BOOK REVIEW

Vincent C., Goettel M. S., Lazarovits, G. 2007. Biological Control: A Global Perspective. CABI Wallingford 440 pp. ISBN-13:978-1-84593-265-7

The management of plant pests using beneficial microorganisms, parasites and predators has a long history of application in agriculture around the world. However, the effective use of beneficial organisms is constrained by environmental, legal and economic restrictions forcing researchers to adopt increasingly multi-disciplinary techniques in order to deploy successful biological control programs. This book seeks to capture this complex problem in the following 45 chapters authored by the worldś leading specialists in particular topics.

Part I." Introduction" (p. 1–6) contains one Chapter 1 – „Adventures in biocontrol" (p. 1–6) authored by G. Lazarovits, M. S. Goetel and C. Vincent.

Part II. "Classical Biocontrol Programmes" (p. 7–104) contains ten chapters" Chapter 2 – „Search for biological control agents of invasive Mediterranean snails" (p. 7–12) authored by J. Coupland and G. Baker. Chapter 3 – „Introductions of parasitoids to control of the apple ermine moth in British Columbia" (p. 13–19) authored by J. E. Cossentine and U. Kuhlmann. Chapter 4 – „Introduction of parasitoids to control the imported cabbageworm" (p. 21–27) authored by R. von Driesche. Chapter 5 – „Biological control of the cassava Greek mite in Africa: overcoming challenges to implementation" (p. 29–37) authored by S. Yaninek. Chapter 6. – „The multicolored Asian ladybird beetle: beneficial of nuisance organism?" (p. 38–52) authored by E. Lucas, G. Labie, C. Vincent and J. Kovach. Chapter 7 – „Introduction of a fungus into North America for control of gypsy moth" (p. 53–62) authored by A. E. Hajek. Chapter 8 – „Weevils control invasive thistles in Canada" (p. 63–68) authored by P. Harris. Chapter 9 – „How many and what kind of agents for the biological control of weeds: a case study with diffuse knapweed" (p. 70–79) authored by J. H. Meyers. Chapter 10 – „Why is biocontrol of common ragweed, the most allergenic weed in Eastern Europe, still only a hope?" (p. 80–91) authored by L. Kiss. Chapter 11 – „Biocontrol for everyman: public participation in a weed project" (p. 92–104) authored by R. N. Wiedenmann, S. L. Post, M. R. Jefford and D. J. Voegtlin.

Part III. "Inundative (or Augmentative) Biocontrol Programmes" (p. 105–373) has two sections with twenty nine chapters. Section (1) "Using Macroorganisms" (p. 105–159) has five chapters: Chapter 12 – „Biological control for insect pests in greenhouses: an unexpected success" (p. 105–117) authored by J.C. van Lenteren. Chapter 13 – „From chemical to biological control in Canadian greenhouse crops" (p. 118–127) authored by L. Shipp, D. Elliot, D. Gillespie and J. Brodeur. Chapter 14 – „An endemic omnivorous predator for control of greenhouse pests" (p. 128–135) authored by D. Gillespie, R. McGregor, J. A. Sanches, S. VanLaerhoven, D. Quiring, B. Roitberg, R. Foottt, M. Schwarz and L. Shipp. Chapter 15 – „Entomopathogenic nematodes: from science to commercial use" (p. 136–151) authored by R.-U. Ehlers. Chapter 16 – „A novel nematode for management of slugs" (p. 152–159) M. Wilson .

Section (2) "Using microorganism" (p. 160–373) contains three chapters (17–19) referring to bacteria, seventeen chapters (20–36) referring to fungi and four chapters referring to viruses: Chap. 17. „A novel bacterium for control of Grass grub" (p. 160–168) authored by T. A. Jackson. Chap. 18. „How early discoveries abort *Bacillus thuringiensis* prejudiced subsequent research and use" (p. 169–178) authored by J.-C. Cote. Chap. 19. „Development of resistance to the biopesticides *Bacillus thuringiensis kurstaki*" (p. 179–184) authored by A. F. Janmaat. Chap. 20. „How much biocontrol is enough?" (p. 185–196) authored by A. Stewart, K. McLean and J. Hunt. Chap. 21. „Control of root diseases with *Trichoderma* spp. in forest nurseries of Central Siberia" (p. 197–202) authored by T. I. Gromovykh, V. A., Tyulipanova, V. S. Sadykova, A. L. Malinovsky. Chap. 22. „Commercial development of *Trichoderma virens* for damping-off-diseases" (p. 203–209) authored by R. D. Lumsden and J. F. Knauss.

