

## Improving integrated pest management in horticulture

Edited by Professor Rosemary Collier, Warwick University, UK



**burleigh dodds**  
SCIENCE PUBLISHING

### Publication date

26 Oct 2021

### Price

£150 / \$195 / C\$255 / €180 / A\$270

### ISBN

Hardback: 978-1-78676-753-0

Mobi: 978-1-78676-754-7

ePub: 978-1-78676-755-4

PDF: 978-1-78676-756-1

### Format

152 × 229 mm / 6 × 9 in, 400 pages

### Illustrations

Color tables, photos and figures

### Series

Burleigh Dodds Series in Agricultural  
Science: no. 110

### BIC/THEMA classification

TVP - Pest control, TVS - Horticulture,  
TVF - Sustainable agriculture, TVK -  
Agronomy & crop production

### Distributors

**INGRAM** Publisher  
Services UK

Print books (exc. US and Canada)



eBooks (worldwide)

Updated 21/06/21

## New title information

# Improving integrated pest management in horticulture

Edited by: Professor Rosemary Collier, Warwick University, UK

### Endorsement:

"This new book is both timely and important for the continued development, improvement and uptake of IPM for horticultural crop. With increasing global pressure to produce sustainable food and to achieve pest suppression using ecologically sensitive methods, this book provides not only the latest research but also practical solutions for key vegetable pests, via relevant case studies. I recommend this book to students and practitioners of IPM in horticulture."

*Emeritus Prof. Nick Birch, formerly James Hutton Institute, UK*

### Description:

Pests and diseases remain a significant threat to crop yields worldwide. With concerns about the environmental impact of synthetic pesticides, there remains a need to develop more environmentally-friendly biological methods of control that can be combined synergistically within integrated pest management (IPM) strategies.

*Improving integrated pest management (IPM) in horticulture* provides a comprehensive review of the recent developments in integrated pest management (IPM) for horticultural crops. The collection builds on the wealth of research on insect and disease control in horticulture using IPM strategies, with dedicated parts to the alternative control methods, such as biological, technological and physical, as well as examples of practical implementation of these methods.

Edited by **Professor Rosemary Collier**, Warwick University, UK, *Improving integrated pest management (IPM) in horticulture* will be a standard reference for researchers in IPM in horticultural science departments, entomologists, manufacturers/suppliers of pesticides and crop pest management products, as well as government agencies monitoring and regulating pest management in agriculture.

### Key features:

- Reviews the latest research on the advances in IPM strategies for insect and disease control in horticultural crops
- Highlights the challenges of using alternative methods of control successfully in IPM programmes (e.g. biopesticides, bioprotectants, biostimulants)
- Provides examples of the practical implementation of IPM strategies to an array of horticultural crops (cucurbits, tomatoes, potatoes, cabbage, cauliflower) in differing environments (greenhouses, protected cultivation)

### Audience:

Researchers in IPM in horticultural science departments, entomologists, manufacturers/suppliers of pesticides and crop pest management products, government agencies monitoring and regulating pest management in agriculture

### Editor details:

**Dr Rosemary Collier** is a Professor in the School of Life Sciences and Research Director of the Crop Centre at the University of Warwick, UK. A leading authority in integrated pest management (IPM) in horticulture, Professor Collier is Coordinator of the IPM Working Group in the European Vegetable Research Institutes Network (EUVRIN) and has coordinated a number of EU IPM research projects such as FlyIPM. Professor Collier has been awarded the Royal Horticultural Society Veitch Memorial Medal for her outstanding contribution to horticultural science.

### Table of contents:

#### Part 1 Biological control

1. Advances in biopesticides/bioprotectants for insect control in horticulture: *Travis Glare, Lincoln University, New Zealand*
2. Advances in biopesticides/bioprotectants for plant disease control in horticulture: *Philippe Nicot, INRAE, France*
3. Advances in biostimulants as an IPM tool in horticulture: *Surendra Dara, University of California, USA*
4. Improving application systems for bioprotectants in IPM programmes in horticulture: *Clare Butler Ellis, Silsoe Spray Applications, UK*

#### Part 2 Decision support

5. Advances in Insect/disease pest monitoring and forecasting in horticulture: *Irene Vänninen, Natural Resources Institute of Finland (LUKE), Finland*
6. Advances in proximal sensors to detect crop health status in horticultural crops: *Catello Pane, CREA, Italy*
7. Advances in decision support systems (DSS) for IPM in horticultural crops: *Mark Ramsden, ADAS, UK*

#### Part 3 Breeding, agronomic practices and physical control

8. Advances in developing pest/disease-resistant varieties of horticultural crops: *Guy Barker, Warwick University, UK*
9. The use of agronomic practices in IPM programmes in horticulture: *Aude Alaphilippe, INRA, France*
10. Advances in conservation biological control in IPM for horticultural crops: *Robbie Girling, University of Reading, UK*

#### Part 4 Implementation and case studies

11. Assessing the economics of IPM for horticultural crops: *Philip Crain, Corteva Agriscience, USA*
12. Encouraging take up of IPM in horticultural crop production: *Oscar Liburd, University of Florida, USA*
13. Practical application of IPM in greenhouses/protected cultivation: *Bruno Gobin, PCS, Belgium*
14. Practical application of IPM in vegetable cultivation (e.g. cucurbits or tomatoes; examples of successful commercial applications of IPM programmes): *Richard Binks, Koppert Biological Systems, UK*
15. Practical application of IPM in vegetable cultivation (e.g. control of cabbage root fly in cauliflower): *Louis Lippens, PCG Kruishoutem, Belgium*
16. Practical application of IPM in vegetable cultivation (e.g. control of Colorado potato beetle; examples of successful IPM techniques): *Jeff Davis, Louisiana State University, USA*

### Related products:

- Critical issues in plant health: 50 years of research in African agriculture, 978-1-78676-232-0, 08 Feb 2019, CAD 290.00, USD 220.00, EUR 205.00, GBP 170.00, and AUD 305.00
- Integrated management of diseases and insect pests of tree fruit, 978-1-78676-256-6, 10 Sep 2019, GBP 190.00, EUR 230.00, USD 245.00, CAD 325.00, and AUD 340.00
- Integrated management of insect pests: Current and future developments, 978-1-78676-260-3, 29 Oct 2019, AUD 340.00, GBP 190.00, EUR 230.00, CAD 325.00, and USD 245.00
- Pesticides and agriculture, 978-1-78676-276-4, 06 Aug 2018, GBP 170.00, EUR 205.00, USD 220.00, CAD 290.00, and AUD 305.00