Volume 2, Issue 12, December - 2024
ISSN (E): 2938-3781

Web of Agriculture: Journal of Agriculture and Biological Sciences
webofjournals.com/index.php/8

DAMAGE TO POLICY CROPS

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Abstract
Melons are very susceptible to pests and diseases, and if necessary, measures are not taken against them, most of the melon crops may be lost, or the plant may not yield at all. On melons feed on several dozen sucking and rodent pests, the most dangerous of which are considered spiders, cockerels, melon beetles and melons fly.

Keywords: Melon, watermelon, cucumber, crop, borba, preparation, plant, and gnawing pests.

Introduction

Melons are everywhere grown in tropical, subtropical and temperate zones of the earth. Total area of melons in the world is 1.5 million hectares. per hectare. In particular, in the USA – 117 mln.ga, Japan – 98 mln.ga, Italy – 50 thousand, Mexico – 39 ming.ga, Spain – 31 ming.ga, Egypt – 29 thousand, Romania – 19 thousand, etc. In addition, melons are planted on large areas in China, India, Afghanistan, Iran, the countries of the Middle East, Central and South America. According to A.Sh. Hamrayev and K. Nasriddinov, the area under cultivation of melons alone in the world is 400-500 thousand hectares.

MELON BEETLE, OR EPILYAKHNA *(*epilachna chrysomelina*)*

Harm. The melon beetle causes significant damage in the south of Central Asia, eating cucumbers, zucchini, and especially the leaves and sap of a melon. If the fight against this insect is not carried out in time, in some years it destroys the entire melon crop, and young plants die. Damaged melons, especially sheared melons, become unsuitable for storage for a long time, the roots rot, destroying it from secondary pests .

Spread. The melon beetle crawls in the southern regions of Uzbekistan (it also moves a little north from Samarkand). It is found in South Tajikistan, Turkmenistan, Iran, Afghanistan, Asia Minor, Southern Europe, North and Central Africa.

Definition

The beetle is 7-8 *mm* in size, broadly oval-shaped; the lower part of the body is flat, the top is very convex; the color is red-brown; there are 6 black spots 1,75 *mm* on the wings. about the length of the mature larva; The color is yellowish, has five rows of large banded thorns along the back, the thorn has hairs on each side, about the length of the larva that recently hatched

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from the egg, four rows of sloping thorns, and moreover a row of hornless thorns on either side of the body, the gum is slightly smaller than the adult beetle, the color is yellow, has black spots on the back. It stands on the leaf surface, sticking with the hind end of the stem, and retains a twisted larval crust on the last crust near the same place; The body of the turtle is hairy. 9 *mm*2 *mm*

Living a life. The melon beetle hibernates at the adult insecticide stage under the self-feeding field or under the remains of farms and other plants near it; In several regions of Turkmenistan, it is found in the joints of the reed (Yerianthus purpurescens Anders.). This pest dies a lot when the minimum absolute temperature in winter is 17-21°C. Awakened beetles during the period when melons appear to bruise and feed on young leaves. The nesting of the beetles lasts a long time, they begin to multiply slowly in fields. Females lays eggs in a single layer on the leaf of a melon plant. In a typical rule, the female beetle lays about 150 eggs throughout its life. From the laid eggs, the larvae emerge in 3-4 days. Beetles and larvae eat leaf pulp, leaving only its veins, and in the ripe period they eat (carve) the fruit and make a honeycomb in it, sometimes so much that the larvae are completely submerged. The larva hatches three times during development, 3-4 days pass from the laying of one pod to the second one. The last larva age goes into maturity, and the larva develops into a hummock 8–10 days after hatching the third time. The development of fungus lasts 1-1.5 weeks. In Turkmenistan and South Tajikistan, the melon beetle gives up to three breeds per year. Some offspring develop long and are interbreeding with each other in time.

The extent of damage caused by the melon beetle

Despite the large amount of information in scientific sources about the great damage of the melon beetle, there are no numerical indicators of the damage of the melon crop from this pest, only according to V.V. Yakhontov in Tajikistan the tomorrow's crop yield of melons and cucumbers is 70-75%, and the yield of the evening second crop is lost by this pest up to 90-100% (Table 1).

Table 1 The variety "Gulobi" depends on the number of pests of the melon crop
Reduction without

Experience options	**Total yield obtained in two repetitions, grams**	**Yield reduction compared to control, %**
To the separately obtained plant put the following:		
2 y'iz	2998	- 21.9
4 years now	2553	-33.5
8 years now	1975	-48. 2
Control:		
On a plant covered with gauze	3815	-
Control:		
In the open	3763	-

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The data of the table shows that the yield decreases proportionally with the increase in the number of pests on a single plant. The yield was reduced by 21.9% when 2 beetles were put on a separate plant, by 33.5% when 4 beetles were put together, and by 48.5% when 8 beetles were put together, respectively. And in the control variants, almost the same amount of yield was obtained.
In the experimental variant, in which 8 lambs were introduced on the separately obtained plant, the melon beetle and its larvae multiplied intensively, and not a single damaged leaf remained.
The results of the experiment on the variety melon "Alapichok" are presented in Table 2.

