

Title Storage life extension of 'Sai Nam Pueng' tangerine fruit using three different coating materials

Author Willawan Kumpoun, Kanya Andkard, and Jammong Uthaibutra

Citation Abstracts of 27th International Horticultural Congress & Exhibition (IHC 2006), August 13-19, 2006, COEX (Convention & Exhibition), Seoul, Korea. 494 pages.

Keywords 'Sai Nam Pueng' Tangerine; storage life; coating material; cold storage

Abstract

The effects of coating materials on quality changes and storage life of tangerine 'Sai Nam Peung' fruit during storage were investigated. Three types of coating materials were used to coat fruit, type A: oxidized polyethylene shellac and wood resin, type B: oxidized polyethylene and shellac and type C: shellac, that were then stored at 5°C. Fruit samples were taken from storage on day 0, 10, 20, 30, and 40 after treatment then kept at 25°C. Fruit quality and shelf life were investigated every 2 days. Non-coated fruit showed signs of wilting after 8 days at ambient temperature, while fruit did not wilt but developed an abnormal odor after 8 days. Fruit coated with material types B and C developed abnormal odors at 16 days and were also slightly wilted. Fruit stored at 5°C gave different results with non-coated fruit wilting after 20 days and a high level of water loss occurred in fruit taken from 5°C to 25°C but no abnormal odor developed through storage. Fruit coated with these 3 coating materials could retain quality for more than 40 days at 5°C without developing wilting symptom or abnormal odor. However, the longer storage period at 5°C, the shorter the shelf life at 25°C of the tangerines.