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## CONTRIBUTION OF PROFESSOR B. A. ARESHNIKOV TO THE DEVELOPMENT OF ENTOMOLOGICAL SCIENCE IN UKRAINE (100TH BIRTHDAY)

## **Summary**

The article presents scientific and historical materials about activity of Areshnikov Borys Andriyovych (1922–1998), who is a famous scientist in the field of agricultural entomology, doctor of biological sciences, professor. B. A. Areshnikov devoted 45 years of his life to the development of domestic agricultural science. For 35 years, his scientific activity has been associated with the Ukrainian Scientific-Research Institute of Plant Protection (now – Institute of Plant Protection of National Academy of Agrarian Sciences of Ukraine).

B. A. Areshnikov substantiated zonal systems of measures to protect grain crops from eurygaster bug, Anisoplia austriaca beetles, aphids and other pests. It has been proven that human economic activity (introduction of certain varieties of wheat, chemical treatment of crops, increase of areas under forest belts, methods of harvesting grain crops) to a certain extent affects the intensity of reproduction of the eurygaster bug, but does not play a leading role in the dynamics of its number. It was shown that in the development of eurygaster bug and the host plant, a synchronous and asynchronous nature of the relationship is observed. It is noted that usually a sharp increase in the number of this pest is preceded by no less than a two-year period of its synchronous development. A technique has been developed for using the indicator of the live weight of bedbugs to predict the number of eurygaster bug. Improved methods of winter wheat protection from a complex of pests have been substantiated and developed, such as eurygaster bug, cereal aphids, flies, Cnephasia pasiuana, ground beetles, etc. An invaluable scientific contribution has been made to the development of the concept of economic thresholds of harmfulness. Important principles of rationalizing the chemical method of protecting grain crops against pests have been formulated. Developed with the direct participation of B. A. Areshnikov, the complex system of grain ear crop protection from pests, diseases and weeds in 1970–80s was implemented in Ukraine on an area of more than 10 million hectares with an effect of 67,7 million rubles.

The results of many years of scientific research work of B. A. Areshnikov were reflected in 4 monographs published by him and about 150 fundamental articles, methodological recommendations and guidelines. Scientist has created a scientific school – it is 7 trained candidates of sciences.

The military and labour merits of B. A. Areshnikov were recognized by many government awards: the Order of the Patriotic War 2nd class, the Order of Glory 3th class, the Order of the Badge of Honour, many medals. For the development of effective measures to control of grain crops' pests, the scientist was awarded the Gold and Silver medals of the VDNG of the USSR.

**Keywords:** B. A. Areshnikov, agricultural entomology, grain crops (cereals), pests, economic threshold of harmfulness, plant protection, chemical method, scientific school.