

## How to Use This Book

This handbook is designed to accommodate a broad field of users, including farmers, consultants, students, extension agents, and researchers. Obviously, some users will not need all the information provided, while others will want additional information. Our intent in this handbook is to provide fundamental information on soybean insect pest management, including insect identification, life history data, and management options. Besides information on specific pests, general sections on important aspects of soybean production and pest management are provided. References for additional information are provided in most sections, and the section on sources of additional information at the end of the handbook provides addresses of entomology departments, where management information for a specific area can be obtained. Authors are indicated after each section, and any unattributed sections are by the editors. The following paragraphs provide some guidance for specific uses of the handbook.

### **Insect Identification**

The introduction to identification and injury diagnosis section explains how to use the individual identification aids. These aids include tables of seasonal occurrence of soybean insect injurious stages, lists of soybean insect pests by injury and scientific classification, and keys to soybean injury and soybean insect pests. A glossary is provided to assist with any unfamiliar terms.

### **Information on a Specific Insect Pest**

Information on specific pests is listed alphabetically by common name for easy reference. An explanation of the pest information provided is given in the introduc-

tion to that section. Information given about specific insects includes scientific classification, origin and distribution, description, injury, pest status, identification, life history, management, and selected references. Drawings of pests and their injuries can be found in the keys, and color photographs of pests and injury are located near the sections on individual insects. The pest status section provides a discussion of the relative importance of the pests.

### **Managing a Specific Insect**

The individual insect pest sections provide some management data. Other information of potential value includes the section on beneficial organisms, the section on soybean physiology, which describes soybean physiological stages, and the section on pest management procedures.

### **General Information on Soybean and Soybean Pest Management**

The first section provides an overview of the importance of soybean, general production practices, physiology, and insect injury as they relate to insect management. The section on beneficial organisms discusses principles of natural and biological control involving predators, parasitoids, and entomopathogens. The large section on soybean pest management provides a broad coverage of pest management issues as they relate to soybean insects. Sections on diseases, weeds, and pest interactions illustrate how insect pest management relates to other aspects of pest management in soybean.

By Leon G. Higley and David J. Boethel