



BIOLOGICAL EFFECTIVENESS OF DRUGS BELONGING TO DIFFERENT CLASSES AGAINST GREENHOUSE THRIPS

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Annotation: In the state proved the results of biological efficacy of chemical preparations borba in teplichnogo tripsa (Greenhouse thrips) and its harmfulness.

Relevance of the topic. Today in all regions of the country the cultivation of greenhouse vegetable crops is popular. In the autumn, seedlings are planted mainly in August and September. During this season, when the air temperature drops, the insects outside move to warmer places, ie greenhouses, and have a significant effect on the crops. Especially autumn nightshade, caterpillars, tomato moth, aphids and aphids migrate to greenhouses in search of food and damage the plant from the time of germination. In recent years, experts note that the greenhouse thrips (greenhouse thrips) in the greenhouses of the Republic is causing significant damage to the pest.

Level of study of the topic. The role of greenhouse thrips in the system, its distribution, bioecological features, development in different crops, the types of entomophagous species that feed on it and their practical importance in the management of pest numbers; Research on the formation of "parasite-host" relationships in the biocenosis, the reproduction and application of effective entomophagous species is being conducted in the world's leading scientific institutions. These include the All-Russian Plant Protection Research Institute (VIZR), the Institute of Zoology of the Russian Academy of Sciences, the International Organization for Biological Protection - IOBC (Germany), the Interregional Plant Institute (India), the California Plant Diagnostic Center, the California Department of Food and Agriculture, Texas Agricultural Experimental Station, GP at Texas Agricultural University Opit, B., D.R. Peterson Gilliespie, M.M. Davidson, R.C. Butler, H.R. Pappi, R.A. JonesJain, Klishina E. V. Drugova, V.I.Rojina, G.P.Ivanova, G.I. Research was conducted by Sukhoruchenko. In Uzbekistan, S.N. Alimukhamedov, Sh.T.Xo'jaev, B.A.Sulaymonov, X.X. Kimsanbaev, K.Sh. Mamatov conducted research on tobacco thrips in the open field and in the greenhouse [1,2,3].

In this: Greenhouse thrips damage the plant from planting in the ground until harvest. If the plant falls off during young germination and no control measures are taken, seedlings can stop growing, leaf shedding can occur, and even complete drying.

Greenhouse thrips infects the underside of the plant, the optimum growth temperature is 25-30°C heat, 50-60% relative humidity. In this case it can lay up to 70-100 eggs per day. The larvae that emerge from the eggs develop by feeding on the sap of the generative and vegetative (flower and leaf) parts of the plant. Damaged flowers can wither and fall off. If the plant is damaged when it enters the crop, white spots will form on the fruit. It was noted that the fruit bends from the affected area and loses its shape, as a result of which the quality of appearance may be impaired.



A-
B-
Figure 1. Cucumber (A) flower and (B) fruit infested with greenhouse thrips.

In the fight against pests in the greenhouse, before spraying the drug should be controlled to a temperature of 20–30°C. At such times the crops should be watered or moist at the bottom, otherwise the drugs will not be effective, there may be burns on the growth points, leaves and other conditions.

The purpose of the study is to study the developmental characteristics of greenhouse thrips, the damage they cause to plants, to develop and recommend to practice measures to combat chemicals under what conditions and at what temperature.

Experimental methods. Experiments in 2018-2019 in the greenhouse of the farm "Bekhzod Agro MAKS" in Kibraytuman of Tashkent region against greenhouse thrips of cucumber variety "Multistar" Pilora, 24% sus.k. (0.51 / ha), Lambatrin, 29.56% em. . (2.0 l / ha) and tested the drugs. As a standard, Prineks, 48% em.k. (1.5l / ha.) Was obtained.

"Guidelines for testing insecticides, acaricides, biologically active substances and fungicides" in the study of the biological efficacy of anti-thrips chemicals II edition T. It was conducted in 2004 [3]. The determination of the biological effectiveness of drugs was based on the formula of Abbott [4].

$$Bc = \frac{AB - Ba}{AB} \times 100$$

In this:

Bc – biological efficiency, %

A– Number of pests before the experiment, pcs

a – number of pests after control, pcs

B – Number of pests after the experiment, pcs

a– Number of pests before control, pcs

Experimental results.The results of the experiments showed that Pilora against greenhouse thrips, 24% sus.k .. -0.25 l / ha. Consumption rate was 93.7% on the 7th day and 90.3% on the 14th day. (Prineks, 48% em.k.) The same efficiency was achieved. Labmatrin, 29.56% em.k. When used at the rate of -2.0 l / gasarf, it was 86.5% on the 7th day, and 88.4% efficiency was observed from the comparison variant (Karate, 5%).

Table 1.

Biological efficacy of tested drugs against cucumber thrips

Toshkent vil. Kibray district “Bekhzod Agro MAKS” LLC, 2018-2019.

Options	Active substance	Consumption is kg.l	Biological efficiency, days,%			
			1	3	7	14
<i>Flowering period</i>						
Pilora, 24% cys.k.	Chlorphenopyr	0,25	48,0	79,0	93,7	90,3
Prineks, 48% em.k (standard)	Chlorphenopyr	1,5	53,7	73,7	87,8	90,0
Control (unprocessed)		-	-	-	-	-
<i>Fruit ripening period</i>						
Labmatrin, 29.56% em.k.	Chlorpirifos + lyambdatsigalotrin	2,0	74,1	80,7	86,5	79,3
Karate, 5% (standard)	lyambdatsigalotrin	0,5	68,5	84,2	88,4	82,8
Control (unprocessed)		-	-	-	-	-
EKF		1,75				

Conclusion. So, in the greenhouse Pilora, 24% sus.k. (0.25 l / ha.) Lambatrin, 29.56% em.k. (2.0 l / ha) were confirmed to be appropriate when used against greenhouse thrips.

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