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Nota di contenuto	Chapter 1. Abiotic stresses-induced physiological alteration in wheat -- Chapter 2. Physiological responses of wheat to environmental stresses -- Chapter 3. Abiotic stress and wheat grain quality: A comprehensive review -- Chapter 4. Salt stress responses and tolerance in wheat -- Chapter 5. Wheat responses and tolerance to drought stress -- Chapter 6. Wheat responses and tolerance to high temperature -- Chapter 7. Wheat responses and tolerance to terminal heat stress- A review -- Chapter 8. Wheat responses and tolerance to UV-B radiation: an overview -- Chapter 9. Tropospheric ozone and its impact on wheat productivity -- Chapter 10. Abiotic stress-induced oxidative stress in wheat -- Chapter 11. Trending Methods to Enhance

Antioxidant Activities in Wheat -- Chapter 12. Abiotic stress signaling in wheat crop -- Chapter 13. Molecular and biotechnological tools in developing abiotic stress tolerance in wheat -- Chapter 14. Wheat Responses to Stress and Biotechnological Approaches for Improvement -- Chapter 15. Applications of molecular markers to develop resistance against abiotic stresses in wheat -- Chapter 16. Identification of Stress Responsive Genes by using Molecular Markers to develop tolerance in wheat -- Chapter 17. Omics approaches in developing abiotic stress tolerance in wheat -- Chapter 18. Use of Phytohormones to Improve Abiotic Stress Tolerance in Wheat -- Chapter 19. Use of plant nutrients in improving abiotic stress tolerance in wheat -- Chapter 20. Use of osmolytes in improving abiotic stress tolerance to wheat (Triticum aestivum L.) -- Chapter 21. Induction of wheat plants resistance to stressors by donors of nitric oxide and hydrogen sulfide -- Chapter 22. Targeting plant hormones to develop stress resistant in wheat -- Chapter 23. Plant growth promoting bacteria: Biotic strategy to cope with abiotic stresses in wheat -- Chapter 24. Progress and Challenges of Wheat Production in the Era of Climate Change: A Bangladesh Perspective. .

Sommario/riassunto

This book presents recent advances in global wheat crop research, including the effects of abiotic stresses like high and low temperatures, drought, hypoxia, salinity, heavy metals, nutrient deficiency, and toxicity on wheat production. It also highlights various approaches to alleviate the damaging effects of abiotic stress on wheat as well as advanced approaches to develop abiotic-stress-tolerant wheat crops. Wheat is probably one of the world’s most important cereals; it is a staple food in more than 40 countries, and because of its adaptability is cultivated in almost every region. Global wheat production has more than doubled in the last 50 years due to higher yields. However, despite their high yield potential, modern wheat cultivars are often subject to crop loss due to the abiotic stresses. As such, plant breeders have long aimed to improve tolerance in order to maintain yield. Written by 85 experts, and offering the latest insights into wheat responses and tolerance to various abiotic stresses, it is a valuable tool for agronomists, plant breeders, plant physiologists and students in the field of plant science and agriculture. It is the first book to comprehensively cover past and current abiotic stress problems and tolerance mechanisms. .