



Pests of Grain Crops

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Abstract: In this article, among the pests that harm agricultural crops, including grain crops - sucking grain crops: wheat thrips, barley aphid, corn aphid, large grain aphid, harmful khasva, grain crops from rodent pests: May red-legged beetle, corn flea, slimy worm, hessian fly, tapeworms and other pests are reported.

Key words: entomocomplexes, thrips, aphids, harmful insects, pest beetles.

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The geographical location of our republic and the soil and climate conditions are very favorable for the development of all areas of agriculture. The lush nature of our republic has wide opportunities for the development of irrigated agriculture. On the other hand, these climatic conditions facilitate the growth of various insects that damage agricultural crops. This requires a deep study of the biology of pests, their organic connection with plants and the environment, and the use of the most effective control measures and tools in order to protect plants.

The year-by-year increase in the number of people on earth, including in our republic, requires the development and implementation of consistent measures to provide our people with quality food, especially grain products.

The constant increase in the demand for food at the world level requires paying special attention to the weight and quality of grain grown in Uzbekistan.

Any kind of insect, especially the type that harms the farm economy, requires comprehensive and complete study, first of all, to study its biology and ecology, to develop ways to protect cultivated plants from them. . Therefore, the formation of entomocomplexes in natural and artificial biocenoses is similar to the relationship between plants and insects in the same area.

Species composition of sucking pests of grain crops

Several species of insects belonging to the Phleothripidae family of the thrips family cause damage to grain. Wheat thrips is the most common and harmful among them.

Wheat thrips (*Haplothrips tritici* Kurd) causes great damage to wheat. As a result, wheat ears dry up. In some cases, the third part of them dries up, and the leaf does not write well. The leaf sheath does not develop well. The weight and quality of damaged grain is low. In some cases, if there is one larva of thrips in one grain, the crop will die by 11%, if there are three - up to 34-35%, and if there are five - up to 50%. The resistance of wheat to this pest varies depending on the variety. Durum wheat is resistant to thrips.

Barley aphid (*Brachycoolus noxius*) affects barley and partially wheat.

Corn borer (*Rhopalosiphum maidis* Fitch) infects barley, wheat, corn, and sorghum. Common root sap also harms wheat. Its economic damage is not very serious.

The large grain aphid (*Sitobion avenae*) also damages only grain companions. As a result of aphids (also called lice in some literature) sucking the sap of the plants, they do not grow normally, the harvest is delayed, the grain is wasted and the leaves turn yellow. Spikes are contaminated with the liquid released by sap, saprophytic fungi develop in years of high humidity, and physiological processes in the leaves are disturbed.

In addition, cheremukha grain aphid (*Rhopalosiphum padi* L.) also damages grain crops. It is not only a grain pest, that is, it damages other plants besides grain crops.

Harmful weevil (*Eurygaster integriceps* Put) causes great damage by sucking the sap of wheat, barley stalks and ears (Fig. 4). Among more than 100 pests that damage grain, the most dangerous is the harmful weevil. This pest has a stinging and sucking mouthparts and damages Cereal leaf, stem and grain by sucking its juice. Damaged grain will be wasted and the yield will be low.

Adults and larvae of spearhead weed (*Aelia acumita* L.) damage wheat and barley crops like a harmful weed. However, the spearhead is less common, and the economic damage is less. Spearhead weevil damages the green part of plants, young and ripe ears of grain and roots. They cause great damage to spring grain.

Dolycoris penicillatus Horv above the point of absorption of the spike dries up and becomes grainless. Weevils are known to damage rice, corn, sunflower and tomatoes. When infected, the tuber at the top of the sunflower stem dries up.

Pests such as grain moth, black beetles, slime worm, grain fly, grain fleas, among the gnawing insects, harm grain crops by feeding on different parts of the plant at different stages of development.

Species composition of rodent pests of grain crops

Pests such as grain moth, black beetles, slime worm, grain fly, and grain fleas among the rodents damage grain crops by feeding on various parts of the plant in different stages of development. This chapter contains the results of research on the species composition, biology, ecological characteristics, damage and measures of combating rodent pests of grain crops.

May red-legged beetle (*Meloe xanthomelas*) causes serious damage to dry crops, especially to flax. It was observed that they damage wheat and barley up to 25%. The body of the May red-legged beetle is black, its height is 15-30 mm, and its head is wide. The wing is very shortened and splits into two sides along the seam. This leaves the abdomen almost open. Red-legged beetles damage cereal crops in their adult years. The beetle appears in irrigated lands at the end of March. They feed on the leaves and fruits of the plant and kill it.

The grain flea (*Chaetocnema hortensis* Geoffe) damages crops such as wheat and barley in dry lands. In case of serious damage, 40-50% of crops are damaged. There are 2 types of the Gallapoya flea and they are similar to each other.

The grain weevil (*Perieges bardus* Bohem) causes great damage to wheat and barley crops. In some years, in Qamashi and Jizzakh districts, they damaged about 70% of grain crops, and in some cases, it was recorded that plants in all fields died. These elephants are widespread mainly in the regions of Central Asia and beyond the Caucasus. It spreads widely in the regions of Fergana region and causes serious damage to grain crops.

Slimy worm (*Lema melanopus* L.) seriously damages the leaves of plants.

Although the Hessian fly (*Mayetiola destructor* Say) does not cause much damage in our region, in some years the damage to grain crops is significant. They especially damage dry crops, young and growing plants.

Apamea anceps Schiff (*Apamea anceps* Schiff) is a member of the family of the tundra family. Gray grain earworm damages wheat, winter barley, and rarely corn. Oats are almost indestructible. They first feed inside the grain, eating its internal contents, leaving only the husk, filling the inside with feces and string. Worms damage the outer part of the grain from the age of IV and form large holes.

Biology and ecological characteristics of sucking pests of grain crops

Wheat thrips (*Haplothrips tritiki* Kurd) is 1.5-2.2 mm long. The body is thin, the last segment of the abdomen is elongated, and the back end is slightly narrowed. The middle part of the front thorax is slightly narrowed like that of other thrips, and the edges of the wings have long spines. The mustache has 8 joints, its body is black, 3 joints are flowing, and the tip is slightly brown. The thrips larva is thin, up to 2 mm long, the mustache has 7 joints, the spine on the last joint of the abdomen is shorter, the larva is light red in color.

Wheat thrips winters in the young larval stage in soil, under cuttings, in cracks in the ground. When the temperature reaches 8°C in early spring, the larvae begin to move and feed. Adult thrips appear in April. By mid-May, they are observed to increase greatly, and at this time spawning is also at its peak. The female thrips lays one, sometimes several, eggs on the spikelet, sometimes on the shell. Adult thrips live by sucking the tip of the stem and the leaf sheath of the wheat plant. The larva emerges 6-7 days after laying eggs. Larvae enter the shell of the spike and begin to suck the shell and flower juice. Later, they begin to suck the juice of the grain.

In addition to wheat, these thrips damage barley, oats, corn and other cereal grasses. They breed once a year. In order to fight against them, it is necessary to improve the plowing of the land, introduce crop rotation and, if necessary, use chemical means.

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