



STUDY OF THE EFFICIENCY OF THE PREPARATION SOLAPSED 48% S.C (COLLAPSED 48 K.S.) AGAINST WHITEFLA ON TOMATOES

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Article history:	Abstract:
<p>Received March 30th 2021 Accepted: April 11th 2021 Published: April 30th 2021</p>	<p>This article provides data on the harmfulness, distribution and lifestyle of the whitefly, which in recent years has been a harmful object in our republic. In order to determine the effectiveness of insecticides against whitefly, observational studies based on tomato pheromones were first introduced. On this basis, in three variants, tests were carried out over the preparations Collapsed 48% S.C (Collapsed 48 c.s.) 0.1 - 0.15 l / ha., (Reference) bestseller 10% c.e. 0.2 kg / ha. The highest efficiency was observed in the variant where Collapsed 48% S.C was used (Collapsed 48 c.c.) 0.1–0.15 kg / ha. In this variant, the efficiency was 7-day 77.8-85.4%.</p>

Keywords: Tamata, fight, whitefly, efficacy, pesticide, research, results, biological efficacy.

INTRODUCTION.

In Uzbekistan, tomato plantings occupied an area of 8.6 thousand hectares in 2018, and its gross harvest amounted to 14.6 thousand tons. It is the main crop both in the nutrition of the population and in the production of canned food. The increase in its yield is associated with many factors of agricultural production.

The fight against harmful insects, is one of them common on tomatoes, they cause great damage to the development of plants and, as a result, to a decrease in crop yield. The most common tomato pest is rust mites. The various methods of struggle used against him do not always give a quick desired result, and it must be admitted that the most cardinal is still the chemical one.

A number of negative aspects of this method, during the struggle for an ecologically clean human environment, are reduced with a competent approach to the use of pesticides. Pesticides used in recent years on tomato plantings belong to the groups of the most effective, less toxic and fast-acting drugs. The goal of our task was to test the new drug Collapsed 48% S.C (MCh "Samo farm servis", Uzbekistan) against whitefly on tomatoes.

Whitefly- (*Trialeurodes vaporariorum*) Until 1986, the greenhouse whitefly (*Trialeurodes vaporariorum*) was considered the main harmful species of whitefly on the territory of Uzbekistan, but in the northern regions of the republic another, more dangerous species was found - the cotton whitefly (*Bemisia tabaci*). It was first discovered in 1986 in cotton-growing regions of Turkmenistan. From where it moved to the territory of Uzbekistan, and as a result, 33 thousand hectares of tomatoes were damaged in the Khorezm region, of which 7 thousand hectares were severely damaged (Danzig et al. 1988).

In the conditions of the Tashkent region, the greenhouse whitefly is mainly found. The pest prefers subtropical conditions - moderate temperature and high air humidity (Khoshimov, 1988) The tobacco whitefly is more resistant to environmental conditions, which does not stop its development during the entire growing season, on agricultural crops (Khodzhaev, 1991).

One of the main methods of combating whitefly on cotton is chemical. However, the rapid addiction to pesticides, resistance draws attention to the issue of finding new methods of combating this pest. (Kimsanbaev, Zakhidov, Kadyrov, 1997).

One of the main methods of fighting whiteflies on and tomatoes is chemical. However, the rapid addiction to pesticides makes us pay attention to the issue of finding new drugs to combat this pest.

RESULTS OF STUDIES.

Test results of the drug Collapse 48% c.c. (Collapsed 48% S.C.) (MChZh "Samo farm servis" Uzbekistan) (d.v. Tiaklopid 480 g / l) on tomato versus white rhizome with a rate of 0.1-0.15 l / ha in table 1.

Whence it can be seen that the highest rates against whitefly with biological effectiveness on the 3rd maximum effect was noted by the drug at rates of 0.1-0.15 l / ha was 75.5-79.5%, on day 7 and was 77.8- 85.4%. On days 14-21, the efficiency of 69.0-70.2%, 67.6-69.1% sharply decreased and was equal, respectively.

Standard Bestseller 10% k.e. at a rate of 1.0 l / ha, the biological effectiveness on the 3rd day after treatment with the drug, the maximum effect was noted at 75.1%, 7 day and amounted to 78.1%. On days 14-21, the biological effectiveness is 70.1% -67.2%.

Table 1.

Biological efficiency of the drug Collapsed 48% c.c. (Collapsed 48% S.C.) against whitefly on tomatoes (Tashkent region, Kibray district, Center for Consulting and Innovative Development in Agriculture at Tashkent State Agrarian University. 25.04.2018)

№	Variants	Consumption rate, l/ha	Number of whiteflies per leaf				
			Before processing	After processing, days			
				3 days	7 days	14 days	21 days
1	Collapsed 48% S.C.	0,1	20,4	5,4	5,2	8,3	9,8
2	Collapsed 48% S.C.	0,15	17,9	3,8	3,0	5,1	8,2
3	Bestseller 10% k.e. (reference)	0,2	22,1	5,7	5,6	7,6	10,7
4	Control (no processing)		18,4	19,1	21,2	24,2	27,3
Biological efficiency (%)							
1	Collapsed 48% S.C.	0,1	-	75,5	77,8	69,0	67,6
2	Collapsed 48% S.C.	0,15	-	79,5	85,4	70,2	69,1
3	Bestseller 10% k.e. (reference)	0,2	-	75,1	78,1	70,1	67,2
4	Control (no processing)		-	-	-	-	-

CONCLUSIONS AND CONCLUSION.

Collapse preparation 48% c.c. (Collapsed 48% S.C.) has good biological effectiveness against aphids, thrips and whiteflies on tomatoes at rates of 0.1 - 0.15 l / ha.

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