

## BOOK REVIEW

**Buntin G.D., Pike K.S., Weiss M.J., Webster J.A. 2007. (Eds.). Handbook of Small Grain Insects. Published jointly by the Entomological Society of America, Lanham, MD and the American Phytopathological Society, St. Paul, MN, USA. ISBN 978-0-9776209-1-3 & ISBN 780977-602913.**

As indicated in the introductory chapter "How to use this handbook" (p. 1) this book is designed primarily for the practitioners of integrated pest management (IPM) programs in small grains, crop consultants, extension agents, agronomists and university teachers who will find very valuable information on various topics in this handbook.

The editors invited 54 specialists from the United States, Canada, Czech Republic, Morocco and Syria who provided fundamental and practical information about managing and control of insects and mites noxious to wheat, barley, oats, rye and triticale with an emphasis on wheat. Rice, millet and other grain crops are not covered in this handbook

In chapter "An introduction to small grains" (p. 2–13) several useful information on worldwide and North American production of major small grain crops are provided. In a clear table Zadok's and Feeke's wheat development scales are well explained making them useful for developing and endorsing grain plantation protection programmes.

The chapter "Small grain pest management" (p. 14–23) provides very useful information on sampling and decision making in arthropod pest management tactics (cultural control, plant resistance, biological control, chemical control) in various kinds of small grain plantations.

Particularly useful is chapter "Identification of arthropods and diagnosis of injury" (p. 24–36) in which the interested reader will find the keys designed for identifying the most common and important pest insects, and a few unusual small grain pests that often are mistaken for more serious pests of small grains.

The main part of the handbook makes chapter "Pest information" (p. 37–91) which provides information on over 60 insect and mite species in respect to the following features: (1) scientific classification, (2) origin and distribution; (3) description, (3) pest status; (4) injury, (5) life history, (6) management, and (7) selected references. In this chapter also the following arthropod species occurring on small grains outside of North America are characterized: *Eurygaster integriceps*, *Zabrus tenebrioides*, *Porphyrophora tritici*, *Mayetiola hordei*, *Delia* spp., and *Schistocerca gregaria*.

In chapter "Beneficial organisms" (p. 93–100) the readers will find interesting information on the role which entomopathogens, parasitoids and predators play in natural control and management of insect pests of small grains.

A great number of good illustrations, list of 205 references, useful glossary (p. 107–111), large list of sources of local information (p. 112–116) and good index (p. 117–119) make this book an excellent source of valuable information for plant protection specialists and academic teachers. Therefore this book should be in each agricultural library.

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