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Nota di contenuto	1. DNA Barcoding in the Marine Habitat: An Overview -- 2. Measurement of a Barcode's Accuracy in Identifying Species -- 3. DNA barcoding: a tool to assess and conserve marine biodiversity -- 4. Safety Assessment and authentication of seafood through DNA barcoding -- 5. Bioinformatics tools in Marine DNA Barcoding -- 6. Morphological and COI sequence based charactersation of Marine Polychaete Species from Great Nicobar Island, India -- 7. Revised Phylogeny of Extant Xiphosurans (Horseshoe Crabs) -- 8. DNA Barcoding in marine nematodes: successes and pitfalls -- 9. DNA

barcoding of calanoid copepods from the gulf of california -- 10. DNA Barcoding of Primitive Species - Nemertine from Sundarbans Marine Bio-Resource -- 11. Future Perspectives of DNA Barcoding in Marine Zooplanktons and Invertebrates -- 12. Molecular Positioning of Living Fossils (Horseshoe Crab) Using DNA Barcoding Approach -- 13. Mitochondrial DNA diversity of Wild and Hatchery Reared Strains of Indian Lates calcarifer (Bloch) -- 14. Barcoding Antarctic fishes: species discrimination and contribution to elucidate ontogenetic changes in Nototheniidae -- 15. Barcoding of Indian marine fishes: For identification and conservation -- 16. DNA barcoding Identifies Brackish Water fishes from Nallavadu Lagoon, Puducherry, India -- 17. DNA Barcoding of Marine fish: Prospects and Challenges -- 18. DNA Barcoding in Phytoplankton and other algae in Marine Ecosystem: An Effective Tool for Biodiversity Assessment -- 19. A search for a single DNA barcode for seagrasses of the world.

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### Sommario/riassunto

More than two third area of our planet is covered by oceans and assessment of marine biodiversity is a challenging task. With the increasing global population, there is a tendency to exploit marine resources for food, energy and other requirements. This puts pressure on the fragile marine environment and necessitates sustainable conservation efforts. Marine species identification using traditional taxonomical methods are often burdened with taxonomic controversies. Here in this book we will discuss the comparatively new concept of DNA barcoding and its significance in marine perspective. This molecular technique can be useful in the assessment of cryptic species which is widespread in marine environment and linking the different life cycle stages to the adult which is difficult to accomplish in the marine ecosystem. Other advantages of DNA barcoding include authentication and safety assessment of seafood, wildlife forensics, conservation genetics and detection of invasive alien species (IAS). Global DNA barcoding efforts in the marine habitat include MarBOL, CeDAMar, CMarZ, SHARK-BOL, etc. DNA barcoding of different marine groups ranging from the microbes to mammals is to be revealed. In conjunction with newer and faster techniques like high throughput sequencing, DNA barcoding is serving as an effective modern tool in marine biodiversity assessment and conservation.

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