

УДК:

CONSERVATION OF SPECIES DIVERSITY AS A WAY OF ECONOMIC AND SOCIAL DEVELOPMENT

Mykola S.Moroz

National University of Life and Environmental Sciences of Ukraine

Ukraine has 35% of the potential of biodiversity in Europe and is a real powerful reserve for conservation and restoration for the entire continent. Being in close cooperation with the existing flora and fauna, insects play a vital function for the biological cycle of matter and energy, which occurs between organisms and their natural environment. Instability of spatial and temporal components of the biological community and habitats, will certainly affect the species richness of insects and, consequently, the diversity of ecosystems.

Ukraine agricultural sector occupies 75% of the territory and the dominant social and economic factors. One formed an opinion on the need to find modern theoretical and practical basis for further study as agro sphere expanded paradigm to address the welfare of creation and preservation of a favorable environment for life. The current threat to the existence of insects in ecosystems is not only an environmental problem but also an obstacle to sustainable economic and social development. Replacing natural flora on a limited list of crops agrocenosis is a powerful stress factor for the native species of insects that affects the quantity and quality of their populations. The formation of biotic complexes in agrocenoses directly affect all components of the process of growing crops. Changes of anthropogenic, biotic and abiotic origin affect the mechanisms of adaptation of natural insect groups and reflect their morphological, physiological, genetic condition. The presence or introduction of fodder plants with different ecological strategy just differently affect ontogenesis, ethology, polyphagia, and spread of insect herbivores.

In the agricultural sector of our country for the production of plant products one observes unjustified increase in areas of monocultures, stable uncontested use of fertilizers, crop protection chemicals. This can lead to irreversible incident on trophic niche habitat, inter specific competition, which is also the dominant steady decline and even extinction of a large number of species of insects. For the introduction of modern agricultural technologies one need to carry out high enough research on changes in the biology of insects that caused the system of relationships "plant-herbivores- entomophagous."

Analysis of studies suggest a close relationship components of the food chain plant-insect parasite. It is known that a primary link in the food chain is a plant. The latter determines the physiological state, viability and productivity of herbivores, which affects the resistance to insects and pathogens entomophages. To preserve the biodiversity of insects must create reserves with species that inhabit the area. By creating compact possible reserves of the spatial arrangement of the type given cluster and optimal compromise between protecting nature and economic interests.

By increasing agrocenosis observed instability spatial patterns of insects and rapid change in the trophic resource environment.

In turn, the presence of large quantities of food in a monoculture cause mass outbreaks appearance and herbivores. As a result, damage to plants is public, it causes a decrease in productivity and significant yield losses. Change of agrocenosis affect the introduction of insect species characteristic of other natural areas.

The overall diversity of beneficial insects be increased during the controlled introduction and acclimatization of new species in agrocenosis entomophages that can lead to a significant reduction of harmful herbivores in the fields of crops. It is advisable at the national and regional levels to create all conditions for the preservation of natural vegetation and support of local populations of insect pollinators. Using land for monoculture one should create and maintain a sufficient number of island of species of flowering plants that historically in a particular area that can ensure food insect pollinators.

Monitoring of the biological condition not only harmful and beneficial insects is essential for the detection and identification as indigenous and trans boundary movements modified organisms. Increased environmental sustainability of agroecosystems requires a systematic measurement of relevant parameters and interpreting time series of environmental data. Regarding the study of effective measures to control the number of herbivores in agrocenosis it is important to conduct regular monitoring of species diversity of insects, their trophic specialization. Using commercial crop of zoophages and pollinators of flowering plants one should plan their efficiency not only to limit harm herbivores, but also to create conditions for the preservation and enhancement of genetic resources of beneficial insects.