Title Effect of temperatures and low O_2 atmospheres on quality changes of pineapples

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Abstract

Mature green pineapples cv. Nang Lae were stored at 8, 10 or 13 deg C with 85-90% RH. The fruit exhibited chilling injury (CI) as brown spots in the flesh along the core when stored at 8 and 13 deg C for 25 and 20 days, respectively. There was no CI found in fruits stored at 10 deg C during 30 days of storage. To study the effect of low O_2 controlled atmospheres (CA) on the keeping quality of pineapples, the fruits were stored in 2, 4 or 6% O_2+N_2. Fruits stored in air served as the control. Fruits in all treatments were stored at 10 deg C with 85-90% RH. The results showed that the pineapples did not exhibit CI, although they were stored for 30 days. Total soluble solids, titratable acidity and ascorbic acid content of fruits in all treatments were not significantly changed during storage. Off-flavour was not detected in fruits stored in low O_2 CA and most of the pineapples had acceptable eating quality when stored no longer than 25 days.