

Analysis of the Species Composition of Sucking Pests Found In Winter Wheat in the Conditions of the Khorezm Region and Measures to Combat Them

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Abstract:

This article discusses the wheat (grain) plant, which is the main food source for mankind. Grain is one of the plants that is seriously, sometimes very severely, damaged by many different diseases and pests. To date, more than 50 species of various insect pests have been observed damaging grain in the grain fields of our Republic. The article also provides information on the biological characteristics of the harmful plant, its habitat, damage, and measures to combat it, and on this basis, chemical measures to combat insects spread in grain are described.

Keywords: plant, main food, grain, pests, damaging grain, Republic, information, biological characteristics, harmful plant, damage, combat, chemical measures.

To date, more than 50 species of insect pests have been observed in the grain fields of our Republic. The main pests that are most widespread and cause serious damage to large areas are the aphid, aphids, thrips, slime mold, Swedish and Hessian flies, weevil beetles, cicadas, stem borers, etc., which in some years, when favorable conditions arise, multiply massively, spread to large areas and cause significant damage to the crop. Grain is one of the plants that is significantly, sometimes severely, damaged by pests. Wheat can be damaged by these pests, causing a 30-50% decrease in yield. In order to effectively combat these main pests in the conditions of the Republic, it is necessary to monitor the spread of pests every week, starting from the period of grass growth, when the average daily air temperature is 8-10 ° C.

In 2020, out of 1,077.6 thousand hectares of grain fields in the Republic, 877.7 thousand hectares were damaged by harmful insects and other pests.

Republic of Karakalpakstan 53.0 19.0

Andijan 76.2 73.1

Bukhara 60.6 24.8

Jizzakh 101.5 101.5

Kashkadarya 141.0 141.0

Navoi 38.0 24.8

Namangan 74.0 70.0

Samarkand 101.2 35.9

Surkhandarya 93.0 93.0

Syrdarya 85.0 85.0

Tashkent 116.1 116.1

Fergana 104.7 84.8

Khorezm 33.2 8.8

Total 1077.6 877.7

The above data shows that the most damage was caused by the Jizzakh, Kashkadarya, Surkhandarya, Syrdarya, Tashkent and Andijan regions. Relatively less damage was caused by Khorezm, Samarkand, Bukhara and the Republic of Karakalpakstan.

The harmful weevil damages the stalk and ear of wheat during the stages of budding, earing, earing and ripening. The pest is more common in mountainous and foothill regions. The harmful weevil overwinters under plant debris and leaf litter as an adult. As a result of observations conducted in the Khorezm region, it was found that the harmful weevil began to emerge from wintering in the first decade of March-April in grain-growing districts. Egg laying continued from the second decade of April to the second decade of May. The first larvae appeared in the second-third decade of April, and larvae were found until mid-June. The first mature grains of the new generation appear in the 1st and 2nd decades of June, and the mature grains migrate to wintering grounds from the 2nd decade of June. The harmful grain-sucking insect begins to fly towards the grain fields during the third decade of March - April. During the earing period, the affected stalk does not produce ears or becomes completely white ears (i.e., empty). As a result of damage to the immature ear, the amount of protein and gluten in the grain decreases. Damage to 2% of the grains in the ear by the harmful grain makes such grain unsuitable for flour production.

Agrotechnical measures play a special role in the fight against weevils. This includes, first of all, plowing the fields affected by weevils after harvesting. As a result of this immediate measure, spilled grain and weevils that can serve as additional food for weevils are buried in the ground and die. Early spring feeding of autumn-sown grain crops with mineral fertilizers and the use of suspensions: carrying out high-quality agrotechnical measures before sowing spring grain crops - tillage, fertilization, and timely sowing of high-quality seeds in the ground - also somewhat reduces weevil damage.

In addition, choose resistant varieties. When early-ripening varieties are planted, the crop does not have time to fully develop. Currently, varieties that are resistant to crop damage and are not susceptible to the development of pests have been created, the planting of which provides protection

of crops without additional costs. There are also varieties that are not affected by the enzyme action of the crop sap and are less susceptible to damage.

Harvesting without delay this measure is that if the grain is harvested in parts during the waxy period of the ears, that is, first harvested and then threshed, the pest does not have time to fully feed and, being physiologically weak, enters the crop. In addition, many weevil larvae are mechanically crushed and die.

Biological method. Egg-eating telenomuses are of great importance in the fight against the weevil. Therefore, conditions should be created for their development by laying piles of straw around the fields in the fall. It is possible to establish biolaboratories in grain-growing farms, where telenomuses, along with other pests, can be propagated and released into the fields using a special method.

Fields with a high density of pests should be planned for chemical protection. Since the main wintering place of harmful insects and a number of other insects is the nests at the edges of the field, after the air temperature in the nests where insects are detected exceeds 10-12 ° C (1-2 days of March). 20-30 m from the edge of the field and the nests planted with grain should be treated with one of the following drugs from both sides using a tractor sprayer or a motorized multi-purpose machine: BI-58 (danadim) 40% em.k. - 1.5 l / ha. Fufanon 57% em.k. - 1.2-2.0 l / ha. Siperphos (nurell-D) 55% em.k. - 0.5 l / ha, Decis 2.5% em.k. - 0.25 l / ha. karate 5% em.k, -0.15-0.2 l/ha. sumi-alpha 5% em.k. - 0.2-0.25 l/ha, cypermethrin 25% em.k. -0.2 l/ha kinmiks 5% em.k - 0.2 l/ha.

The period of use of the above drugs in the bulldozers and the time until the leaves of mulberries are cut off around the field should be 45-50 days.

CONCLUSION

Later, when the wheat heads and flowers, if the weevils multiply and threaten the crop, it is possible to use any of the insecticides listed above, but firstly, the mulberry trees should be 400-500 m or more from the edge of the field. Secondly, it is necessary to have tractor sprayers and a lake apparatus, not an OBX-28 sprayer (it is absolutely impossible to use airplanes or hang gliders).

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