Trends In Agricultural Insect Pest Management 1st Edition

#agricultural pest management #insect pest control trends #sustainable farming solutions #integrated pest management (IPM) #crop protection techniques

Explore the evolving landscape of modern farming with this essential guide on trends in agricultural insect pest management. This first edition delves into innovative sustainable farming solutions, offering insights into advanced crop protection techniques and the latest integrated pest management (IPM) strategies. Understand how to effectively implement insect pest control trends for more resilient and productive agriculture.

Trends in Agricultural Insect Pest Management

The book, consists of 31 chapters, will be useful to scientists working in the field of entomology. Chapters 1-10 present comprehensive review of concept and implementation and future need of pest management, impact of climate on pest population, insect invasion, pollinators, pesticide use, bar coding as tool to understand diversity and pesticide formulation and safety to environment. The next 5 chapters present comprehensive information on host plant resistance, soil solarization, neem and behaviour modify chemicals as component of pest management. Chapters 16-26 present the management strategies on crops like sugarcane, rice, sorghum, tobacco, fruits, vegetables crops and stored grain pests and strategies for management of mites which are emerging pests of agricultural crops. In the last 5 chapters presents the strategies for transmission of technology and its impact and the role of electronic media on dissemination of technology. The book contains comprehensive information in recent trends in various aspects of pest management complied by scientist working in specialized areas of pest management. The book will be useful to students, teachers, researchers and policy planners associated with pest management.

Integrated Pest Management

Contributed papers by experts in the field detail how to put integrated pest management to work. Presents the philosophy and practice, ecological and economic background as well as strategies and techniques including not only the use of chemical pesticides but also biological, genetic and cultural methods to manage the harm done by insect pests. Covers such key crops as cotton, corn, apples and

forage. This edition reports important advances of the last decade including an increased environmental and ecological awareness and a trend toward lower chemical pesticide use.

Introduction to Insect Pest Management

This volume reviews current developments in integrated pest management (IPM), focussing on insect pests. It discusses advances in understanding species and landscape ecology on which IPM is founded, as well as advances in cultural, physical and biological methods of control. The first part of the book reviews current developments in understanding insect species, community and agroecosystems ecology. This understanding provides the foundation for developing effective IPM programmes which work with ecosystems to keep pests from reaching damaging levels. Parts 2 and 3 then review advances in cultural, physical and, in particular, biological methods of control. Chapters cover developments in classical, conservation and augmentative biological control as well as the use of entomopathogenic fungi, viruses, nematodes and semiochemicals. The final parts of the book summarise current research on monitoring pesticide use as well as emerging classes of biopesticides. Edited by pioneers in IPM techniques, and including contributions from some of most eminent experts in the field, this will be a standard reference for the IPM research community, crop scientists, entomologists, companies involved in pesticides and crop pest management as well as government agencies monitoring and regulating pest management in agriculture.

Integrated Management of Insect Pests

Pests Control and Acarology presents novel methods adopted in pest management for cereal crops and fruit trees. Each chapter was written by experts in their respective areas, and provides a rigorous review and outline of current trends and future needs, to expedite progress in the field. The book was structured in three sections as follows. The first section introduces the topics and defines concepts of Integrated Pest Management and Biological Control. The second section includes two chapters: the first one discusses a new trap barrier system for rodent pest control in rice and the second one presents methods used in the management of stem borers in cereal crops. The third section presents various topics within the area of Acarology.

Pests Control and Acarology

This is the first introductory text to deal with the problems caused by insects as pests in Australian agriculture and related primary industry, and the use of insects to combat pests such as insects and weeds. It emphasizes Australian examples throughout and is designed specifically to reflect traditional and recent developments associated with pest management in Australia and other countries. The development of integrated pest management is a central theme, but chapters are provided on all major facets of pest control, with accounts of their development, importance and contributions to current management strategy and practice. Each chapter concludes with suggestions for further reading and the most recent references are cited to give students, applied entomologists, researchers and agriculturists the most current and comprehensive information available.

Insects and Pest Management in Australian Agriculture

Pest and disease management continues to challenge the agricultural community. The rise in new pest and crop problems juxtaposed with public concern over pesticide use and more stringent environmental regulations creates the need for today's agricultural producers to stay current with new technologies for producing quality crops profitably. Biological and Biotechnological Control of Insect Pests presents an overview of alternative measures to traditional pest management practices, utilizing biological control and biotechnology. The removal of some highly effective broad-spectrum chemicals, caused by concerns over environmental health and public safety, has resulted in the development of alternative, reduced risk crop protection products. These products, less toxic to the environment and easily integrated into biological control systems, target specific life stages or pest species. Predation - recognized as a suitable, long term strategy - effectively suppresses pests in biotechnological control systems. Biological and Biotechnological Control of Insect Pests covers these topics and more. It explores the current approaches in alternative solutions such as: biological control agents, parasites and predators, pathogenic microorganisms, pheromones, botanical insecticides, genetic control, genetic engineering of plants and biocontrol agents, and government regulations for biocontrol agents and recombinant DNA technology. This book will be a useful resource to entomologists, agronomists, horticulturists, and environmental scientists.

