

Advances in biocontrol of crop insect pests

Edited by Professor Travis Glare, Lincoln University, New Zealand and Professor Johannes Jehle, Institute of Biological Control – Federal Research Centre for Cultivated Plants (JKI), Germany



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Advances in biocontrol of crop insect pests

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Description:

As a result of increasing consumer and regulatory concern about the environmental impact of synthetic pesticide use, the biocontrol sector has rapidly expanded and continues to diversify in its product offering, with a suggested estimate of over 1700 different biocontrol products now available on the market.

Advances in biocontrol of crop insect pests provides a detailed overview of some of the key developments in this area, including the techniques used to disrupt insect pest behaviour, such as the use of semiochemicals and genetic engineering. The book also reviews recent advances in understanding plant defences against insect pest attacks and how these defences can be improved to limit crop damage and yield.

Through its exploration of the recent advances in the biocontrol sector, the book highlights the potential of novel biocontrol agents to reduce agriculture's environmental impact, whilst also considering the key formulation issues and regulatory challenges that may arise during the product development stage.

Key features:

- Provides a detailed overview of the recent advances in the biocontrol sector, focussing on the development of products to control crop insect pests
- Considers the key issues and challenges that can arise as a result of the development of novel biocontrol agents, such as the challenge of commercialising a new product to a rapidly changing market
- Addresses how breeding techniques can be optimised to improve plant defences against insect pest attacks

Audience:

University and other researchers in entomology and crop protection; governments and other private sector agencies responsible for regulating biocontrol products; agrochemical companies manufacturing and selling crop protection products; as well as agronomists providing advisory services on aspects of biocontrol

Editors' details:

Dr Travis Glare is Professor of Applied Entomology and Director of the Bio-Protection Research Centre at Lincoln University, New Zealand. He has an international reputation and has published widely in the field of entomopathogenic microbes and use of biopesticides. He has worked on a range of international projects to develop novel biopesticides.

Professor Johannes Jehle is Head of the Institute of Biological Control at the Federal Research Centre for Cultivated Plants (Julius Kühn Institute) and Adjunct Professor at the Technical University Darmstadt, Germany. He is also Vice-President of the West Palaeartic Regional Section of the International Organisation for Biological and Integrated Control (IOBC-WPRS), a member of the IOBC Working Group on Microbial and Nematode Control, and previous President of the Society of Invertebrate Pathology (SIP). A member of the editorial boards of several journals, Professor Jehle is internationally known for his research on entomopathogenic viruses.

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