BIOLOGICAL PROTECTION OF PLANTS

Azizov Rahmatillo - *is a student of Fergana State University*
Muminov Rahmatillo - *is a student of Fergana State University*

Abstract: This article provides information on methods of biological protection of plants and the importance of bees in plant life.

Key words: Plants, biological protection, photosynthesis, nutrients, agriculture, ecology, selection, beekeeping, greenhouse.

Plants are the world of living organisms; autotrophic organisms with the ability to photosynthesize (see Autotrophs); the cell membrane usually consists of thick cellulose, the reserve nutrient is starch. Heterotrophic nutrition characteristic of some plants (saprophytes, parasites) is secondary. Other characteristics of plants (unique development cycle, way of formation of organs, adhesion, etc.) do not belong to all plants. But this set of characters makes it easy to distinguish plants from other living organisms. Only at the lower level of structure, especially at the unicellular level, the difference between plants and other organisms is not so clearly felt; therefore, zoologists include euglena-like algae as single-celled animals. The main difference between single-celled plants and other single-celled organisms is the presence of chloroplasts. As the level of structure increases, so does the difference between plants and other organisms.

Protection of plants, protection of plants from pests and diseases - 1) a field of agricultural sciences; studies damage caused by pests, diseases, and weeds to plants and develops measures for their prevention and elimination; 2) a system of measures to be developed to eliminate pests, plant diseases and weeds in agriculture and forestry. Its task is not only to destroy harmful organisms or to limit their activity, but also to determine in advance the periods of their appearance and the extent of their spread, as well as to prevent the spread of the most dangerous pests from one area to another (see Quarantine).

Plant protection, agricultural entomology, phytopathology, botany, mycology, bacteriology, virology, ecology, biocenology, chemistry, biochemistry, animal and plant physiology, physics, biophysics, genetics, selection, toxicology and other sciences are based on information. Pests and diseases of plants, weeds cause great damage to crops, especially the harvest. Therefore, in the cultivation of agricultural products and their preservation, protection of plants. plays an important role. The damage caused by pests and diseases to plants has been known since ancient times. At the beginning of the 18th century, the French botanist J. Tournefort tried to classify plant diseases. In the second half of the 18th century, the contagiousness of most

diseases was proved based on experiments (A.T. Bolotov in Russia, A. Tillet in France, F. Fontana in Italy, Ya. Fabricius in Denmark, etc.). In the second half of the 18th century, German scientist A. de Bari, Russian scientist M.S. Voronin and others discovered new types of phytopathogenic fungi, their morphology, development characteristics. In the second half of the 19th century, the damage caused by plant pests and diseases to the economy of several countries required their study and the development of measures to combat them.

In the late 19th and early 20th centuries, thousands of species of phytopathogenic fungi, bacteria, viruses, and nematodes were discovered. The biology and physiology of the main pest species were studied; measures to combat harmful organisms have been improved. Plant protection in Turkestan. The first scientifically based methods were developed in 1898 at the suggestion of the Locust Control Committee. In 1911, the Turkestan Entomological Institute was established in Tashkent, and measures were taken to study cotton and sugar beet pests and to combat them.) and Plant Protection in Khiva Agricultural Experiment Stations. sections were opened. In 1929, the General Cotton Committee of Uzbekistan Plant Protection. established a special institute for the study of cotton pests by uniting several departments of the institute; Later, it was Plant Protection of the All-Union Scientific Research Institute of Cotton (SoyuzNIXI). was transformed into the central st.In 1957, on the basis of the central plant of SoyuzNIXI, the plant protection institute of the present Uzbekistan was established. To effectively protect the crop, to make a forecast of the development and reproduction of pests and diseases, to conduct inspections of crops, seedlings, as well as weeds in order to determine the extent of pests and disease outbreaks in time. , it is achieved by planning a system of measures such as plant treatment using various methods and tools. Several methods of pest, disease and weed control are used. Agrotechnical plant protection methods, technical methods of organizational management and crop care, as well as ways of storing agricultural products, i.e. the reproduction and accumulation of pests, methods of combating the development of diseases (sowing period and methods, soil cultivation, fertilization norms, weed control, rotation includes planting, reclamation). Mechanical and physical methods of protection include methods that resist the entrance of the pest into agricultural plants (trapping the pest, burning, freezing, flooding, destruction by electric current, etc.). To attract and then kill pests, light traps are used, as well as organic compounds - attractants. The method of chemical protection of plants is based on the use of various chemical drugs; despite the many negative aspects, this method is currently one of the leading methods in plant protection. In Uzbekistan in 2005, about 200 chemical agents were used against plant pests, diseases and weeds alone. The State Commission for Chemicals and Plant Protection under the Cabinet of Ministers of the Republic of Uzbekistan permits the use of chemical and biological preparations and monitors strict adherence to the rules of their use. The method of

biological protection of plants uses parasites, predatory insects, microorganisms and antibiotics against pests. The method of genetic protection of plants is based on the interaction of two organisms: the parasite and the host. The immunity (resistance) of the plant to diseases and pests is important. Microbiological protection of plants uses microorganisms to fight against diseases and pests.

In the combined - integrated protection method of plants, chemical and biological control methods are used to fight against harmful insects and mites. In this case, species in the agrobicenosis disturbed by man are relatively restored, which is one of the important factors of biosphere protection. Protection of plants. while creating the theory of S.N. Lgimuhamedov, N. G. Zaprometov, V. A. Znamensky, K. I. Mirpolatov, M. N. Narzikulov, R.O. The works of Olimdzhanov, T.D. Strakhov, V.N. Shchegolev, V.V. Yakhontov and others became of great importance. Protection of plants in Uzbekistan. The Center for Plant Protection of the Ministry of Agriculture and Water Resources plans, organizes and monitors the implementation of practical activities. Protection of plants under U. Protection of plants directly at warning points (156) against the spread and reproduction of diseases, pests and diseases. activities are performed. Scientific work in this field is carried out at the Institute of Plant Protection of Uzbekistan, higher educational institutions, experimental stations. Plant Protection in the Republic of Uzbekistan. state management and control in the field of agriculture and water management of the Republic of Uzbekistan, the State Sanitary Epidemiology Service of the Ministry of Health, the State Committee for Nature Protection, and other state administration bodies. Law of the Republic of Uzbekistan "On Protection of Agricultural Plants from Pests, Diseases and Weeds" (August 31, 2000) Provision of plant protection, Plant protection. regulates relations related to the prevention of the harmful effects of drugs on human health and the environment.

References:

1. Yakhontov V.V., Pests of Central Asian agricultural plants and products and their control, T., 1953;
2. Agricultural entomology, M., 1976; Pospelov S.M.,
3. Protection of plants, T., 1978;
4. List of plant protection products approved for use in the Republic of Uzbekistan, T, 2003.