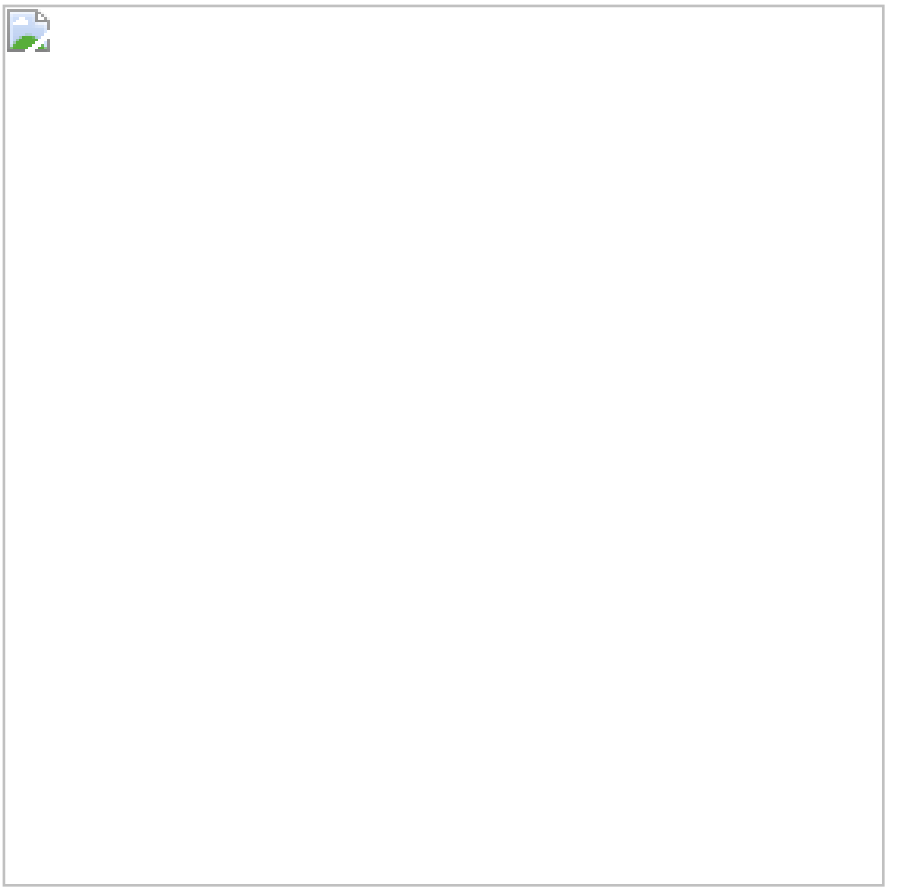

Stink Bugs of Economic Importance in America North of Mexico

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MCPHERSON, J. E. and R. M. MCPHERSON. 2000. Stink bugs of economic importance in America north of Mexico. CRC Press; Boca Raton. [14+] 253 p. ISBN 0-8493-0071-1. Hardback. $69.95.

Stink bugs (Pentatomidae) have been considered major crop pests for many years. Their relatively large size and tendency to aggregate make them one of the more easily recognized pest groups in the field. With the introduction of synthetic insecticides, growers were able to control economically damaging species and their pest status waned somewhat on crops that were sprayed regularly. In recent years, growers relied more heavily on biological control of key pests, and modern insecticides are more selective for specific pest groups, most of them having little or no effect on stink bugs. New technologies such as *Bt* cotton target lepidopteran pests, but do not control stink bugs. As a result, stink bug numbers are increasing on many crops and their importance as pests is resurging.The publication of this book is particularly timely and it should be of interest to anyone interested in pest stink bugs or the crops they attack.

The book is well organized. Chapter 1 provides an introduction to stink bugs with a brief overview of taxonomy, biology and economic importance. Chapter 2 contains background information on the major crops attacked. Basic information on each crop (origin, history, phenology, acres planted, etc.) is provided and stink bug damage to the crop is characterized. The chapter concludes with three thorough tables of crop or plant hosts on which stink bugs have been observed feeding and developing. The tables do not list which stink bug species feed on each crop or host plant, and each table contains the same information arranged by plant common name, scientific name and family name. The third chapter provides keys to families of Pentatomoidea, subfamilies of Pentatomidae and common species and subspecies of Pentatominae. The chapter also contains 64 figures that illustrate key characters used in the keys and give a general idea of body shape and appearance of many species.

Chapters 4 through 11 deal with the following specific pest taxa of stink bugs: *Nezara viridula* (L.), *Euschistus* spp., *Acrosternum hilare* (Say), *Oebalus* spp., *Chlorochroa* spp., *Murgantia histrionica* (Hahn), *Piezodorus guildinii* (Westwood), and *Thyanta* spp. Each chapter introduces the pest species or complex, providing information on distribution, historical and current importance, and crop hosts. The life history is characterized as are behavior, development, natural control agents, chemical ecology (scent gland secretions), and laboratory studies where relevant. Each chapter also characterizes damage to specific crops, frequently accompanied by photographs of typical injury. Finally, relationships between stink bugs and disease agents are reviewed when known.

The final chapter addresses management tactics for stink bugs. Various aspects of biological, cultural and chemical control are covered in detail. A review of sampling techniques and economic thresholds for various crops is provided. The authors also discuss the future outlook for managing stink bug pests.

The authors are to be commended for putting together an outstanding guide to pest stink bugs. The backgrounds of these two scientists are quite different. J. E. McPherson is a recognized authority on the taxonomy and biology of the Pentatomoidea. He has published extensively on this group and his grasp of the literature is excellent. R. M. McPherson is an applied scientist and recognized authority on the management of insect pests in several crops, primarily tobacco and soybeans. The product of this collaboration is a synergy not typically found in this type of reference. The book is a thorough treatment of the included taxa with a clear emphasis on the economic aspects of this group. In fact, one of the major strengths of the book is the long list (over 30 pages) of references. This list of references alone would be worth the purchase price. The book is well written and remarkably free of typographic or other errors.

Two minor weaknesses should be pointed out. First, the title of the book implies that all stink bugs of economic importance will be addressed. A better title would have been 'Stink Bugs Injurious to Crops . . . ' or something similar. Although several species of predacious stink bugs are economically important as predators of crop pests, no mention is made of these. In fact, there is almost no mention of predacious species in the book. Predacious stink bugs are frequently confused with pest species by growers and researchers and some attention to the predators would have been beneficial. Second, although the line drawings are adequate to illustrate characters and general appearance, the use of photographs would have facilitated identification of the pest species. Photographs were used effectively to illustrate damage to a number of crops, but not to aid in identification of the pests. These weaknesses do not detract significantly from the value of this book, though.

Overall, this is an excellent reference and I would highly recommend it to anyone interested in stink bugs or pest management in crops where these bugs are pests. The price is reasonable and makes the book affordable to anyone with an interest in stink bugs.

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