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Nota di contenuto	Chapter 1. Brassinosteroids and Future of Crop Plants under Changing Environment -- Chapter 2. Salicylic acid: Food, Functions and Future -- Chapter 3. Nitric Oxide: A Key Bioactive Regulator of Plant Tolerance Mechanism under Metal induced Oxidative Stress -- Chapter 4. Recent Advances in the Role of Nitric Oxide and Cross-talk with Signaling Molecules under Environmental Stress in Plants -- Chapter 5. Strigolactone in Action: Signaling, Transport and the Control of Plant Growth and Development -- Chapter 6. Interpreting the Genetic Symphony: Strigolactones and their Regulatory Effect on Plant Growth and Development -- Chapter 7. Karrikins and its Role in Mitigating Nutrient Deficiency in Plants -- Chapter 8. Hemin: A New Plant Bio stimulator -- Chapter 9. Phyto-melatonin: History, Biosynthesis and Response -- Chapter 10. Tools and Techniques to Quantify PGRs Content in Plants -- Chapter 11. Implications in Phytohormones Research: From Lab to Field -- Chapter 12. The Potential for Plant Growth Regulators to Impact Crop Productivity in Future Agricultural

System -- Chapter 13. Integration of Plant Hormones in the Biological System as an Opportunity for Sustainable Crop Production -- Chapter 14. Phytohormones for Combat Global Challenges: An Eco-friendly Approach.

Sommario/riassunto

This edited book focuses on plant growth regulator synthesis, potential applications, stress tolerance mechanisms and preservations. It explores the recently registered molecules strigolactones, karrikins, and hemin-mediated regulation of plant biology. Chapters cover the integration of plant hormones in the biological system as an opportunity for sustainable agriculture. This book explores the latest information on plant growth regulators covering both theoretical and practical aspects. Plant growth regulators are organic chemical compounds that alter or regulate the metabolism in plants. In plants, plant growth regulators play the role of biostimulants that can enhance resistance to stress. Plant growth regulators in low concentrations often lead to vital improvements and high yields in crop plants. Plant growth regulators are involved in several physiological, morphological, and biochemical mechanisms associated with plant growth, development and defence againststresses. This book brings together the latest research work on plant growth regulators and their emerging importance. The book is a useful read for students, researchers, and instructors in the field of plant biology.