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EFFECTIVENESS OF NEW CHEMICALS AGAINST CHANNELS OF THE TETRANYCHIDAE FAMILY IN INTENSIVE SEED ORCHARDS

ANORBAYEV AZIMJON RAIMKULOVICH
Professor, Candidate of Agricultural Sciences
azimjon.anorbayev@mail.ru

RAKHMANOV AKHLIDDIN KHABIBULLOYEVICH
Base Doctoral Student, Tashkent State Agrarian University
a.raxmonov@tdau.uz

ABSTRACT:

In this article, the Lambda-plus 20% k.e (0.1l/ha) effectiveness was determined in order to test and determine the effectiveness of new anti-cannabis chemicals in intensive seed orchards.According to him, the control was carried out 3,7,14,21 days after drug administration.The highest efficiency was observed at 7 days, i.e. 87.5%.As the obtained experiments result, practical conclusions and recommendations for production were given.

KEYWORDS: pest, spider, tetranychidae, intensive seed orchard, leaves and young twigs.

INTRODUCTION:

The United States and Turkey are the leading countries in Europe in the apples cultivation and export, while China and Iran are the leaders in Asia.However, in high rainfall years, low air temperatures and high humidity, up to 90.0% crop yields in apple orchards were lost due to pests and diseases.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 resolutions of the Cabinet of Ministers, the Ministry of agriculture and water resources of the Republic of Uzbekistan has played an important role in the organization of firms and the management system improvement of the fruit and vegetable industry.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, and pumpkin.At present, the country needs to grow at least 330-400 g 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 recommends increasing the consumption of grapes by 25 kg and an additional 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.One of the urgent tasks is to preserve the crop grown in these intensive seed orchards due to the significant increase in pest infestation and the timely and effective control of these pests [5].

One of the pests that in recent years in orchards sucks the sap of leaves and young twigs and seriously harms the yield is the apple red mite (Panonychus ulmi Koch)[1)].

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 fruit decreases, and the yield decreases by 50-60%. [7),8), 10)].

One of the most harmful canals in intensive seed orchards is the brown fruit canker (Bryobia redikorzevi Reck) belonging to the family Tetranychidae.The pest spreads 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 cannabis seeds are more likely to damage apples from fruit 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 seed orchards, research 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. BeyBiyenko, K. Fasulati methods for determining the density and level of occurrence of pests.Agrotoxicological experiments were carried out according to the method of K.A.Gar, SH.T.Khojayev.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. (0.4l/ha) were obtained.The controls were analyzed from 3 days of use of the experimental drugs.Prior to treatment, Lambda-plus averaged 20.5 units per leaf in the 20% k.e version and Vertimek 1.8% in the 21.8% version.

According to the results of the study, our observations effectiveness in the variant where the drug was previously used Lambda-plus 20% k.e. (0.1l / ha) was 78.2%, 3 days after the drug was administered, was the highest in 7 days, at 87.5%.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.k (0.4 l / ha), the efficiency was 76.7% for the next 3 days of treatment of trees, while the biological efficiency was the highest on day 7, that is, 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.

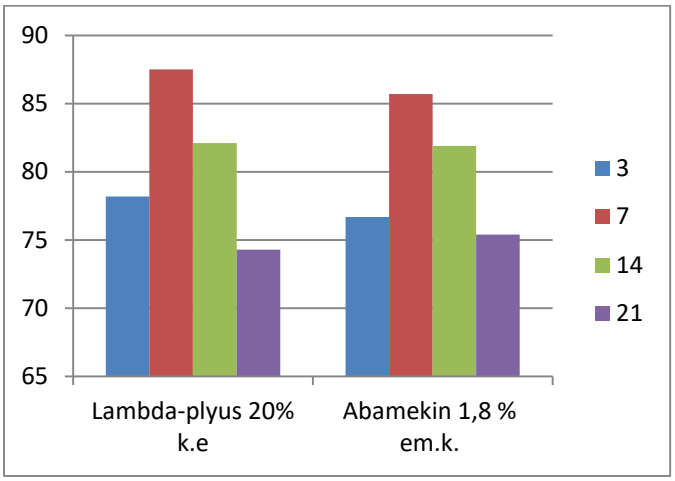

Diagram 1.Biological efficacy of spider acaricides in intensive orchards ("ErkinShakhinaShakhzoda" farm in Qibray district of Tashkent region, July 2, 2020)

CONCLUSIONS AND SUGGESTIONS:

Research has shown that in intensive seed orchards, spider mites are an important factor in managing the number of timely control measures using effective chemicals, taking into account their bioecology and survival. High biological efficiency can be achieved by first applying Lambda-plus 20% k.e at a rate of 0.1 l/g per hectare of chemical control measures against spider mites.

Timely implementation of agro-technical measures in late autumn and early spring in the fight against spider mites in intensive seed orchards, the crop grown maintenance during the growing season using low-toxic chemicals for the environment and beneficial insects possible.

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