NOVATEUR PUBLICATIONS
JournalNX- A Multidisciplinary Peer Reviewed Journal
ISSN No: 2581 - 4230
VOLUME 9, ISSUE 1, Jan. -2023

GETTING TO KNOW THE PROCESS OF USING CHEMICAL PREPARATIONS IN INTENSIVE APPLE ORCHARDS

Otayev Odilbek Yo'ldoshevich
Xorezm Mamun Academy, Junior Researcher of Natural Science Department,
O.Otayev@bk.ru

Azatova Gulasal Umidbek qizi
2nd Master Degree Student of Agronomy, Urgench State University,
Gulasal1404@gmail.com

ABSTRACT
This article shows the biological effectiveness of aphids and chemical preparations against them in the intensive gardens of Khorezm region. The description of the used chemical preparations is given.

Key words: aphids, apple maggot, pesticides, cypermethrin, bi-58, efficiency, apple.

Scientific staff of the Scientific-Research Institute of Plant Quarantine and Protection provided the necessary information on the use of methods of applying drugs against garden pests.
Sh.T. Khojaev's book "Methods and conditions of using pesticides in agriculture and conducting research" (2020) is widely used to determine the effectiveness and application of chemical pesticides against pests.
Alpha cypermethrin against the apple fruit borer (Carpocapsa pomonella), which is widely used in apple orchards, duet active substance (chlorprifos + cypermethrin), Yason's active substance lyamdocyclogalathrin drugs and Mospilan 20% against apple aphids active substance (acetampirid), imidaclopyrid active substance (gaucho), B-58 active substance (dimethoate) preparations are being tested.
Alpha-cypermethrin is a protective and repellent contact, enteric insecticide for the control of a wide range of insects. It has a long-term residual effect, as well as repellent and antifinding properties. Mechanism of action effective at all stages of insect development.
Alpha-cypermethrin, like other pyrethroids, affects the exchange of calcium in synapses and sodium-potassium channels, disrupts the activity of the nervous system. This leads to a significant excess release of acetylcholine as the nerve impulse passes. Poisoning is manifested in damage to the motor centers, strong agitation. Yason, SP acetamiprid 200 g/kg.
Yason is a systemic insecticide of contact-gastric action that is effective against semi-hardy, thrips, hardy and even-winged members of the family. Cucumber and indoor and outdoor tomato, onion, cabbage, pepper, citrus crops, flowers, apple, pear, tobacco, etc. are widely used in pest control. the drug protects against Lepidoptera, half-winged, thrips family, Coleoptera and flat-winged. Systematic and contact actions allow pests to be affected even through untreated areas of plants. The product can spread across cultures. As for plants, the drug is characterized by a good systemic and translaminar effect, as a result of which it is absorbed by the plant and spreads in all its parts. Therefore, the effect of using the drug is also manifested in untreated parts of plants. Pests die as a result of direct contact with

the drug, as well as consumption of treated plants. The insecticidal effect of the drug affects the nervous system of insects. is manifested by its effect on the system, which leads to the death of insects from excessive nervous excitement and paralysis.

Mospilan- The newest systemic insecticide of contact-intestinal action against representatives of isoptera, Coleoptera and heminoptera and Lepidoptera groups. The active ingredient of the drug is acetamiprid (class acetamides).

