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Titolo	The Brassica rapa Genome // edited by Xiaowu Wang, Chittaranjan Kole
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ISBN	3-662-47901-X
Edizione	[1st ed. 2015.]
Descrizione fisica	1 online resource (170 p.)
Collana	Compendium of Plant Genomes, , 2199-4781 ; ; 4
Disciplina	635.34
Soggetti	Plant breeding Plant genetics Agriculture Bioinformatics Plant Breeding/Biotechnology Plant Genetics and Genomics
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	1 Economic/Academic importance -- 2 Background History of the National and International B. rapa Genome Sequencing Initiatives -- 3 Genomic Resources and Physical Mapping of the B. rapa Genome -- 4 De Novo Genome Assembly of Next-Generation Sequencing Data -- 5 Crop Genome Annotation: A Case Study for the Brassica rapa Genome -- 6 Miniature Transposable Elements (mTEs): Impacts and Uses in the Brassica genome -- 7 Genomic Survey of the Hidden Components of the B. rapa Genome -- 8 The Common Ancestral Genome of the Brassica Species -- 9 Genome Evolution after Whole-Genome Triplication: The Subgenome Dominance in Brassica rapa -- 10 Genome Triplication Drove the Diversification of Brassica Plants -- 11 Comparative Analysis of Gene Conversion between Duplicated Regions in Brassica rapa and B. oleracea Genomes -- 12 Molecular Mapping and Cloning of Genes and QTLs in B. rapa -- 13 Impact on Brassica breeding -- 14 The Database for Brassica Genome Studies—BRAD -- 15 Future Prospects.
Sommario/riassunto	This book provides insights into the latest achievements in genomics

research on *Brassica rapa*. It describes the findings on this Brassica species, the first of the U's triangle that has been sequenced and a close relative to the model plant *Arabidopsis*, which provide a basis for investigations of major Brassica crop species. Further, the book focuses on the development of tools to facilitate the transfer of our rich knowledge on *Arabidopsis* to a cultivated Brassica crop. Key topics covered include genomic resources, assembly tools, annotation of the genome, transposable elements, comparative genomics, evolution of Brassica genomes, and advances in the application of genomics in the breeding of *Brassica rapa* crops.
