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Nota di contenuto	Chapter 1. Biological functions, uptake and transport of essential nutrients in relation to plant growth -- Chapter 2. Role of Plant Nutrients in Plant Growth and Physiology -- Chapter 3. Foliar Application of Micronutrients in Mitigating Abiotic Stress in Crop Plants -- Chapter 4. Biofortification of Plant Nutrients: Present Scenario -- Chapter 5. Trace elements in abiotic stress tolerance -- Chapter 6. Biomolecular functions of micronutrients towards abiotic stress tolerance in plants -- Chapter 7. Phosphorus nutrition: plant growth in response to deficiency and excess -- Chapter 8. Role of potassium in governing photosynthetic processes and plant yield -- Chapter 9. Heavy Metal Tolerance in Two Algerian saltbushes: A Review on Plant Responses to Cadmium and Role of Calcium in Its Mitigation -- Chapter 10. Role of sulfur in plant abiotic stress tolerance: Molecular interactions and defense mechanisms -- Chapter 11. The role of silicon in plant tolerance on abiotic stress -- Chapter 12. Mechanisms of

selenium-induced enhancement of abiotic stress tolerance in plants -- Chapter 13. Plant Nutrients and their Roles under Saline Soil Conditions -- Chapter 14. Ionic Basis of Salt Tolerance in Plants: Nutrient Homeostasis and Oxidative Stress Tolerance -- Chapter 15. Role of Micronutrients in Salt Stress Tolerance to Plants -- Chapter 16. Role of beneficial trace elements in salt stress tolerance of plants -- Chapter 17. Nutrient Homeostasis and Salt Stress Tolerance -- Chapter 18. Ion homeostasis and antioxidant defense towards salt tolerance in plants -- Chapter 19. Salinity Stress Alleviation by Organic and Inorganic Fertilization -- Chapter 20. Aspects of co-tolerance towards salt and heavy metal stresses in halophytic plant species -- Chapter 21. Role of mineral nutrients in plants growth under extreme temperatures -- Chapter 22. Molecular Approaches to Nutrient Uptake and Homeostasis in Plants under Abiotic Stress.

Sommario/riassunto

This book discusses many aspects of plant-nutrient-induced abiotic stress tolerance. It consists of 22 informative chapters on the basic role of plant nutrients and the latest research advances in the field of plant nutrients in abiotic stress tolerance as well as their practical applications. Today, plant nutrients are not only considered as food for plants, but also as regulators of numerous physiological processes including stress tolerance. They also interact with a number of biological molecules and signaling cascades. Although research work and review articles on the role of plant nutrients in abiotic stress tolerance have been published in a range of journals, annual reviews and book chapters, to date there has been no comprehensive book on this topic. As such, this timely book is a valuable resource for a wide audience, including plant scientists, agronomists, soil scientists, botanists, molecular biologists and environmental scientists.