

1. Record Nr.	UNINA9910502622603321
Titolo	The Coconut Genome / / edited by M. K. Rajesh, S. V. Ramesh, Lalith Perera, Chittaranjan Kole
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2021
ISBN	3-030-76649-7
Edizione	[1st ed. 2021.]
Descrizione fisica	1 online resource (224 pages)
Collana	Compendium of Plant Genomes, , 2199-479X
Disciplina	584.5
Soggetti	Plant genetics Plant biotechnology Agriculture Plant Genetics Plant Biotechnology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Chapter 1. World Economic Importance -- Chapter 2. Botanical Study and Cytology -- Chapter 3. Germplasm Resources: Diversity and Conservation -- Chapter 4. Breeding Strategies -- Chapter 5. Characterization of Genetic Diversity Using Molecular Markers -- Chapter 6. Quantitative Trait Loci (QTL) and Association Mapping for Major Agronomic Traits -- Chapter 7. Palms in an 'OMICs' Era -- Chapter 8. Genome Sequencing, Transcriptomics, Proteomics and Metabolomics -- Chapter 9. Mitochondrial and Chloroplast Genomes -- Chapter 10. Endosperm Oil Biosynthesis: A Case Study for Trait Related Gene Evolution in Coconut -- Chapter 11. Aroma and Fragrance: A Case Study for Trait-Related Gene Evolution in Coconut -- Chapter 12. Resistance Gene Candidates (RGCs) in Coconut Palm: A Molecular Platform for the Genetic Improvement of Resistance to Pathogens -- Chapter 13. Epigenetics of Coconut Endosperm Development -- Chapter 14. Genome Editing: Prospects and Challenges -- Chapter 15. Coconut: The Tree Of Life- Endless Possibilities.
Sommario/riassunto	This book serves as the first comprehensive compilation describing the breeding strategies and genetics and genomics of the coconut palm. It

describes gene evolution of economically important traits such as oil biosynthesis, aroma and fragrance, disease-resistant genes and small RNAs-mediated gene regulation of coconut. Application of “omics” approaches in palms and the prospects of genome editing technologies in coconut are also discussed. The author list includes pioneers and experts in the field of coconut genomics. The book appeals to postgraduate students, researchers and industry players in the field of plantation crops in general and coconut in particular.
