

STUDY OF THE EFFICIENCY OF THE PREPARATION METEORIT 50% V.D.G. AGAINST WHITEFLA ON TOMATO CULTURE

Mirakbar Zufarov,
Tashkent State Agrarian University

Mokhichekhra Ablazova,
Tashkent State Agrarian University

Shakhnoza Makhmudova
Tashkent State Agrarian University

ABSTRACT:

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 on the preparations Meteorite 50% h.d. 0.1 - 0.125 kg / ha., (Reference) bestseller 10% ae. 0.2 kg / ha. The highest efficiency was observed in the variant where the Meteorite 50% EH was used. 0.1 - 0.125 kg / ha. In this variant, the efficiency was 7-day 80.3-85.5%.

Keywords: Tomato, fight, whitefly, effectiveness, pesticide, research, results, biological effectiveness.

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 plant development 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 chemical. 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 the task set before us in 2018 was to test the new drug Meteorite 50% h.d. (Meteorit 50% WG) (MCJ "Samo farm servis", Uzbekistan) against whitefly on tomatoes.

LITERATURE REVIEW:

Whitefly - (*Trialeurodes vaporariorum*.) Until 1986, on the territory of Uzbekistan, the greenhouse whitefly (*Trialeurodes vaporariorum*) was considered the main harmful species, 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 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 developing 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. One of the main methods of fighting whiteflies on tomatoes is chemical. However, the rapid addiction to pesticides makes us pay attention to the issue of finding new drugs to combat this pest (Kimsanbaev, Zakhidov, Kadyrov, 1997).

RESULTS OF STUDIES:

Experience in testing the drug Meteorite 50% v.dg. (Meteorit 50% WG) (MЧЖ "Samo farm servis", Uzbekistan) on tomato against whiteflies with a rate of 0.1-0.125 kg / ha in Table 1.

Whence it can be seen that the highest rates of biological effectiveness against whiteflies on the 3rd day, the maximum effect was noted by the drug at rates of 0.1-0.125 l / ha, it was 76.5-79.7%, on the 7th day it was 80.3-85, 5%. On days 14-21, the efficiency of 76.7-81.9%, 71.5-73.2% sharply decreased and was equal to aphids, respectively. Standard Bestseller 10% k.e. at a rate of 0.2 l / ha, the biological effectiveness on the 3rd day after treatment with the drug, the maximum effect was observed at 75.2%, on the 7th day and amounted to 78.4%. On days 14-21, the biological effectiveness is 74.6-71.2%.

Table 1 Biological effectiveness of Meteorit 50% WG. against whitefly on tomatoes (Tashkent region, farm named after "Kanish Fayz Agro")

№	Variants	Consumption rate, kg / ha, l/ha	Number of whiteflies on one leaf, ind.				
			Before processing	After processing, days			
				3 days	7 days	14 days	21 days
1	Meteorit 50% WG	0,1	20,7	4,6	4,2	6,6	8,7
2	Meteorit 50% WG	0,125	18,2	3,8	3,0	4,3	7,2
3	Bestseller 10% k.e. (reference)	0,2	22,6	5,9	5,6	7,5	9,8
4	Control (no processing)		18,5	19,1	21,2	24,2	27,3
Biological efficiency (%)							
1	Meteorit 50% WG	0,1	-	76,5	80,3	76,7	71,5
2	Meteorit 50% WG	0,125	-	79,7	85,5	81,9	73,2
3	Bestseller 10% k.e. (reference)	0,2	-	75,2	78,4	74,6	71,2
4	Control (no processing)		-	-	-	-	-

CONCLUSIONS AND CONCLUSION:

The drug Meteorite 50% h.dg (Meteorit 50% WG) has good biological effectiveness against whitefly on tomatoes at application rates of 0.1 - 0.125 kg / ha. Forms working suspension well. No phytotoxicity was found.

BIBLIOGRAPHY:

- 1) Аскаралиев А., Саипнозарова В. «Картошка ва памидорда канани ривожланиши хамда унга карши кураш тадбирлари» // состояние и перспективы овощеводства, бахчеводства и картофелеводства в Узбекистане. Тез.док.конф. Ташкент 2003.
- 2) Герасимов Б.А., Осницкая У.А., «Вредители и болезни овощных культур» Москва.
- 3) Маматов К.Ш. «Ржавчинный клещ на посевах овощных культур и меры борьбы с ним» Ташкент. Уз.информ. Агропром 1998.
- 4) Murodov B.E., Yakhyoyev J.N. Quarantine Pests Of Internal Quarantine Of The Republic Of Uzbekistan // Education and science in Russia and abroad. 2017 | Pages: 32-36.
- 5) Методические указания по испытанию инсектицидов, акарицидов, биологически активных веществ фунгицидов /Под.ред.проф. Ш.Т.Ходжаев/ Госхимкомиссии РУз - Ташкент. Узинформагропром. 1994. 96 с, 2004г.
- 6) Кимсанбаев Х.Х., Зуев В.И., Кадирходжаев А.К., Сулаймонов Б.А. «Вредители и болезни пасленовых овощных культур и меры борьбы с ними». Ташкент 2006.
- 7) Сулаймонов Б.А. «Памидор зараркунанда ва касалликларига кдрши кураш чоралари» Тонжент 1997г.
- 8) Сулаймонов Б.А., Маматов К.Ш. «Памидор занг канаси (*Aculops lycopersici* Mass) ва унга карши кураш». Ўсимликларни зараркунанда, касаллик ва бегона утлардан химоя килишнинг ривожланиш истикболлари. Илмий - амалий конференция. Ташкент 2001.
- 9) Ходжаев Ш.Т., Маматов К.Ш. «Ржавый клещ на томатах»Ж. «Сельское хозяйство Узбекистана»№ 4 1991г.
- 10) Б.Э.Муродов, Ж.Н.Яхёев Карантинный вредители внутреннего карантина Республики Узбекистан // Образование и наука в России и за рубежом. - 2017. - № 3 (32). -С. 32-36.