1. Record Nr. UNINA9910911290503321

Autore	Parray Javid Ahmad
Titolo	Progress in Soil Microbiome Research / / edited by Javid Ahmad Parray
Pubbl/distr/stampa	Cham : , : Springer Nature Switzerland : , : Imprint : Springer, , 2024
ISBN	9783031714870 9783031714863
Edizione	[1st ed. 2024.]
Descrizione fisica	1 online resource (0 pages)
Collana	Progress in Soil Science, , 2352-4782
Disciplina	551.5
Soggetti	Atmospheric science Atmospheric Science
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Soil Microbiome A Comprehensive Research Review -- Microbiome and Ecosystem Approaches -- Microbial Consortium with Multifunctional Plant Growth-Promoting Traits and its Significant Contribution in Sustainable Agriculture -- Microbiome Driven Soil Fertility: Understanding Symbiotic Relationships -- Plant Microbiome Research and its Impact on Sustainable Crop Yields.
Sommario/riassunto	This book focuses on the latest research in soil and microbiome, evaluating new and emerging innovations. Recent research has connected specific microbial taxa to plant productivity, and it is now possible to link changes in microbiome structure to the functioning of plants or crops due to advanced approaches. It provides: Insights into basic microbiome research. Focusing on its applications in agriculture. Soil bioremediation. Environmental restoration. It addresses the impact of global change on soil microbial diversity and ecosystem functions. We aim to tailor microbiome applications to individual host species better, improving treatment efficiency. The book will discuss microbiome dynamics in various environments and their potential to improve soil and plant health to meet growing food demands. It will also highlight the current developments in microbiome research and their implications for climate change. 1. Linking the dynamics of microbial communities to microbiome function. 2. Recent soil microbiome applications and harnessing for sustainable agriculture,

food security, and environmental management 3. An advanced and elaborative view of the most recent microbiological research findings 4. Simple, insightful illustrations of current microbial biotechnology trends 5. Future advances in microbial biotechnology research for sustainable development .