

Effectiveness of New Chemicals against Channels of the Tetranychidae Family in Intensive Seed Orchards

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Annotation: During our experiment, Lambda-plus 20% k.e (0.1 l / ha) was obtained to test and determine the effectiveness of new anti-cannabis chemicals in intensive seed orchards. As a benchmark for this drug, Vertimek is 1.8% em.k. (0.4 l / ha) were obtained. The controls were analyzed from 3 days after the use of the experimental drugs. Prior to processing, Lambda-plus 20% k.e. In the variant in which the drug was used, the average was 20.5 pieces per leaf, and in the variant with Vertimek 1.8% emk was 21.4 pieces.

Keywords: Pest, spider, Tetranychidae, Intensive seed orchard, leaves, young twigs

Introduction: Decree and resolution of the President of the Republic of Uzbekistan "On organizational measures to reform the fruit and vegetable and viticulture sectors", orders and decisions of the Cabinet of Ministers of the Republic of Uzbekistan, the Ministry of Agriculture and Water Resources farms, the establishment of agro-industrial firms and the improvement of the management system of the fruit and vegetable sector. Central Asia, including Uzbekistan, is one of the centers of many agricultural origins, including fruit and grapes. From ancient times, the region has preserved valuable local varieties of fruit crops such as apricots, blackberries, apples, pears, cherries, pistachios, almonds, walnuts, grapes, vegetables such as carrots, cucumbers, onions, melons, watermelons, squash and melons. .

At present, the country needs to grow at least 330-400 g of fruit per capita per day or 115-120 kg of fruit per year, including 15 kg of grapes and 10 kg of berries. The Uzbek Regional Medical Institute plans to increase the consumption of grapes by 25 kg.

It is recommended to consume 10-11 kg of dried fruits. However, today the population produces 94 kilograms of fruit per year, including 12 kilograms of grapes. In the United States, Italy, Spain, and France, the figure is 120 to 230 kilograms [4, 5].

Ensuring food security and producing high-quality and environmentally friendly products for the population is one of the most important tasks in our country today. This includes timely and effective protection of orchards and vineyards against pests and other agro-technical measures. Orchards and vineyards can lose up to 60-70% of their yield due to pests.

At present, new orchards based on intensive, high-yielding, disease and pest-resistant varieties are being established on horticultural farms in accordance with the decisions and decrees of our government. In these intensive seed orchards, the damage caused by pests is increasing significantly, and one of the urgent tasks is to preserve the crop grown through the timely and effective control of these pests [5].

In recent years, one of the pests that has seriously damaged the yields of orchards by sucking the leaves and young twigs is the Panonychus ulmi Koch.

This pest feeds mainly on the sap of leaves and young twigs. As a result, the leaves lose their natural color, form spots, and then turn yellow and fall out. The fruits begin to fall off before they ripen and mature. In turn, the quality of ripe fruits decreases, and the yield decreases by 50-60% [7, 8, 10].

One of the canals in intensive seed orchards that harms by sucking the sap of leaves and young twigs is the brown fruit canker (Bryobia redikorzevi Reck) of the family Tetranychidae. The pest's distribution extends from the Baltic states, Leningrad and Moscow regions to the Caucasus, and to the western borders of the European part of Russia, Uzbekistan and Kazakhstan [9]. Brown fruit cannab is more harmful to apple trees during the growing season. The pest feeds by sucking the sap of leaves and buds and avoids sunlight, and most of them are observed in the middle and lower parts of the tree [2, 3, 6].

Research methods: In order to determine the effectiveness of new chemicals against canals in intensive orchards, a study was conducted on a 2.5-hectare intensive seed orchard of the farm "Erkin Shahina Shahzoda" in Qibray district of Tashkent region. Entomological calculations and observations in the experimental field were performed on the basis of G.Y. Bey Biyenko, K. Fasulati methods for determining the density and level of occurrence of pests. Agrototoxicological experiments were carried out according to the method of K.A.Gar, SH.T.Khojajev. Biological efficacy in field and laboratory experiments was determined using the W.S.Abbot formula.

Research results and their discussion: During the study, Lambda-plus 20% k.e (0.1 l / ha) was obtained to test and determine the effectiveness of new antifungal chemicals in intensive seed orchards. As a benchmark for this drug, Vertimek is 1.8% em.k. (0.4 l / ha) were obtained. The controls were analyzed from 3 days of use of the experimental drugs. Prior to

processing, Lambda-plus 20% k.e. in the variant in which the drug was used, the average per leaf was 20.5, and in the variant in which Vertimek was applied 1.8% emk.

Studies have previously shown that Lambda-plus is 20% k.e. (0.1 l / ha) in the variant in which the drug was administered, the effectiveness of our observations was 3 days after administration of the drug was 78.2%, and at 7 days was the highest, ie 87.5%. was formed. For 14 days of our observations, the efficiency was 82.1%, and for 21 days it was 74.3%. From the 21st day of the study, the amount of pest began to increase again.

In the variant with the following template, Vertimek was 1.8% em.c. was 85.7%. On day 14 of our observations, the efficiency was 81.9%, and on day 21 it was 75.4%. In this case, too, the efficiency was found to decrease after 21 days. It was observed that the eggs and nymphs of the pest were less affected by chemicals. The results are presented in Table 1 below.

**Biological efficacy of spider acaricides in intensive orchards
(Erkin Shahina Shahzoda farm, Qibray district, Tashkent region, July 2, 2020)**

Variants	Active substance	spending norm l/h	Number of pests per leaf, pcs				Biological efficiency, %, by day				
			Pre-processing number	Number after processing, pcs				3	7	14	21
				3	7	14	21				
Lambda-plyus 20% k.e	Lambda-sigalotryn 200 g/l	0,1	20,5	5,7	4,8	8,5	15,6	78,2	87,5	82,1	74,3
Abamektin 1,8 % em.k.	Abamektin	0,4	21,4	6,4	5,9	8,9	15,6	76,7	85,7	81,9	75,4
Control	-	-	22,1	28,3	39,4	51,3	65,5	-	-	-	-

Conclusions and Recommendations: According to the results of the study, the number of spiders in intensive orchards should be increased in a timely manner with the use of effective chemicals, taking into account its bioecology and survival in the fight against spiders. is an important factor in management. Before applying chemical control measures against spiders, Lambda-plus 20% k.e. High biological efficiency can be achieved by applying the drug at a rate of 0.1 l / ha per hectare.

In intensive seed orchards, timely agro-technical measures in late autumn and early spring in the fight against spiders, it is possible to preserve the crop grown during the growing season by applying low-toxic chemicals to the environment and beneficial insects .

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