Principles Of Insect Pest Management

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Integrated Pest Management for Floriculture and Nurseries - Steve H. Dreistadt 2001
References, suppliers, and a comprehensive index make this book indispensable to growers, farm advisors, IPM scouts, pesticide applicators, pest control advisors, and students. A complete sourcebook for bulbs, cut flowers, potted flowering plants, foliage plants, bedding plants, ornamental trees, and shrubs as grown in the field, greenhouse, and nursery.--COVER.
IPM in Practice, 2nd Edition - Mary Louise Flint 2012
IPM in Practice features IPM strategies for

weed, insect, pathogen, nematode, and vertebrate pests and provides specific information on how to set up sampling and monitoring programs in the field. This manual covers methods applicable to vegetable, field, and tree cops as well as landscape and urban situations. Designed to bring you the most up-to-date research and expertise, this manual draws on the knowledge of dozens of experts within the University of California, public agencies, and private practice.

Biodiversity and Insect Pests Geoff M. Gurr 2012-04-12

Biodiversity offers great potential for managing insect pests. Itprovides resistance genes and anti-insect compounds; a huge rangeof predatory and parasitic natural enemies of pests; and communityecology-level effects operating at the local and landscape scalesto check pest build-up. This book brings together world leaders intheoretical, methodological and applied aspects to provide acomprehensive treatment of this fast-moving field. Chapter authors from Europe, Asia, Africa, Australasia and theAmericas ensure a truly international scope. Topics range fromscientific principles, innovative research methods, ecologicaleconomics and effective communication to farmers, as well as casestudies of successful use of biodiversity-based pest managementsome of which extend over millions of hectares or are enshrined asgovernment policy. Written to be accessible to advanced undergraduates whilst alsostimulating the seasoned researcher, this work will help unlock thepower of biodiversity to deliver sustainable insect pestmanagement. Visit spanstyle="font-family: "Calibri","sans-serif"; font-size: 11pt; mso-fareast-font-family: SimSun; mso-fareast-theme-font: minor-fareast; mso-ansi-language: EN-US; mso-fareast-language: ZH-CN; mso-bidi-language: TH;"www.wiley.com/go/gurr/biodiversity toaccess the artwork from the book./span

Integrated Pest Management - Jay Lawrence Apple 1976

The origins of integrated pest management concepts for agricultural crops, Integrating economics and pest management, Implementing pest management programs: an international perstective, Pest management: priciples and philosophy, Pest management in ecologicao perspective, The agroecosystem: a simplified plant community, Tobacco pest management, Systems approach to cotton insect pest mamagement, Pest management on deciduous fruits: multidisciplinary aspects, Integrated forest pest management: a silvicultural necessity, Progress, problems, and prospects for integrated pest management.

Heat Treatment for Insect Cont-rol Dave Hammond 2014-09-18

Stored product insects and other pests represent a major hygiene and safety issue to many industries, from food production to building infestation, and issues for timber pallets and packaging. Beds bugs are rapidly becoming a public health issue in hotels, hostels and houses in many parts of the world. While fumigation has been one of the prevalent routes for pest control, there remain issues with the toxicity of the chemicals used and potential exposure to humans therefore heat treatment has proven to be a successful alternative when used correctly. It is well known that excessive heat is dangerous to life. There is a difference between the amount of heat required to kill microbes such as bacteria and viruses and that required to kill larger life forms such as insects or mammals. This book focuses on the use of heat to kill insects and mites in food production, storage and other facilities. Heat Treatment for Insect Control examines how controlled heat treatment kills all stages of pest insect life across species and without causing damage to surrounding structures or electronics. The advantages of heat treatment include no health & safety hazards, a completely controllable and environmentally

friendly process, reduced treatment time of fumigation (hours verses days), as well as no factory shutdown or exclusion of staff from adjacent areas during treatment. Part I reviews the principles of heat treatment, with chapters covering the fundamentals, planning, best practice and costs of integrated pest management. Part II looks at heat treatment applications in food production, storage, food materials and fresh produce. Part III examines the other applications in clothing, small rooms, buildings, and transportation. Provides a comprehensive and systematic reference on the heat treatment for insect control Reviews the development of heat treatment processes and technology as part of integrated pest management approaches

