

CHAPTER 8

APPROACHES OF GAMMA IRRADIATION FOR EXTENDING THE SHELF LIFE OF FRUITS

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ABSTRACT

Postharvest quality loss of agricultural produce during storage is a global concern. Irradiation of the fresh produce is being widely used to extend shelf life, as quarantine measure, and is gaining increased importance. Irradiation with ionizing energy is also effective in causing death of many common pathogens that include *E. coli* O157:H7, *Listeria monocytogenes*, *Salmonella*, and *Vibrio spp.* and are responsible for various foodborne diseases. Irradiation of fruits has addressed problems concerning short shelf-life, high initial microbial loads, insect, and pest management in the supply chain,