# MAIN PUMPTIN PESTS OF PEACHES AND MEASURES AGAINST THEM

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## ABSTRACT

The article provides information about the system of peach cultivation in the world and in the above privacy in Uzbekistan. The biology and ecology, morphology of the main sucking peach pests, such as large peach stem aphid, are given the harmfulness and operational measures for combating these pests.

***Key words: peach garden, suck insect, pest, biology, ecology, entomophagous, chemical preparation.***

As the world's population grows, so does the demand for food. Therefore, it is important to provide a stable supply of agricultural products, increase the number of peach orchards (Persica vulgaris) and grow quality export-oriented products from them. The total area of peaches in the world today is 115,000 hectares, with a gross yield of 21,2 million hectares. In particular, 14.3 million tons were planted in China, 1.8 million tons in Spain, 1,147,000 tons in Italy, 541,000 tons in the United States, 1,000 tons in Greece and 20,000 hectares in Uzbekistan, yielding 161,905 tons [1].

Therefore, today, along with the expansion of peach orchards, it is important to protect them from pests and preserve the crop. Our observations show that peach orchards are significantly affected by a number of rodent and sucking pests, including these pests; peach body juice, peach green juice, thyme, oriental fruit and other pests. Among these pests, it has been observed that in recent times the damage of peach juice has increased, leading to a sharp decrease in yield.

Adult peach body sap - P.persicae body color is gray with transverse rows of black spots with brown centers. His mustache and legs are covered with reddish brown and black stripes. P.persicae is a large body sap, with apterae ranging in length from 2.7 mm to 4.2 mm. P.persicae form dense colonies in the fruiting part of the tree. They form a large number of pits and are usually attended by ants. They originated in East-Central Asia and spread westward along the traditional trade routes in the past centuries, probably with their trees. In recent decades, P.persicae has spread west and south to Europe and the Middle East, where it has become an important pest of peach and almond trees [6].

Studies on population dynamics have shown that aphids first appear in the roots and then rise to cover the roadside and trunk, where the populations acted differently [2]. The effect of host and temperature on biotic potential in controlled field conditions was studied. Juice adults grew on peach, almond, plum and apricot branches at different temperatures (15º, 20º and 25ºC). 20ºC is the best temperature for the reproductive potential of P.persicae was the best host for peach buds in terms of mass growth [3]. P.persicae described an individual morphological variation, from three host plants in two locations in Tunisia with three climatic conditions, peach, almond, and plum. 13 morphological features were studied in 90 wingless sap collected from three host plants. The results suggest that the host plant species may affect the morphology of P. Persicae [4]. Chrysoperla carnea, Coccinella undecimpunctata, Pauesia antennatava and Coccinella algerica, two of the most common natural relatives of saplings, play an important role in controlling the number of pests [3]. Preparations: Vegetable oils, mineral oils, calcium sulfate + laxative powder have also been studied as one of the most effective methods in pest control [7-8]. As a result of the widespread use of chemicals against sucking pests found on the peach tree in the conditions of the republic has led to a sharp change in the number of natural entomophagous populations in the biocenosis.

Therefore, in the peach biocenosis, it is advisable to use drugs that have little negative impact on natural insects during pest control. We tested chemicals with Chemical spraying of trees infested with sucking pests was carried out on a motorized hand-held device at a rate of 700 liters of working fluid per hectare. Calculations were performed every 3, 7, 14 and 21 days before and after spraying. The calculation of biological efficiency was performed according to the Abbot formula. The results of the initial experiments are presented in Table 1 below.

**Table 1**

Vertimos x 6% em.k against spiders in peaches. Efficacy of the drug (Abamectin 20 g/l + Acetamiride 40 g / l)

*(Field experiment, Tashkent region, Kibray district, experimental field - 700 l/ha, 2020)*

| № | Options (drug name) | Consumption rate, l\ga | Average of 1 leaf number of pests | | | | | Biological efficiency by days,% | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Before processing | After processing In the days | | | | | | | |
| | | | | 3 | 7 | 14 | 21 | 3 | 7 | 14 | 21 |
| 1 | Control (unprocessed) | - | 18,6 | 22,5 | 23,6 | 24,8 | 25,2 | - | - | - | - |
| 2 | Atilla 5% em.k. (standard) | 0,5 | 20,2 | 2,2 | 2,0 | 3,1 | 3,7 | 91,0 | 92,1 | 88,5 | 86,4 |
| 3 | Vertimos iks 6% em.k. | 0,3 | 19,6 | 1,6 | 1,1 | 0,6 | 0 | 93,2 | 95,6 | 97,7 | 100,0 |

According to the table, Atilla, 5% em.k.- 0,5 l / ha, when used against peach spider mites, the biological efficiency increased by 91,0% by 3 days after spraying and by 92,1% by 7 days. In the variant used in the amount of Vertimos x 6% em.k – 0,3., L / ha, the number of aphids was reduced to 93,2-100,0% compared to the control.

**Table 2.**

Vertimos ix 6% em.k against peach body juice. efficacy of the drug (Abamectin 20 gr / l + Acetamiride 40 gr/l)

*(Field experiment, Tashkent region, Kibray district, experimental field - 700 l/ha, 2020)*

| № | Options (drug name) | Consumption rate, l\ga | Average of 1 leaf number of pests | | | | | Biological efficiency by days,% | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Before processing | After processing In the days | | | | | | | |
| | | | | 3 | 7 | 14 | 21 | 3 | 7 | 14 | 21 |
| 1 | Control (unprocessed) | - | 15,2 | 17,5 | 18,2 | 19,4 | 20,2 | - | - | - | - |
| 2 | Atilla 5% em.k. (standard) | 0,5 | 16,0 | 2,3 | 2,0 | 3,3 | 3,7 | 87,5 | 89,6 | 83,8 | 82,6 |
| 3 | Vertimos iks 6% em.k. | 0,3 | 17,2 | 1,5 | 0,9 | 0,3 | 2,5 | 92,4 | 95,6 | 98,6 | 89,1 |

According to the data in Table 2, Atilla 5% em.k - 0.5 l / ha, when used against peach-infested juices, the biological efficiency increased by 87.5% by 3 days after spraying and by 89.6 by 7 days. %. In the variant with Vertimos x 6% em.k., - consumption of 0.3 l / ha, it was found that the number of syrups decreased from 92.4 to 98.6 compared to the control.

In conclusion, in the Tashkent region, 2 species of spiders, 6 types of spiders, 6 species of spiders, peach sap, green peach juice and 2 species of shield predominate in peach orchards. to date has not lost the importance of the economic damage it brings. Although measures are taken to control these canals in the country every year, to date, the threat of this type of spider mites and aphids to gardens remains, as well as the creation of a modern, environmentally friendly, highly biologically and cost-effective system of pest control. remains one of the most pressing and important issues of the day.

Experimental results show that the tested Vertimos x 6% em.k. The drug has a high biological effectiveness against sucking pests found in peaches, the biological effectiveness of sucking pests is more than 90% by 14 days when applied in scientifically justified periods. The results of the experiments also showed that

high biological efficiency can be achieved if the chemicals are used in scientifically based terms, ie in the presence of an average of 3-5 sucking pests per 1 leaf.

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