Biological and Biotechnological Control of Insect Pests

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.

Integrated Pest Management

Insect pest control continues to be a challenge for agricultural producers and researchers. Insect resistance to commonly used pesticides and the removal of toxic pesticides from the market have taken their toll on the ability of agricultural producers to produce high quality, pest-free crops within economical means. In addition to this, they must not endanger their workers or the environment. We depend on agriculture for food, feed, and fiber, making it an essential part of our economy. Many people take agriculture for granted while voicing concern over adverse effects of agricultural production practices on the environment. Insect Pest Management presents a balanced overview of environmentally safe and ecologically sound practices for managing insects. This book covers specific ecological measures, environmentally acceptable physical control measures, use of chemical pesticides, and a detailed account of agronomic and other cultural practices. It also includes a chapter on state-of-the-art integrated pest management based, a section on biological control, and lastly a section devoted to legal and legislative issues. Insect Pest Management approaches its subject in a systematic and comprehensive manner. It serves as a useful resource for professionals in the fields of entomology, agronomy, horticulture, ecology, and environmental sciences, as well as to agricultural producers, industrial chemists, and people concerned with regulatory and legislative issues.

Insect Pest Management

Insect pests are becoming a problem of ever-more biblical proportions. This new textbook collates a series of selected papers that attempt to address various fundamental components of area-wide insect

pest control. Of special interest are the numerous papers on pilot and operational programs that pay special attention to practical problems encountered during program implementation. It’s a compilation of more than 60 papers authored by experts from more than 30 countries.

Area-Wide Control of Insect Pests

Pest and Disease Management Handbook updates the 3rd edition of the Pest and Disease Control Handbook (1989). The structure of this important new book differs in several respects, acknowledging the advances that have been made in integrated crop management and the trends towards the more rational use of pesticides. Fully revised and up-to-date, the book commences with a new introductory chapter covering the principles of pest and disease management. Following chapters, each written by acknowledged experts in the field, cover a group of major temperate northern hemisphere crops. As well as comprehensive details of pest and disease management strategies, each chapter also includes a classification scheme for the cited pests and diseases. This important publication is a vital tool for all those involved in the crop protection / agrochemical industry including business managers, entomologists, agricultural scientists, plant pathologists and those studying and teaching BASIS courses. As an important reference guide for undergraduate and postgraduate students studying agricultural sciences, applied entomology and crop protection, copies of the book should be available on the shelves of all research establishments and universities where these subjects are studied and taught. Pest and Disease Management Handbook is published for the British Crop Protection Council (BCPC) by Blackwell Science. BCPC is a registered charity having the principal objective of promoting the development, use and understanding of effective and sustainable crop protection practice. Dr David V Alford, based in Cambridge, UK, is a member of the BCPC board, with many years' experience working as a government entomologist.

Pest and Disease Management Handbook

Plant Pests and their Control, Revised Edition discusses the concepts involved in pest management, along with its application, constraints, and opportunities. This book is comprised of 13 chapters that cover topics relevant in understanding the basis and practice of pest management. The first six chapters deal with the various aspects of entomology. These chapters cover the importance of insects; the physiological properties of insects; and reproduction and life cycle. The next chapter covers the non-insect pests. Chapter 8 discusses the relationship between insects and plants, while Chapter 9 covers the mortality factors of insect, such as predators, parasites, and pathogens. The next chapter presents the ecological background of pest control. The remaining three chapters discuss pest management itself. This text will be of great use to agriculturists, horticulturalists, and pest control professionals. Household owners dealing with residential pest infestation will also find this book a great source of information.

Plant Pests and their Control

This is the last volume of the IPMD series. It aims, in a multi-disciplinary approach, at reviewing and discussing recent advances and achievements in the practice of crop protection and integrated pest and disease management. This last effort deals with management of arthropods, and is organized with a first section on biological control in citrus orchards, a second one on advanced and integrated technologies for insect pest management and a last section, dealing with mites and their biological control. A wide and exaustive literature already covers several aspects of chemical or biological control of insects and mites, but there is still a need for a more holistic vision of management, accounting for different problems and solutions, as they are applied or developed, in different regions and cropping systems, worldwide. In this series we attempted to fill this gap, providing an informative coverage for a broad range of agricultural systems and situations.

