ABSTRACT

EFFECT OF COMBINATION OF ALOE VERA AND CHITOSAN GEL CONCENTRATIONS ON THE QUALITY OF CALIFORNIA PAPAYA (Carica papaya L.) DURING STORAGE

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California papaya (Carica Papaya L.) is a fruit with a type of climatic respiration rate so that the fruit quickly decays. One of them is by coating using aloe vera and chitosan. Postharvest handling needs to be done to maintain the quality of papaya fruit. This experiment aims to determine the quality of California papaya (Carica Papaya L.) coated with aloe vera and chitosan with different concentrations. The experiment was carried out in Kec. Sukaraja, Kab. Tasikmalaya in June - July 2022. This experiment used a Randomized Block Design (RBD) with 9 treatments and repeated 3 times so there were 27 experimental units. The concentrations of aloe vera and chitosan tested were A (0% + 0%), B (0% + 1%), C (0% + 2%), D (20% + 0%), E (20% + 1%), F (20% + 2%), G (30% + 0%), H (30% + 1%) and I (30% + 2%). The results showed that the combination concentration of 30% aloe vera and 1% chitosan was able to maintain fruit weight loss and decay until the 10th day, and was more resistant to damage to the California papaya.

Keywords: aloe vera, chitosan, concentration, quality of papaya.