

1. Record Nr.	UNINA9910253942703321
Titolo	Sugarcane Biotechnology: Challenges and Prospects // edited by Chakravarthi Mohan
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2017
ISBN	3-319-58946-6
Edizione	[1st ed. 2017.]
Descrizione fisica	1 online resource (176 pages)
Disciplina	633.61233
Soggetti	Plant breeding Plant genetics Genetic engineering Plant Breeding/Biotechnology Plant Genetics and Genomics Genetic Engineering
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	Chapter 1.Potential health benefits of sugarcane -- Chapter 2. Sugarcane genomics and transcriptomics -- Chapter 3.Unraveling the sugarcane genome: progress made so far and challenges ahead -- Chapter 4.Methods of sugarcane transformation -- Chapter 5.Factors affecting genetic transformation efficiency in sugarcane -- Chapter 6. Novel potential candidate promoters and advanced strategies for sugarcane transformation -- Chapter 7.Sugarcane: an efficient platform for molecular farming -- Chapter 8.Biotechnological interventions for improving sucrose accumulation in sugarcane -- Chapter 9.Sugarcane as a potential biofuel crop -- Chapter 10.Plastome engineering: yesterday, today, and tomorrow.-Chapter 11.CRISPR-Cas9 system as a genome editing tool in sugarcane.
Sommario/riassunto	This book provides exhaustive information on several recent technologies that are employed for sugarcane improvement through biotechnology and will be of great interest to plant scientists, biotechnologists, molecular biologists and breeders who work on

sugarcane crop. Topics discussed in this volume include genomics and transcriptomics, transgenic sugarcane for trait improvement, potential candidate promoters, new strategies for transformation, molecular farming, sugarcane as biofuel, chloroplast transformation, and genome editing.
