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Altri autori (Persone)	GaurRajarshi Kumar SharmaPradeep K. <1953->
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Nota di contenuto	Front Cover; Preface; Contents; List of Contributors; 1. Genes Ppd and Vrn as Components of Molecular Genetic System of Wheat Regulation Resistance (Triticum aestivum L.) to Abiotic Stress; 2. Plant WRKY Gene Family and its Response to Abiotic Stress; 3. Induced Tolerance and Priming for Abiotic Stress in Plants; 4. Roles of HSP70 in Plant Abiotic Stress; 5. Potential Role of Small RNAs during Stress in Plants; 6. DeepSuperSAGE in a Friendly Bioinformatic Approach: Identifying Molecular Targets Responding to Abiotic Stress in Plants; 7. Regulation of Translation as Response to Abiotic Stress 8. Metabolomics and its Role in Study of Plant Abiotic Stress Responses 9. Molecular Approaches for Plant Transcription Factor Characterization; 10. New Insights in the Functional Genomics of Plants Responding to Abiotic Stress; 11. Cold Stress Signaling and Tolerance in Rice; 12. Mathematical Modelling for Investigation of Plant Cold Tolerance; 13. Physiological, Biochemical and Molecular Mechanisms of Drought Tolerance in Plants; 14. Proteomic Analyses of Alterations in Plant Proteome Under Drought Stress

15. AREB/ABF Proteins are Master Transcription Factors that Mediate ABA-Dependent Gene Regulation During Water-stress  
16. Root Studies for Drought Tolerance in Wheat;  
17. Abiotic Stress in Lotus: Aluminum and Drought;  
18. Genes Regulated in Plants under Salt Stress;  
19. Molecular Aspects of Crop Response to Abiotic Stress with Emphasis on Drought and Salinity;  
20. Plant-arthropod Interactions Affected by Water Deficit Stress through Association with Changes in Plant free Amino Acid Accumulations;  
21. Hydrogen Sulfide as a Potent Regulator of Plant Responses to Abiotic Stress Factors  
22. Multifaceted Role of Glutathione in Environmental Stress Management  
About the Editors; Color Plate Section

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Sommario/riassunto

Plants under abiotic stress are those suffering from drought, extreme temperatures, flood and other natural-but non-living-factors. Abiotic stress is responsible for reduced yields in several major crops, and climate change is focusing research in this area. To minimize cellular damage cause by such stresses, plants have evolved complex, well-coordinated adaptive responses that operate at the transcriptional level. Understanding these processes is key to manipulating plant performance to withstand stress. This book deals with the role of gene silencing in the adaptation of plants to these s

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