1. Record Nr. UNINA9910677261503321 Autore Inamuddin Titolo Biofertilizers: Study and Impact Pubbl/distr/stampa Newark:,: John Wiley & Sons, Incorporated,, 2021 ©2021 **ISBN** 1-119-72498-8 1-119-72499-6 1-119-72497-X Descrizione fisica 1 online resource (688 pages) Altri autori (Persone) AhamedMohd Imran BoddulaRajender RezakazemiMashallah Disciplina 631.86 Soggetti **Biofertilizers** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto Biofertilizer Utilization in Forestry / Wendy Ying Ying Liu, Ranjetta Poobathy -- Impact of Biofertilizers on Horticultural Crops / Clement Kiing Fook Wong, Chui-Yao Teh -- N2 Fixation in Biofertilizers / Rekha Sharma, Sapna Nehra, Dinesh Kumar -- Organic Farming by

Poobathy -- Impact of Biofertilizers on Horticultural Crops / Clement Kiing Fook Wong, Chui-Yao Teh -- N2 Fixation in Biofertilizers / Rekha Sharma, Sapna Nehra, Dinesh Kumar -- Organic Farming by Biofertilizers / Anuradha, Jagvir Singh -- Phosphorus Solubilizing Microorganisms / Rafig Gurbanov, Berkay Kalkanci, Hazel Karadag, Gizem Samgane -- Exophytical and Endophytical Interactions of Plants and Microbial Activities / A Mbotho, D Selikane, JS Sefadi, MJ Mochane -- Biofertilizer Formulations / Sana Saif, Zeeshan Abid, Muhammad Faheem Ashiq, Muhammad Altaf, Raja Shahid Ashraf -- Scoping the Use of Transgenic Microorganisms as Potential Biofertilizers for Sustainable Agriculture and Environmental Safety / Vasavi Rama Karri, Nirmala Nalluri -- Biofertilizer Utilization in Agricultural Sector / Osikemekha Anthony Anani, Charles Oluwaseun Adetunji, Osayomwanbo Osarenotor, Inamuddin -- Azospirillum: A Salient Source for Sustainable Agriculture / Rimjim Gogoi, Sukanya Baruah, Jiban Saikia -- Actinomycetes: Implications and Prospects in Sustainable Agriculture / V Shanthi -- Influence of Growth Pattern of Cyanobacterial Species on Biofertilizer Production / Tejaswi Jasti,

Anirudh Kaligotla Venkata Subrahmanya, Lalitha Rishika Majeti, Viswanatha Chaitanya Kolluru, Rajesh K Srivastava -- Biofertilizers Application in Agriculture: A Viable Option to Chemical Fertilizers / Rajesh K Srivastava -- Quality Control of Biofertilizers / Swati Agarwal, Sonu Kumari, Suphiya Khan -- Biofertilizers: Characteristic Features and Applications / Tanushree Chakraborty, Nasim Akhtar --Fabrication Approaches for Biofertilizers / Andrew N Amenaghawon, Chinedu L Anyalewechi, Heri Septya Kusuma -- Biofertilizers From Waste / Rafaela Basso Sartori, Ihana Aguiar Severo, Alisson Santos de Oliveira, Paola Lasta, Leila Queiroz Zepka, Eduardo Jacob-Lopes --Biofertilizers Industry Profiles in Market / Kashish Gupta -- Case Study on Biofertilizer Utilization in African Continents / Osikemekha Anthony Anani, Charles Oluwaseun Adetunji -- Biofertilizers: Prospects and Challenges for Future / Tanushree Chakraborty, Nasim Akhtar --Biofertilizers: Past, Present, and Future / Mukta Sharma, Manoj Sharma -- Algal Biofertilizer / Muhammad Mudassir Igbal, Gulzar Muhammad, Muhammad Shahbaz Aslam, Muhammad Ajaz Hussain, Zahid Shafiq, Haseeba Razzag.

## Sommario/riassunto

Great attention has been paid to reduce the use of conventional chemical fertilizers harming living beings through food chain supplements from the soil environment. Therefore, it is necessary to develop alternative sustainable fertilizers to enhance soil sustainability and agriculture productivity. Biofertilizers are the substance that contains microorganisms (bacteria, algae, and fungi) living or latent cells that can enrich the soil quality with nitrogen, phosphorous. potassium, organic matter, etc. They are a cost-effective, biodegradable, and renewable source of plant nutrients/supplements to improve the soil-health properties. Biofertilizers emerge as an attractive alternative to chemical fertilizers, and as a promising costeffective technology for eco-friendly agriculture and a sustainable environment that holds microorganisms which enhance the soil nutrients' solubility leading a raise in its fertility, stimulates crop growth and healthy food safety. This book provides in-depth knowledge about history and fundamentals to advances biofertilizers. including latest reviews, challenges, and future perspectives. It covers fabrication approaches, and various types of biofertilizers and their applications in agriculture, environment, forestry and industrial sectors. Also, organic farming, quality control, quality assurance, food safety and case-studies of biofertilizers are briefly discussed. Biofertilizers' physical properties, affecting factors, impact, and industry profiles in the market are well addressed. This book is an essential guide for farmers, agrochemists, environmental engineers, scientists, students, and faculty who would like to understand the science behind the sustainable fertilizers, soil chemistry and agroecology.