Handbook of Biological Control - T. W. Fisher 1999-09-20

For many years the use of chemical agents such as pesticides and herbicides has been effective in controlling the many varieties of pests that infest both agricultural crops and backyard gardens. However, these pests are gradually becoming resistant to these agents, because the agents themselves are acting as selective factors making the pests better and better able to resist and persist. As a result, the use of biological controlling agents is increasing. This book is a comprehensive and authoritative handbook of biological control. Key Features * Introduction (preface plus 2 chapters) * Principles and processes (12 chapters) * Agents, biology, and methods (6 chapters) * Applications (10 chapters) * Research (2 chapters)

The Economics of Integrated Pest Management of Insects - David W Onstad 2019-09-02

The book begins by establishing an economic framework upon which to apply the principles of IPM. Then, it looks at the entomological applications of economics, specifically, economic analyses concerning chemical, biological, cultural, and genetic control tactics as well as host plant resistance and the cost of sampling.

Lastly it evaluates whether the control provided by a traditional IPM system is sufficient, or if changes to the system design would yield greater benefits.

Insect Management for Food Storage and Processing - Jerry Heeps 2016-06-05

Insect Management for Food Storage and Processing, Second Edition is completely revised and updated with new chapters on topics including inspection techniques; retail pest management; environmental manipulation (e.g., hot, cold, modified atmospheres, ionization) to control insects; and the latest scientific research on integrated pest management (IPM) control techniques. Common and unusual exterior/interior pest insects are covered and examples of both chemical and non-chemical pest insect control strategies are thoroughly discussed. The book provides the practical and science-based strategies to solve pest insect problems in an effective and economical manner. Chapter authors are recognized around the world as experts in their respective fields. Scientific language is put in simple terms so those working in a food plant or warehouse environment can easily take information from the chapters and apply it for effective pest insect control strategies. Control methods explained have survived the test of time. This edition addresses the pesticide and food safety regulatory environment food processing personnel must work in every day. Chapter information presented is original research that contains basic reference material, literature reviews, and actual pest insect case histories that authors have experienced with control methods that work. The book is written so its readers can pick it up and use it as a ready reference across any food manufacturing or production environment. It’s a must read for commercial and structural pest control operators, technicians, or directors; food plant inspectors, auditors, and plant sanitarians; as well as QA managers, food safety consultants,

and university extension personnel.

Principles of Insect Pest Management - G. S. Dhaliwal 1996

Ecologically Based Integrated Pest Management - D. P. Abrol 2012

The availability of modern tools and transgenic crop protection technology has opened new vistas in the vast field of pest management. All these issues form the focus of the book, where they have been discussed by eminent scientists who are authority in their respective fields. The book describes the science and art of integrated pest management. It contains 48 chapters grouped into six sections which include topics ranging from: ? Impact on food security ? Breeding for resistance ? IPM in crops, fruits, vegetables ? Future strategies and policy issues. ? IPR related issues It also gives detailed information on emerging strategies and problems such as the role of biotechnology and the implications of IPR issues. The roles of IPM in sustaining food productivity, contribution of IPM in meeting economic, environmental and social costs have been elaborated. The role of diagnostic tools, weather forecasting, transgenic plants, biological control, and new chemicals in future IPM programmes and strategies to meet the challenges of pest adaptation have been highlighted. The need for improved information transfer, implementation and application of IPM has been discussed. Finally, it is essential to know the status of IPM, its future, challenges and constraints which have been extensively elaborated in the last chapter of this book. The book intends to fill the gap by providing the critical analysis of different management strategies having bearing on agriculture sustainability and environmental protection. The compilation of this book is unique in the sense that it does not deal with the conventional way of discussing pest management with respect to particular crops or the regions. It emphasizes on the other hand an overview of the management

strategies with critical evaluation of each in the larger context of ecologically based pest management.

The Basic Principles of Insect Population Suppression and Management - E. F. Knipling 2006-08

This publication deals with the basic principles of insect population suppression and management. Its purpose is to develop a better understanding of the principles and mechanisms of different methods of control in relation to the dynamics of insect pest populations. Special emphasis is given to how these principles and mechanisms can be applied to slow down, stabilize, suppress, or eradicate target pest populations. Various control methods that are in use or being developed are analyzed critically, with special consideration given to ways that different techniques can be used simultaneously or sequentially to complement each other in developing ecologically acceptable insect control strategies.

