

1. Record Nr.	UNINA9910416103003321
Autore	Patra Jayanta Kumar
Titolo	A Practical Guide to Environmental Biotechnology // by Jayanta Kumar Patra, Gitishree Das, Swagat Kumar Das, Hrudayanath Thatoi
Pubbl/distr/stampa	Singapore : , : Springer Nature Singapore : , : Imprint : Springer, , 2020
ISBN	981-15-6252-0
Edizione	[1st ed. 2020.]
Descrizione fisica	1 online resource (XI, 175 p. 145 illus., 76 illus. in color.)
Collana	Learning Materials in Biosciences, , 2509-6133
Disciplina	628.5
Soggetti	Microbiology Water Hydrology Soil science Soil Science
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Chapter 1: General Guidelines of Laboratory Safety, Calculations Used In Laboratory Experiments, Basic Laboratory Glassware And Instruments -- Chapter 2: Analysis of Quality of Water and Its Nutrient Contents -- Chapter 3: Analysis of Quality of Soil and Its Nutrient Contents -- Chapter 4: Isolation, Culture and Biochemical Characterization of Microbes -- Chapter 5: Plant Tissue Culture Techniques and Nutrient Analysis.
Sommario/riassunto	This textbook provides practical guidelines on conducting experiments across the entire spectrum of environmental biotechnology. It opens with general information on laboratory safety, rules and regulations, as well as a description of various equipment commonly used in environmental laboratories. It then discusses in detail the major experiments in basic and advanced environmental studies, including the analysis of water and soil samples; the isolation, culture, and biochemical characterization of microbes; and plant tissue culture techniques and nutrient analyses. Each chapter features detailed method sections and easy-to-follow protocols, and offers guidance on calculations and formulas, as well as illustrative flow charts to assist with troubleshooting for each experiment. Given its scope, the book is

an invaluable aid for laboratory researchers studying environmental biotechnology, and a rich source of information and advice for advanced undergraduates and graduates in the fields of environmental science and biotechnology.
