

ABSTRACT

Ardasania, Ivani. 2014. **Increasing Pectin and the influence of Glycerol in the Gel of Aloe Vera (Aloe vera) and Long Immersion As Edible Coating on quality big red chili pepper (Capsicum annum l.).** Department of Biology, Faculty of science and technology UinenMaulana Malik Ibrahim was unfortunate. Supervisor: Dr. I. H. Eko Budi Minarno, M. Pd. Supervisor II: SyarifahUmayatus, M.a

Keywords: Edible coating, Aloe Vera Gel, long immersion, the big red Chili.

Edible coating is a coating technique of natural fruit and vegetables. Aloe vera Gel has the potential to be applied in edible coating technology. Polysaccharides and lignin contained in Aloe Vera can withstand the loss of liquid from the surface of the skin, reduce the rate of respiration rate. Therefore, it reduces the withered rate and retain the freshness of the red chilli. This research aims (1) to determine the influence of the application of Aloe Vera gel as edible coating on quality red chili, (2) to determine the influence of long immersion to the quality of red chili, (3) to determine the influence of interaction of Aloe Vera gel as edible coating and long immersion to quality of red chili.

The study plan was performed using Random Design complete (RAL) which were arranged in a factorial factor with 2 to 3 times the repetition. The first factor was pure Aloe vera gel solution (without addition), and Aloe vera gel solution with the addition of glycerol 1% and pectin 1%. The second factor was the long immersion for 1, 5 and 10 minutes. This research was carried out in January 2014 – February 2014 in the Biochemistry laboratory of Biology Department, Faculty of science and technology UIN Maulana Malik Ibrahim and chemical laboratory of University of Muhammadiyah Malang. This research used the Analysis of Variance (Anova) with Test Distance Duncan (UJD) with 5% significant level on the SPSS program.

The results showed the aloe vera gel as edible coating with the addition of pectin 1% and 1% glycerol and long immersion in 5 minutes can maintain the red chilli weights reduction, textures, levels of vitamin C, and color up to 10 days.