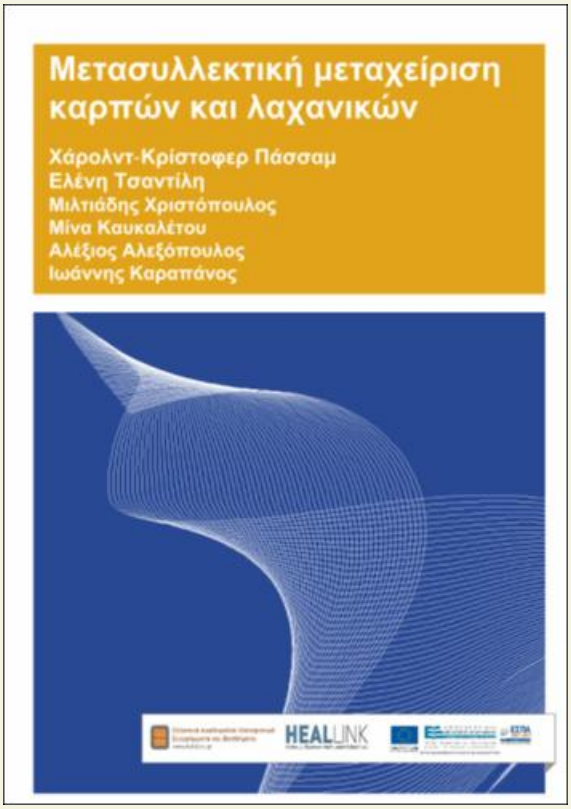

METADATA

Title: Postharvest Handling Of Fruits and Vegetables

Other Titles: -

Language: Greek

ISBN: 978-960-603-261-5

Subject: NATURAL SCIENCES AND AGRICULTURAL SCIENCES

Keywords: Postharvest Handling / Quality / Postharvest Physiology / Storage Of Fruits And Vegetables / Postharvest Technology

Bibliographic Reference: Passam, H., Tsantili, E., Christopoulos, M., Kafkaletou, M., Alexopoulos, A., & Karapanos, I. (2015). Postharvest Handling Of Fruits and Vegetables [Undergraduate textbook]. Kallipos, Open Academic Editions. http://dx.doi.org/10.57713/kallipos-669

Abstract

The textbook deals with modern postharvest physiology and technology of fruits and vegetables and consists of two main parts: (1) Postharvest physiology and handling of horticultural crops and (2) Applied postharvest technology. The introductory chapter refers to the production and importance of fruits and vegetables worldwide and in our country, as well as postharvest losses. In the first part, the classification of fruits and vegetables, the concept of quality, the main quality characteristics of horticultural crops, and the pre- and postharvest factors affecting them are presented. The main physiological parameters (e.g., respiration, water loss, ethylene, ripening and senescence, metabolic changes after harvesting, etc.) that affect the postharvest life and behavior of fruits and vegetables are described, as well as the recommended postharvest handling practices for tree fruits, vegetables, leafy vegetables, shoots, immature inflorescences, and underground organs, with detailed examples of representative species from each category. Additionally, the main postharvest physiological disorders are described, as well as chilling injury and chilling, while reference is made to the main postharvest diseases of fruits and vegetables. Regarding the application of postharvest technology, the principles of operations applied to maintain quality and extend the postharvest life of fresh fruits and vegetables are initially provided, followed by a detailed description of the technology used (e.g., precooling, de-greening, artificial ripening, dehydration, covering of products with edible or plastic membranes or wax, sorting, cleaning, packaging, preservation and storage methods, application of modified or controlled atmospheres, etc.). Finally, particular emphasis is placed on minimally processed fruits and vegetables.

The Project is funded by the National Development Programme 2021-2025 of the Ministry of Education and Religious Affairs and implemented by the Special Account for Research Funds of the National Technical University of Athens and the Hellenic Academic Libraries Link.