

Garden pests

Abdukarimova Mamlakat Abdukarimovna.

a.a.mamlakat@gmail.com

Kulmurotova Aziza Muhiddinovna

azizakulmurotova@gmail.com

Termiz Institute of Agrotechnologies and Innovative Development.

Abstract: This paper provides information on the control of sucking pests in intensive fruit orchards by studying the bioecology of sucking pests such as aphids, aphids, spider mites, scale insects, mealybugs, etc.

Key words: Pesticide, joint, entomophagus, imoga, larva, cumulative, partogenetic.

According to data, a person needs to eat an average of 58.3 kilograms of fruit in a year to get enough vitamins. So, if we multiply this annual consumption rate by the number of our country's population of more than 35 million, we need to grow more than 2 billion 75 thousand tons of fruit per year just for our own needs. It has a positive effect on the quality and weight of the grown fruits by protecting them from pests. More than 1.5 million species of insects are known to science on Earth. They make up more than half of all animal species. Insects are very important in nature, they play an important role in the circular circulation of organic matter in the food chain. In addition, to ensure food safety, it is necessary to fight against their harmful species.

More than 300 arthropods damage fruit trees in Uzbekistan. Among the sucking pests, mainly aphids, spider mites, coccids, aphids, plant fleas cause great damage to fruit trees.

Aphididae - 0.5-8 mm in size, some species develop all their joints on one type of plant, some move from one plant to another in the summer and return to the same plant in the fall. Gives 20-25 joints in a year. By sucking sap from the young twigs and leaves, the aphids weaken the tree, reduce the yield, curl the twigs and leaves, and make it weak for the next year's winter.

Apple sap mainly damages apple, quince, and pear trees. The size is 2 mm, the eggs hatch in young branches and start feeding in spring. After reaching maturity, it gives birth to 50 live larvae in the spring and 20-30 in the summer.



The size of erythrocyte is 2.1-2.6 mm, and when it is crushed, it is red in color. Larvae and adults hibernate under the bark of trees, on the basis of thick branches. It wakes up in March-April. Gives 15-16 joints in a year. Infected branches have hollows and bends. Winged species appear in May and spread by flying or cuttings.

Shields - males with wings do not feed, only take part in reproduction and live from several hours to 2-3 days. Larvae, which hibernate under the shield of the female, spread throughout the plant in the spring and feed on bark or leaves. As a result, the leaves fall quickly, and the fruits remain incomplete. The branches are covered with glue.

Apple comma-shaped shields live in clusters on branches. The mother hibernates under her shield. The female lays 50-100 eggs under her shield. Gives 1-2 syllables a year.

Sunflower-colored shield - damages all fruit trees. When the plant is infected, purple smooth spots remain on the leaves, stems and fruits. The mated queen hibernates and lays about 70 eggs in the spring.

Acacia false shields are omnivorous and overwinter as larvae under the bark and close to the ground. It mainly damages the leaves.

Spiders are divided into two families, 4-legged and 2 two-legged. 2 pairs of legs appear magnified 15-20 times.

Common spider mite is omnivorous (harms many plants: apple, cherry, cherry, plum), gives 11-13 generations per year. The size is 0.3-0.4 mm, the larva has 3 pairs of legs, the nymph and the adult have 4 pairs of legs. The first generation occurs in the weed, and the next generations spread to the trees through the wind and threads. Mated females winter in different places to minus 20-29 C.

Hawthorn mite damages apples, pears, plums, cherries, cherries, peaches, apricots. The size is 550-300 microns, nine-colored, there are 12 pairs of hairs on the back. Mated females hibernate among the hazans. It gives 7-9 generations in a year. In the spring, the female lives for 40 days and lays 150-160 eggs.

The garden spider damages apples, cherries, cherries, plums, vines. Gives 7-10 syllables a year. There are 13 feathers on the back. Mated female mite hibernates in the bark of the mite. One tick lives 40-60 days and lays 50 eggs.

The swelling pear mite infects apples, pears, quinces, hawthorns. Adults with 4 pairs of legs hibernate near tree trunks and under bark. In the spring, it forms swellings under the leaves of the upper branch and feeds inside.



Kandalas – Apple and pear kandalas are reminiscent of woven circle nets. Serkarakat flies. The back of the leaf is damaged, and the top is pale green and white. The mature breed hibernates in tree bark or in the ground.

In order to protect agricultural crops from pests, it is necessary to implement agrotechnical, biological, chemical and combined types of protection in sequence. Moves to the next step when necessary. After flowering, if there are 10 clusters of aphids per 100 branches, chemical control is carried out against them. However, it is necessary to take into account the number of entomophages. If the ratio of aphidophages and lice is 1:20, 1:30, the chemical control measure is abandoned. By studying the biological characteristics of pests, their stages of development, the influence of various factors on their development, it will be possible to apply effective control against them in the most optimal phases and with optimal methods.

Agrotechnical measures - improvement of soil structure, normalization of spacing, elimination of weeds, because most of the pests multiply first in weeds and then move to agricultural crops. In moderation, mineral fertilizers, macro and micro elements are necessary for watering and plant nutrition. Mineral fertilizer penetrates between soil particles and increases soil porosity. The vascular part breathes, grows in search of nutrients and moisture and becomes strong. Symptoms appear in the plant even when macro-microelements are lacking. For example, if there is a lack of nitrogen, growth will lag behind, the leaves will crumble and turn pale green. When there is a lack of phosphorus, the production of fruits decreases, and the leaves and veins turn reddish. When there is a lack of potassium, the edge of the leaf begins to dry, a large number of small buds appear on the branch. If there is a lack of calcium, the root part of the plant does not develop well. If there is a lack of iron, chlorosis (yellowing of the leaves) is observed in the upper part, and the leaves fall off.

Biological control-insects against these pests are also present in nature, but occur in plants, pests and entomophages (food chain sequence), and after these pests multiply, entomophages (beneficial insects for us) appear. Entomophages cause great damage to the young varieties and leaves of the plant before they appear in healthy condition. Therefore, entomophages are artificially propagated in biolaboratories to combat harmful insects in agricultural crops.

Chemical control is highly toxic and fast-acting, but when used improperly, it can persist for a long time in the soil, in the plant and in its crop, as well as increase the resistance of insects to pesticides. Organochlorine and organophosphorus pesticides, besides being effective, have a cumulative (accumulating) feature in the body of humans and warm-blooded animals. Although the toxic substance does not act immediately, as a result of its accumulation, after several years it completely disables a certain organ. Taking this into account, synthetic pyrethroids and (toxic substances obtained from plants, bacteria, viruses) should be alternately used. In particular, when using pesticides, it is necessary not to use them more than their consumption rate, when using them for the second time, the interval between applications is 20-30 days (depending on the duration of exposure and how many times they are used), and it is necessary to stop using pesticides 20-30 days before harvesting. Currently, almost no organochlorine pesticides are used in Uzbekistan.

Summary: Some types of pests found in orchards and vineyards are apple, plum and grape bollworms, violets, false shields, fruit spider mites, pear sweetworm, pear aphids, acacia false shields, oriental fruitworm, The moth causes great damage by breeding several times during the season.

Among the diseases of fruit trees, hole spotting (cluster sporiosis), moniliosis (anthrax disease), powdery mildew, parsha (scab disease), peach leaf swelling, and plum pocket diseases cause great damage to the quality and quantity of the crop.

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