

Title Changes of antioxidant activity of orange citrus tankan peel and fruit during storage
Author Fany Nely, Kusumiyati, Seishi Kawasaki, Takayoshi Akinaga
Citation Program and Abstracts, 4th International Symposium on Tropical and Subtropical Fruits, November 3-7 2008, Bogor, Indonesia. 215 pages.
Keyword Citrus tankan; DPPH; polyphenol content

Abstract

Citrus tankan is an important fruit in Okinawa. The changes of antioxidant activity during 30 days of storage at normal storage (25°C, 65%) and cold storage (5°C, 85%) of orange fruit were evaluated using folin ciocalteu method and DPPH radical scavenging activity. Fruits over 20 days of storage had shown symptom of deterioration. Orange juice at normal storage had shown higher polyphenol content and radical scavenging activity than cold storage, while its peel was the contrary. In general, polyphenol content of juice and peel were increased with number of storage days. Radical scavenging activity on water and ethanol solvent extraction decreased in antioxidant activity with number of storage days, while hexane solvent extraction increased both in orange juice and peel.