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The effects of hot water treatment combined with benomyl on postharvest shelf life of crystal lime, Citrus spp. / Fadhlullah Kamil.

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THE EFFECT OF HOT WATER TREATMENT COMBINED WITH BENOMYL ON POSTHARVEST SHELF LIFE OF CRYSTAL LIME, *Citrus* spp.

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This project report is submitted in partial fulfillment of the requirement of the degree of Bachelor of Science in Agrotechnology (Postharvest Technology)

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ABSTRACT

Crystal limes (Citrus spp.) were treated by the combination of hot water and fungicide dipping at 50°C for 3 minutes and untreated fruits as a control. All the samples were kept in the lab at 25-27°C and observation was done every 4 days till the 20th day. This is to examine the best way to prolong the shelf-life and maintain crystal lime quality characteristics during postharvest storage. In this study, HWT had no adverse effects on quality attributes, including pH, soluble solids contents, firmness and rind color. The study showed that the combined treatment with HWT was not assisst in prolong the shelf-life of crystal limes. From the result, the rind color of HWTs' samples showed the significant difference than the other treatments in the last day. The result also showed that the firmness, total soluble solid (TSS), pH and ascorbic acid content for all treatment does not have any significant difference compared with control. The results confirmed that hot water and fungicide dipping could be applied to crystal limes as an effective postharvest treatment to maintain postharvest quality during storage. However, as it compared with the control, HWT was the best treatment than the other treatments.