

# Species Composition and Control of Plants Which Damage Pineapple Trees in Khorazm Region

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**Abstract:** This article identifies aphid species that are commonly found on arborvitae and juniper trees planted as ornamental trees in the Khorezm region, presents their bioecological characteristics and countermeasures.

**Key words:** tree, aphid, insecticide, entomophage, conifers, branch, leaf.

**Introduction:** On the initiative of President Shavkat Mirziyoyev, the "Green Space" project is being implemented in our country from March 1, 2022. The green space is understandable for everyone, the name is fluent, the content is deep, and the essence is a great expression. And the green space is an important step in the way of beautifying the place where we live, our neighborhood, our city [5]. A lot of pine trees are planted in our region to create a green space, but currently, the species composition of their pests and effective methods of combating them have not been developed.

**Relevance and current status of the topic:** Various types of palm trees are widespread in our country. They are planted in the plots of land for the purpose of greening the population, for landscape landscaping, Tuya and Majavelnik. In the next period, the condition of deciduous plants is observed to deteriorate in nurseries, roadsides and farm lands. Seedlings are imported from local nurseries and from foreign countries. In the next decade, the condition of the trees in the city and around the residential roads is expected to deteriorate. This condition can be caused by the deterioration of the ecology, a sharp decrease in humidity in some periods, the entry of harmful insects into the country, or the absence of effective methods of combating it. Having moderate conditions for the development of pineapple plants allows them to control the number of harmful insects with the help of natural entomophages. The introduction of a pest alien to the biocenosis causes irreversible processes and reduces the possibility of preserving biological diversity in the area. [1; 2]. We studied the aphids of saffron plants distributed in the conditions of Khorezm region.

**Methods of conducting experiments:** The research was conducted in the park of the Lokomotiv recreation park in the city of Khiva, Khorezm region, in the park of the Farovon Hotel, and around the roads belonging to Khorezm Yolkokalam LLC. Research on the testing of chemical preparations was carried out in Mojjevelnik and camel trees in the Lokomotiv recreation park in Khiva. Laboratory studies of plant sampling and study of damage symptoms were conducted based on generally accepted methods with the help of appropriate methodological manuals [3, 4].

**Research results and their analysis:** Identified aphids Mojjevelnik aphid (*Cinara juniper*) has a pear-shaped body with a size of 3.05 x 1.75 mm. There are 2 dark stripes on the back from the head to the abdomen. It was found that it hibernates in the egg state. From the second ten days of March, it was observed that they emerge from the eggs and begin to suck the sap of the plant. Gives 3-4 portogenetic generations during the season. In October and November, male and female aphids begin to lay eggs for the winter. It feeds by sucking plant sap

from March to November. As a result of its damage, 2-4 year old saplings dry up. It damages the plant's buds, stems, and branches.

*Cinara Cupressi* - the body has a soft brown color, the size is from 1.8 to 3.9 mm. Color-changing yellow-brown black spots and shiny yellow spots are also found. There is a black border on the chest. They are often found on young green shoots, brown leaves on old shoots. For example: up to 80 aphids can be found on a 10 cm stem. They are often found in the lower parts of the plant where there is more shade. As a result of strong drying of the weather, they fall to the ground to protect themselves from the heat. It feeds on the sap of plants and causes its branches to dry up. Ants transfer their nymphs from dry branches to green branches, thus damaging the plant and causing it to dry up.

High relative humidity of atmospheric air and temperature of 15-20°C increases the development of aphids, resulting in increased damage to trees. Infected trees are seen with shiny leaves and branches. The soil under most trees appears to be wet and dark in color. This color appears due to the juices spilled from the plant. The fact that the climate is dry and hot prevents their reproduction a little. *Cinara juniper* and *Cinara cupressi* species are spread in the Mojjevelnik and camel trees planted in Khorezm region, and many damage to the pineapple plants is observed.

**Table 1**  
**Biological effectiveness when using preparations against aphids.**

№	Options	Consumption rate l/ha	Average number of aphids on 1 infested leaf			Biological efficiency in %			
			Before processing	In the days after processing			3	7	14
				3	7	14			
1	Mospilan (asetamiprid)	1.0	8,3	1,2	1,1	0,8	85,5	86,7	90,3
2	Gaucho(imidaklapirid)	1.0	9,6	1,3	2	0,9	86,4	79,1	90,6
3	B-58 (Dimetoat)	1.0	10,1	1,37	0.6	0,8	86,4	92	94
4	Nazorat variant	-	12.4	12,8	12,7	12,9			

The biological effectiveness of insecticides against aphids was studied. The obtained data are presented in Table 1. The drugs Mospilan (acetamiprid), Gaucho (imidaclapirid), B-58 (Dimethoate) were used, and the biological efficiency of the drug Bi-58 was higher. All tested preparations can be used for aphids. It was found that only the Bi-58 paraparata has a higher efficiency compared to other paraparatas.

In short, aphids belonging to two species, *Cinara juniper* and *Cinara cupressi*, are widely distributed on camellia and mozhjevelnik trees. Bi-58, Mospilan, Gaucho devices can be used against them.

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