Pests and Their Management - Omkar 2018-08-01

This book comprehensively compiles information on some of the major pests that afflict agricultural, horticultural and medicinal crops in particular as well as many polyphagous pests. Not only does this book deal with the pests of common globally produced crops it also addresses those of rarely dealt with crops such as seed spices, medicinal and aromatic plants. While the perspective of insect pests is largely Indian and South East Asian in context, the book does deal with globally problematic pests, particularly polyphagous ones. Not only will the readers be acquainted with the pests, their damaging potential and their life cycle but also with the latest methods of managements including ecofriendly measures being employed to keep pest populations at manageable levels. The 27 chapters in the book, are grouped into four sections primarily based on crop types, viz. pest of agricultural, horticultural and medicinal

crops, and polyphagous pests, making the book easy to navigate. Each of the chapters is comprehensive and well illustrated and written by academicians who have dedicated their entire lives to the study of a particular crop-pest complex. The final chapter of this book provides an overview on the principles and processes of pest management.

Area-wide Integrated Pest Management Jorge Hendrichs 2021-02-01

Over 98% of sprayed insecticides and 95% of herbicides reach a destination other than their target species, including non-target species, air, water and soil. The extensive reliance on insecticide use reduces biodiversity, contributes to pollinator decline, destroys habitat, and threatens endangered species. This book offers a more effective application of the Integrated Pest Management (IPM) approach, on an area-wide (AW) or population-wide (AW-IPM) basis, which aims at the management of the total population of a pest, involving a coordinated effort over often larger areas. For major livestock pests, vectors of human diseases and pests of high-value crops with low pest tolerance, there are compelling economic reasons for participating in AW-IPM. This new textbook attempts to address various fundamental components of AW-IPM, e.g. the importance of relevant problem-solving research, the need for planning and essential baseline data collection, the significance of integrating adequate tools for appropriate control strategies, and the value of pilot trials, etc. With chapters authored by 184 experts from more than 31 countries, the book includes many technical advances in the areas of genetics, molecular biology, microbiology, resistance management, and social sciences that facilitate the planning and implementing of area-wide strategies. The book is essential reading for the academic and applied research community as well as national and regional government plant and human/animal health authorities with responsibility for protecting plant and

human/animal health.

Insect Pest Management - David Dent 2000

This is a revised edition of an undergraduate textbook, which incorporates advances in insect pest management, and has been updated throughout to provide a more balanced, comprehensive coverage of the subject. Topics include a history of insect pest management, and a discussion of insecticides.

Establishing Integrated Pest Management Policies and Programs -

The Basic Principles of Insect Population Suppression and Management - E. F. Knipling 1979

Insect-pest Management and Control - National Research Council (U.S.). Committee on Plant and Animal Pests. Subcommittee on Insect Pests 1969

Principles of Plant and Animal Pest Control : Insect-pest management and control - National Research Council (U.S.). Committee on Plant and Animal Pests 1968

Sterile Insect Technique - Victor A. Dyck 2021-01-06

The sterile insect technique (SIT) is an environment-friendly method of pest control that integrates well into area-wide integrated pest management (AW-IPM) programmes. This book takes a generic, thematic, comprehensive, and global approach in describing the principles and practice of the SIT. The strengths and weaknesses, and successes and failures, of the SIT are evaluated openly and fairly from a scientific perspective. The SIT is applicable to some major pests of plant-, animal-, and human-health importance, and criteria are provided to guide in the selection of pests appropriate for the SIT. In the second edition, all aspects of the SIT have been updated and the content considerably expanded. A great variety of

subjects is covered, from the history of the SIT to improved prospects for its future application. The major chapters discuss the principles and technical components of applying sterile insects. The four main strategic options in using the SIT — suppression, containment, prevention, and eradication — with examples of each option are described in detail. Other chapters deal with supportive technologies, economic, environmental, and management considerations, and the socio-economic impact of AW-IPM programmes that integrate the SIT. In addition, this second edition includes six new chapters covering the latest developments in the technology: managing pathogens in insect mass-rearing, using symbionts and modern molecular technologies in support of the SIT, applying post-factory nutritional, hormonal, and semiochemical treatments, applying the SIT to eradicate outbreaks of invasive pests, and using the SIT against mosquito vectors of disease. This book will be useful reading for students in animal-, human-, and plant-health courses. The in-depth reviews of all aspects of the SIT and its integration into AW-IPM programmes, complete with extensive lists of scientific references, will be of great value to researchers, teachers, animal-, human-, and plant-health practitioners, and policy makers.

