

1. Record Nr.	UNINA9910488705203321
Titolo	The Date Palm Genome, Vol. 1 : Phylogeny, Biodiversity and Mapping / / edited by Jameel M. Al-Khayri, S. Mohan Jain, Dennis V. Johnson
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2021
ISBN	3-030-73746-2
Edizione	[1st ed. 2021.]
Descrizione fisica	1 online resource (252 pages)
Collana	Compendium of Plant Genomes, , 2199-479X
Disciplina	584.84135
Soggetti	Plant biotechnology Plant genetics Agriculture Plant Biotechnology Plant Genetics Palmera de dàtils Genomes Llibres electrònics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Part 1: Biology and Phylogeny -- Chapter 1. Date Palm (Phoenix dactylifera L.) Biology and Utilization -- Chapter 2. Systematics and Evolution of the Genus Phoenix: Towards Understanding Date Palm Origins -- Chapter 3. A Brief History of the Origin of Domesticated Date Palms -- Part 2: Biodiversity and Molecular Identification -- Chapter 4. Genome Conformity of In Vitro Cultures of Date Palm -- Chapter 5. Date Palm Genetic Identification and Improvement Utilizing Molecular Markers and DNA Barcoding -- Chapter 6. DNA Fingerprinting of Date Palm Pollen Sources and their Relevance to Yield and Fruit Traits -- Chapter 7. Gender Determination of Date Palm -- Part 3: Genome Mapping and Bioinformatics -- Chapter 8. Whole Genome Mapping of Date Palm (Phoenix dactylifera L.) -- Chapter 9. Date Palm (Phoenix dactylifera L.) Chloroplast Genome -- Chapter 10. Comparative Analysis of Date Palm (Phoenix dactylifera L.) Mitochondrial Genomics -- Chapter 11. Date Palm Bioinformatics.

Sommario/riassunto

This book is the first volume of a comprehensive assemblage of contemporary knowledge relevant to genomics and other omics in date palm. Volume 1 consists of 11 chapters arranged in 3 parts grouped according to subject. Part I, Biology and Phylogeny, focuses on date palm biology, evolution and origin. Part II, Biodiversity and Molecular Identification, covers conformity of in vitro derived plants, molecular markers, barcoding, pollinizer genetics and gender determination. Part III, Genome Mapping and Bioinformatics, addresses genome mapping of nuclear, chloroplast and mitochondrial DNA, in addition to a chapter on progress made in date palm bioinformatics. This volume represents the efforts of 30 international scientists from 10 countries and contains 78 figures and 30 tables to illustrate presented concepts. Volume 2 is published under the title: Omics and Molecular Breeding.
