

Title The influence of using biodegradable packaging films on the quality decay kinetic of plum tomato (PomodoroDatterino[®])

Author G. Muratore, Del Nobile, G.G. Buonocore, C.M. Lanza and Nicolosi Asmundo

Citation Journal of Food Engineering Volume 67, Issue 4, April 2005, Pages 393-399

Keyword Plum tomato; Food Packaging; Biodegradable films

Abstract

A comparative study on the influence of water and gas (oxygen and carbon dioxide) permeability of the packaging film on the quality decay kinetics of plum tomato is presented. The study was conducted by packaging plum tomato (cultivar Iride) with three different plastic films, a commercially available polyolefinic film and two biodegradable films, and storing the packages at market conditions. During storage the following parameters were monitored: vitamin C content, carotenoids content and sensorial attributes. Results showed that the use of packaging films with high barrier properties speed up the quality decay kinetic of the investigated produce. It was also observed that biodegradable films with an appropriate permeability coefficient can be advantageously used to prevent contamination from both microorganisms and insects, without reducing the shelf life of the produce.