

EFFECT OF DIFFERENT WRAPPING MATERIALS ON QUALITY
OF TOMATO (*Durobanis*) STORED AT AMBIENT TEMPERATURE

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EFFECT OF DIFFERENT WRAPPING MATERIALS ON QUALITY OF TOMATO
(*Lycopersicon esculentum*) STORED AT AMBIENT TEMPERATURE

By
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PENGAKUAN DAN PENGESAHAN LAPORAN
PROJEK ILMIAH I DAN II

Adalah ini diakui dan disahkan bahawa laporan ilmiah bertajuk:

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oleh NUR IZYAN SINTI ALIAS, No.Matrik UK 14 324 telah diperiksa dan semua pembedaan yang disarankan telah dilakukan. Laporan ini dikemukakan kepada Jabatan sebagai memenuhi sebahagian daripada keperluan memperoleh Ijazah Sarjana Muda SAINS AGROTEKNOLOGI (TEKNOLOGI LEPASTUAJIAN), Fakulti Agroteknologi dan Sains Makanan, Universiti Malaysia Terengganu.

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DECLARATION

I hereby declare that the work in thin thesis is my own except
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ABSTRACT

Tomato is a climacteric fruit, having respiratory peak during their ripening process. Being a climacteric and perishable vegetable, tomatoes have a very short life span, usually 2-3 weeks. This has led to a need to develop technology for extending the shelf life. This study was conducted to determine the effects of using different types of wrapping materials [newspaper, high density polyethylene (HDPE), polyvinyl chloride (PVC) cling film and unwrapped (control)] of varying permeabilities to gases and water vapor on the physico-chemical characteristics of the tomatoes from pink maturity stage during storage at ambient temperature, $\pm 24^{\circ}$ C and relative humidity of 70-75%. Physical characteristics were determined by quantitative measurements of color and texture in term of skin and flesh firmness. Chemical evaluation involved TSS and pH. The results obtained from these studies indicated that there were significant differences between different types of packaging materials for all of the parameters tested over the storage period. Generally, in almost all the analyses done, the quality of the tomato deteriorated with increase in storage time. Among all the wrapping materials used, it was found that PVC cling film could extend the shelf life of the tomatoes almost up to 2 weeks with minimum color and texture changes, and marginally low changes in other parameters tested. The unwrapped tomatoes (control) were found to be the least effective followed by newspaper and HDPE.