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metal stress -- 12. Strigolactones mediated regulation of plant biology under heavy metal stress: physiological and molecular aspects -- 13. Auxin induced arsenic regulation in Plants: New insight -- 14. Phytohormones and heavy metal stress combination in plants: An overview -- 15. Signaling molecules and phytohormonal induced heavy metal stress regulation in plants.

Sommario/riassunto

This contributed volume aims at compiling multifaceted functions of plant hormones in plants under heavy metal stress. The main focus of this book is to address the recent developments in the arena of hormone mediated heavy metal stress tolerance. Plants are continuously challenged by abiotic stressors like heavy metals, which have negative impacts on growth and development. Hormonal stimulation via exogenous cues and endogenous signals can help plants to better withstand heavy metal toxicity. Plant hormones are biologically active compounds that act as a multifunctional signaling molecule and regulate key physiological and biochemical processes. Currently, researchers all over the globe have been exploring the in-depth mechanisms of hormone-modulated regulation of plant biology using various advanced molecular techniques. These recent advancements in hormone research have possible applications in plant stress management as well as developing metal stress-tolerant crop varieties. This book is of interest to university faculty, researchers, plant scientists, industry professionals and policymakers on a global scale. Also, the book serves as additional reading material for undergraduate and graduate students of agriculture, forestry, plant biology, and environmental sciences.