

Special Issue

Application of Phytohormones in Postharvest Ripening and Quality Improvement of Fruits

Message from the Guest Editors

The application of phytohormones in postharvest fruit management has emerged as an important area of research, driven by the need to enhance fruit quality and reduce postharvest losses. The applications of phytohormones such as ethylene, auxins, and melatonin have been addressed regarding ripening and various postharvest fruits. Recent advancements in biotechnology and molecular biology have enhanced our understanding of their mechanisms, enabling more precise control over preservation processes for fruits after harvest. This Special Issue focuses on the role of phytohormones in regulating fruit quality traits, including texture, flavor, bioactive compounds, pathogen infection, metrics of antioxidant activity, ROS levels, energy metabolism, cell wall modifications, and cuticle properties. Cutting-edge research utilizing advanced techniques such as transcriptomics, metabolomics, and genome editing will be highlighted to uncover novel insights. We invite original research articles, reviews, and methodological papers that address challenges in postharvest management, sustainability, and the development of eco-friendly phytohormone-based treatments.

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