INTISARI

Perlakuan pemotongan pada *fresh-cut* buah apel beresiko menjadikan *browning.* Ada beberapa metode untuk menghambat *browning* dengan menambahkan bahan *anti-browning* yaitu Natrium bisulfit ($NaHSO_3$) dan *edible coating Carboxyl Methyl Cellulose* (CMC). Penelitian bertujuan untuk mendapatkan konsentrasi Natrium bisulfit yang tepat serta mengetahui pengaruh *edible coating* CMC sebagai penghambat *browning* dan mempertahankan kualitas serta masa simpan buah apel Manalagi potong segar. Penelitian dilakukan dengan rancangan percobaan faktorial yang disusun dalam Rancangan Acak Lengkap (RAL) dengan 3 ulangan. Percobaan yang diujikan terdiri dari Natrium Bisulfit 50 ppm+ tanpa *edible coating* CMC 1%, Natrium bisulfit 50 ppm+ *edible coating* CMC 1%, Natrium bisulfit 100 ppm+ tanpa *edible coating* CMC 1%, Natrium bisulfit 100 ppm+ *edible coating* CMC 1%, Natrium bisulfit 150 ppm+ tanpa *edible coating* CMC 1%, Natrium bisulfit 150 ppm+ *edible coating* CMC 1%, Natrium bisulfit 200 ppm+ tanpa *edible coating* CMC 1%, Natrium bisulfit 200 ppm+ *edible coating* CMC 1% yang disusun dalam 8 perlakuan dan sebagai pembanding dilakukan perlakuan tanpa perendaman. Hasil penelitian menunjukkan bahwa perendaman Natrium bisulfit 100 ppm+ *edible coating* CMC 1% memiliki penghambat *browning* yang lebih baik pada *fresh-cut* buah apel Manalagi hingga hari ke 9.

Kata kunci: *Natrium Bisulfit; Edible Coating CMC; Umur Simpan dan Kualitas Apel Manalagi*

ABSTRACT

Cutting treatment on fresh-cut apple could increase risk of browning. There are several methods to inhibit browning by adding anti-browning ingredients such as Sodium bisulfite ($NaHSO_3$) and CMC edible coating. The study aimed to obtain appropriate concentration of Sodium bisulfite and to know the effect of edible coating CMC as anti browning agent to maintainquality and shelf life of fresh-cut apple cv Manalagi. This Research was carried out in a double factor experimental design and arranged in completely randomized design (CRD) with three replications. The experiments analysis consisted of 50 ppm + Sodium bisulfite without edible coating CMC 1%, 50 ppm Sodium bisulfite + 1% edible coating, Sodium bisulfite 100 ppm + without edible coating CMC 1%, Sodium bisulfite 100 ppm + 1% edible coating CMC, Sodium bisulfit 150 ppm + without edible CMC 1% coating, Sodium bisulfit 150 ppm + 1% edible coating CMC, 200 ppm + Sodium bisulfite without CMC 1% edible coating, 200 ppm Sodium bisulfite + 1% CMC, arranged in 8 combinations of treatments with a treatment without soaking as control. The result showed that Sodium bisulfite 100 ppm + 1% edible coating CMC resulted a better inhibiting in browning on fresh-cut apple up to 9 days.

***Keywords**: Sodium bisulfite; Edible Coating CMC; Manalagi-apple Fresh-cut*