

Abstract

Studies were conducted to investigate the effects of fruit sanitation treatments on the microbiology of fresh-cut Thai mango (*Mangifera indica* cv. Chokanan). Washing in warm (50°C), Peracetic acid (80 mg/L) or chlorinated (100 mg/L) water for 5 min significantly ($p \leq 0.05$) reduced total microbial populations on the skin and stem end of mangoes. Yeast and mold populations were particularly sensitive to the heat treatment. Microbial populations on fresh-cut mango slices prepared from unwashed fruit were significantly ($p \leq 0.05$) higher than those prepared from washed fruit. Chlorinated water and warm water were equally effective in moderating the transfer of microorganisms from the fruit surface to the flesh. Storage time and temperature had significant effect ($p \leq 0.05$) on the microbiology of the stored mango slices. Sanitizing treatments did not alter chemical indices (pH, total acidity, soluble solids) or headspace gas composition (CO₂, O₂) in stored mango slices.