

THE MAIN PESTS OF GARLIC

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ABSTRACT:

In agriculture, the cluster method of production has been introduced, the volume of agricultural land allocated to clusters is 7.5% in fruit and vegetable growing. Today, more than 80 types of agricultural products grown in our country are exported to 66 countries around the world. Garlic is one of them. Garlic has a special place among crops in terms of medicinal properties.

KEYWORDS: garlic, onion, pest, mosquito, egg, larva, mature seed, fight.

INTRODUCTION:

Garlic has a special place in the national cuisine of all peoples. This product with a pungent odor is very beneficial for health. A unique compound in garlic is allucin, which has antibacterial, antiviral, antifungal and antioxidant properties. It is also a source of phytonutrients such as selenium, alliin and adjoen, which have a good effect on blood circulation, digestion and immune system, lowering blood pressure and helping to cleanse.

Garlic is an effective tool against bacteria and viruses. Studies show that fresh garlic prevents food poisoning and kills microbial rods and salmonella in the stomach.

Garlic is a source of vitamin B6, which is essential for the health of the immune system and the growth of new cells. Vitamin V6 also lifts a depressed mood.

This product protects the human heart from cardiovascular diseases such as myocardial infarction and atherosclerosis. Garlic also relieves allergic inflammation in the respiratory tract, such as allergic rhinitis. Freshly made garlic juice relieves itching from rashes and insect bites.

The beneficial compounds in garlic increase insulin and regulate blood sugar levels. Eating garlic every day reduces the risk of cancer. This feature is due to the fact that it contains allyl sulfides.

Studies have shown that garlic regulates the activity of fat cells in our body. This is due to the anti-inflammatory properties of garlic.

However, there are a number of reasons that hinder the growth and development of garlic. We know that pests, for example, can cause serious damage to garlic. 95 species of garlic and onion pests are known in the CIS countries. The most damaging of these are the onion fly, the onion hidden clover, the onion moth, the nightshade, the caterpillar.

We observed a lot of damage from onion fly and garlic thrips from these pests during our research. Our research is carried out in the Andijan region in the Andijan vegetable research center.



These photos are from our research area.

Onion fly (*Delia Antigua* Mg.) Diptera belongs to the family of amphibians. The fly is light gray, 6-7 mm long. The female has longitudinal dark stripes on the abdomen. Larvae up to 10 mm long, leaking. There are 16 dentate gyrus tumors on the posterior end of the body. Onion flies are widespread in almost all parts of the CIS. The fungus overwinters at a depth of 10-20 cm in the soil, and cherries and stalks fly away when the grass blooms. Insects group in groups of 5-20 and lay their eggs on the onion leaf, leaf axils, dry bark of the bulb, or under the cuttings around the plant. Eggs develop in 3-8 days. The larvae enter the plant and after 15-25 days, turn into a fungus in the soil. The fungus develops in 15-20 days. The pest gives up to 3 offspring in different zones. Onion fly larvae infect garlic and ordinary onions. They make their way into the onion head, the damaged onion head usually rots. The leaves wither and dry up. It can also damage the bulbs of various flowers. Strong and early damaged onions dry out slowly; late pests, on

the other hand, give a poor yield and create a source of new pest, or pest spread. That is, it is possible to detect a mosquito bite inside a damaged garlic bulb, which allows it to spread to new areas. The yield of garlic decreases by 13-24%, which reduces the marketability. Ordinary onions suffer less damage.

Living life. Onion flies do not stop growing throughout the year. Only on cold winter days, 278 larvae (worms) and fungi of the pest can be found in the form of a temporary "sleep" on the garlic bulb and the underground part of the onion. Even on hot summer days, he goes to sleep. The most favorable conditions for the onion fly are late summer, late autumn, as well as February-May. At this time, she lays 5-20 eggs on the bottom (close to the ground) of the onion and onions, on the stem of the plant and around it. The larvae open up, move down the plant stem, move towards the plant node, and feed. The damaged plant begins to separate from the healthy in appearance: the leaves stop growing, twist, turn yellow and dry out from the tip. The ends of the plant crack, giving a sign of damage, remain small and of poor quality. In Uzbekistan, the pest develops by giving 4-5 generations per year. The worm, which has stopped growing, quickly sprouts inside the onion and in the dark brown fake cocoon between the stem leaves. After another 8-38 days, a new generation of mature breed (small flies) will fly out of it and start developing.

Planting this crop after another 3-4 years in the field to sow garlic etiquette in the rotation, but do not fertilize. Harvesting and disposal of crop residues from the field, deep plowing, early sowing of the crop.

Tobacco thrips - *Thrips tabaci* Lind. The border belongs to the family of birds or thrips (Thysanoptera), the ovary (Terebrantia), the family Thripidae. Tobacco thrips is the most serious pest of garlic and onion in Uzbekistan

and neighboring countries. 75-85% of the amount of garlic and onion protection from pests falls on this pest. In Central Asian conditions, 5-6 of the joints, which give 7-8 times a year, can pass through the garlic cloves and onions. Thrips can damage the garlic until it is formed from the onion sprouts. The larvae and mature offspring of the pest multiply rapidly by biting and sucking garlic stalks. As a result, longitudinal white spots appear on the onion greens. If protective measures are not taken in time, the garlic will start to dry out from the tip of the onion and eventually dry out completely and the crop may become fine.

The oral apparatus is short, adapted for stabbing. The larva of thrips is more pale than imago, wingless, the females do not lay eggs, the eyes consist of three to four facets, and the whiskers are six-jointed. The female lives for a month and during this time lays up to 100 eggs in the plant tissue. After three to four days, the larvae emerge from the eggs and begin to feed mainly along the leaf roots. After four strokes, the larva turns into a mature insect. In the conditions of Uzbekistan, 113 thrips give seven to eight joints.

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Implement coordinated agronomic measures that increase plant tolerance as a control measure. Chemical control measures are carried out when the pest infects more than 20% of plants.

We study the biology and ecology of pests in chemical control and conduct research observations to test effective drugs against them.

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