

1. Record Nr.	UNINA9910437618403321
Titolo	Heavy metal stress in plants // Dharmendra K. Gupta, Francisco J. Corpas, Jose M. Palma, editors
Pubbl/distr/stampa	Heidelberg ; ; New York, : Springer, c2013
ISBN	3-642-38469-2
Edizione	[1st ed. 2013.]
Descrizione fisica	1 online resource (xii, 242 pages) : illustrations (some color)
Collana	Gale eBooks
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Disciplina	571.9543
Soggetti	Plants - Effect of heavy metals on Heavy-metal tolerant plants
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	Metalloproteins Involved in the Metabolism of Reactive Oxygen Species (ROS) and Heavy Metal Stress -- Metal Transporters in Plants -- Biochemistry of Metals/Metalloids to Words Remediation Process -- Roles of Phytochelatins in Heavy Metal Stress and Detoxification Mechanisms in Plants -- Detoxification and Tolerance of Heavy Metal in Tobacco Plants -- Heavy Metal Uptake and Tolerance of Charophytes -- Molecular Mechanisms Involved in Lead Uptake, Toxicity and Detoxification in Higher Plants -- Inter-Population Responses to Metal Pollution: Metal Tolerance in Wetland Plants -- Intraspecific Variation in Metal Tolerance of Plants -- Metallomics and Metabolomics of Plants Under Environmental Stress Caused by Metals -- Biogeochemical Cycling of Arsenic in Soil-Plant Continuum: Perspectives for Phytoremediation -- Evaluation of the Potential of Salt Marsh Plants for Metal Phytoremediation in Estuarine Environment.
Sommario/riassunto	Plants possess a range of potential cellular mechanisms that may be involved in the detoxification of heavy metals and thus tolerance to metal stress. Metal toxicity causes multiple direct and indirect effects in plants that concern practically all physiological functions. The main purpose of this book is to present comprehensive and concise information on recent advances in the field of metal transport and how

genetic diversity affects heavy metal transport in plants. Other key futures of the book are related to metal toxicity and detoxification mechanisms, biochemical tools for HM remediation processes, molecular mechanisms for HM detoxification, how metallomics and metalloproteomics are affected by heavy metal stress in plants, and the role of ROS metabolism in the alleviation of heavy metals. Some chapters also focus on recent developments in the field of phytoremediation. Overall the book presents in-depth information and the most essential advances in the field of heavy metal toxicity in plants in recent years.
