INTISARI

Fresh-cut merupakan salah satu pengolahan buah dan sayuran yang melibatkan pencucian, pengupasan dan pegirisan sebelum dilakukan pengemasan dengan suhu rendah untuk dilakukan penyimpanan sehingga mudah dikonsumsi tanpa menghilangkan kesegaran dan nilai kandungnya. Dampak lebih lanjut dari *fresh-cut* yaitu terjadinya perubahan enzimatis, penurunan umur simpan dan mutu buah. Pencoklatan enzimatis pada *fresh-cut* mengakibatkan kerugian ekonomis, karena beresiko menjadikan *browning*. Penghambatan reaksi *browning* dapat dilakukan dengan menambahkan beberapa bahan anti *browning* seperti natrium bisulfit, asam sitrat dan arginin. Tujuan penelitian yaitu untuk mengkaji larutan manakah yang efektif untuk menghambat reaksi pencoklatan pada *fresh-cut* buah apel Manalagi (*Malus sylvestris Mill*). Penelitian dilakukan di Laboratorium Pascapanen Program studi Agroteknologi Fakultas Pertanian Universitas Muhammadiyah Yogyakarta. Metode penelitian yang digunakan yaitu metode eksperimental faktor tunggal yang disusun dalam Rancagan Acak Lengkap (RAL). Hasil penelitian menunjukkan bahwa pemberian bahan anti *browning* berupa L-arginin 100 mmol menunjukkan hasil paling efektif untuk menghambat *browning* hal ini ditunjukan pada setiap pengamatan, sementara perendaman asam sitrat menunjukan hasil yang kurang efektif dalam menghambat *browning*.

Kata kunci: Apel Manalagi, *fresh–cut, browning,* natrium bisulfit, L-arginin, asam sitrat

ABSTRACT

Fresh-cut is one of the fruits and vegetables processing which involves washing, stripping and slicing before packaging with low temperature for storage so that it is easy to consume without losing its freshness and biological value.Further impact of fresh cut is the occurrence of enzymatic changes, decreased shelf life and fruit quality. Enzymatic browning in fresh cut results in economic losses, because it risks making browning. Inhibition of the browning reaction can be done by adding some anti-browning ingredients such as sodium bisulfite, citric acid and arginine. The purpose of the research is to examine which solution is effective for inhibiting browning reactions in fresh cut apple Manalagi (Malus sylvestris Mill). The research was conducted at the Postharvest Laboratory of the Agrotechnology Study Program at the Faculty of Agriculture, Muhammadiyah University, Yogyakarta. The research method used was the experimental method of the single factor compiled in a Completely Randomized Design (CRD). The results showed that the give of anti-browning ingredients in the form of L-arginine 100 mmol showed the most effective results for inhibiting browning this was shown at each observation, while soaking citric acid showed results that were less effective in inhibiting browning.

Keywords:Manalagi apples, fresh-cut, browning, sodium bisulfite, L-arginine, citric acid