Title Effect of controlled atmosphere on the postharvest quality of banana fruit "Kluai Kai"

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Keyword Control Atmosphere; banana Kluai Kai; postharvest

Abstract

Banana (Musa AA Group, 'Kluai kai') has short life storage due to fast turning yellow then browning and softening after harvesting. The effects of exposure to controlled atmosphere condition on the quality of banana were determined. Bananas were exposed at 5% O_2, 10% O_2, 5% CO_2 and 10% CO_2 storage at 13°C. Bananas were treated with 5%O_2, 10% O_2 had storage life for 40 and 35 days respectively. While as 5%, 10% CO_2 treatment had storage life for 40 days and non – treated had storage life for 30 days. At 10% CO_2 delayed turning yellow following by 5% CO_2, 5% and 10% O_2, respectively. Firmness was decreased in response to 10% CO_2 by maintaining firmness than other treatments. Colour L value tends to increase in association with turning yellow of bananas during storage. A 10% CO_2 treatment was extremely effectively in delaying of turning yellow of banana and also decreasing of hue value. Exposure to 10% CO_2 decreased the ethylene production even if it increased respiration rate when compared with the other treatments.