

# Microbiology and quality of fresh-cut 'Kimju' guava treated with hot water

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## Abstract

The effects of hot water treatment at 40-60°C for 10-30 min on microbial populations and quality of fresh-cut 'Kimju' guava during storage at 10°C were studied. Fresh-cut guavas were immersed in hot water at 40, 50, or 60°C for 10 and 30 min, and then stored at 10°C. A significant 1-1.5 log reduction in total microbial count, coliforms, and lactic acid bacteria of fresh-cut guava treated with hot water at 50-60°C for 10-30 min was found during storage at 10°C. Fungal counts on fresh-cut guava were undetectable after immersion in hot water. A slight decrease in fungal counts during storage was found when fruit had been treated with hot water at all temperatures. Hot water treatment at 50°C for 10 and 30 min was found to be capable of reducing microbial populations on fresh-cut guava without changes in texture or increasing disorders. However, browning was observed in fresh-cut guava treated with hot water at 60°C. The shelf life of fresh-cut guava was about 6 days at 10°C.