



THE USEFULNESS OF APPLYING A BIOLOGICAL METHOD AS OPPOSED TO MIGRATING GIFTS BY STAGES

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INTRODUCTION

Differences arising in the location of the types of crops grown in the agrobiocenosis of Karakalpakstan require consideration of the parties. The reason is that in the main areas, except for fields where agricultural crops are located, plants are slugged, forming peculiar biocenoses. Pests of agricultural crops that voluntarily use such favorable places have dramatically increased their numbers in places that exclude such fields, the dynamics of unprofitable development with the subsequent transition to unprofitable fields is revealed. Therefore, in the dynamics of the development of locust species and pests with such dynamics of development, it has been established that pests appear during the development of characteristic phases of crop fields and continue their reproduction in places where plants grow in field hunting grounds.

The correct implementation of pest control measures in due time, taking into account the characteristic difference in the dynamics of development, is an urgent issue that is waiting for its solution today.

Methods and techniques used: Types of pests migrating from different biotopes of agrobiocenosis to the fields of agricultural crops, bioecological development, dynamics B.P.Adashkevich (1983), the level of damage caused by V.I.Tansky (1988), methods of biological control against them Mirzali (1986), identification of the number of pests Sh.T.Xojaev etc,

(2004). The biological utility of the conducted countermeasures was determined using the Abrata formula (Gar, 1963). Field and production experiments B. A. Dospekhov (1985) conducted a mathematical and statistical analysis of the results obtained using methodological techniques.

RESEARCH RESULTS

The main purpose of our research is to identify the types of pests that cause reproduction in a certain period in the forests of agrobiocenoses, migrating to the fields of rural home crops, and the factors that affect them. The main species of pests that cause significant damage to rural home crops at such stages are *Agrotis segetum* Dan. et Schiff., *Agrotis exclmationi* L. is known to cause pests in crop fields in the early days of the vegetation period if accumulated and fed, then it increased in the wild grasses in the surrounding areas, and a high degree of winter hardiness was found in these places.

The trichogramm entomophagy distribution method, which has been replicated in the laboratory, is being used with high results to counteract the biological methods that are being used today. Finally, a trichogramma was distributed against sovka tentacles that appeared in the wild grasses that were sprouting in the fields of agricultural crops from early spring. To determine the biological usefulness of the method, after 20 days, the larvae were collected and the trichogramma was found to be harmful (Table 1).



As a result, 71.3-75.8% of the pests were not in the brain phase when they were distributed three times (60x80x60 thousand units) at the rate of 200,000 units per hectare against the growing soybean crops, which are increasing in the area of agricultural crops. In

August, 36.2-43.5% of the trichograms were distributed to the confessions, and the number of trichograms in nature was affected by the large number of trichograms in nature, and the number of controlled.

Table 1
Biological usefulness in the distribution of trichogramma against sovka eggs
(Nukus, Chimbay)

Biotopes used where possible	Variants	Quantity, pcs	number of eggs, pcs	biological usefulness %	In August, the trichogramma damaged tentacles, calves
In the agrobiocenosis	Trichogramma	200000	2,6	75,8±1,3	43,5±0,9
	Control	-	2,4	1,4±0,2	2,5±0,1
Around fields	Trichogramma	200000	2,3	71,3±2,6	36,2±0,8
	Control	-	2,0	2,6±0,4	2,8±0,6
Middle	Trichogramma	200000	2,2	73,5±0,8	39,9±0,3
	Control	-	2,2	2,0±0,3	2,6±0,4
Than control		-	-	71,5±2,3	37,3±1,2

More importantly, since the early spring, trichogramma has increased in the fields, damaging the eggs of pests, gradually increasing their number during the growing season, taking into account the predominance of the possibility of damage. Consequently, entomophagous, which multiplies around the fields, migrates to the fields of rural home crops with the help of sovkas, becoming an important biological factor in reducing the number of pests.

In order to substantiate the scientific effect of the treatment, the dynamics of development was determined by the number of eggs laid in the fields where the above biological benefits were obtained by distributing an augmented trichogram in the biolaboratory around cotton, vegetables and vegetable fields as a prophylactic measure from early spring (Table 2).

Table 2
Effect of trichogramma on egg dynamics when used for prophylactic control
(Nukus, Chimbay districts, 2018-2019)

Types of crops	Variants	100 plant sovka skulls sany, calves				
		May			June	
		I	II	III	I	II
Cotton	when the trichogram is distributed	0,1	0,2	0,2	0,1	-
	when the trichogram is distributed	1,4	4,2	8,5	9,1	1,6
	Difference	1,3	4,0	8,3	9,0	1,6
Vegetables	when the trichogram is distributed	0,2	0,4	0,4	0,6	0,4
	when the trichogram is distributed	1,8	5,1	11,6	14,2	8,3



	Difference	1,6	4,7	11,2	13,6	7,9
Vegetables	when the trichogram is distributed	0,2	0,2	0,4	0,2	-
	when the trichogram is distributed	1,6	3,5	8,4	11,3	5,6
	Difference	1,4	3,3	8,0	11,1	5,6

The results of the biological method, which was carried out against the eggs of the sovkat, which caused great damage to the fields of rural home crops, prove that the sovkat growing in the fields are important when they are destroyed in time. This is due to the fact that at the beginning of the growing season in the fields distributed at the rate of 200,000 per hectare, the number of eggs was lower than in the fields without entomophagous distribution. The number of sow eggs in the fields where the biological method was not carried out in the prophylactic matlab is in May-June it is known that the 100 plants examined caused a great deal of damage, averaging 11.1-13.6. In the fields where the method was used, it was found that the number of scattered eggs of sow did not exceed 0.4-0.6.

CONCLUSION

In the Karakalpak agrobiocenosis, tugai forests and abandoned biotopes occupying a small area in the areas of agricultural crops have been identified as important biocenoses in the development of sovkat, which are the main pests of rural crops. It has been found that these biotopes develop due to favorable abiotic, biotic factors, and the wintering sovkat species increase from early spring and then migrate to the fields of rural home crops. It has also been scientifically proven that the number of pests can be minimized by correctly identifying the migration period and distributing 200,000 people per hectare three times from a biolaboratively multiplied trichogram to their mass-laying stations. The increased number of sovkat was correctly identified and it was proposed to increase the biological usefulness of the distributed trichogram to 71.3-75.8%. Thus, in order to prevent the development and damage to the fields of agricultural crops, there is no need to take additional measures to control the crops planted in such fields.

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