

ARREDONDO-BERNAL, H. C. AND RODRIGUEZ DEL BOSQUE, L. A. (EDS.) 2008. Casos de control biológico en México. Mundi-Prensa, México D.F., Mexico. xv + 423 pp. ISBN 978-968-7462-65-3, paperback, 350 Mexican pesos (US \$30.36 from Amazon.com).

Lest any reader should be unaware, classical biological control of *Aleurocanthus woglumi* Ashby, citrus blackfly, was undertaken and was highly successful decades before the same parasitoids were imported into Texas and Florida. This book describes campaigns in biological control targeted against 34 pests (or groups of related pests) in Mexico, just part of that country's more than 70-year history in biological control. Chapters of the book and their pagination are alphabetized below by scientific name of the pest.

- Aceria guerreronis* (Acari: Eriophyidae)
p. 121-126.
- Acrobasis nuxvorella* (Lepidoptera: Pyralidae)
p. 223-230.
- Aleurocanthus woglumi* (Hemiptera: Aleyrodidae)
p. 333-346.
- Anastrepha* spp. (Diptera: Tephritidae)
p. 193-222.
- Anthonomus eugenii* (Coleoptera: Curculionidae)
p. 127-135.
- Anthonomus grandis* (Coleoptera: Curculionidae)
p. 75-87.
- Anticarsia gemmatilis* (Lepidoptera: Noctuidae)
p. 89-100.
- Antonina graminis* (Hemiptera: Pseudococcidae)
p. 383-393.
- Aphis gossypii* (Hemiptera: Aphididae)
p. 137-153.
- Aphids (other, as pests of pecan)
p. 231-244.
- Dalbulus* spp. (Hemiptera: Cicadellidae), pests of maize (corn)
p. 1-7.
- Coreids and pentatomids (as pests of pecan)
p. 245-252.
- Crambids (as pests of maize and sugarcane)
p. 9-22.
- Diaphorina citri* (Hemiptera: Psyllidae)
p. 323-331.
- Eichhornia crassipes* (Liliales: Pontederiaceae)
p. 415-423.
- Epilachna varivestis* (Coleoptera: Coccinellidae)
p. 23-32.
- Eriosoma lanigerum* (Hemiptera: Aphididae)
p. 375-382.
- Heliothis virescens* and *Helicoverpa zea* (Lepidoptera: Noctuidae)
p. 57-74.
- Hypothenemus hampei* (Coleoptera: Curculionidae)
p. 101-120.
- Maconellicoccus hirsutus* (Hemiptera: Pseudococcidae)
p. 177-191.

- Musca domestica* (Diptera: Muscidae)
p. 395-413.
- Paracoccus marginatus* (Hemiptera: Pseudococcidae)
p. 365-374.
- Parlatoria pseudaspidotus* (Hemiptera: Diaspididae)
p. 359-364.
- Phthorimaea operculella* (Lepidoptera: Gelechiidae)
p. 33-45.
- Phyllocnistis citrella* (Lepidoptera: Gracillariidae)
p. 347-358.
- Phyllocoptruta oleivora* (Acari: Eriophyidae)
p. 315-322.
- Planococcus ficus* (Hemiptera: Pseudococcidae)
p. 253-265.
- Plutella xylostella* (Lepidoptera: Plutellidae)
p. 155-165.
- Saissetia oleae* (Hemiptera: Coccidae)
p. 293-302.
- Schistocerca piceifrons piceifrons* (Orthoptera: Acrididae)
p. 47-55.
- Toxoptera aurantii* (Hemiptera: Aphididae)
p. 267-277.
- Toxoptera citricida* (Homoptera: Aphididae)
p. 279-292.
- Trialeurodes vaporariorum* (Hemiptera: Aleyrodidae)
p. 167-176.
- Unaspis citri* (Hemiptera: Diaspididae)
p. 303-314.

Each chapter is self-standing, having its own account of the pest, an assessment of the natural enemies of the pest in Mexico (and in some chapters also elsewhere), an account of biocontrol activity against it in Mexico, and a bibliography. The title of each chapter begins with a Spanish-language colloquial name of the pest. There is no abstract. With the exception of the aquatic weed *Eichhornia crassipes*, all other targets are arthropods. One of them, *Musca domestica*, is a pest in dairies, stables, chicken farms and human habitations, and all the rest are pests of plants. Among these 32 pests of plants is one, *Antonina graminis*, which damages pasture grasses, but also some turf-grasses. The remaining 31 are pests of agricultural crops. Yes, *Maconellicoccus hirsutus*, the 'pink hibiscus mealybug' is a pest of crop plants too. No attention is paid in this book to pests of turf and ornamental plants, and there is no sign here of campaigns against pests of forest trees or invasive pests of the natural environment.

Some of the 34 examples describe successful campaigns whereas others have not progressed

beyond an assessment of natural enemies attacking the targets. Some have employed classical biological control, some have used augmentative biocontrol, and some have used biopesticides or even 'conservation biocontrol.' Some provide data about the severity of the pests or level of suppression of pests by use of biocontrol methods. In all, 67 authors have provided 34 chapters, giving an account of the state of the art or science of biological control in Mexico of 34 pests, all in one convenient and very moderately priced book.

Biological control activities have surged in Mexico since the early 1990s, and are promoted by a specialist society (Sociedad Mexicana de Control Biológico) with its own website, well-attended annual meeting, and online publication (Vedalia). What readers might hope for would be a second volume of this book describing the status of work on an additional 30 or so target pests.

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