Title Shelf life extension using packaging techniques

Author S. Sacharow

Citation ISHS Acta Horticulturae 709: 125-126. 2006.

Keywords packaging; vacuum; gas; active packaging; oxygen ingress; shelf-life; smart packaging

Abstract

The role of packaging includes shelf-life extension. Simple procedures such as vacuum and/or gas packaging serve to extend the shelf-life of foods. More recent and complex processes, as exemplified by active or smart packaging and additional methods used to enforce the shelf-life of a food, include time/temperature considerations, oxygen scavengers, and antimicrobials. Smart packaging includes methods of detecting food spoilage through various devices and activated sensors. The materials used to effect shelf-life extensions include specific materials based on the shelf life method utilized. The material must be able to hold vacuum and/or defined gas composition and be functional. Examples are given of flexible materials used. Also, dyes are used on specific packages on the market that display enhanced shelf life through packaging.