in the yield of certain types of proteins. Proteins are instead produced continually under promoters that would normally be active in uninfected cells. L. and P. Cherbas provide instruction in this technique using transformed Drosophila cell lines.

The volume is rounded out with a catch-all section that includes a dense and fascinating chapter by N. Chejanovsky on programmed cell suicide, or apoptosis, and how a baculovirus/insect system can be used to study it. Studies of apoptosis are just one of the far-flung areas into which the BEVS has spread. New ideas may present themselves to a careful reader of Murhammer’s second edition of Baculovirus and Insect Cell Expression Protocols; it is filled with valuable information from Bac-to-Bac.

Vince D’Amico
USDA—Forest Service
Newark, DE 19716
E-mail: vdamico@fs.fed.us.

Field Manual of Techniques in Invertebrate Pathology, Second Edition
Harry K. Kaya and Lawrence A. Lacey
868 pp., $269.00 (hardcover); $109.00 (softcover)
ISBN 140-2-0593-1-0

Harry Kaya and Lawrence Lacey, two world-renowned experts in insect pathology and microbial control, have done an excellent job in this second edition of Field Manual of Techniques in Invertebrate Pathology. Similar to its first edition, this book provides background on a wide spectrum of methods and techniques and their use in the application and evaluation of entomopathogens in the field. The targeted audience includes researchers, students, integrated pest management (IPM) practitioners, and those conducting environmental impact studies on microbial and nematode entomopathogens. This book is also a great complementary text to Manual of Techniques in Insect Pathology (also by Lacey) that provides methods for studying insect pathogens in the laboratory.

Eighty-one authors contributed to this text, which is divided into 10 sections with 40 chapters. Sections I to VII focus on a wide range of basic but critical topics which are important when considering entomopathogens in field trials. Major topics encompassed in this section are theory and practice of microbial insecticide application; statistical analysis for designing of field experiments; ground-base and aerial application equipment, including strategies for the dissemination of beneficial microbial agents by insects; naturally occurring and exotic pathogens and their impact in agro- and forest ecosystems, urban and aquatic habitats; and evaluation of major pathogen groups under field conditions. Chapters in these sections include detailed instructions on inoculum handling, design of field experiments and experimental plots and application/assessment of efficacy of several microbial control agents. Supplementary techniques and media considered for conducting follow up laboratory studies for Koch’s pathogenicity postulates and other useful assays are also included in several of the chapters of this section. In addition to insect pests, other invertebrate pests such as of mites and slugs are considered, broadening the scope of this book. Authors of these chapters have done a great job in updating information including techniques, methods, and current studies dealing with field applications of entomopathogens.

Section VIII focuses on the evaluation of transgenic plants for suitability in pest management and resistance programs, including risk assessment modeling and monitoring. Special emphasis is placed on Bacillus thuringiensis (Bt) transgenic plants. Section IX provides updates on resistance to various insect pathogens and strategies to manage resistance, including the promotion of refuges, persistence of formulations, and high application rates, among others. The last section (Section X) provides guidelines for evaluating effects of microbial control agents on nontarget organisms, encompassing methods for nontarget evaluation and regulations.

I congratulate Harry Kaya and Larry Lacey for this great and detailed text they have compiled, which provides invaluable information for the study and optimal use of microbial control agents in a variety of terrestrial and aquatic settings. I strongly recommend researchers and students to acquire this second edition. It is truly a must-have book, not only for those dealing with microbial control and IPM practices but also for all entomologists interested in studying microbial and nematode pathogens of insects and their dynamics in the field.

S. Patricia Stock
Department of Entomology
The University of Arizona
Tucson, AZ 85721
E-mail: spstock@ag.arizona.edu.

Perspectives in Ecological Theory and Integrated Pest Management
Marcos Kogan and Paul Jepson
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Integrated pest management (IPM) is theoretically rooted in ecology, and yet there is no formal link between the principles defined by ecological theory with the practices implemented in the name of IPM. Perspectives in Ecological Theory and Integrated Pest Management shows where links exist and proposes directions where these linkages could be strengthened. This book is largely an update on the book Ecological Theory and Integrated Pest Management Practice (Kogan 1986). The current 16-chapter book, like its predecessor, is largely devoted to insects, but one chapter in the current book is devoted to weed IPM and one chapter to rodent IPM.

The various chapters range from very broad topics to very specific topics. One chapter evaluates IPM as