

INTISARI

NAZIFAH, N., 2019. PENGARUH PELAPISAN KITOSAN TERHADAP KUALITAS MUTU BUAH MANGGIS (*Garcinia mangostana* L) DALAM PROSES PENYIMPANAN, KARYA TULIS ILMIAH, FAKULTAS FARMASI, UNIVERSITAS SETIA BUDI, SURAKARTA.

Faktor penghambat potensi ekspor buah manggis di Indonesia yaitu penurunan mutu buah selama proses penyimpanan. Pelapisan atau coating kitosan dapat memperpanjang masa simpan dan mengontrol kerusakan buah, menurunkan kecepatan respirasi, menghambat pertumbuhan kapang, dan menghambat pematangan dengan mengurangi produksi etilen dan karbondioksida. Buah manggis yang semakin matang memiliki kandungan gula yang semakin meningkat hal tersebut mengakibatkan terjadinya perubahan kandungan gula dan pada buah manggis. Penelitian ini bertujuan untuk mengetahui pengaruh pelapisan kitosan terhadap penurunan mutu fisik manggis dan kandungan gula pereduksi selama proses penyimpanan.

Konsentrasi bahan pelapis kitosan yang digunakan yaitu 2% dan 3%. Penurunan mutu fisik manggis diamati dengan melihat prosentase penyusutan bobot manggis, penampakan visual serta kandungan gula pereduksi selama proses penyimpanan menggunakan metode Nellson-Somogy.

Hasil penelitian menunjukkan bahwa persentase penyusutan bobot buah manggis berbeda signifikan hingga hari ke 10 dan pada hari 11-14 tidak berbeda signifikan, kenaikan kandungan gula pereduksi pada sampel yang diberi pelapisan dan tanpa pelapisan selama penyimpanan 7 dan 14 hari berbeda signifikan

Kata kunci : Kitosan, Gula pereduksi, Penyusutan bobot, Nellson-Somogy

ABSTRACT

NAZIFAH, N., 2019. THE EFFECT OF CHITOSAN COATING ON MANGOSTEEN FRUITS (*Garcinia mangostana L*) QUALITY IN THE STORAGE PROCESS, SCIENTIFIC PAPER, FACULTY OF PHARMACY, UNIVERSITAS SETIA BUDI, SURAKARTA

One of resistance factor of mangosteen fruit export potency in Indonesia is degradation of fruits quality during storage. *Coating* of chitosan could extend the storage period and control damaged of fruits, reduced respiration speed, resisted mold growth, resisted fruit to ripe by resisting etilen and carbondioxide production.

Mangosteen fruits that were getting ripen have an increasing sugar content that caused the changing of sugar content in mangosteen fruits.

This research/study aimed to find out the effect of chitosan coating on quality degradation of mangosteen physics and sugar reducing content during storage process.

Coating materials concentration usage was 2% and 3%. Quality degradation of mangosteen physics could be observed by looked at the ratio of mangosteen depreciation mass, visual appearance and also reducing sugar content during the storage by Nellson Somogy methode.

The result of these research was indicated that ratio of mangosteen fruit depreciation mass significantly different until the 10th day, and there is no significant differencial on the days 11th to 14th.

There was significant differences on reducing sugar content increasing between the sample with coating and without coating on the storage during 7 and 14 days

Key word : Chitosan, Reducing sugar, Ratio of mangosteen fruit depreciation mass Nellson-Somogy