

**THE EFFECT OF CALSIUM CLORIDE (CA_{CL}₂) CONCENTRATION
ON SHELF LIFE OF GUAVA FRUIT
(*Psidium guajava* L.) CRYSTAL VARIETY**

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ABSTRACT

One of many obstacles in the post-harvest processing of guava crystal fruit is the shelf-life which is relatively short, due to the climacteric characteristic of this fruit characterized by perishable condition. In order to diminish the post-harvest damage, it is important to have a proper action so the shelf life of this fruit can be longer. One of many strategies that can be implemented for slowing the fruit repining is through the application of exogenous chemical substance. Moreover, the aim of this research is to determine the influence of calcium chloride (CaCl₂) concentration on the shelf-life of guava crystal fruit (*Psidium guajava* L.). This research was conducted in Gunung Roay, Kahuripan Village, Tawang District, Tasikmalaya City, from June 2023 to July 2023. This experiment was arranged in Completely Randomized Design (CRD) consisting five treatments with five repetitions. The levels of CaCl₂ concentration treatment were A= 0% (control), B= 2%, C= 4%, D= 6% and E= 8%. The application of CaCl₂ concentration was done by immersing the fruit for 120 minutes. Data were analysed by analysis of variance with F test and continued by Duncan's Multiple Range Test with 5% of critical value. The result of the research shows that the application of CaCl₂ had significant effect on the shelf life of guava fruit .The application of CaCl₂ at the concentration of 2%, 4%, 6% and 8% had the same effect on weight loss, fruit hardness and the value of total dissolved solid for 12 days of shelf life.

Keywords: Calcium chloride, concentration, guava fruit, shelf life