Title Effect to high carbondioxide pressure treatments on postharvest quality in longan cv. Daw fruit

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Keyword longan; high corbondioxide pressure treatments; browning

Abstract

The objectives of this research were to study on using high CO_2 to maintain fruit quality and prolong storage life of longan cv. Daw Fruit harvested at the commercial stage were treated with CO_2 at pressure 1 kg/cm^2 for 1 hr., 1 kg/cm^2 for 2 hr, 1 kg/cm^2 for 3 hr, 1.5 kg/cm^2 for 1 hr, 1.5 kg/cm^2 for 2 hr, 1.5 kg/cm^2 for 3 hr, 2 kg/cm^2 for 1 hr, 2 kg/cm^2 for 2 hr, 2 kg/cm^2 for 3 hr and non treated; then stored at 10°C with 85% RH for 15 days. The changes in respiration, weight loss and pericarp browning index were evaluated at 3 day intervals. Results indicated that most effective CO_2 treatment: 2 kg/cm^2 for 1 hr had lower rates of respiration. This treatment not only reduced weight loss, but also delayed pericarp browning more than other treatment. Therefore, high CO_2 pressure treatment could be maintain postharvest quality and control of browning.