Record Nr.	UNINA9910800198103321
Titolo	Compendium of bioenergy plants : switchgrass / / editors, Hong Luo, Yanqi Wu, Chittaranjan Kole
Pubbl/distr/stampa	Boca Raton : , : CRC Press, , 2014
ISBN	0-429-16778-4 1-4665-9636-8
Descrizione fisica	1 online resource (463 p.)
Collana	Compendium of Bioenergy Plants
Altri autori (Persone)	LuoHong <1963-> WuYanqi <1965-> KoleChittaranjan
Disciplina	631.5
Soggetti	Switchgrass - Genetic engineering Switchgrass - Breeding Energy crops
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 at the end of each chapters.
Nota di contenuto	Front Cover; Preface to the Series; Dedication by Series Editor; Preface; Contents; List of Contributors; List of Abbreviations; Chapter 1 - An Overview of Switchgrass; Chapter 2 - The Agronomy of Switchgrass for Biomass; Chapter 3 - The Use of Endophytes and Mycorrhizae in Switchgrass Biomass Production; Chapter 4 - Switchgrass Biomass Content, Synthesis, and Biochemical Conversion to Biofuels; Chapter 5 - Classic Genetics and Breeding of Bioenergy Related Traits in Switchgrass; Chapter 6 - Switchgrass Molecular Genetics and Molecular Breeding for Bioenergy Traits Chapter 7 - Switchgrass Genomic Resources DevelopmentChapter 8 - MicroRNAs and Their Potential Applications in Switchgrass Improvements; Chapter 9 - Tissue Culture, Genetic Transformation, and Improvement of Switchgrass Through Genetic Engineering; Chapter 10 - Biomass Thermochemical Conversion Technologies for Production of Fuels, Power and Chemicals; Chapter 11 - Biological and Biosystems Engineering for Processing of Switchgrass Feedstocks and Biofuel Production; Chapter 12 - Applications of Biomass Production Modeling for Switchgrass

1.

	Chapter 13 - Economics of Switchgrass Feedstock Production for the Emerging Cellulosic Biofuel IndustryChapter 14 - Switchgrass (Panicum virgatum L.) as a Bioenergy Crop: Advantages, Concerns, and Future Prospects; About the Volume Editors; Color Plate Section; Back Cover
Sommario/riassunto	This book contains the most comprehensive reviews on the latest development of switchgrass research including the agronomy of the plant, the use of endophytes and mycorrhizae for biomass production, genetics and breeding of bioenergy related traits, molecular genetics and molecular breeding, genomics, transgenics, processing, bioconversion, biosystem and chemical engineering, biomass production modeling, economics of switchgrass feedstock production etc. The book will be of interest and great value to the switchgrass research communities in both academia and industry and a handbook for agro