Trapping of Small Organisms Moving Randomly James R. Miller 2015-03-31

This new book is the first to make logical and important connections between trapping and foraging ecology. It develops and describes—both verbally and mathematically--the underlying principles that determine and define trap-organism interactions. More important, it goes on to explain and illustrate how these principles and relationships can be used to estimate absolute population densities in the landscape and to address an array of important problems relating to the use of trapping for detection, population estimation, and suppression in both research and applied

contexts. The breakthrough nature of subject matter described has broad fundamental and applied implications for research for addressing important real-world problems in agriculture, ecology, public health and conservation biology. Monitoring traps baited with potent attractants of animals like insects have long played a critical role in revealing what pests are present and when they are active. However, pest managers have been laboring without the tools necessary for quick and inexpensive determination of absolute pest density, which is the cornerstone of pest management decisions. This book spans the gamut from highly theoretical and fundamental research to very practical applications that will be widely useful across all of agriculture.

Integration of Insect-Resistant Genetically Modified Crops within IPM Programs - Jörg Romeis 2008-07-01

Insect pests remain one of the main constraints to food and fiber production worldwide despite farmers deploying a range of techniques to protect their crops. Modern pest control is guided by the principles of integrated pest management (IPM) with pest resistant germplasm being an important part of the foundation. Since 1996, when the first genetically modified (GM) insect-resistant maize variety was commercialized in the USA, the area planted to insect-resistant GM varieties has grown dramatically, representing the fastest adoption rate of any agricultural technology in human history. The goal of our book is to provide an overview on the role insect-resistant GM plants play in different crop systems worldwide. We hope that the book will contribute to a more rational debate about the role GM crops can play in IPM for food and fiber production.

Principles of Host-plant Resistance to Insect Pests - Niranjan Panda 1979

Introduction; Insect-plant interaction; Host-plant selection in Phytophagous insects; Mechanisms

of resistance; Biochemistry of resistance; Factors affecting expression of resistance; Resistance programme; Genetics of resistance; Plant resistance in pest management.

Integrated Pest Management and Pest Control - Sonia Soloneski 2012-02-24

Integrated Pest Management is an effective and environmentally sensitive approach that relies on a combination of common-sense practices. Its programs use current and comprehensive information on the life cycles of pests and their interactions with the environment. This information, in combination with available pest control methods, is used to manage pest damage by the most economical means and with the least possible hazard to people, property, and the environment.

Weed and Pest Control - Sonia Soloneski 2013-03-14

This book covers alternative insect control strategies, such as the allelopathy phenomenon, tactics in integrated pest management of opportunistic generalist insect species, biological control of root pathogens, insect pest control by polyculture strategy, application of several integrated pest management programs, irrigation tactics and soil physical processes, and carbon stocks to manage weeds.

Contemporary Insect Diagnostics - Timothy J. Gibb 2014-10-27

Contemporary Insect Diagnostics aids entomologists as they negotiate the expectations and potential dangers of the practice. It provides the reader with methods for networking with regulatory agencies, expert laboratories, first detectors, survey specialists, legal and health professionals, landscape managers, crop scouts, farmers and the lay public. This enables the practitioner and advanced student to understand and work within this network, critically important in a time when each submission takes on its own specific set of expectations and potential ramifications. Insect diagnosticians must be knowledgeable on pests that affect

human health, stored foods, agriculture, structures, as well as human comfort and the enjoyment of life. The identification and protection of the environment and the non-target animals (especially beneficial insects) in that environment is also considered a part of insect diagnostics. Additionally, Integrated Pest Management recommendations must include any of a variety of management tactics if they are to be effective and sustainable. This greatly needed foundational information covers the current principles of applied insect diagnostics. It serves as a quick study for those who are called upon to provide diagnostics, as well as a helpful reference for those already in the trenches. Includes useful case studies to teach specific points in insect diagnostics Provides problem-solving guidance and recommendations for insect identification, threat potential, and management tactics, while accounting for the varying needs of the affected population or client Contains numerous color photos that enhance both applicability and visual appeal, together with accompanying write-ups of the common pests

Introduction to Integrated Pest Management - M.L. Flint 2012-12-06

Integrated control of pests was practiced early in this century, well before anyone thought to call it "integrated control" or, still later, "integrated pest management" (IPM), which is the subject of this book by Mary Louise Flint and the late Robert van den Bosch. USDA entomologists W. D. Hunter and B. R. Coad recommended the same principles in 1923, for example, for the control of boll weevil on cotton in the United States. In that program, selected pest-tolerant varieties of cotton and residue destruction were the primary means of control, with insecticides consid ered supplementary and to be used only when a measured incidence of weevil damage occurred. Likewise, plant pathologists had also developed disease management programs incorporating varietal

selection and cul tural procedures, along with minimal use of the early fungicides, such as Bordeaux mixture. These and other methods were practiced well before modern chemical control technology had developed. Use of chemical pesticides expanded greatly in this century, at first slowly and then, following the launching of DDT as a broadly successful insecticide, with rapidly increasing momentum. In 1979, the President's Council on Environmental Quality reported that production of synthetic organic pesticides had increased from less than half a million pounds in 1951 to about 1.4 billion pounds-or about 3000 times as much-in 1977.

