

BIOECOLOGY, PESTS AND CONTROL MEASURES OF PSEUDOCOCCUS COMSTOKI KUW.

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Abstract: The article describes the distribution, bioecology and harmfulness of the Comstock worm, which causes damage in gardens. In addition, the results of experiments with chemical preparations against the Comstock worm are presented.

Key words: Fruit tree, temperature, Comstock worm, claws, egg, larva, pesticides, effectiveness

Enter. Comstock's worm - (*Pseudococcus comstoci* Kuw) belongs to the subfamily of the coccidae family, coccidae - Sossinea. Widespread, omnivorous insect. It can be found in almost all fruit and ornamental trees, woody plants and some herbaceous plants (even in cotton in places near mulberry rows). From fruit trees, it severely damages pomegranates, apples, pears, peaches, and mulberries.



Комсток куртi. (*Pseudococcus comstoci* Kuw) ning tashqi ko'inishi

The Comstock worm hibernates in various places: trees, under grape skins, around roots, in wall cracks in the form of eggs. When laying eggs, the female takes out a waxy white feather (ovisak) and places it inside. The remaining forms (larvae, adults) die during the winter. Due to various reasons, most of the eggs may die in winter. In the spring (March-April), the larvae emerge from the cocoons and move along the trunk of the tree. Comstock worm

cannot move and migrate far. It can move from place to place mainly in various passive ways: on seedlings and fruits, water flow, agricultural equipment, clothes. The first young of the Comstock worm are active, the 2nd and 3rd young are less active. Comstock worm hibernates in the cracks of plant stems, under the bark, in branches and in the soil around the tree trunk, at a depth of 35 cm. The larvae hatch in the spring when the trees are leafing. During the egg-laying period, the female Comstock worm produces a white cotton-like sac that surrounds the body. Larvae that should turn into females and mature females are similar in appearance. The development of the male Comstock worm differs from the development of the female in that the larva that turns into a female molts 3 times in a row. jumps and then turns into a mature female shortly after the hibernation period. Two hibernation periods are characteristic for larvae that turn into males. Female chervets can spawn without changing their place after spawning. After two weeks, depending on the maturity of her eggs, she begins to crawl along the plant, looking for a place to lay eggs. The color of newly laid eggs is pale yellow, and as the embryo develops inside them, it turns black. Larvae emerge from overwintered eggs at the end of March, in the first decade of April, they become egg-laying breed in the first ten days of May, and by the end of May, larvae emerge from their second eggs. The female larva lives for 3 months; The development of a young larva takes 12-16 days; The second instar larva lasts 10-20 days and the third instar lasts 8-14 days. 42 - 65 days are enough for the development of one generation in summer. On average, the female lays about 200-600 eggs. After three years, the Comstock worm becomes an adult and begins to lay eggs after 10-30 days. The number of eggs laid by each breed is the highest in the first generation (up to 250-650). In the conditions of Uzbekistan, the Comstock worm develops 3-4 generations per season. Comstock worm (*Pseudococcus comstoci* Kuw) can damage more than 300 species of cultivated and wild plants. It damages all parts of plants (fruits, even roots). The worms usually feed along the veins on the back side of the leaf. Due to the damage of the worm, the leaves of the plant turn yellow and dry, the

branches become crooked, swelling and cracks are formed on the trunk, roots and branches of the tree. Such a tree weakens and is more quickly damaged by secondary (bark-eating) pests. The quality of the fruits deteriorates, and the productivity of the tree decreases.

Our experiments were carried out by testing a number of insecticides against the Comstock worm in the conditions of Andijan district. When applying pesticides, emulsions and suspensions of pesticides resistant to the external environment were sprayed. The average number of worms and beetles in the selected plants before processing was calculated, and after processing, the number of insects killed by pesticides on 3-7-15-21 was re-counted. The biological efficiency of pesticides was determined based on Abbot's formula.

The operations were carried out in the morning, when the air temperature was above 27-28 °C and the wind speed was 2 m/s, the flow rate of the working fluid was 200 l/ha.

In each variant, a tree was extracted from 6 bushes. The number of Comstock caterpillars in the mulberry inflorescence was counted every 3 days. The work was carried out on May 7, 2021 using a motorized suspension sprayer.

In the experiment, there was no fight against the Comstock worm in apples. In the experiment, Malaton 57% em.k 3.0 l/ha is used in the sample, Danadim expert 40% em.k 1.5 l/ha, in the amounts according to the rate of consumption. Before applying the drug, larvae are identified from each plant on a 10 cm stem. For this purpose, branches of 10 cm were examined from 5 places of each option. In this way, the number of larvae per 10 cm of stem is determined.

The organization of the experiment, subsequent accounting and calculation of biological efficiency were carried out in the "Methodological instructions..." (2004) approved by the State Chemical Commission of the Republic of Uzbekistan. Counting of adults and larvae of the Comstock worm was carried out based on the number of butterflies caught in 1 trap, after which the calculation of efficiency was carried out according to the Abbott formula.

Foydalanilgan adabiyotlar ro‘yhati.

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