



Book Review

Elhadi M. Yahia (ed.). **Post harvest biology and technology of tropical and subtropical fruits, Volume 3: Cocona to mango**, 1st edition, June 2011, 584 Pages. Wood head publishing Ltd., 80 High Street, Sawston, Cambridge CB 22 3H, UK, ISBN 978 1 84569 735 8, Price £ 165.00/US\$280.00/€200.00.

The book reviews the important issues relevant to postharvest biology and technology of fruits grown in the tropical and subtropical regions of the world. Postharvest handling practices are of high priority in fruit industry since losses due to rough handling are often quite high. The book describes important approaches to minimize postharvest losses and maintain quality through proper storage, transport, and processing; and reviews current research on these aspects. It contains authentic information on 22 tropical and subtropical fruits: well-known fruits like mango, grapes, dates, and guava together with lesser known fruits like mamey sapota and feijoa have been described. Chapters on individual fruits are organized alphabetically. It is interesting to note that some of the fruits described in the book are not of high demand presently but may attain commercial status in near future as specialty fruits due to their nutritive qualities and health benefits.

The book adopts an integrated approach in dealing with each crop. Origin, botany, morphology, and economic importance are described, which is uncommon in books dealing with postharvest technology. This helps the reader to familiarize with crops that are less known. Stages of development and maturation physiology, which reflect the ultimate quality of the fruit; pre-harvest factors affecting quality; maturity indices for harvest; bruise-free harvesting methods; biotic and abiotic factors which lead to loss of quality with suitable remedial measures; and postharvest handling practices are detailed. The morphological, physiological and biochemical changes taking place after harvest which ultimately lead to ripening and senescence of fruits are

reviewed with relevant research findings. An understanding of these factors is a prerequisite for designing postharvest handling and storage practices. Harvest and packaging operations to ensure quality; optimum storage and transport conditions for maximizing consumer acceptability along with the physiological changes during storage; handling methods of organic produce; and food safety conditions have been described in detail.

Many of the fruits contain antioxidants that protect the living tissues against damage by reactive oxygen species. Indeed, fruits like durian and macadamia nut are rich sources of antioxidants. Nutritional value and health benefits as well as processed and value-added products are covered. The book contains good illustrations of harvesting and handling practices and several colour photographs introduce the lesser known fruits to the readers. It clearly demonstrates that postharvest handling practices have to be improved throughout the system from harvest, pre-cooling, packing operations, and cold chain management, till the product reaches the consumer. The book gives a comprehensive treatment on all these aspects and is a good text book for students and a reference book for professionals working in the field of postharvest technology of fruits.

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