Category 2 Integrated Pest Management

The book deals with the present state and problems of integrated pest management (IPM) as relating to stakeholder acceptance of IPM and how IPM can become a sustainable practice. The book covers the implementation of integrated pest management in USA, Canada, Denmark, Germany, Italy, Sweden, Netherlands, China, India, Indonesia, Australia, Africa, and its impact in reducing pesticide use in agriculture. The book also deals with the impact of transgenic crops on pesticide use.

Biology and nature of damage of EFSB; Mechanical control; Host-plant resistance; Biological control; Sex pheromone; Socio-economics of eggplant protection in Bangladesh; Pilot project demonstration and promotion of IPM.

Integrated Pest Management Research Symposium, the ProceedingsAsheville, NC, April 15-18, 1985Technological Innovations in Integrated Pest Management Biorational and Ecological PerspectiveScientific Publishers

The Integrated Pest Management IPM is an ecosystem approach to managing pests through understanding the crop ecosystem as a basis of good crop management decisions and support the sustainable intensification of crop production and pesticide risk reduction. Often, low levels of populations of some pests are needed to keep natural enemies in the field and the aim of IPM is to reduce pest populations to avoid damage levels that cause yield loss. The IPM is still directly associated with pests and defined as a knowledge-intensive process of decision making that combines various strategies (biological, cultural, physical and chemical, regular

field monitoring of the crops etc.) that focuses on reduction of pesticide use to sustainably manage dangerous pests. This book is intended to guide farmers in the integrated management of pest and diseases, helping them with decision making. It provides a description of the most dangerous pests and diseases, including symptoms, possible location, types of plants, biology as well as ways of monitoring. It also describes the main components of specific Integrated Pest Management.

This essential reference provides complete coverage of integrated pest management (IPM). With more than 40 recognized experts, the book thoroughly details the rationale and benefits of employing an IPM plan and provides technical information on each aspect from cultural practices to choosing when and how to use chemicals. It also brings together research work on pest problems with information on the practical implementation of the tools. Case studies of successful operations are provided as well.

This book presents experiences and successful case studies of integrated pest management (IPM) from developed and developing countries and from major international centres and programmes. It contains 39 chapters by many contributors addressing themes such as: emerging issues in IPM, including biotechnology, pesticide policies and socioeconomic considerations (8 chapters); country experiences from Africa, Asia, North and South America, Europe, Australia and New Zealand (20 chapters); and regional and international experiences, including those of FAO, USAID, ICIPE, CIRAD, the World Bank and CGIAR Systemwide IPM Program (9 chapters). This book will be of significant interest to those working in the areas of crop protection, entomology and pest management.

This comprehenisive text approaches the subject from an ecological/evolutionary biological

perspective. The assumption is that one cannot study forest insects without understanding the dynamics of the relationship between an insect and its host plant. This relationship includes knowing what factors control forest insect populations such as food, food quality, tree vigor, host selection, and symbiotic relationships. The authors also discuss tree-injuring insects from the perspective of their influence on tree physiology and growth as well as economic and commercial effects. The book represents a "modern" approach to the topic of forest and shade tree insects; is well-illustrated; and includes a comprehensive primary reference list.

'We often overlook the ability of insects to overcome the effects of continued stress as is often experienced with development of resistance as well as the evolution of new biotypes. The single gene technology poses several challenges including stability of gene expression besides concern on the safety of products. It is against the background that integration of conventional and biotechnological approaches to pest control assumes importance'--Cover.

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.

Op onderwerp zijn de diverse gidsen en handleidingen gerangschikt

Contributed papers presented at the National Seminar on Integrated Pest Management.

This manual represents the attempt to summarize the experience on tomato production in Eritrea. It is aimed at providing guidance for the Facilitators in the planning and implementation of future IPM activities, with a view to establishing a national network implementing IPM approaches not only on tomato, but on a range of vegetables and other crops (e.g. citrus, cereals) prioritized in the different regions, in an effort to promote a judicious use of chemical pesticides through promotion of IPM. The manual is a technical reference that gives background information and refers to practical exercises / activities that can be useful in the field during the FFS, to help the trainees better understand the different topics.

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.

Human population is growing rapidly, disproportionate to food supply, which necessitate production of more volume of food in the near future. The reliance on insecticides for quick and dramatic results was not totally free from adverse effects. This book intends to fill the gap by providing a critical analysis of different management strategies that have a bearing on agriculture, sustainability, and environmental protection. This book emphasizes the management strategies with

evaluation of each strategy in the bigger picture of ecologically driven pest management. This book includes 24 chapters, which cover ecological and biorational basis of pest management, integrated pest and disease management, crop breeding for resistance, use of entomopathogenic nematodes and other agents, remote sensing, biosecurity issues, risk to biodiversity by exotic species, new and emerging pests of horticultural crops, saffron and stored grains, the role of extension technologies in dissemination of IPM and, future challenges and strategies. The book is aimed to serve as reference book for teachers, researchers, extension officers, and policy makers associated with IPM. This book can also be used as supplementary reading material in undergraduate and postgraduate courses. This book provides a multidisciplinary IPM perspective to entomologists, plant pathologists, extension educationists, anthropologist and economists.