Vurro / Gressel / Butt

Enhancing Biocontrol Agents and Handling Risks

The increased relevance given to life and food quality, and environment preservation must be balanced with the needs to produce enough food to sustain humanity. Food production without pest (weed, disease and insect) control is impossible. The environmental considerations as well as the evolution of pesticide resistances requires that chemical pest control be augmented and significantly supplanted by other procedures. Despite many promising results obtained using biological control agents, their utility is still quite limited, replacing only a small part of the market of chemical products. This is due to many reasons, such as difficulties to find new and suitable agents, technological limits in application, storage and formulation of organisms, environmental restrictions of application, costs of registering, producing and delivering biopesticides. The major reason though is that very few agents have the efficacy of traditional chemicals, yet typically costing more than chemical pesticides The advent of biotechnologies and molecular biology has opened new perspectives in using microrganisms in biocontrol, by allowing improvements in the properties of biocontrol agents and their delivery. The potential new risks associated with the introduction of new genes and organisms must be adequately accessed, which is a recurring motif throughout the proposed program. It is only if these issues are fully and transparently addressed can the necessary lines of communication be opened to the public. The book preserves, as the NATO workshop which generated it, a subject-oriented structure that could attract the interest of the scientific community working with different biological agents (fungi, bacteria, virus, nematodes, insects), on different targets (pathogens, insects, weeds). This multi-disciplinary approach (molecular biology, formulation, genetics, risk assessment, new technology, biochemistry, physiology) is necessary to design biocontrol agents with improved efficacy. It is hoped that by investing in this type of multi-disciplinary area that research will lead to new and improved agents that will be ready for use at about the time when the food supply becomes limiting, or when resistance to the few remaining conventional pesticides becomes a major limitation.

72,50 €
67,76 € (zzgl. MwSt.)

Nicht mehr lieferbar

Artikelnummer: 9781586032166
Medium: Buch
ISBN: 978-1-58603-216-6
Verlag: IOS Press
Erscheinungstermin: 01.01.2001
Sprache(n): Englisch
Auflage: 1. Auflage 2001
Serie: NATO Science Series A: Life Sciences
Produktform: Gebunden
Seiten: 296

Kundenservice Verlag Dr. Otto Schmidt KG
Neumannstraße 10, 40235 Düsseldorf | kundenservice@otto-schmidt.de | 0221-93738-997 (Inland)