Title Effect of chitosan and heat treatment on physiological changes of green papaya shred under controlled atmosphere

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Abstract

Effects of pretreatments with chitosan dip and heat treatment on physiological changes of papaya shred stored under controlled atmosphere were studied. Green papaya shreds dipped in distilled water or in 0.25% chitosan or dipped in hot water at 60°C for 1 min were kept under constant 10% CO_2 that all treatments were stored at 4°C. The results showed that chitosan dip effectively reduced chilling injury symptoms, weight loss and delayed score of core and crispness of treated shred compared to papaya shreds dipped in distilled water and heat treatment water. The shredded papaya treated with heat treatment was delayed in respiration rate and ethylene production but it was increased weight loss and changes in score of color and crispness.