

## INTISARI

Jambu air Dalhari memiliki kekurangan mudahnya penurunan mutu kualitas buah yang disebabkan proses kehilangan air dan mengakibatkan kulitnya cepat keriput ketika disimpan suhu ruangan. Aktivitas mikrobia juga dapat mengakibatkan kerusakan pada buah jambu air. *Edible coating* salah satu upaya untuk mengurangi resiko kehilangan air dan pertumbuhan mikrobia. Penelitian ini bertujuan untuk menentukan konsentrasi kombinasi alginat, minyak atsiri kayu manis dan perendaman  $\text{CaCl}_2$  untuk memperpanjang umur simpan, menghambat kecepatan kehilangan air dan pertumbuhan mikroba pada umur simpan buah Jambu air varietas Dalhari. Penelitian dilakukan di Laboratorium Pasca Panen Universitas Muhammadiyah Yogyakarta, dilakukan bulan Oktober - Desember 2017. Metode penelitian yang digunakan adalah metode percobaan yang disusun dalam Rancangan Acak Lengkap (RAL) dengan rancangan faktor tunggal, yang terdiri dari 8 perlakuan dan 1 kontrol yaitu perendaman  $\text{CaCl}_2$  1%,  $\text{CaCl}_2$  2%, alginat + atsiri kayu manis 1%, alginat + atsiri kayu manis 1,5%,  $\text{CaCl}_2$  1% + alginat + atsiri kayu manis 1%,  $\text{CaCl}_2$  1% + alginat + atsiri kayu manis 1,5%,  $\text{CaCl}_2$  2% + alginat + atsiri kayu manis 1%,  $\text{CaCl}_2$  2% + alginat + atsiri kayu manis 1,5%. Hasil penelitian menunjukkan bahwa perlakuan  $\text{CaCl}_2$  2% + alginat + atsiri kayu manis 1,5% paling efektif untuk memperpanjang umur simpan jambu air Dalhari hingga 9 hari. Penambahan minyak atsiri kayu manis belum mampu menghambat pertumbuhan mikrobia.

Kata kunci : Jambu air Dalhari, *Edible Coating* Alginat, Minyak Atsiri Kayu Manis,  $\text{CaCl}_2$

## **ABSTRACT**

*Rose apple cv Dalhari easy to loss its water content and quickly wrinkle in room stored. Microbia activity can also couse damage to the Rose apple. Edible coating is one of treathment to reduce water loses and inhibit microbial growth on Rose apple cv Dalhari. This study aims to determine the concentration of cinnamon essential oil and CaCl<sub>2</sub> in alginate to extend the shelf life, inhibit of water losses and microbial growth of Rose apple cv Dalhari. This research was conducted at Post Harvest Laboratory in Universitas Muhammadiyah Yogyakarta between October - December 2017. The research used was experimental method compiled in Completely Random Design (CRD) with single factor design, consisting of eight treatments and one control: CaCl<sub>2</sub> 1%, CaCl<sub>2</sub> 2%, alginate + cinnamon 1%, alginate + essential cinnamon 1.5%, CaCl<sub>2</sub> 1% + alginate + essential cinnamon 1%, CaCl<sub>2</sub> 1% + alginate + essential cinnamon 1.5%, CaCl<sub>2</sub> 2% + alginate + cinnamon 1%, CaCl<sub>2</sub> 2% + alginate + essential cinnamon 1.5%. The results showed that the treatment of CaCl<sub>2</sub> 2% + alginate + atsiri cinnamon 1.5% was most effective to extend the shelf life of Rose apple cv Dalhari up to 9 days. However the addition of cinnamon essential oil has not been able to inhibit microbial growth.*

*Keywords: Rose apple cv Dalhari, Edible Coating Alginate, Cinnamon Essential Oils, CaCl<sub>2</sub>*