Table 2 Harm of the melon beetle in the variety of melons "Olapo'chok"
Delivery Rate

Variants	**Number of laying beetles and larvae**	**The resulting crop, in grams**	**Lost yield, in grams**	**Damage Coefficient**
1	3 years now	2570	2320	47.4
2	5 years now	2420	2470	50.7
3	7 years now	1850	3040	62.1
4	9 years now	1700	3190	65.2
5	10 years ago	1210	3680	75.2
6	**Control**	4890	-	-
7	3 of Lichinka	2510	2380	48.6
8	5 of Lichinka	1640	3250	66.4
9	7 of Lichinka	1500	3390	69.3
10	9 of Lichinka	1400	3490	71.3
11	10 of Lichinka	1270	3620	74.0

As can be seen from the data of the table, the degree of plant damage of the melon beetle depends on the number of pests in one plant, when 3 beetles are put on the plant, the yield is reduced to 47.7%, when 10 beetles are put on the plant, to 75.2%, and when the same number of larvae is laid, it is reduced to 48.6 and 74.0%, respectively.
In addition, experiments have been carried out on the reduction of melon crops in the field depending on the number of melon beetles. Less than 100 and heavily damaged, 100 damaged melon, watermelon and cucumber plants are selected and all fruits are weighed on scales (Table 3).

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Table 3 **Harvest of melons infected with melons beetleWeight loss**

Varieties of melons and melons		Weight of 100 melons of fruits, kg		Reduction of yield	
		Harmless	corrupted	kg, from	%- da
Melon	Olanpo'choq	427,2	259,7	167,5	39,7
Cucumbers	Marg'ilon	19,6	13,1	6,5	32,7
Watermelon		548,2	432,4	115,8	20,5

According to the table data, the average decrease in yield in all three levels of damage is 20.9% for watermelon, 32.7% for cucumbers, and 39.2% for melon.

How many parts of the leaf surface are damaged by the melon beetle and its larvae in laboratory conditions are shown in Table 4.

Table 4 **Wormwood of watermelon beetles and larvae in a day leaves damage to the surface**

The number of beetles and larvae in the experiment	Damaged leaf surface, cm2					
	First 24 hours	24 hours	Uchichi Sutka	To'tinchi sutka	Beshilangchi Sutka	Average per day, sm2
Qo'ng'izlar:						
№ 1	1,1	1,1	0,7	1,2	0,9	1,00
№ 2	1,0	1,3	1,2	1,0	1,3	1,16
№ 3	1,0	1,0	1,3	1,3	1,1	1,14
№ 4	0,9	1,2	1,0	0,7	0,6	0,88
№ 5	1,2	0,8	1,1	0,9	1,3	1,06
Medium:	1,04	1,08	1,06	1,02	1,04	1,048
Larvae:						
At 3 years						
№ 1	0,9	1,0	1,2	0,9	1,2	1,04
№ 2	0,8	1,1	1,3	0,7	0,9	0,96
№ 3	1,4	0,7	1,0	1,2	0,8	1,02
№ 4	1,0	0,9	1,2	1,3	1,1	1,10
№ 5	1,2	1,3	0,6	1,1	1,0	1,04
Medium:	**1,06**	**1,00**	**1,06**	**1,04**	**1,00**	**1,032**

Beetles and 3-year-old larvae feed on melon leaves once a day. When replacing nutrient leaves, their damaged part is measured. Observation is carried out for five hours.

The data of the table shows that the melon beetle and its larvae eat an average of 1.03-1.05 cm2 of leaf surface per day.

In the period of mating and egg-laying of pigs is especially horrible. At this time, each female beetle can eat up to 7-8 cm2 of leaf surface in one day. At the age of 3 and 4, the larvae can eat up to 9-12 cm2 leaves per day.

It has been observed that the melon beetles and larvae often eat the flowers and young fruits of melons and cucumbers to the fullest.

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Conclusions

Tomorrow's crop yield of melons and cucumbers is lost by melon beetles by 70-75%, and the yield of evening second crops - up to 90-100%

The degree of plant damage by the melon beetle depends on the number of pests per plant, the yield is reduced to 47.7% when 3 beetles fall on the plant, to 75.2% with 10 beetles, and 48.6 and 74.0%, respectively, when the same number of larvae falls.

When sowing melons it is necessary to use high-quality seeds and choose the optimal timing of planting, for example, tomorrow's melon should be sown on March 20-30 in the conditions of the southern zones of Uzbekistan.

Despite unfavorable conditions and the conduct of autumn-winter and spring activities, melon beetles can appear on melon crops. These beetles are lost by the application of permitted pesticides. If necessary, the processing is repeated after 15-20 days, but we recommend to stop the processing 20 days before harvesting.

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