1. Record Nr. UNINA9910298330603321

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Titolo	Epigenetics in Plants of Agronomic Importance: Fundamentals and Applications : Transcriptional Regulation and Chromatin Remodelling in Plants / / by Raúl Alvarez-Venegas, Clelia De la Peña, Juan Armando Casas-Mollano
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2014
ISBN	3-319-07971-9
Edizione	[1st ed. 2014.]
Descrizione fisica	1 online resource (158 p.)
Disciplina	570 571.6 580 581.35
Soggetti	Plant genetics Plant science Botany Cell biology Plant Genetics and Genomics Plant Sciences Cell Biology
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 at the end of each chapters.
Nota di contenuto	The role of germinally inherited epialleles in plant breeding -- Epigenetics and heterosis in crop plants -- Epigenetic variation amongst polyploidy crop species -- Histone Phosphorylation in Plants -- Tomato epigenetics: Deciphering the "beyond" genetic information in a vegetable fleshy-fruited crop -- Recent advances in epigenetics on somatic embryogenesis of important agronomical plants -- microRNA expression and regulation during plant Somatic Embryogenesis -- Can epigenetics help forest plants to adapt to climate change?.
Sommario/riassunto	Over the past decades, chromatin remodelling has emerged as an important regulator of gene expression and plant defense. This book

provides a detailed understanding of the epigenetic mechanisms involved in plants of agronomic importance. The information presented here is significant because it is expected to provide the knowledge needed to develop in the future treatments to manipulate and selectively activate/inhibit proteins and metabolic pathways to counter pathogens, to treat important diseases and to increase crop productivity. New approaches of this kind and the development of new technologies will certainly increase our knowledge of currently known posttranslational modifications and facilitate the understanding of their roles in, for example, host-pathogen interactions and crop productivity. Furthermore, we provide important insight on how the plant epigenome changes in response to developmental or environmental stimuli, how chromatin modifications are established and maintained, to which degree they are used throughout the genome, and how chromatin modifications influence each another.