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	Descrizione fisica	1 online resource (XXII, 253 p. 69 illus., 65 illus. in color.)
	Collana	Compendium of Plant Genomes
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	Nota di contenuto	Part 1: Nutritional and Pharmaceuticals Properties -- Chapter 1. Date Palm: Source of Foods, Sweets and Beverages -- Chapter 2. Date Palm Bioactive Compounds: Nutraceuticals, Functional Nutrients and Pharmaceuticals -- Chapter 3. Green Synthesis of Nanoparticles from Date Palm (Phoenix dactylifera L.) -- Part 2: Omics Technologies -- Chapter 4. Omics Resources and Applications in Date Palm -- Chapter 5. Proteomic Insights of Date Palm Embryogenesis and Responses to Environmental Stress -- Chapter 6. Date Palm Metabolomics -- Part 3: Molecular Breeding and Genome Modification -- Chapter 7. Induced Mutagenesis in Date Palm (Phoenix dactylifera L.) Breeding -- Chapter 8. Date Palm Quantitative Trait Loci -- Chapter 9. CRISPR-Cas Based Precision Breeding in Date Palm: Future Applications -- Part 4: Genomics of Abiotic and Biotic Stress -- Chapter 10. Metagenomics of Beneficial Microbes in Abiotic Stress Tolerance of Date Palm -- Chapter 11. Genomics Approaches for Insect Control and Insecticide Resistance Development in Date Palm.
	Sommario/riassunto	This book is the first comprehensive assemblage of contemporary knowledge relevant to genomics and other omics in date palm. Volume 2 consists of 11 chapters. Part I, Nutritional and Pharmaceuticals

Properties, covers the utilization of date palm as an ingredient of various food products, a source of bioactive compounds and the production of nanomaterials. Part II, Omics Technologies, addresses omics resources, proteomics and metabolomics. Part III, Molecular Breeding and Genome Modification, focuses on genetic improvement technologies based on mutagenesis, quantitative traits loci and genome editing. Part IV, Genomics of Abiotic and Biotic Stress, covers metagenomics of beneficial microbes to enhance tolerance to abiotic stress and the various genomics advances as they apply to insect control. This volume represents the efforts of 34 international scientists from 12 countries and contains 65 figures and 19 tables to illustrate presented concepts. Volume 1 is published under the title: Phylogeny, Biodiversity and Mapping.