Book Review

Kiriazheva L.P., Dolzhenko V.I. 2002. Khlebnye Zhuzhelitsy i Borba s Nimi [Ground Beetles of the Genus *Zabrus* and Measures for their Control]. All-Russian Institute of Plant Protection, Sankt Petersburg, 122 pp. ISBN 5-93717-012-1 (in Russian).

Out of 25,000 known species in the family *Carabidae* 2,500 species occur on the territory of the former Soviet Union and the present Russian Federation. Although some species among genera *Amara*, *Acinopus*, *Ophonus*, *Harpalus* and others feed on plants they only occasionally cause economic damage to cultivated plants. However, species belonging to genus *Zabrus* have been recorded since XIX century as serious pests of many cereal crops in Asia and Western and Eastern Europe, including Poland.

Into genus Zabrus belong following species considered in the book: Z. tenebrioides Goeze., Z. morio Men., Z. rotundicollis Chd., Z. ovipennis Chd., Z. trinii F.-W., and Z. aciculatus Schaum. Because Z. tenebroides is the main plant pest the book deals practically only with that species.

The book has three main chapters. Chapter 1 – "Distribution and biology" treats the following topics: distribution, biology, larval development and life of adults of *Z. tenebrioides*.

Chapter 2 – "Prognosis of abundance and estimation of noxiousness" treats the following topics: population abundance, prognosis of dates and periods of larval development, determination of expected damage made by larvae to crops, evaluation of yield losses, determination of needed chemical treatments.

Chapter 3 – "Protection of cereal crops against *Z. tenebrioides*" discusses planning of protective measures and organization of cultural and chemical control against larvae and adults. Special attention was given to rentability of protective measures.

Although the book refers to the situation in Russia but the methods used for field scouting, prognosis and forecasting of *Z. tenebrionides* are of general value and they can be used in other countries.

I recommend this very useful book to plant protection inspectors and entomologists.

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