1. Record Nr. UNINA9910878058103321

Titolo	Current Trends in Fisheries Biotechnology / / edited by Bijay Kumar Behera
Pubbl/distr/stampa	Singapore : , : Springer Nature Singapore : , : Imprint : Springer, , 2024
ISBN	9789819731657 9789819731640
Edizione	[1st ed. 2024.]
Descrizione fisica	1 online resource (212 pages)
Disciplina	639.3
Soggetti	Freshwater ecology Marine ecology Animal biotechnology Zoology Freshwater and Marine Ecology Animal Biotechnology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Chapter 1. Metagenomics in aquatic ecosystem health surveillance -- Chapter 2. Mitochondrial genes and their application in fish diversity studies -- Chapter 3. Role of Epigenetic reprogramming in Fisheries and Aquaculture -- Chapter 4. Proteomics in Fisheries and Aquaculture -- Chapter 5. Nano-biosensor applications for water quality monitoring -- Chapter 6. Microbial ecology in microplastics: Impact on aquatic ecosystems and bioremediation -- Chapter 7. Water pollution and bioremediation in Aquatic Environment -- Chapter 8. Environmental DNA: A potential tool in biodiversity conservation -- Chapter 9. Genomics data analysis techniques in aquaculture -- Chapter 10. Soil Biotechnology: A promising approach for aquaculture Wastewater Treatment -- Chapter 11. Plankton as Environmental Biotechnological Tool for Monitoring Aquatic Ecosystem Health -- Chapter 12. Surrogacy Technology in Fisheries and Aquaculture.
Sommario/riassunto	This book discusses information on recent trends in fisheries biotechnology. It addresses various aspects, such as metagenomics, proteomics, surrogacy, and nano-biosensor applications in fisheries

and aquaculture. This is a sunrise sector and provides nutritional security to millions of people globally. Recent developments in biotechnology, such as genomics, proteomics, bioremediation, and nanotechnology, are highly useful for the sustainable development of fisheries and aquaculture. Furthermore, mitochondrial markers, surrogacy, and epigenetics reprogramming have high potential for fisheries and aquaculture advancements. Aquatic ecosystem health surveillance is also very essential for the conservation and management of fisheries biodiversity in natural ecosystems and has also been covered in the book. This book is suitable for undergraduate and graduate students and researchers in fisheries science. It will also be helpful for various written examinations for scientist and assistant professor aspirants in this field, officials of government developmental departments, and allied agricultural sciences. Progressive fish farmers, entrepreneurs, aquaculturists, and individuals involved in the aquaculture industry will find this book valuable.