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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Section 1:Biology and Reproduction -- Laticifers of Jatropha -- Wood Anatomy of Indian Jatrophas -- Breeding System and Pollination in Jatropha curcas: An Overview -- Pollen of Jatropha L.: Taxonomic and Phylogenetic Considerations -- Embryology of Jatropha - A Review -- Structure and Development of Fruit and Seed of Jatropha gossypifolia l -- Fruit, Seed and Seedling characters in Jatrophas -- Genetic Improvement in Jatropha curcas through Selection and Breeding -- Section2:Genetic diversity of Jatropha and domestication -- Origin, domestication, distribution and diversity of Jatropha curcas L -- Systematics of Indian Jatropha L -- Economic and Medicinal Importance of Jatrophas -- Genetic Diversity of Jatropha curcas In Southern Mexico

-- Relationship of the genetic diversity of Jatropha curcas in Brazil and worldwide -- Towards the Domestication of Jatropha: The Integration of Sciences -- Karyology and Genomics of Jatropha - Current Status and Future Prospects -- Studies on Jatropha curcas L and its improvement through induced mutation -- The use of EcoTILLING for the genetic improvement of Jatropha curcas L -- Comparative Genomics in Euphorbiaceae -- Proteomic perspectives on understanding and improving Jatropha curcas L -- Section 3:Jatropha germplasm -- Genetic Diversity, Molecular Markers and Marker Assisted Breeding in Jatropha -- Interspecific Hybridization in the Genus Jatropha -- Genetic Affinities of Jatropha with other Euphorbiaceous Taxa -- Jatropha germplasm manipulation in Brazil -- Conservation strategies and management of Jatropha germplasm -- Section 4:Biotechnology -- Micropropagation of Jatropha curcas for large scale multiplication of quality germplasm -- Jatropha tissue culture: A critical review on present scenario and future prospects -- Tissue culture studies of Jatropha species: A Review -- Genetic Transformation of Jatropha curcas: Current status and future prospects -- Improvement of Jatropha oil by genetic transformation -- Genome structure of Jatropha curcas L -- Towards the Metabolomics of Jatropha curcas L.

Sommario/riassunto

Jatropha, Challenges for a New Energy Crop –Volume 2 aims to report on the state of the art of scientific investigations that were made during the past ten years on the new crop Jatropha curcas. The progresses obtained on the knowledge of this abstemious, semi-wild species are already impressive and were mainly achieved in just a decade (2001-2011). This knowledge extends from basic Jatropha physiology and biological reproduction to the basic agronomic practices and systems for its productive management, but also the complete set of biotechnological tools, such as in vitro culture, genetic transformation, genome sequencing, genetic maps, and marker-assisted selection that are necessary for its selective breeding. These scientific and technological achievements pave the way for the future technological management and domestication of Jatropha as an industrial oilseed crop able to contribute to the feeding of the transport system.