Title Post-harvest management of citrus fruits in India

Author Sonkar R.K.

Citation Program and Abstracts, 11th International Citrus Congress (ISC Congress), 26-20 October 2008, Wuhan, China. 333 pages.

Keywords citrus; postharvest

Abstract

Citrus fruits being non-climacteric have a relatively short post-harvest life store contrast to the climacteric fruits like mango, banana and sapota. In a developing country like India, post-harvest losses of citrus fruits are in growing countries. This is mainly due to the unscientific practices of picking, handling, packaging, transport and storage. However, with the thrust given to agriculture modernization from XI 5 year plan, several post-harvest technologies have been developed to minimize the post-harvest losses. Post-harvest treatments such as curing, washing, wax coating with fungicide have contributed to minimize post-harvest losses in the last decade. Modern packaging containers involving use of corrugated fibre board boxes in lieu of conventional wooden boxes, tray packing with linier low density polyethylene (LLDPE), low density polyethylene (LDPE) and high density polyethylene (HDPE) films have shown tremendous effects on preserving shelf life as well as maintaining the quality of citrus fruits during long term storage. Pre-harvest sprays of chemicals like plant growth regulators (PGR) and fungicides in various studies resulted better effect on reducing the colour development and microbiological spoilage. Sesame oil, carbendazim, or ethephon treatment checked the decay losses due to *Aspergillus niger*, *Alternaria citri*, *Penicillium digitatum* and *Penicillium italicum* in citrus fruits. The treatment with 2,4-D helped in maintaining colour for longer duration during storage. The film wrapping in the modified atmosphere storage reduced the rate of respiration, which resulted in prolonged shelf life.