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Perpustakean Sultanah Nur Zahirah Universiti Malaysia Terengganu (UMT)





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Effect of chitosan coating on tomato (Lycopersicum esculentum) at ambient temperature / Ahmad Rashdan Kamaruddin.

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EFFECT OF CHITOSAN COATING ON TOMATO (*Lycopersicum esculentum*) AT AMBIENT TEMPERATURE

Ahmad Rashdan Bin Kamaruddin

This project report is submitted in partial fulfillment of the requirement of the degree of Bachelor in Science Agrotechnology (Post Harvest Technology)

FACULTY OF AGROTECHNOLOGY AND FOOD SCIENCE UNIVERSITI MALAYSIA TERENGGANU

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ABSTRACT

A study was conducted to look at the effect of chitosan coating at low concentration on appearances, colour measurement, pH, fruit firmness, total soluble solid and weight loss of tomatoes. It was carried out at Post Harvest Laboratory, Department of Agrotechnology and Food Science University Malaysia Terengganu. The fruits coated with chitosan solution at concentrations of 0% as control, 0.25%, 0.5% and 1.0% held at ambient conditions of for 12 days. The experimental design was a Completely Randomize Design (CRD). The fruits coated with 1.0% chitosan was the best rather than others. The fruits coated with 1.0% chitosan solution gave its effect (P<0.05) on weight loss, fruits total soluble solid, pH, appearances and hue angle. The fruits coated with 1.0% chitosan solution gave no significant effect on fruit firmness. From the result it can be concluded that chitosan coating is able to extend the storage life of tomatoes and prevent the fruits from decay.