Effects of trimming and storage temperature on quality of fresh-cut pineapple cultivar 'Tradseethong'

T. Puthmee, B. Matulaprungsan, S. Kanlayanarat

Acta Horticulturae 989: 193-197. 2013.

Abstract

Recently, the value of fresh-cut products is increasing especially ready-to eat types due to increasing consumer demand for convenience foods. Most of them are fruits such as pineapple, melon and jack fruit that take a lot of time to peel out. Quality of fresh-cut produce is important. In this study, the effects of trimming types and storage temperature on quality of fresh-cut pineapple were investigated. To assess the effect of temperature, fresh-cut pineapple was stored at 4, 10 and 13°C with 92-95% relative humidity. Weight loss, firmness and overall appearance (color, odor, sweetness and pulp browning) were recorded every 2 d. The result showed that fresh-cut pineapple stored best at 10°C which most effectively reduced weight loss, delayed firmness loss, and maintained sensory quality. Subsequent experiment used 10°C as storage temperature to determine the effects of trimming types. Two types of trimming were compared; long section per half of fruit and sixteen pieces per half of fruit. Results showed that sixteen pieces type had a lower total ascorbic acid and higher contamination with total microbial plate count than a long section per half of fruit. The sixteen pieces cut had also lower scores for sweetness, color and overall acceptability. Our results suggest that for maximum retention of quality, pineapple should be trimmed as long sections per fruit half, and stored at 10°C.