

## CRITERIA FOR DAMAGE TO AGRICULTURAL CROPS IN THE FERGANA REGION OF KARADRINA PEST

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**Abstract:** in the Republic of Uzbekistan, Karadrina (small earthworm), an omnivorous insect feeds on more than 100 species of plants, is a pest that is not included in the quarantine list. Since the small land tonality causes excessively strong damage to rural farm crops, it leads to a sharp decrease in the yield and quality of crops.

Today, measures of the harmonized fight against caradrina have been developed, with the timely effective application of these combat measures, we will achieve a reduction in the areas where the pest has spread.

**Keywords:** Karadrina, quarantine, altyntkoz, Kandala, honqizi and buzzing flies.

### Introduction. Karadrina. (*Spodoptera exigua* Hb.)

Small land tunnel. Butterfly belonging to the tunlams family. The length of its body is 11-13 mm, when the wings are spread, 23-34 mm. It lays its eggs in balls on the plant, and in autumn on the soil. Worms of a green or gray hue will be 2.5-3.0 cm long.

Karadrina is a dangerous pest of gooseberries and is widespread in all cotton districts of the republics of Central Asia and Transcaucasia. It suddenly multiplies once every 4-7 years. Developing very strongly, it occupies very large areas in one season and brings great casualties to farming. It feeds on more than 100 species of omnivorous insects. Cereals, alfalfa, tobacco, beets, beets, corn, potatoes, carrots and other crops. Karadrina lays her eggs in balls of 10 of several and covers them with feathers obtained from the abdomen. Overwintered butterflies one up to 2,000 further joints can lay up to 300-600 eggs. Adult worms come in 30mm tall. The humpback period lasts 8 -10 days. In the conditions of Uzbekistan, karadrini gives offspring 5-6 times a year. The development of each joint takes 30 days. Hissing regarding the duration of the reproduction of the caradrina and the number of its joints is continued until late autumn, when the average ten-day tribute with border hiss reaches 100c, until it is determined in which way the development of the pest will be completed. The forecast for the long term is drawn up on the basis of data on the development times of each link. In this case, the reference to the previous syllable in the last and the last is especially important, since it is in this way that the activity of the karadrina next year will be determined if the butterflies of the last and last previous syllable in the flying Davir have an average 10-day khavo value above 13.50 C, which indicates that Each year's report allows you to determine how many years will be repeated in the range of conditions that will come in handy for the butterflies of the last syllable to fly when the charter is below 13.50 C.



**Figure 1. Sign and larva of Karadrina.**

Biological peculiarities-butterflies of karadrina during the growing season, food destroys young bop plants. Karadrina migrates to the sprouts of weeds, alfalfa and crops that grow in early spring. And in the summer it goes to gooseberries and other crops. Worms are forced to feed on mature and stale plants, as a result of which butterflies lay very few eggs, while worms hatched from their eggs rarely live. In conditions of moderate development and existing humidity, butterflies lay eggs on plants that grow anew in the fall.

Kusand of karadrina: 36 species of entomophag insects of karadrina are known in Uzbekistan. Of the Kushans, the ones that bark the most are the poachers, the ihnevmonids and the taxines. Predators such as ants, goldfish, Kandala, honqizi and buzzing flies attack its worms. These insects can destroy the eggs of the pest and destroy the worms. Karadrina butterflies are also eaten by birds and benefited.



**Figure 2. Karadrina larva and hump.**

Fight against: regular loss of weeds in crops, autumn plowing, giving yacht water in winter and the use of biostimulants that accelerate plant development, additional watering when many worms appear in crops. To regularly inspect the free land on which weeds grow, which the pest likes in bakhor and early summer. If the deadlines for the appearance of this pest coincide at the time of the loss of gooseberries, then such processing will continue to affect both pests. Carrying out special measures to combat caradrina is recommended when 10-15% of plants are affected.

Revitalizing trichogram: placed in glass jars to extract and revive the tikhogram stored in refrigerators. These jars are stored in rooms with a temperature of 25-26 OS air humidity of 75-80%. After 3-6 days, a trichogram begins to fly inside the jar. Thoroughly washed, 10 g of sitatroga eggs are placed in 3 L glass jars, the inner walls of which are soaked, the eggs are glued, turning the jars sideways.



**Figure 3. Trichogram gesture and poaching gesture.**

Trichogram reproduction. 3 L glass jar, sitatroga egg, 20% sugar syrup and illuminators are lowered into each jar from 2 g into a trichogram, its mouth is covered with a cloth and 20% sugar is placed in a trichogram. 5-6 days later, the cytatroga eggs turn dark in color. After that, the eggs are rubbed with a brush from the walls of the bottle, which are packed with a measure of the amount and write the date on the paper bags. The trichogram is distributed to field areas in proportions of 1 g/gek, 2 g/gek, depending on the number of pests.

Increase the entomophage of the Bracon. Having picked up 4-5-year-old worms from the sadocks, paper garmoshkas were placed in them in advance. 3 li is put in glass jars of 300. The jars are covered

with black cloth bn, and the belly is left in place for 4-5 hours. When the worms enter the paper rakes and begin to roll up the cocoons, 100 imogas are placed in the jars, previously fed for 2 days. For 10-12 days, new poach imogs fly out of the affected worms. The optimum temperature for the development of poached should be 65-80% relative air humidity of 25-300s. In field fields, it is distributed in a ratio of 1:1.1:5.1:10, depending on the number of pests.

The observation results were carried out in several districts of the Fergana region.

Scientific staff of the Fergana branch Entomology and biosul Laboratory of the Scientific Research Institute of Plant Quarantine and chemistry feramon handrail sites installed against the pest of small Earth tunlami (karadrina) are as follows:

#### **Feramon handrails installed in Fergana branch experimental area in Ultarma village, Baghdad district**

1.S-120-33

3.S-120-35

2.S-120-34

4.S-120-36

#### **Farm "Ghizduvon ariq soy bo'yi" on the territory of UCHKUPRIK district Dekhkanov MMTP**

1.S-120-37

2.S-120-38

#### **Farm " Oltiqush zamini" in Dangara MMTP territory of dangara district**

1.S-120-39

2.S-120.40

#### **Ziynatjan fayzi farm in Naghara district Naimacha MMTP territory**

1.S 120-41

2.S 120-42

Observations were made in the districts based on the test results. Repeated crops in the districts mosh, feramon mules mounted on corn were replaced by Clay coating twice in the control navome. Karadrina butterflies were counted and recorded the results in the monitoring book. In the Baghdad district, a lot of pests of pheramon mulberries, which were rubbed on cultivated fields and field edges. Owners of farm farms, where pheramon tutkichs were researched, were given scientific recommendations on pest control work.



<b>Karadrina control of the research staff of the Entomology and biosul Laboratory of the Fergana branch of the Research Institute of Plant Quarantine and chemistry. 2022 year</b>									
№	Pheramon number	30.avg	31.avg	05.sen	06.sen	07.sen	12.sen	15.sen	20.sen
<b>Baghdad district</b>									
1	S-120-33	3	4	14	0	2	5		3
2	S-120-34	4	7	21	0	2	8		0
3	S-120-35	4	9	10	0	3	9		1
4	S-120-36	10	17	25	0	4	28		0
<b>Dang'ara district</b>									
1	S-120-39	1	4		0	5		0	0
2	S-120-40	0	1		0	9		2	0
3	S-120-41	1	5		0	26		1	0
4	S-120-42	0	1		0	33		0	0
<b>Uchko'prik district</b>									
1	S-120-37	4	5		28	0	1		
2	S-120-38	5	1		26	0	0		

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