Record Nr. UNINA9910253957703321

Titolo Biodiversity and Conservation of Woody Plants / / edited by M. R.

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Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,,

2017

ISBN 3-319-66426-3

Edizione [1st ed. 2017.]

Descrizione fisica 1 online resource (XII, 511 p. 83 illus.)

Collana Sustainable Development and Biodiversity, , 2352-474X ; ; 17

Disciplina 635.976

Soggetti Biodiversity

Forestry

Plant genetics Plant breeding

Plant Genetics and Genomics Plant Breeding/Biotechnology

Lingua di pubblicazione Inglese

Formato Materiale a stampa

Livello bibliografico Monografia

Nota di bibliografia Includes bibliographical references at the end of each chapters.

Nota di contenuto

Part 1: Genetic Diversity -- Chapter 1. In vitro conservation of woody

plants (Elena Corridoira) -- Chapter 2. conservation of woody plant diversity in Kenya (Kimberly E. Medley) -- Chapter 3. Biotechnology and conservation of germplasm (María Teresa González-Arnao) -- Chapter 4. Native woody plant diversity under Eucalyptus plantation in Ethiopia (Shiferaw Alem) -- Chapter 5. Use of molecular markers in conservation management of tropical trees (Suchitra Changtragoon) -- Chapter 6. Neem biodiversity and conservation September end (A.V.C. Silva) --Chapter 7. oil palm genetic diversity and conservation and management (Maizura Ithnin) -- Part 2: Biodiversity and Conservation -- Chapter 8. coconut genetic diversity, conservation, and utilization (M. K. Rajesh) --Chapter 9. Pistachio conservation (Ahmet Onay) -- Chapter 10. Genetic diversity and conservation of Mexican forest trees (Christian Wehenkel) -- Chapter 11. Climate change, genetic diversity and conservation of paleoendemic redwoods (M. R. Ahuja) -- Chapter 12. Biodiversity and conservation of germplasm in mulberry -- chapter 13. Prospects of conserving date palm genetic diversity for sustainable populations

Sommario/riassunto

(Adel Aboul-Saud) -- Chapter 14. Climate change and state of forest genetic resources conservation in Norway (Tore Skroppa) -- Chapter 15. Conservation perspectives of Mesoamerican agroforestry system (saikat basu) -- Chapter 16. Conservation perspectives of Mesoamerican agroforestry system (saikat basu).

This book provides complete, comprehensive, and broad subject-based reviews for students, teachers, researchers, policymakers, conservationists, and NGOs interested in the biodiversity and conservation of woody plants. Forests cover approximately 31 percent of the world's total landmass; 93 percent is natural forest and only 7 percent consists of planted trees. Forest decline is progressing at an alarming rate worldwide. In addition to human activities (logging, deforestation, and exploiting forest lands for agriculture and industrial use), a number of other factors – including pests and diseases, drought, soil acidity, radiation, and ozone – are cumulatively contributing to global forest decline. The present situation forces us to focus on forest conservation strategies for the present and future. Gene conservation and maintaining genetic diversity in forest ecosystems are crucial to the preservation of forest genetic resources. This calls for integrated action to implement both the in situ (on site) preservation of forest stands and ex situ (distant from the original site) strategies for the conservation of woody plants' genetic resources. Selected priority areas include: 1) assessing patterns of genetic diversity and threats, 2) understanding the biological processes regulating genetic diversity, 3) assessing the impact of human activities and climate change on genetic diversity, and 5) finding methods for prioritizing species and populations for the conservation of forest trees genetic resources. All chapters were written by leading scientists in their respective fields, which include: woody plant diversity, ecology and evolution; assessment of genetic diversity in forest tree populations; conservation planning under climate change; and in situ and ex situ strategies, including biotechnological approaches, for the conservation of woody plants genetic resources.