taken away from its tree at ambient temperature. Tomato were treated with 0.5% and 1.0% chitosan coating and were packed with LDPE film. The effectiveness of the treatments was assessed by evaluating their impact on the following parameters: loss of weight, flesh firmness, skin color and soluble solids content. LDPE film were effective in decreasing surface damage and loss of firmness compared to coated and control fruit. LDPE film markedly showed the ripening of tomato as shown by their retention of firmness and delay changes in their skin color. Its also showed the slowing down in weight loss. The tomato packed in LDPE film effective in providing a physical barrier to moisture loss and therefore slowing down the dehydration and fruit shriveling.