

Riceland Spiders of South and Southeast Asia

A T Barrion and J A Litsinger, Entomology Division, International Rice Research Institute, Philippines

Spiders are among the most omnipresent and numerous predators in both agricultural and natural ecosystems, and without them insect pest populations would become out of control. Their potential as biological control agents can only be appreciated through a greater understanding of their abundance and species composition in different ecological systems. There is therefore a great need for literature providing guidance on spider identification.

The spider fauna of several cultivated crops, in a number of regions of the world, has been well documented. There have been some previous attempts to record the spider fauna of rice in South and Southeast Asia, but these are scattered in the journal literature. This volume provides a comprehensive illustrated guide that can be used by specialists and novices to identify these spiders. The majority of the species covered were collected from a diversity of habitats in the Philippines. The bulk of the book consists of keys to the identification of families, genera and species of Philippine spiders, illustrated by more than 1000 line drawings and 100 colour photographs. A total of 339 species belonging to 134 genera within 26 families are recognized. Of these, 253 species and seven genera are new to science. Distribution maps for individual species and a classification scheme for Philippine riceland spiders are also provided. Overall, the work represents a major contribution to the literature for those interested in spiders or more generally in biological control and crop protection.

Contents:

- Historical background
- External anatomy
 - Cephalothorax • Eyes • Mouthparts • Pedipalps • Maxille • Labium • Sternum • Legs • Abdomen
- Life History
- Materials and Methods
 - Collection sites • Sampling techniques • Perservation of specimens • Photographing and preparation for illustrations • Classification • Measurements • Rearing methods
- Classification of the spider families Order Araneae
- A key to identification of families of Philippine spiders
- Descriptions
 - Key to the uloborid genera and species
 - Key to the pholcid genera and species
 - Key to the salticid genera and species
 - Key to the clubionid genera and species
 - Key to the gnaphosid genera and species
 - Key to the thomisid genera and species
 - Key to the eusparassid genera and species
 - Key to the mimetid genera and species
 - Key to the genera and species of ant-eating spiders
 - Key to the genera and species of lynx spiders
 - Key to the genera and species of nursery web spiders
 - Key to the genera and species of wolf spiders
 - Key to the genera and species of comb-footed spiders
 - Key to the genera and species of sheet-web spiders
 - Key to the genera and species of long-jawed spiders
 - Key to the genera and species of metid spiders
 - Key to the genera and species of araneid spiders
- Common relatives of spiders
- Spider diversity in Philippine rice environments
- Distribution maps of riceland spiders
- Colored plates of some common spiders

Readership: Those interested in spiders or more generally in biological control and crop protection.

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Medical and Veterinary Entomology, 2nd Edition

*D S Kettle, Emeritus Professor, Department of Entomology,
University of Queensland, Australia*

The first edition of this book, published in 1984, established itself internationally as a standard text in medical and veterinary entomology. This new edition retains the same overall aims and structure but has been thoroughly revised to take account of new advances in the subject.

The main focus of the book is on the general biology of insects and the Acari (mites and ticks) of medical and veterinary importance, together with brief descriptions of their taxonomy and of the treatment of diseases they cause. The book consists of 32 chapters and is divided into three parts: the first provides a general introduction to the classification, structure and function of the relevant insects and Acari; the second covers, in seventeen chapters, the main groups of insects and acarines of medical and veterinary importance, from the Culicidae (mosquitoes) to the Ixodidae (hard ticks); part three then provides an overview of those diseases of which the pathogens are transmitted by insects or acarines.

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Insect Pests of Cotton

Edited by G Matthews, Imperial College at Silwood Park, Ascot, UK,
and J Tunstall

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The Scale Insect Family Coccidae: An Identification Manual to Genera

C J Hodgson, Department of Biological Sciences,
Wye College, University of London, UK

The soft-scales (Coccidae) are one of about 20 families of the scale insect superfamily Coccoidea. The females are all sap-sucking and all 1100 known species are potential pests in agriculture, horticulture or forestry. This family is amongst the most poorly known although the third largest in the superfamily. This book discusses all known genera and redescribes and illustrates the adult females of the type species of about 160 soft scale genera. No previous revision has covered all world genera. On the basis of this study a new classification of the soft-scales is introduced based on both male and female characters and keys are provided to the identification of the type species (females) of each genus. An introductory chapter describes the basic structure and introduces the terminology. As the females of all Coccoidea are of potential economic importance, this book will be of value to any entomologist who needs to identify soft-scales either for quarantine or for research involving natural enemies for biological control.

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Tribe Saissetiini
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Host Plant Resistance to Insects

N Panda, former Professor of Entomology, Orissa University of Agriculture and Technology, India, and G S Khush, Principal Plant Breeder, International Rice Research Institute, Philippines

The overuse and misuse of insecticides some four decades ago created major environmental problems and was followed by the development of an 'integrated pest management' approach to crop pests. This approach utilizes a combination of host plant resistance and cultural, biological and chemical control methods. Crop improvement programs emphasize the breeding of crop varieties with multiple resistance to pests, and resistant varieties developed in recent years represent some of the greatest achievements of modern agriculture.

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