

1. Record Nr.	UNINA9910437832203321
Titolo	Crop Improvement Under Adverse Conditions // edited by Narendra Tuteja, Sarvajeet Singh Gill
Pubbl/distr/stampa	New York, NY : , : Springer New York : , : Imprint : Springer, , 2013
ISBN	1-283-93364-0 1-4614-4633-3
Edizione	[1st ed. 2013.]
Descrizione fisica	1 online resource (401 p.)
Disciplina	631.558
Soggetti	Plant science Botany Plant biochemistry Plant anatomy Plant development Plant physiology Plant genetics Plant Sciences Plant Biochemistry Plant Anatomy/Development Plant Physiology Plant Genetics and Genomics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	The Research, Development, Commercialization, and Adoption of Drought and Stress Tolerant Crops -- Impact of Extreme Events on Salt Tolerant Forest Species of Andaman & Nicobar Islands (India) -- Greenhouse Gases Emission from Rice Paddy Ecosystem and their Management -- Remote Sensing Applications to Infer Yield of Tea in a Part of Sri Lanka -- Polyamines Contribution to the Improvement of Crop Plants Tolerance to Abiotic Stress -- Overlapping Horizons of Salicylic Acid in Different Stresses -- Genotoxic Stress, DNA Repair and Crop Productivity -- In Vitro Haploid Production - A Fast and Reliable Approach for Crop Improvement -- Production of Abiotic Stress

Tolerant Fertile Transgenic Plants using Androgenesis and Genetic Transformation Methods in Cereal Crops -- Plant Diseases - Control and Remedy through Nanotechnology -- Nanobiotechnology: Scope and potential for crop improvement -- Role of Nematode Trapping Fungi for Crop Improvement under Adverse Conditions -- Sugars As Antioxidants in Plants -- Chromium Toxicity and Tolerance in Crop Plants -- Boron Toxicity and Tolerance in Crop Plants -- Arsenic Toxicity in Crop Plants: Approaches for Stress Resistance -- Mechanism of Cadmium Toxicity and Tolerance in Crop Plants.

Sommario/riassunto

Plant development and productivity are negatively regulated by various environmental stresses. Abiotic stress factors such as heat, cold, drought, and salinity represent key elements limiting agricultural productivity worldwide. Thus, developing crop plants with the ability to tolerate abiotic stresses is a critical need which demands modern novel strategies for the thorough understanding of plant response to abiotic stresses. Crop Improvement under Adverse Conditions will serve as a cutting-edge resource for researchers and students alike who are studying plant abiotic stress tolerance and crop improvement. The book presents the latest trends and developments in the field, including the impact of extreme events on salt tolerant forest species of Andaman & Nicobar Islands, the overlapping horizons of salicylic acid in different stresses, and fast and reliable approaches to crop improvement through In Vitro haploid production. Written by renowned experts and featuring useful illustrations and photographs, Crop Improvement under Adverse Conditions is a concise and practical update on plant abiotic stress tolerance and crop improvement.
