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Titolo	The Allium Genomes / / edited by Masayoshi Shigyo, Anil Khar, Mostafa Abdelrahman
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2018
ISBN	3-319-95825-9
Edizione	[1st ed. 2018.]
Descrizione fisica	1 online resource (230 pages)
Collana	Compendium of Plant Genomes, , 2199-4781
Disciplina	635.25
Soggetti	Plant genetics Plant breeding Agriculture Plant Genetics and Genomics Plant Breeding/Biotechnology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Economic/Academic importance -- Botanical descriptions -- Classical genetics on gene mapping -- Cytological details of genome -- Molecular mapping of genes & QTLs -- Structural & functional genomic resources developed -- Requirement of whole-genome sequencing and the potential usefulness of the information -- Background history of the national and international genome initiatives, public and private partners involved -- Strategies & tools for sequencing -- Enumeration of sequences -- Cytoplasmic genome -- Repetitive sequences -- Gene annotation -- Metabolomics -- Synteny with allied & model genomes -- Comparison of gene families -- Allium genetic resources -- Impact on plant breeding. .
Sommario/riassunto	This book describes the latest advances in Allium genome research. Allium includes plant species known for their huge nuclear genome size, which makes them ideal for somatic chromosome observations in high school experiments. In order to advance the genome analysis of A. cepa and its functional study, scientists in international research collaborations have developed several types of artificially manipulated genetic stocks and analyzed them using modern technologies. The

Allium vegetable crop includes garlic, shallot, wakegi onion, Japanese bunching onion, and rakkyo. Bulb onion is one of the world's most important Allium commercial crops, with an estimated annual production of 85.8 million tons in 2013, and ranking third after tomato and watermelon in terms of global vegetable crops.