The effect of the drug on harmful organisms is unique and differs from currently used pesticides: acetomiprid interacts with nicotine-acetylcholine receptors of the postsynaptic membrane as an opponent of acetylcholine. However, unlike acetylcholine, mospilan - the active substance of the acetomiprid drug is not destroyed, which leads to a violation of the transmission of nerve impulses through the synapse, and the insect dies. It has a systemic and contact effect and can spread throughout the plant. Therefore, the anti-pest effect of the drug is manifested even in untreated areas of plants. Due to the new mechanism of action, harmful objects do not resist it, it maintains high biological efficiency at normal and high temperatures, it does not have phytotoxicity. The duration of the drug's protective effect is 14-21 days. Low toxicity for warm-blooded animals, dangerous class - 3malotoxic for pollinators-bees and bumblebees, safety factor 3 corresponds to most of the used pesticides, except for high alkalinity, does not shrink during storage. , does not change its properties when the temperature changes. **B-58-** contact and systemic insectocaricide against pests. It destroys insect pests in fruit, berry, flower crops and grapes. Purpose of Bi-58. Contact and systemic emulsion concentrate is designed to combat sucking and rodent pests. Bi-58 is designed to protect crops such as apples, pears, plums, currants, raspberries, grapes, vegetables, flower crops, ornamental shrubs. Bi -58 is used against the following pests: false scale insects, scale insects, mites, aphids, aphids, copper, moths, moths, leaf eaters, caterpillars, beetles, sawflies, caterpillars, leafhoppers, gall , bedbugs, thrips, etc. method of use: dissolve 2 ampoules (10 ml) in the required amount of water (see). table), mix well. Treatment is carried out with a sprayer in the morning or evening in dry, calm weather at a temperature not higher than +25°C.

The biological effectiveness of a pesticide is determined by the number of pests reduced under the influence of the drug or by the affected (diseased) plant itself and some of its organs (root, fruit, leaf, stem).

There are different formulas for determining biological effectiveness. Among them, the most common is the natural development of the pest in the control plot **Abbot's formula.**

$$C = \frac{Ab - Ba}{Ab} \times 100$$

Here: A- The number of times the pest was sprayed with the drug in the experimental plot.

a- in the days after spraying the drug.

B- The number of pests in the control area before the drug was sprayed.

b- in the days after spraying the drug.

Alpha cypermethrin, duet active substance (chlorprifos + cypermethrin), Yason effect in order to determine the biological efficiency against the apple worm in the area of 4 hectares of intensive apple orchard of Khorezm scientific research institute of agrotechnologies of cotton breeding

lamdocyclogalathrin preparations, mospilan 20% active ingredient (acetampyrid), imidaclopyrid active ingredient (gaucho), and B-58 active ingredient (dimethoate) were tested.

Treatment against aphids was carried out from June 7 to June 21. Every 3-7-14 days, aphids in the field were recorded in the field notebook. 1 option was set to 10x100cm (1000m2) and the limits of the options were left from 3 meters. As a result, after 7 days, the biological efficiency of acetampiride was - 87%, gaucho -90%, dimethoate -94%.

Biological effectiveness when using preparations against aphids.

№	**Options**	**Consumption rate l/ha**	**Average number of aphids on 1 infected leaf**				**Biological efficiency, in % in days**		
			Before working	**In the days after processing**					
				3	**7**	**14**	**3**	**7**	**14**
1	Mospilan 20% li	1.0	9.5	1.9	1.24	1.71	80	87	82
2	Imidaclopyrid	1.0	9.1	1.45	0.91	1.37	84	90	85
3	B-58	1.0	9.8	1.37	0.59	1.18	86	94	88
4	Control option	-	10.2	10.8	11.7	12.6			

Treatment against aphids was carried out from June 7 to June 21. Each apple worm in the field was recorded in the field notebook for 3-7-14 days. Experiments consisted of four options, and option 1 was designated as the control option. 1 option was set to 10x100cm (1000m2) and the limits of the options were left from 3 meters. As a result, after 7 days, the biological efficiency of alpha cypermethrin was - 89%, chlorprifos + cypermethrin -87%, lamdocyclogalathrin -84%.

Biological efficiency when using anti-apple worm preparations.

№	Options	**Consumption rate l/ha**	Damaged apple %	Biological efficiency %
1	alpha cypermethrin	1.0	3.2	89
2	duet	1.0	3.8	87
3	Yason	1.0	4.7	84
	Control option	-	29.2	-

In short, alpha-cypermethrin has a 3-5% higher biological efficiency compared to duet and jason, and mospilan compared to aphids, and bi-58 pereparat has a 3-6% higher biological efficiency compared to imidoclopyrit.

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