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Chap. 23. „*Trichoderma stromaticum* for management of witches' broom of cacao in Brazil" (p. 210–217) authored by A. W. V. Pomella, J. T. de Souza, G. R. Niella, R. P. Batman, P. K. Hebbar, L. L. Loguercio, and R. D. Lumsden. Chap. 24 „Lessons learned from *Sporidesmium*, a fungal agent for control of sclerotia-forming fungal pathogens" (p. 218–223) authored by D. R. Fravel. Chap. 25 „Sporodex, fungal biocontrol for powdery mildew in greenhouse crops" (p. 224–233) authored by W. R. Jarvis, J. A. Traquair and R. R. Belanger. Chap. 26 „Potential and limitations of *Microsphaeropsis ochraceae*, an agent for biosanitation of apple scab" (p. 234–240) authodes by O. Carisse, G. Holloway and M. Leggett (p. 234–240). Chap. 27 „Competitive exclusion of aflatoxin products: farmer-driven research and development" (p. 241–253) authored by P. J. Cotty, L. Antilla and R. J. Wakelyn. Chap. 28 „Aflatoxin control in cotton and groundnuts: regulatory aspects" (p. 254–261) authored by S. Baccchus. Chap. 29 „Postharvest biocontrol: new concepts and applications" (p. 262–273) authored by M. Misniewski, C. Wilson, S. Droby, A. El Ghaouth and C. Stevens. Chap. 30 „Development of the mycoherbicide, BioMal (p. 274–283) authored by S. M. Boyetchko, K. L. Bailey, R. K. Hynes and G. Peng. Chap. 31 „Development of *Chondrostereum purpureum* as a mycoherbicide for deciduous brush control" (p. 284–290) authored by W. Hintz. Chap. 32 „Developing the production system for *Chondrostereum purpureum*" (p. 291–299) authored by P. Y. de la Bastide and W. E. Chintz. Chap. 33 „*Beauveria bassiana* for pine caterpillar management in the People's Republic of China" authored by Zenghazi Li. Chap. 34 „Green Muscle™, a fungal biopesticide for control of grasshoppers and locusts in Africa" (p. 311–318) authored by J. Langewald and C. Kooyman. Chap. 35 „Pollinators as vectors of biocontrol agents – the B52 story" (319–327) authored by P. G. Kevan, J. Sutton and L. Shipp. Chap. 36 „Genetic modification for improvement of virulence of *Metarhizium anisopliae* as a microbials insecticide" (p. 328–335) authored by R. J. St. Leger. Chap. 37 „Madex and Virosoft viral biopesticides for codling moth control" (p. 336–343) authored by C. Vincent, M. Andermatt and J. Valero. Chap. 38 „A nucleopolyhedrovirus for control of the velvetbean caterpillar in Brazilian soybeans" (p. 344–352) authored by F. Moscardi. Chap. 39 „Abietiv, a viral biopesticides for control of the balsam fir sawfly" (p. 353–361) authored by C. J. Lucarotti, G. Moreau and E.G. Kettela (p. 353–361). Chap. 40 „Field tests in the UK of a genetically modified *Baculovirus*" (p. 362–373) authored by J. S. Cory. Chap. 41 „Control of mites in pome fruit by inoculation and conservation" (p. 374–382) authored by N. J. Bostanian and J. Lasnier. Chap. 42 „Management of aphid populations in cotton through conservation: delaying insecticide spraying has its benefits" (p. 383–391) authored by D. Steinkraus. In Chap. 43 „Management of pests and diseases in New Zealand and Australia Vineyards" (p. 392–398) authored by G. M. Gurr, S. L. Scarratt, M. Jacometti and S. D. Wratten. Chap. 44 „Take-all decline: model system in the science of biological control land clue to the success of intensive cropping" (p. 399–414) authored by R. J. Cook. Chap. 45 „The biocontrol network: a Canadian example of the importance of networking" (p. 415–427) authored by J.-L. Schwarz, W. Campbell and R. Laprade. A good index (p. 429–440) facilitates finding necessary information.

Without any doubt this book provides a huge volume of extremely important information and therefore will be a valuable source for researchers, extension service specialists and for students interested in crop science, pest management, biotechnology, ecology and policy analysis.

I strongly recommend this book to all agricultural and life sciences libraries as an excellent source of invaluable information from the field of ecologically sound pest management .

Jerzy J. Lipa
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