

Title Improvement of plum storage with modified atmosphere packaging
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Citation Abstracts, 10th International Controlled & Modified Atmosphere Research Conference, 4-7 April 2009, Antalya, Turkey. 80 pages.
Keyword Modified atmosphere; MA; package

Abstract

Post-harvest supply chain is a critical point for agro-food marketing. The management of freshness in the storage is fundamental to maintain high profits in the agro-food sector to improve the distribution and to respond to retailers and consumers requirements. Plum are considered to have a climacteric-ripening pattern, in which ethylene is the hormone responsible for ripening. Modified atmosphere (MA) storage is a method helpful to maintain the natural quality of fruits. MA added to low temperatures influence fruit metabolism and reduce ethylene production, weight losses, hardness of pulp, preserving vitamins and organic acids.

The objective of this study was to increase the condition of storage and the shelf life of different plum cultivars through the use of MA and different types of plastics film. Considered units are commercial pallets with large batches of product and individual basket units. Qualitative destructive analysis to determine weight losses, total sugar, and acidity titratable were made to compare samples stored in MA and test maintained in normal atmosphere at 0°C.