

ABSTRACT

THE APLPLICATION OF 1-MCP AND CHITOSAN TO KEEP QUALITY AND EXTEND SHELF LIFE ON GUAVA “MUTIARA”

By

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Using chitosan and 1-MCP for guava ‘Mutiara’ is important to keep the quality of fruit and to reduce the respiration and transpiration rate post-harvest process. The use of container is also important to keep the quality and extend the shelf life guava ‘Mutiara’. The aims of this research were to study (1) the effect of 1-MCP on the shelf life and quality guava ‘Mutiara’, and (2) the effect of combination 1-MCP and chitosan to shelf life and quality guava ‘Mutiara’.

This research was conducted in the Horticultur Postharvest Laboratory, Faculty of Agriculture, Lampung University from September to Oktober 2013. Treatments were arranged in a completely randomized block design with three replications, with replications were treated as a blocks. Each treatment unit was repeated three times and each consists of one guava.

The results of this research showed that (1) 1-MCP as a sole application did not significantly on the shelf life and quality guava 'Mutiara' compared to treatments of control and chitosan alone, (2) the combination of 1-MCP with a concentration of 0,5 grams and 2,5% chitosan was able to extend shelf life and keep quality of 'Mutiara' guava up to 20 days of storage.

Keywords: guava, chitosan, 1-MCP, shelf life, quality.