

Types of Ash Beet Pests and Measures Against them

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ANNOTATION

In this article, the most common pests that cause rapid damage to crops are red-headed beetles, beet beetles, beet aphids, wireworms and other pests that cause great damage to vegetable, melon and potato crops, reducing yields by 35-45%, dries without succumbing. The article describes the biology of the main pests of vegetables, melons, potatoes, the duration of their existence and measures to combat them.

KEYWORDS: *pest, damage, duration, chemicals, impact, vegetables, varieties, biology, living conditions, offspring, eggs, larvae, adults, result)*

Introduction. Login Agriculture is one of the most important sectors of the Uzbek economy. This sector is one of the most promising sources of strengthening the export potential of the country, along with meeting the demand of the population for food products, and the processing industry for raw materials.

The soil and climatic conditions of Uzbekistan are favorable for the cultivation of vegetables, melons and potatoes in open and closed areas, as well as for the reproduction, development and spread of pests and diseases.

The red-headed eel - (*Epicauta erythrocephala* Pall.) Is a pest that, in addition to feeding on wild legumes, causes great damage to vegetables and potatoes. The beetle of this insect is a dangerous pest [2].





Beet long nose - (*Bothynoderes punctia ventris* Germ) is different, of which ordinary beet long nose, gray long nose, black long nose are more harmful. These pests damage the beets by gnawing on the stems, leaves and tubers.

Damaged plants are left to grow and harvest. Beetle beetles overwinter in the soil at a depth of 15 cm to 45 cm [3].

The overwintered beetles lay their eggs under the plant debris in the soil, and the larvae emerge from the eggs after 6–12 days, depending on the conditions. After living for 1-2 months, the larvae become pupae in the soil and reproduce 1-2 times a season.

Beet juice - (*Aphis fabae* Scop) infects soup beets, sugar beets and seed beets, and sucks horse ears from weeds. The leaves of the affected plant are twisted, the tubers are crushed and hardened.



The quality of the crop deteriorates and the virus spreads. beet juice multiplies by giving offspring 10-12 times in one season [2].



Figure 1. Beet juice larvae and infested beet plant.

Simriots-(*Agriotes meticulosus* Cond), a member of the family Coleoptera (Elateridae), eats and infects all types of potatoes, cabbage, tomatoes, beets and melons.

There are several different species of squirrels, and their larvae cause more damage. Depending on the species, the development period lasts up to 3-4 years, ie it gives birth once every 3-4 years [2]. The mature larvae germinate in autumn and turn into beetles in 2-3 weeks.



Figure 2: Mature seed, larva and damaged root of Simqurt

The beetles overwinter under the soil, dry manure, and emerge from hibernation in the spring.

Some species of caterpillars, the desert caterpillar larvae, overwinter at a later age and turn into beetles in spring or summer. They often live in the soil.

Experimental site: The experiment was carried out on 50 m² on the experimental plot of the Nukus branch of Tashkent State Agrarian University, located in Kutankul OFI, Nukus district. At the same time, experiments were carried out on varieties of beet Diyor, Bordeaux-237, Borro F₁, Single, Detroit F₁ and Bikores. In the experiment, the sowing of soup beets was carried out from seed in spring and summer. In soup beets, pests begin to damage mainly after the formation of leaves. In which mainly the Red-headed Spaniel, the long nose of the beet, the beet juice, caused great damage to the leaves of the beet, and the beetles inflicted their damage on the root of the beet. With this in mind, chemical control measures were carried out against these pests mainly during the period when the red-headed shpanga pest had 5-6 leaves of beet. (Table 1)

Nurel-D, 10% em.k at 0.25 l / ha, Nurel-D 10% em.k, 0.5 l / ha, biological efficiency 89.2% and Dalate plus, 10% em.k. At a rate of 0.25 l / ha 85.5%, Dalate plus, 10% em.k. 0.5 l / ha yielded 87.4% bioavailability when applied in moderation against pests.

Table 1 Biological efficacy of chemicals used against red-headed shpanga pest Experimental plot of Nukus branch of Tashkent State Agrarian University located in Nukus district, Kutankul OFI (2019-2020)

Types of drugs and consumption rates, l / ha	Average number of Red-headed Spaniel pests in 1 tube, pcs					Biological efficiency, in% days			
	The day before the drug	In the days following the drug							
		1	4	7	10	1	4	7	10
Nurel-D, 10% em.k 0.25	5,4	5,2	4,6	2,4	0,4	5,4	29,8	69,6	88,2
Nurel-D, 10% em.k 0.5	5,7	5,1	3,9	2,1	0,2	12,1	43,7	74,8	89,2
Dalate plus, 10% em.k. 0.25	5,5	5,4	4,7	2,6	1,9	3,5	29,6	67,7	85,5
Dalate plus, 10% em.k. 0.5	5,9	5,3	4,5	2,3	1,4	11,7	37,2	73,4	87,4
Control (unprocessed)	5,6	5,7	6,8	8,2	9,4	-	-	-	-

Conclusion: In the conditions of Karakalpakstan, the main pest of red-headed shpanga soup beet is Nurel D 10% em.k. It is recommended to spray any of Dalate plus 10% em.k drugs in 300-400 liters of water.

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