

ABSTRACT

The aim of this research was to find out the best concentration and many variation of essential oil as an antibacterial for the fresh-cut Melon bacterial decomposition, and to analyze the effectiveness of edible coating from alginate with essential oil as the anitibacterial in keeping the quality of Fresh-cut Melon. The research was conducted using experimental method which organized in Random Complete Plan (RCP) with single factor experimental plan. The study was divided into two steps. The first was Lemon and Orange essential oil Antibacteria test, and the second was edible coating application of Antibacteria alginat on the fresh-cut Melon. The parameter being observed was the resistivity of antibacteria, microbiology population, color, weight loss, sugarreduction, total titrable acid, and pH. The results of the research indicated that essential oil of Lemon 0,8% capabled to inhibit of the fresh-cut Melon bacterial decomposition. The essential oil of Orange 0,6% capable to keep the quality of physical properties (color and wight loss), biological (microbiology population) and chemical properties (sugar reduction, quantity of acid, and pH)on fresh-cut Melon.

Keyword : Fresh-cut Melon, Essential Oil, Edible Coating, Alginate