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Record Nr.	UNINA9910337939403321
Titolo	The Carrot Genome / / edited by Philipp Simon, Massimo Iorizzo, Dariusz Grzebelus, Rafal Baranski
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2019
ISBN	3-030-03389-9
Edizione	[1st ed. 2019.]
Descrizione fisica	1 online resource (372 pages)
Collana	Compendium of Plant Genomes, , 2199-4781
Disciplina	572.862 635.13
Soggetti	Plant genetics Plant breeding Agriculture Bioinformatics Plant physiology Plant Genetics and Genomics Plant Breeding/Biotechnology Plant Physiology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Economic and Academic Importance -- Daucus: Taxonomy, Phylogeny, Distribution -- Carrot floral development and reproductive biology -- Gene Flow in Carrot -- Carrot Domestication -- Genetic Resources for Carrot Improvement -- Carrot Molecular Genetics and Mapping.
Sommario/riassunto	This book provides an up-to-date review and analysis of the carrot's nuclear and organellar genome structure and evolution. In addition, it highlights applications of carrot genomic information to elucidate the carrot's natural and agricultural history, reproductive biology, and the genetic basis of traits important in agriculture and human health. The carrot genome was sequenced in 2016, and its relatively small diploid genome, combined with the fact that it is the most complete root crop genome released to date and the first-ever Euasterid II genome to be sequenced, mean the carrot has an important role in the study of plant development and evolution. In addition, the carrot is among the top ten

vegetables grown worldwide, and the abundant orange provitamin A carotenoids that account for its familiar orange color make it the richest crop source of vitamin A in the US diet, and in much of the world. This book includes the latest genetic maps, genetic tools and resources, and covers advances in genetic engineering that are relevant for plant breeders and biologists alike.