

ABSTRACT

Sherina Zahran Tiara. B.1810903. Application of Edible Coating Chitosan and Aloe Vera Gel on Curly Red Chili (*Capsicum annum* L.) Based on Immersion Time and Different Types of Packaging. Under the guidance of Tiana Fitrilia and Muhammad Rifqi.

Curly red chili is one of the horticultural food ingredients that has a short shelf life, so it is necessary to do post-harvest handling such as edible coating. This study aims to determine the effect of the duration of immersion of edible coating and the type of packaging on the shelf life of curly red chili. The experimental design used was a completely randomized design (CRD) with two factors, namely the length of immersion minutes (5, 7, 10) and the type of PP plastic packaging (not perforated, perforated). The data analysis used was Two Way ANOVA with Duncan's Advanced Test with 95% confidence interval. The analysis carried out included weight loss, water content, vitamin C content and respiration rate. The best treatment in maintaining the quality of curly red chili is A1B2 (5 minutes immersion time with perforated PP packaging) with the highest vitamin C content of 460,319 mg/100g and the respiration rate of 1,885 mgCO₂/kg/hour, also 26.824% of weight lost and 67.732% of water content.

Keywords: aloe vera gel, curly red chili, chitosan, immersion time, polypropylene plastic