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Nota di contenuto	Chapter 1.Phylogenetics and its application in biodiversity conservation -- Chapter 2.Phylogenetics in the Context of Tree Diversity and Conservation -- Chapter 3.Conservation metagenomics: Understanding microbiomes for biodiversity sustenance and conservation -- Chapter 4.Overview of omics-assisted techniques for biodiversity conservation -- Chapter 5. Genetic consequences of fragmentation in tropical forests: Novel approaches to assess and monitor critically endangered species -- Chapter 6.Molecular markers in assessing genetic clonal fidelity for in vitro propagated endangered medicinal plants -- Chapter 7.Strategies, opportunities and challenges in crop genetic diversity conservation: a plant breeder's perspective -- Chapter 8.Soil Microbial Metagenomics in Agroforestry System: Tools and Techniques -- Chapter 9.Phylogenetic and population genetic studies of Citrus genetic resources in northeast India: a review -- Chapter 10.Next-Generation Amplicon Sequencing: a cost-effective method for exploring microbial biodiversity -- Chapter 11.Molecular

characterization and phylogeny of Clerodendrum species occurring in North Eastern Region of India by Internal Transcribed Spacer 2 of Nuclear DNA -- Chapter 12. Population genetic diversity of Dysoxylum binectariferum, an economically important tree species of the Western Ghats, India -- Chapter 13. Gut metagenomics of Pati hanh (Anas platyrhynchosdomesticus) -- Chapter 14. Morphological and molecular characterization of genome types in wild and cultivated bananas (Musa species) of two states in North Eastern India -- Chapter 15. Pollen digital image mapping and its symmetrical correlation using MATLAB -- Chapter 16. Role of Next-generation sequencing (NGS) in understanding the Microbial Diversity.

Sommario/riassunto

This book provides insight into the use of molecular and genomic techniques to the study of populations of critically important species at various geographical scales. It delves into a wide range of issues relevant to biodiversity conservation, such as population differentiation, landscape genomics, ecological interactions, phylogenetics, phylogeography, metagenomics, molecular methods, and data processing. The current rate of biodiversity loss is unprecedented and valuable genetic resources are being lost at an alarmingly rate. Effective strategies to conserve these genetic resources are essential to maintain healthy ecosystems with inter-dependent species. The book is an invaluable resource for training undergraduate and graduate students, postdoctoral fellows, and for young researchers. This book is particularly useful for the policy makers and academics who want to learn about important concepts in population and conservation genetics and genomics.
