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| Descrizione fisica | 1 online resource (xv, 509 pages) : illustrations (some color) |
| Collana | Gale eBooks |
| Altri autori (Persone) | AhmadParvaiz AzoozM. M PrasadM. N. V <1953-> (Majeti Narasimha Vara) |
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| Nota di contenuto | Chapter 1: Recent Advances of Metabolomics to Reveal Plant Response During Salt Stress Chapter 2: MicroRNAs and Their Role in Salt Stress Response in Plants Chapter 3: Unravelling Salt Stress in Plants Through Proteomics Chapter 4: Genetic Approaches to Improve Salinity Tolerance in Plants Chapter 5: LEA Proteins in Salt Stress Tolerance Chapter 6: Enhancing Plant Productivity Under Salt Stress - Relevance of Poly-omics Chapter 7: Salt Stress and MAPK Signaling in Plants Chapter 8: ABA: Role in Plant Signaling Under Salt Stress Chapter 9: Calcium Signaling and Its Significance in Alleviating Salt Stress in Plants Chapter 10: Improving Salt Tolerance in Rice: Looking Beyond the Conventional Chapter 11: Approaches to Improving Salt Tolerance in Maize Chapter 12: The Role of Phytochromes in Stress Tolerance Chapter 13: Role of Arbuscular Mycorrhiza in Amelioration of Salinity Chapter 14: Breeding Salinity Tolerance in Citrus Using Rootstocks Chapter 15: Effects of Salt Stress on Photosynthesis Under Ambient and Elevated Atmospheric CO2 Concentration Chapter 16: Nitrogen-Use-Efficiency (NUE) in Plants Under NaCl Stress Chapter 17: The Responses of Salt- Affected Plants to Cadmium Chapter 18: Plant Tissue Culture: A |

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| | Useful Measure for the Screening of Salt Tolerance in Plants. |
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| Sommario/riassunto | Among abiotic stresses, soil salinity and sodality are major problems limiting plant growth and productivity. These problems are of great concern for countries whose economies rely on agriculture. Currently more than 100 countries are adversely affected by salinity and sodality and in many of these regions salinization is caused due to irrigation The production of crop is low in saline soil due to salt toxicity which interferes with nutrient uptake. The responses to salt stress comprise of wide range of changes at the molecular, biochemical and physiological levels. Plants withstand these stresses by modulating certain biochemical pathways. Tolerance mechanism of plants towards salinity is still a debated question. Biotechnological approaches have improved a lot in understanding the mechanisms of salt tolerance in plants. Omic approach is one of the recent tools that help us in understanding the physiology and biochemistry of the cells under salinity stress. Signalling is also an important way to understand the salinity tolerance. This volume has been compiled with the help a galaxy of researchers all over the world encompassing plant biologists and soil scientists. This book will be useful for those who are interested in stress biology of plants and would provide information about the role of omics and signalling in plants under salinity. |