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USE OF CHEMICAL MEANS IN PLANT PROTECTION

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Annotation: This article talks about a brief history of the science of chemical protection of plants, methods of plant protection, the role and importance of chemical methods. Reasonable opinions and comments are used throughout the article.

***Keywords*:** means of chemical protection of plants, the place of the chemical method, crops.

In order to fully satisfy the demand of the population of our republic for food products and industry for raw materials, it is necessary to properly organize plant protection works in the community, association of companies, and farms. This can be achieved by agronomy students thoroughly mastering all sections and parts of the science of plant protection.

There are many aspects of producing abundant and high-quality crops from agricultural crops, but one of the most important problems is protecting the crops from harmful insects, diseases and weeds.

Protection of plants is one of the activities that should be carried out in order to increase the productivity of agricultural crops and improve the quality of products in our republic. Although the use of chemical substances in the protection of plants has been known since ancient times, it was not of practical importance until the 19th century. the extensive use of pesticides necessitated the development of chemical control. Although chemical control is recommended in cases where other methods are ineffective, it is distinguished by its rapid effect, high biological, economic and economic efficiency, but most pesticides are used for plants, food products, and the environment. It can pollute a little, because the harmful effects of some pesticides on warm-blooded animals and plants have not been sufficiently studied. A mixture of copper sulfate and lime was used to treat scab diseases of grain crops, sulfur to treat powdery mildew of vines, Paris blue to Colorado beetle, and copper sulfate and lime to treat mildew of vines, and good results were achieved.

Chemical substances As a result of the development of the chemical industry and scientific achievements in this field, in 1924, a laboratory for the scientific examination of toxic substances, by the end of the twenties, plant protection stations, in 1929, the Institute of Plant Protection (VIZR) was established, in 1931 In (NIUIF) a scientific research institute for fertilizers and insect acaricides was established, and later (VNIIXSZR) a scientific research institute conducting research on chemical protection of plants.

It is known from the world experience (FAO) that the rapid development of agriculture, together with high technology in farming, makes it impossible to obtain high quality products from scientifically based unprotected agricultural crops, harmful insects, diseases and 20-30% of the gross product is lost every year under the influence of weeds, and for some crops, this indicator is even higher, because the attack and development of harmful organisms is not uniform, due to weather, soil-climatic conditions, agro-ecological, anthropogenic and sometimes unexpectedly, they can be in a state of depression, epizootic and epiphytotic and give birth to terrible conditions. For example, in 2000, in Russia, some species of locusts became very numerous and caused great damage. Naturally, the problems of plant protection will be solved, it will be difficult to grow stable, effective products from agricultural crops.

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It is necessary to provide plant protection with highly qualified personnel, introduce new effective drugs in the assortment of pesticides, preventive measures, early detection of the development of organisms, processing techniques and technology should be perfected.

Currently, the chemical method is one of the leading methods in the world, as can be seen in the example of the table below.

The purpose of teaching the science of plant protection is to introduce students to the main harmful organisms of plants and to teach effective methods of combating them.

The main task of this science is to reduce or completely eliminate the damage caused to plants by harmful insects, diseases and weeds.

Plant protection is a very complex process that includes specific complex measures, namely:

1. Agrotechnical
2. Quarantine
3. Physics and mechanics
4. Biological
5. Chemical control methods

Chemical method of plant protection. When the chemical method is used, chemicals are used that kill harmful organisms or suffocate their vital activity. So, chemically, organic and inorganic poisons are used against harmful organisms. Chemical substances can be used against all types of insects and harmful organisms in all agricultural crops, forests, pastures, greenhouses, warehouses, elevators and other facilities. Due to the fact that chemicals are released from the industry at much lower prices, they quickly cover the costs of their application, it is known that in 1985 the cost of one soum was covered by 3.8 soums, in some years the costs can be covered 10-15 times due to additional products. (in greenhouses). Tens of thousands of different preparations are currently being prepared worldwide from more than 1,000 chemical compounds. The use of pesticides for plant protection increased until the mid-1980s, then gradually decreased from 1986, and in 1989, this indicator fell to the same level as in 1981.

According to the data of statistical analysis, in 1995-2000 domestic and global prices of plant science products equalized, which led to the gradual cessation of pesticides in plant protection and their increase again at the end of the year. It is planned to increase the use of herbicides to 30%, and the use of insecticides and fungicides to 40%.

In 1990, 24.6 billion tons of pesticides were produced worldwide. has a dollar value.

Currently, in our country, a lot of attention is paid to the assortment of pesticides, and a lot of research is being carried out to create environmentally friendly pesticides that change from year to year. For example: application of herbicides with irrigation water, application of pesticides with mineral fertilizers is among these.

Scientific researches are conducted by the Research Institute of Plant Protection of the Republic of Uzbekistan under the Ministry of Agriculture and Water Management of the Republic of Uzbekistan.

Requirements for modern pesticides.

Hygienic requirements have been developed for all chemical substances-pesticides, because all pesticides are biologically active substances, and when used are dangerous not only for harmful organisms, but also for the environment and human health. The effect of pesticides is not only at the time of application, but can also have a chronic effect afterwards. Therefore, the developed hygienic

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requirements are aimed at protecting human health and keeping the environment ecologically clean. First of all, pesticides should be used according to regulations and pollute the environment as little as possible. Second, it is planned to replace the highly effective and highly effective pesticides with low-impact pesticides. Thirdly, the forms and methods of use of pesticides are not significantly changed.

Despite the fact that chemical substances-pesticides have several advantages with some of their properties, they have their own disadvantages.

For example: Most pesticides are harmful to humans, warm-blooded animals, birds, fish and the environment in general. Organochlorine compounds, triazines, ureas, are very resistant, remain on the treated surface for a long time without decaying or disintegrating, and have cumulative (accumulation) properties. One type of pesticides, when used chronically, creates resistance in the body - training, endurance, etc.

Pesticides should have the following properties:

1. Low impact on humans and warm-blooded animals;
2. Rapid decomposition;
3. To be highly biologically, economically, economically effective;
4. Ease of use;
5. Easy to store and transport;
6. Selective effect on beneficial insects;
7. It is easy to mix and use;

Thus, the method of chemical protection of plants differs from other methods and is studied by the science of chemical means of plant protection.

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