

ABSTRACT

Dragon fruit has the characteristic that there is a unique combination of sweet and sour taste that is refreshing. Dragon fruit is widely consumed because the chemical content contained in it has many properties. This research aimed to examine the ability of vanilla essential oil on chemical quality and microbiological and to determine the effect of adding vanilla essential oil on alginate-based edible coating with different concentrations to extend shelf life and maintain the fresh-cut quality of dragon fruit. The research was conducted at the Postharvest Laboratory of the Faculty of Agriculture, University of Muhammadiyah Yogyakarta in March 2018 to April 2018. The experiment was design with Completely Randomized Design using five treatments such as: 1) without treatment, 2) alginate 2%, 3) alginate 2% + vanilla essential oil 0,3 %, 4) alginate 2% + vanilla essential oil 0,6%, 5) alginate 2% + vanilla essential oil 0,9%. The result indicated that alginate 2% + vanilla 0,9% was able to inhibit the growth of bacteria in fresh-cut dragon fruit. The used edible coating based alginate with concentration of vanilla essential oil 0,9% could maintain physical quality of weight loss, chemical (pH, anthocyanins, sugar reduction) and sensory analysis on fresh-cut dragon fruit.

Keywords : Fresh-cut dragon fruit, Vanilla essensial oil, Alginate, Edible coating