Integrated Pest Management - D. Dent 1995-07-31

This important book provides a practical guide to the principles and practice of developing an integrated pest management (IPM) programme. Integrated Pest Management answers the question `how do you devise, develop and implement a practical IPM system which will fully meet the real needs of farmers?'. The term `pest' in this book is used in its broadest sense and includes insects, pathogens, weeds, nematodes, etc. The book commences by outlining the basic principles which underlie pest control (crop husbandry, socio-economics, population ecology and population genetics) and reviews the control mesures available and their use in IPM systems. Subsequent chapters cover the techniques and approaches used in defining a pest problem, programme planning and management, systems analysis, experimental paradigms and implementation of IPM systems. The final seciton of the book contains four chapters giving examples of IPM in different cropping systems, contributed by invited specialists and outlining four different perspectives. Integrated Pest Management will be of great use to agricultural and plant scientists, entomologists, aracologists and nematologists and all those studying crop

protection, particularly at MSc level and above. It will be particularly useful for, and should find a place on the shelves of all personnel within the agrochemical industry, universities and research establishments working in this subject area and as a reference in libraries for students and professionals alike.

Ecofriendly Pest Management for Food Security - Omkar 2016-02-03

Ecofriendly Pest Management for Food Security explores the broad range of opportunity and challenges afforded by Integrated Pest Management systems. The book focuses on the insect resistance that has developed as a result of pest control chemicals, and how new methods of environmentally complementary pest control can be used to suppress harmful organisms while protecting the soil, plants, and air around them. As the world's population continues its rapid increase, this book addresses the production of cereals, vegetables, fruits, and other foods and their subsequent demand increase. Traditional means of food crop production face proven limitations and increasing research is turning to alternative means of crop growth and protection. Addresses environmentally focused pest control with specific attention to its role in food security and sustainability. Includes a range of pest management methods, from natural enemies to biomolecules. Written by experts with extensive real-world experience.

Forages, Volume 2 Kenneth J. Moore 2020-05-29

Forages: The Science of Grassland Agriculture, 7th Edition, Volume II will extensively evaluate the current knowledge and information on forage agriculture. Chapters written by leading researchers and authorities in grassland agriculture are aggregated under section themes, each one representing a major topic within grassland science and agriculture. This 7th edition will include two new additional chapters covering all aspects of forage

physiology in three separate chapters, instead of one in previous editions. Chapters will be updated throughout to include new information that has developed since the last edition. This new edition of the classic reference serves as a comprehensive supplement to An Introduction to Grassland Agriculture, Volume I.

Integrated Pest Management - D. P. Abrol 2012

Providing a critical evaluation of the management strategies involved in ecologically-based pest management, this book presents a balanced overview of environmentally safe and ecologically sound approaches. Topics covered include biological control with fungi and viruses, conservation of natural predators, use of botanicals and how effective pest management can help promote food security. In the broader context of agriculture, sustainability and environmental protection, the book provides a multidisciplinary and multinational perspective on integrated pest management useful to researchers in entomology, crop protection, environmental sciences and pest management.

Integrated Pest Management (IPM) - Harsimran Gill 2016-08-31

This book is an update on environmentally sound pest management practices under the umbrella of integrated pest management (IPM). It consists of seven contributions from different authors providing information on pest management approaches as chemical alternatives. The book chapters detail about historical review of IPM concepts; strategies and some experiences in applications of IPM in Latin America; pest control in organic agricultural system; and the use of entomopathogenic and molluscoparasitic nematodes, insect pheromones, semiochemicals, detergents, and soaps as a part of IPM scheme. The goal of this book is to provide the most up-to-date review on information available around chemical alternatives in IPM. Therefore, this book will equip academia and industry with adequate basic concepts and applications of IPM as eco-friendly pest management option.

