

Book Review

Golosova, M.A. 2004. *Nasekomye-Vrediteli Lesa: Biologicheskoe Regulirovanie Populatsii* [Insects as Forest Pests: Biological Regulation of Populations]. Izdatelstvo Gosudarstvennogo Universiteta Lesa. Moskva, 188 pp. ISBN 5-8135-0232-7. (In Russian).

This concised monograph describes the role of biotic factors in regulating population dynamics and abundance of insects noxious to forest trees. Its author – a well known Russian entomologist professor Margarita Golosova – in the “Introduction” (p. 3–4) emphasizes that forest insects are very good object for ecological studies as well as for application of biological control means.

Chapter 1 “Basic principles of dynamics of population abundance of forest insects” (p. 5–10) reviews the basic Russian monographs (e.g. by Viktorov 1976) and foreign literature (e.g. Berryman 1992) concerning dynamics of forest insect populations.

Chapter 2 “Role of biotic factors in population dynamics of forest pests” (p. 11–19) discusses biocenotic, autecological and synecological phenomena affecting the abundance of forest pests.

Chapter 3 “Characteristic of natural enemies of forest pests” (p. 20–45) reviews polyphagous and monophagous predatory and parasitic natural enemies of forest pests. Of special interest are data concerning host specificity of parasites and their host searching and finding abilities.

Chapter 4 “Use of classical biocontrol of forest pests” (p. 46–54) reviews and discusses various topics e.g. principles of introduction and adaptation of natural enemies as well as modifications of biotopes making them favorable for entomophagous insects.

Chapter 5 “Entomopathogenic microorganisms and their role in regulating population of forest pests” (p. 55–150) illustrates morphological, biological and ecological characteristics of bacteria, viruses, fungi and nematodes causing diseases of forest insects. Section referring to the effect of environmental factors on the role and effectiveness of natural enemies of forest pests provides very comprehensive information in that chapter.

Chapter 6 “Diagnostic of infectious diseases of insects” (p. 151–158) outlines concise information and instruction on the use of light and electron microscopy in diagnosis of insect diseases and identification of pathogens of insects.

Chapter 7 “Biological preparations for forest protection” (p. 159–171) provides biological and technical characteristic of seven bacterial insecticides based on *Bacillus thuringiensis*; five virus insecticides based on *Baculovirus* spp.; six fungal insecticides based on *Beauveria bassiana*, *Verticillium lecanii*, *Metarhizium anisopliae* and *Entomophthora thaxteriana*; and one based on *Steinernema carpocapsae*.

Chapter 8 “Technologies and strategies of application of biopreparations against forest pests” (172–175) provides advice and instructions for proper use and evaluation of effectiveness of applied microbial insecticides.

Chapter 9 “Biotechnical methods of forest protection” (p. 176–179) reviews the use of attractants, pheromones, hormones and insect growth regulators to suppress forest insect populations.

Chapter 10 “Genetic methods” (p. 180–184) provides information on use of irradiation, chemosterilants and genetic translocation method in forest insect control.

Literature (p. 185–186) contains 34 Russian and 22 foreign references concerning the subject of the book. It is a pity that a lack of subject index makes difficult to find needed information on specific pests or biological control agents.

Jerzy J. Lipa
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