

## ABSTRACT

### STUDY OF MAKING RANDU LEAF EXTRACT (*Ceibapentandra L.*) AS AN EDIBLE COATING MATERIALS ON THE PHYSICAL AND CHEMICAL TOMATO FRUIT DURING STORAGE

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One of postharvest handling that can inhibit the process of transpiration and respiration of the fruit is edible coating. The addition of glycerol concentration functions as plasticizer of the solution kapuk leaves. Combination dipping temperatures used to coat the fruit sequentially. The aims of this research was to know the effect of edible coating with extract kapuk leaves on physical and chemical changes tomato fruits during storage with room temperature. The results showed by analysis of variance (ANOVA), the treatment affect on hardness, weight loss, moisture and PH parameters. Further testing LSD on day-18th storage, 5% glycerol concentration and dipping temperature of 60 °C treatment can inhibit hardness fruit 2,12N, 5% glycerol concentration and dipping temperature of 60 °C treatment can reduce weight loss amounted to 6,24%, 5% glycerol concentration and dipping temperature of 50 °C treatment can maintain the fruit water content of 95,94%, and 3% glycerol concentration and dipping temperature of 40 °C treatment to maintain the pH at 4,16. So in this study the treatment of 5% glycerol concentration and dipping temperature of 60 °C is selected as the best treatment because it can maintain the quality of the fruit is well until the 18th day of storage.

Keywords: tomatoes, glycerol, dipping temperature, edible coating