

1. Record Nr.	UNINA9910409687203321
Titolo	Coconut Biotechnology: Towards the Sustainability of the 'Tree of Life' / / edited by Steve Adkins, Mike Foale, Roland Bourdeix, Quang Nguyen, Julianne Biddle
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2020
ISBN	3-030-44988-2
Edizione	[1st ed. 2020.]
Descrizione fisica	1 online resource (288 pages)
Disciplina	634.61233 634.974
Soggetti	Plant anatomy Plants - Development Plant genetics Plant physiology Plants Plant Anatomy/Development Plant Genetics and Genomics Plant Physiology Plant Systematics/Taxonomy/Biogeography Fruita tropical Biotecnologia Llibres electrònics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	Preface -- Towards the Sustainability of the 'Tree of Life': an Introduction -- Biology, Ecology and Evolution of Coconut -- Improving the Value of the Coconut with Biotechnology -- In situ and Ex situ Conservation of Coconut Genetic Resources -- Collecting Coconut Germplasm for Disease Resistance and other traits -- Diversity Studies Using Molecular Markers -- Genome Studies for Effective Management and Utilization of Coconut Genetic Resources -- Biotechnology Contributing to Integrated Pest Management: The Example of Two

Major Coconut Pests, *Oryctes rhinoceros* and *Brontispa longissima* --
Dealing with Lethal Yellowing and Related Diseases in Coconut --
Germplasm Re-establishment and Seedling Production: Embryo Culture
-- Coconut Micropropagation for Worldwide Replanting Needs --
Towards Innovative Coconut Breeding Programs -- Index.

Sommario/riassunto

Widely known as the 'tree of life', coconut (*Cocos nucifera* L.) provides a bountiful source for making a wide variety of healthy foods and industrial items. Its cultivation, however, has been encountering seriously destructive issues including lethal diseases and natural adversities which are currently distressing livelihoods of millions of small-holder farmers around the world. There is an urgent mandate to resolve these issues by meeting sustainable seedling production, facilitating genetic conservation, as well as developing disease identification and modern breeding. This book introduces improvements in coconut biotechnology by covering the advances in micropropagation, germplasm conservation, and molecular pathogenic diagnosis. This comprehensive volume will be a useful source of information and references to researchers, graduate students, agricultural developers, and scholars in the plant sciences. In order to benefit general readers, the book also covers fundamental aspects of biology, diversity, and evolution of this marvelous palm species. .
