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| Altri autori (Persone) | AltafMuhammad Ahsan<br>LalMilan Kumar<br>TiwariRahul Kumar |
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| Nota di contenuto | Ch 1. Evolution of melatonin as an oxidative stress mitigator in plant -- Ch 2. Melatonin-mediated drought stress mitigation by modulation of physiological and biochemical responses in plants -- Ch 3. Reprogramming of salt stress under the influence of melatonin -- Ch 4. Mechanistic insights on melatonin-mediated heat stress regulation in plant -- Ch 5. Melatonin a key regulator of cold stress in plants -- Ch 6. Illustrating recent development in melatonin-heavy metal research in plant -- Ch 7. Melatonin in Nutrient use efficiency of regulation in crop plants -- Ch 8. Melatonin-mediated signalling and regulation of viral and bacterial diseases -- Ch 9. Explicating the role of melatonin in the mitigation of fungal diseases in plants -- Ch 10. Role of melatonin in management of stress tolerance of forest tree species -- Ch 11. Emerging role of melatonin in integrated management of crop pathogens -- Ch 12. Exploring Melatonin's Potential as an Alternative Strategy for Protecting Plants from Biotic Stresses. |

Sommario/riassunto

This edited book highlights the multifunctional role of the ubiquitous molecule, melatonin in crop plants. The major focus of this edition is to provide a comprehensive insight into the key focus is on Melatonin mediated alleviation of abiotic stresses and pathogens infection. The inception of melatonin as an animal hormone and the subsequent discovery of its multifaceted function in the animal system has revolutionized the research on this penial hormone. During the last decade, the discovery, quantification and functional studies of melatonin as phytohormone has emerged at a rapid pace. Recently, this phyto-protectant has become an integral component of lab and field-based research on the mitigation of adverse effects of climate-driven abiotic stresses and postharvest biology and technology. The book explores melatonin mediated management of various abiotic stresses such as drought, salinity, heat and cold temperature. The book also focuses on role of melatonin in heavy metal stress, viral, bacterial, and fungal diseases, and, also contains chapter on melatonin facilitated nutrient use efficiency in plants. This book is of interest to postharvest industries, horticulturists, scientists, researchers, and students.