Plant and Soil Microbiome

Series Editors:
Ajay Kumar, James White and Joginder Singh

BIOCONTROL AGENTS FOR IMPROVED AGRICULTURE

Edited by
Ajay Kumar, Gustavo Santoyo,
Joginder Singh

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Biocontrol Agents for Improved Agriculture

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About the book

Description

Biocontrol Agents for Improved Agriculture, a volume in the *Plant and Soil Microbiome* series, presents both an advanced and current description of the important role of plant and soil microbiome in plant disease management. Including the latest biotechnological interventions for harnessing plant and soil microbiome and their potential in controlling plant

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Key Features

- Presents emerging microbial biocontrol strategies for addressing plant pathogens
- Covers production and commercialization of biocontrol products
- Includes accessible, informative illustrations of current trends in microbial biotechnology

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Details

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Editors

Ajay Kumar

Amity Institute of Biotechnology, Amity University, Noida, India

Gustavo Santoyo

Genomic Diversity Laboratory, Institute of Biological and Chemical Research, Universidad Michoacana de San Nicolas de Hidalgo, Mexico

Joginder Singh

Department of Botany, Nagaland University, Nagaland, India

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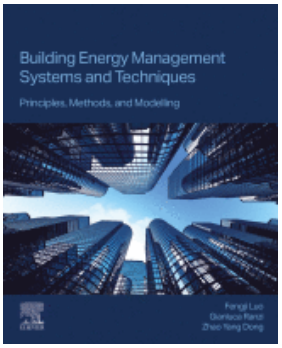

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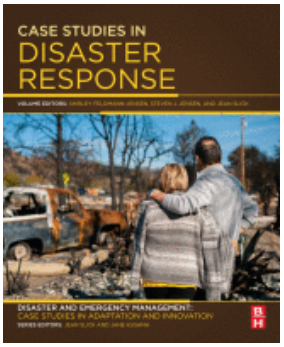

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Chapter 7 - Production and commercialization of biocontrol products

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Abstract

In recent decades, biocontrol agents (BCAs) have been suggested and researched as a potential replacement for the synthetic pesticides used to manage pre and postharvest infections of plants. However, there are other limits and hurdles that must be addressed before BCAs can be effectively introduced to the market. A specific strategy addressing the BCAs formulation via interdisciplinary techniques (liquid or solid) is needed to enhance the yield, effectiveness, and shelf life of the generated product, regardless of the method chosen for manufacturing. This is necessary for the commercial development of BCAs. Regrettably, not all BCAs are able to withstand the conditions encountered during the process of formulation. Stability can be upgraded by giving the plant special growing conditions or by adding protective ingredients to the medium of the formulation. Thus, to ensure the stability for a longer duration and easier application of BCAs, formulation methodology must be well established and validated. To prolong the shelf life of the formulated product, a comprehensive range of packaging circumstances should be considered, ideally up to two years. Even while the percentage of BCAs is expanding, they