Sterile Insect Technique - V.A. Dyck 2005-11-29
The sterile insect technique (SIT) is an environment-friendly pest control method that fits into area-wide integrated pest management (AW-IPM) programmes. This book describes the principles and practice of SIT, frankly evaluating its strengths and weaknesses, successes and failures. SIT is useful against pests that have considerable impact on plant, animal and human health, and criteria are provided to guide in the selection of pests appropriate for SIT.

Entomology and Pest Management - Larry P. Pedigo 1996

Pest and Vector Control - H. F. van Emden 2004-01-29
This short, readable textbook is designed to introduce students the biology and techniques of aricultural pest and disease vector control and management. As such, it is unique; no other book attempts to marry together the fields of pest and vector control. The authors are two of the leading authorities in their respective fields and amongst the best known entomologists of their generation.

Insect Pest Management, 3rd Edition - David Dent 2020-11-03
An undergraduate and postgraduate textbook covering the key principles, methodologies, approaches and practical examples of insect pest management in agricultural, post harvest systems, horticulture, insect vectors and medical and veterinary entomology. The book covers the underpinning monitoring and forecasting of pest outbreaks, yield loss and impact assessments and all of the latest methods of control and management of insects from insecticides, host manipulation, plant resistance, biological control, use of interference, agronomic and precision control methods as well as socio-economic and research management aspects of developing integrated approaches to pest management. The new edition also reflects the key advances made in the disciplines of

molecular biology, biochemistry and genomics related to insects and their management, as well as the importance and role of biodiversity, climate change, precision agriculture, data management and sustainability of production and supply in delivering integrated management solutions.

Entomology and Pest Management - Larry P. Pedigo 2002

Ideal for those with little or no background in the subject, "Entomology and Pest Management, fourth edition" promotes an understanding of major elements of general entomology and relates them to modern principles of insect pest management. Both theory and practice are emphasized and numerous examples are presented to facilitate learning. Pest management topics are discussed as aspects of "applied ecology," and solutions to pest problems are presented with regard to environmental quality, profitability, and durability. Profound changes have affected the world of pest management in recent years. Users of this fourth edition will benefit from the following new coverage, making this book the most up-to-date resource available: Favorite Web Sites are listed at the end of each chapter, and a new Appendix 4 presents one of the most comprehensive compilations of web sites for entomology resources found anywhere, providing readers with instant access to the latest facts, figures, and developments in the field. Information on the current developments of low risk tactics such as microbial pesticides, insect growth regulators, and pheromones are included in chapters 9 and 13. Recent advances in biotechnology, including updates on the status of transgenic plants developed for pest management and the benefits and risks of cropping these plants are discussed in chapter 12.

Pest Management Principles for the Commercial Applicator - 1993

Encyclopedia of Pest Management - David Pimentel, Ph.D. 2002-05-09
PRINT/ONLINE PRICING OPTIONS AVAILABLE UPON REQUEST AT a href="http://www.tandfonline.com/action/bookPricing?doi=10.1081%2FE-EPM " target="_blank"Taylor & Francis Online
Integrated Pest Management - Edward B. Radcliffe 2009
This textbook presents theory and concepts in integrated pest management, complemented by two award-winning websites covering more practical aspects.
Ecologically Based Pest Management - National Research Council 1996-03-21
Widespread use of broad-spectrum chemical pesticides has revolutionized pest management. But there is growing concern about environmental contamination and human health risks--and continuing frustration over the ability of pests to develop resistance to pesticides. In Ecologically Based Pest Management, an expert committee advocates the sweeping adoption of ecologically based pest management (EBPM) that promotes both agricultural productivity and a balanced ecosystem. This volume offers a vision and strategies for creating a solid, comprehensive knowledge base to support a pest management system that incorporates ecosystem processes supplemented by a continuum of inputs--biological organisms, products, cultivars, and cultural controls. The result will be safe, profitable, and durable pest management strategies. The book evaluates the feasibility of EBPM and examines how best to move beyond optimal examples into the mainstream of agriculture. The committee stresses the need for information, identifies research priorities in the biological as well as socioeconomic realm, and suggests institutional structures for a multidisciplinary research effort. Ecologically Based Pest Management addresses risk assessment, risk management, and public oversight of EBPM. The volume also overviews

the history of pest management--from the use of sulfur compounds in 1000 B.C. to the emergence of transgenic technology. Ecologically Based Pest Management will be vitally important to the agrichemical industry; policymakers, regulators, and scientists in agriculture and forestry; biologists, researchers, and environmental advocates; and interested growers.