Integrated Management of Arthropod Pests and Insect Borne Diseases

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 e.

Integrated Pest Management

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.

Integration of Insect-Resistant Genetically Modified Crops within IPM Programs

This book explores ecologically sound and innovative techniques in insect pest management in field and protected crops. From a general overview of pest management to new biorational insecticides such as insect growth regulators, and new strategies to reduce resistance, the coverage is entirely up-to-date. Other chapters describe advances in pest management of important crops such as cotton, corn, oilseed rape and various vegetables.

Insect Pest Management

FROM THE PREFACE: The idea of Integrated Pest Management (IPM) is not a new one, and since the term was first coined, it has come to achieve a range of different meanings. In its simplest form it is accepted as being a control strategy in which a variety of biological, chemical and cultural control measures are combined to give stable long term pest control. In its recent renaissance, IPM has more often been taken to describe more biologically oriented pest control strategies that have arisen following problems with purely chemical control. It is the purpose of the first six chapters of this book to consider fundamental principles for IPM development, and to outline current research progress and future research needs, in the light of technological developments and agricultural requirements. The final seven chapters of the book deal with the practical aspects of IPM implementation. The range of crop types considered represent the diversity of crop production and storage systems in Western Europe, with different ecological backgrounds, against which IPM might operate, and within which IPM has developed to differing extents.

Integrated Pest Management

Overexploitation of natural resources and excessive chemicalization of agriculture have led to poor sustainability of farm production. Indiscriminate use of agricultural chemicals has resulted in problems of pest resurgence and development of resistance on the one hand and has posed serious problems of environmental contamination through residues in food chain on the other hand. The importance of achieving food production through the use of ecofriendly sustainable pest management techniques is being realized more and more in the recent past. Eminent scientists from different research institutions have looked into this aspect seriously and have come up with many enlightening suggestions compiled together in this book.

Sustainable Insect Pest Management

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.

Ecologically Based Pest Management

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.

Introduction to Integrated Pest Management

Pesticides lead serious problems like pollutions, health hazards, pest resistance, secondary pest outbreak, etc. Therefore, biological control is widely accepted at global scenario as an effective alternative for pesticidal use and as eco-friendly pest control method. Therefore, newer and recent trends of biological insect pest control are given in this book. The book contains 16 chapters under which biocontrol agents like braconids, Ichneumonids, tachinids, chalcids, ladybird beetles, carabids, lace wings, grasshoppers, hemipterans, weevils and vertebrates such as picies, amphibians and birds are discussed with respect to their diversity and their role in pest management. Emphasis is given on biological control of mosquitoes, mulberry and sugarcane pests and some commonly occurring insect pests. Thus, the book is extremely useful for farmers, students, teachers, scientists and industrialists.

Agricultural Insect Pests of the Tropics and their Control

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.

Recent Trends in Biological Pest Control

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.

IPM in Practice, 2nd Edition

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.

The Economics of Integrated Pest Management of Insects

The second edition of the CRC Handbook of Pest Management in Agriculture examines the interdependency of agricultural pest management strategies. Topics discussed include agricultural losses to pests; chemical and non-chemical control technologies; pesticide resistance; environmental impacts of pesticides; biological pest control; host-plant resistance; crop rotations and other cultural controls; assessments of the relative effectiveness, benefits, and risks of various pest control strategies; and improved pest control approaches for making agriculture more profitable and sustainable. This is a "must have" book for entomologists, plant pathologists, and weed control specialists, in addition to university and research institute libraries.

Entomology and Pest Management

This edited book highlights the latest information on the use of nanotechnology, satellite technology, and biotechnological tools in pest management. It covers the role of climate change and ecology in managing pests and also their molecular identification. Other methods that the book encompasses are organic pest management, host-plant resistance, semiochemicals, and bio-control technology. The book also covers insect pollinators which play important role for fruits in horticultural crop production. Intensive and extensive cultivation of horticultural crops lead to serious pest problem. Climatic conditions in India and elsewhere due to which new pests have emerged that causes severe damage to the horticultural crops. In response to this, researchers have developed new techniques to fight pests and their growing resistance to pesticides. This book covers the latest information on identity, biology, damage, seasonal development, and pest management of the horticultural crop pests. It serves to be an essential tool for horticultural professionals, including development officers, horticulturists, field-level extension workers, nurserymen, planters, and entomologists, and is a valuable source of reference for relevant researchers, teachers, and students in the region.

