

Title Effect of edible coating on pineapple fruit quality during cold storage
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Abstract

Edible coating has been used for preserving the quality and safety of fresh fruit and vegetables. The effect of an edible coating, Semperfresh™ (sucrose-fatty acid ester), on postharvest quality of pineapple fruit during cold storage was studied and compared with a commercial coating material, Sta-fresh 7055 (paraffin-polyethylene wax). Pineapple fruit (*Ananas comosus* L.) were coated with 1 and 2% Semperfresh™ and 10% Sta-fresh 7055 and then stored at 10°C, 90-95% RH. Fruit qualities were evaluated by weight loss, peel color development, internal browning, titratable acidity, total soluble solids and ascorbic acid content. All the coating treatments were significantly effective on the retention of peel color (hue angle) and the weight loss compared to the control fruit. Coating with 2% Semperfresh™ and 10% Sta-fresh 7055 reduced internal browning and maintained higher ascorbic acid content compared to that of 1% Semperfresh™ coated fruit and control. Coating treatments extended storage life of pineapple fruit up to 5 weeks, whereas the control fruit had a storage life of only 28 days.