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The Importance of Agrotechnical Measures in the Fight Against Garden Pests

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Abstract: New advances in science and technology will be used, along with basic data, including plant protection, forecasting and quarantine services. In solving these tasks, the analysis of orchards, protection and expansion of existing orchards from destruction are important measures. Using agro-technical methods can prevent the reproduction of pests, and sometimes completely eradicate them. Successful application of agro-technical methods can create unfavorable conditions for pests, create favorable conditions for the good growth of free plants and the proliferation of entamophages. The development and damage of pests often depends on the natural environment, the amount of food, the suitability of temperature and humidity for the pest, and other environmental conditions.

Keywords: forecasting, quarantine, agrotechnical method, entamophagous, pest, biocenosis, biological method, chemical method, physical method, mechanical method, integrated method.

Orchards are widely used not only for the supply of products to industry, but also for the establishment of forests, reclamation and landscaping. In addition, the bulk of human consumption is met by fruits, vegetables and melons. Insects play a special role in their cultivation. Insects are also a child of nature and are inextricably linked with it. Insects are part of the biocenosis, that is, a living plant that lives in a confined space and belongs to the complex of animal organisms. Organisms in the botenosis have a great influence on each other when they are strongly interconnected. New advances in science and technology will be used, along with basic data, including plant protection, forecasting and quarantine services. In solving these tasks, the analysis of orchards, protection and expansion of existing orchards from destruction are important measures. Preliminary data on the use of biological agents in the protection of plants from pests date back to the beginning of the twentieth century.

The fight against garden pests is carried out mainly in the following two directions:

(a) Prevention or warning: to prevent the spread of pests in fields, orchards, pastures and other crops, as well as in warehouses where agricultural products are stored;

(b) Extermination: Elimination of pests that damage crops and endanger crops.

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Pests can cause damage from planting to harvesting and even when the crop is stored in warehouses. Garden pests are controlled by agrotechnical, biological, chemical, physical, mechanical methods and quarantine measures are taken. These methods of struggle are included in the production plan of farms in the form of a combined event. Each method of struggle has its own advantages and disadvantages, which can be applied only under certain conditions.

Agrotechnics method. This method is essential in the harmonious protection of plants. Using agro-technical methods can prevent the reproduction of pests, and sometimes completely eradicate them. Creating unfavorable conditions for pests through the successful application of agrotechnical methods, good growth of free plants favorable conditions for the development and proliferation of entomophagous.

The development and damage of pests often depends on the natural environment, the amount of food, the suitability of temperature and humidity for the pest, and other environmental conditions. The judicious use of agro-technical measures will prevent the mass development of many pests and reduce their damage. Such agro-technical methods include tillage, crop rotation, fertilization, timely irrigation, and so on. When this work is done in a short time, less chemicals are used. In the following years, the establishment of less specialized farms made it possible to plant the same type of crops on large areas. This, in turn, created a favorable situation for plant pests. In addition, the size and shape of the fields were changed, crop rotation was organized, large reservoirs were built, new lands were reduced and the area of irrigated lands was expanded. These measures have led to some species of pests that are harmless becoming major pests.

The Central Asian climate is very conducive to the development of pests, and many species thrive here by reproducing several times. These include vegetable juices, spiders, apple caterpillars, and more. The suitability of pests for specialization also leads to their mass proliferation. Fruit tree pests can cause damage from early spring to late autumn, that is, until the harvest. Therefore, chemical drugs should be used as little as possible, as they can cause great harm, infecting humans and animals, by injecting food into plants through animals. That is why It is advisable to use agro-technical methods on farms. In addition, the damage of some pests can be reduced even if the crop is harvested in a short time. Another advantage of the agro-technical method is that the product is clean without pesticide residues, and in the fields there is an opportunity for the development and reproduction of beneficial insects, which ensures that the ecological balance does not deviate to one side. Beneficial insects now fly from one of these fields to another (e.g., from bedouins to gardens). Bedouins serve as a source of reproduction of useful species.

The agro-technical method is mainly useful in 2 directions:

1) healthy plants are less resistant to pests, and the application of the method also creates unfavorable conditions for these species;

2) conditions are created for the development of diseased plants and their recovery. In addition, one of its advantages is the implementation of agro-technical methods in conjunction with integrated methodological measures. This method often does not require additional costs.

Agrotechnical measures in horticulture are as follows:

1) cutting off the dried stalks under the influence of pests and diseases;

2) regular shaping of trees, pruning, rejuvenation, harvesting of fruits shed due to disease and damage;

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3) processing between garden rows;
4) whitewash the trees.

Carrying out organizational and economic activities, getting rid of monoculture will allow the increase of beneficial insects in crops. At the same time, it is necessary to create favorable conditions for the development of beneficial species, to plant plants, to plant serasal horses. We know that bees increase fruit and cotton yield by 1.5-2%.

Crop rotation - When fruit trees planted in the same field are replaced by other crops, pests and diseases do not spread on the ground. Plowing leads to the destruction of eggs, larvae and imagos of insects in the soil. Certain results are also achieved when Yahweh water is given. Delayed planting time or early planting can also create a favorable situation for some pests and diseases. If mineral and organic fertilizers are applied to the soil, the growth and development of plants in scientifically fertilized fields will be good and they will be resistant to pests and diseases.

Mineral fertilizers increase the osmotic pressure of plants, which is inconvenient for feeding sucking insects. Potassium and phosphorus fertilizers strengthen the mechanical tissues of the leaves and stems of plants, thicken the cuticle, resulting in unfavorable conditions for sucking insects, making their trunks shorter to suck plant sap. Nitrogen, phosphorus and potassium fertilizers cause a temporary cessation of feeding of plant sap, cicadas. Irrigation has a major impact on the number of beneficial and harmful insects. Moisture-loving insects create conditions for the development of plant sap and some other species. Dry-loving xerophilous insects have a negative effect. Of the agrotechnical methods, the effect of irrigation on insects in particular is not well organized. Taking into account the survival of the pest found in each crop, the start of harvesting will prevent the spread of this type of pest in the future.

The following complex measures should be taken to improve orchards:

- Damaged leaves and fruits in autumn or early spring The branches are cut by turning the tree upside down to a depth of 20-30 cm.
- When quinces and apples come out of the flower and the damaged fruits and twigs are clear, 15-20 days after flowering, all the damaged fruits, twigs and branches are cut and burned.
- To increase immunity against diseases before autumn plowing should be given 30 kg of potassium and 60 kg of phosphorus fertilizers per hectare: in pure form, in summer 1–1.5 kg of ammophos fertilizer is applied to each bush 1-2 times. Organic fertilizers are applied before plowing at least 20 tons per year.
- After harvest, all damaged plant remains should be taken to the garden and burned.
- To reduce the activity of pests in the gardens is recommended to plant a variety of seedlings in the crop.
- Excessive watering and irrigation of gardens reduces the number of pests and increases productivity.

If the above measures are taken in a short time and with high quality, our diamonds and orchards will remain productive. Focusing on cutting down trees and removing fallen leaves during the growing season will result in the destruction of diseased spores.

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