Title Effects of CaCl2 dips and heat treatments on quality and shelf-life of shredded green papaya

Authors P. Kakaew, H. Nimitkeatkai, V. Srilaong, S. Kanlayanarat

Citation ISHS Acta Horticulturae 746:335-342. 2007.

Keywords calcium chloride; firmness; heat treatment; shelf-life; shredded green papaya

Abstract

Shredded green papaya was dipped in 0.5% calcium chloride solutions at 25 or 40°C. After treatment, shreds were stored at 4°C for 10 days. Weight loss, surface color (lightness and hue value), firmness, respiration rate and sensory evaluation were determined every 2 days in storage. Application of calcium dip at both temperatures resulted in a decrease of respiration rate throughout storage. Heat treatments with calcium chloride or distilled water improved surface color, firmness and reduced weight loss of shredded green papaya. The results indicate that calcium chloride could maintain the quality and prolong shelf-life of shredded papaya, especially at higher dipping temperature. The combined effects of calcium chloride dip and heat treatment on shredded green papaya were discussed.