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Titolo	Improvement of Crops in the Era of Climatic Changes : Volume 2 // edited by Parvaiz Ahmad, Mohd Rafiq Wani, Mohamed Mahgoub Azooz, Lam-Son Phan Tran
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Descrizione fisica	1 online resource (380 p.)
Disciplina	631.523
Soggetti	Plant science Botany Plant physiology Plant breeding Plant biochemistry Cell biology Physical geography Plant Sciences Plant Physiology Plant Breeding/Biotechnology Plant Biochemistry Cell Biology Earth System Sciences
Lingua di pubblicazione	Inglese
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Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	Brassicas: Responses and Tolerance To Heavy Metal Stress -- Recent Advances in Rapid and Sensitive Screening For Abiotic Stress Tolerance -- Transcriptomics of Heat Stress in Plants -- Biotic Stress and Crop Improvement -- Salt Stress and Sugar Beet Improvement: Challenges and Opportunities -- Genotypic Variation for Drought Tolerance in Wheat Plants -- Soil Contaminants: Sources, Effects and Approaches for Remediation -- Role of Macronutrients in Plant Growth and Acclimation: Recent Advances and Future Prospective -- Mutation

Breeding: A Novel Technique for Genetic Improvement of Pulse Crops Particularly Chickpea (*Cicer arietinum* L.) -- Organic Farming: The Return To Nature -- The Role of Cytological Aberrations in Crop Improvement Through Induced Mutagenesis -- Wheat Improvement: Historical Perspective and Mutational Approach-A Review -- Cotton Leaf Curl Virus Disease Predictive Model Based on Environmental Variables -- Transcription Factors in Abiotic Stress Responses -Their Potentials in Crop Improvement.

Sommario/riassunto

Abiotic stress drastically limits agricultural crop productivity worldwide. Climate change threatens the sustainable agriculture with its rapid and unpredictable effects, making it difficult for agriculturists and farmers to respond to the challenges cropping up from environmental stresses. In light of population growth and climate changes, investment in agriculture is the only way to avert wide scale food shortages. This challenge comes at a time when plant sciences are witnessing remarkable progress in understanding the fundamental processes of plant growth and development. Plant researchers have identified genes controlling different aspects of plant growth and development, but many challenges still exist in creating an apt infrastructure, access to bioinformatics, and good crop results. Improvement of Crops in the Era of Climatic Changes, Volume 2 focuses on many existing opportunities that can be applied methodically through conventional breeding, without touching upon the latest discoveries such as the power of genomics to applied breeding in plant biology. Written by a diverse faction of internationally famed scholars, this volume adds new horizons in the field of crop improvement, genetic engineering and abiotic stress tolerance. Comprehensive and lavishly illustrated, Improvement of Crops in the Era of Climatic Changes, Volume 2 is a state-of-the-art guide to recent developments vis-à-vis various aspects of plant responses in molecular and biochemical ways to create strong yields and overall crop improvement.