Area-wide Integrated Pest Management

This, the first volume of the ‘Integrated Management of Plant Pests and Diseases’ book series, presents general concepts on integrated pest and disease management. Section one includes chapters on infection models, resurgence and replacement, plant disease epidemiology and effects of climate change in tropical environments. The second section includes remote sensing and information technology. Finally, the third section covers molecular aspects of the subject.

CRC Handbook of Pest Management in Agriculture, Second Edition

This comprehensive handbook on economic entomology for Australian field crops and pastures is the first of its kind. It encompasses pests and beneficial insects as well as allied forms of importance in Australian agriculture. Organised by commodities – such as cereals, sugar and tropical pasture legumes – it examines all the pest species for a particular commodity across Australia. Identification, distribution, damage, host range, biology, risk period and monitoring techniques are described for each entry, accompanied by useful illustrations. The book also describes introduced biological control agents that effectively control crop pests. Pests of Field Crops and Pastures will be a useful tool in crop management for progressive farmers, agronomists, agricultural consultants and academics alike.

Trends in Horticultural Entomology

This textbook presents theory and concepts in integrated pest management, complemented by two award-winning websites covering more practical aspects.

General Concepts in Integrated Pest and Disease Management

"Provides a detailed summary of pest management principles and techniques, outlining a broad selection of critical issues regarding current practice and future technology in this area. Discusses the role of soils, weather, and surrounding habitats in regulating pest occurrence and severity."

Pests of Field Crops and Pastures

Papers presented at the National Symposium on Pest Management Strategies : Current Trends and Future Prospects, held at Chennai during 1-2 February, 2001; in Indian context.

Integrated Pest Management

The author presents a balanced case concerning the advantages and disadvantages of the chemical control of pests, using a wide variety of examples in a historical context.

Handbook of Pest Management

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.

Strategies in Integrated Pest Management

Mites (Acari) for Pest Control is an extremely comprehensivepublication, covering in depth the 34 acarine families that containmites useful for the control of pest mites and insects, nematodesand weeds. In addition to providing information on each relevantacarine family, the book includes essential information on theintroduction, culture and establishment of acarine biocontrolagents, the effects of the host plants, agrochemicals andenvironmental factors on mites used in biological control anddiscusses commercial and economic considerations in theiruse. Mites are now used in various ways for biological control, witha growing number of species being sold commercially throughout theworld. The authors of this landmark publication, who have betweenthem a huge wealth of experience working with mites in biologicalcontrol programs, have put together a book that will for many yearsbe the standard reference on the subject. The book will be of great value to all those working in cropprotection and biological control both in research as well as incommercial operations, including acarologists, entomologists,integrated pest management specialists, agricultural and plantscientists. Libraries in all universities and researchestablishments where these subjects are studied and taught shouldall have copies on their shelves. Uri Gerson is at the Department of Entomology, Faculty ofAgricultural, Food and Environmental Sciences, Hebrew University,Rehovot, Israel. Robert L. Smiley and Ronald Ochoaare at the Systematic Entomology Laboratory, US Department ofAgriculture, Agricultural Research Service, Beltsville, MD, USA

Pest Control

Biocontrol is among the most promising methods for a safe, environmentally benign and sustainable pest control. Microbial pesticides offer a great potential, and it is anticipated that they will become a substantial part of the use of all crop protection products. Their development and commercialization, however, has been difficult and with many failures. In this book a rational and structured roadmap has been designed for the development and commercialization of microbial pest control products for the control of arthropod pests. The building blocks of the entire process are identified and essential aspects highlighted. Biopesticides based on entomopathogenic bacteria, fungi, viruses and nematodes are elaborately discussed. This systematic roadmap with a strong focus on economics and market introduction will assist academic researchers and industrial developers of biopesticides in accomplishing their goal: the development of successful cost-effective microbial pesticides.

Sterile Insect Technique

Pest Control Strategies is a compilation of papers presented at the symposium held at Cornell University in June 1977. It covers various aspects and issues on pest control. It also discusses the risks and benefits of using pesticides on human health as well as on the economy and environment. Composed of four parts, the book provides an overview of the various alternative pest control techniques and identifies possible solutions on crop pest problems. Part 1 discusses the role of the U.S. Department of Agriculture in the integrated pest management programs and policy. The following part discusses the complexity of pest management in terms of socioeconomic and legal aspects. Part 3 presents the different case studies about pest management. These case studies include the potentials for research and implementation of integrated pest management on deciduous tree-fruits and other agricultural crops. The last part of this collection describes the current status, needs, and future developments of integrated pest management. This book will be relevant to extension leaders, educators, government officials, and agriculturists as well as to students, teachers, and researchers who are interested in the integrated pest management program.

Pest Management in U.S. Agriculture

Mites (Acari) for Pest Control