

QUARANTINE EVENT AGAINST THE CALIFORNIAN SCALE INSECT
(*DIASPIDIOTUS PERNICIOSUS* COMST)

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ABSTRACT

A dangerous pest is widespread in Uzbekistan. Of these is a dangerous coccid. They damage many plants. It damages the apple tree, pear, plum, quince, peach, almonds, hawthorn, elm, poplar and others. Winter diapausing larvae of the first age, covered with a dark gray or black shield. In the spring they are intensively fed, molt and form a shield similar to that of an adult female. After the second moult, adult females are formed. After mating, females spawn larvae-tramps, which creep along branches and leaves, and can also settle on fruits. They give rise to the next generation.

Key words: *Female, male, nymph, larva, phase, cycle, control measures.*

HARMFULNESS

Damages about 270 plant species from 84 families, prefers the Rosaceae family (apple, pear, apricot, plum). Appearing in the garden, in a short time forms dense colonies on trunks, branches, leaves and fruits. The scabbard depletes trees, causes longitudinal and transverse cracking and death of the bark, premature fall of leaves, a decrease in growth, curvature and drying of shoots, crushing and deformation of fruits. A high number of pests causes the death of plants.



Harm of the California scale insect on an apple tree.

MORPHOLOGY

It belongs to the order *Hemiptera*, the family of the scale insects (*Diaspididae*). Sexual dimorphism is observed. Female: Scutellum round, 1.5-2.0 mm in diameter, slightly convex, dark gray in the center, lighter at the edges. Larval skins are in the center of the scutellum. The body is rounded, the color is lemon yellow. Eyes, wings and legs are missing. Antennae in the form of tubercles, proboscis almost three times as long as body. In wintering larvae, the scutellum is larger and black in color. Male: The imago is light orange in color, with 1 pair of wings, well developed legs, 10-segmented antennae. The scutellum of the male larva is oblong-oval, up to 1 mm long. Females and males in different cultures and feeding places show variations in the size, shape and color of the scutes. The most convenient for identification is the structure of the female pygidium. Tramps are the same in both sexes, lemon yellow in color, 0.26 to 0.3 mm long, with three pairs of legs, a pair of antennae, two long hairs on the last abdominal segment. The eyes are simple. The mouth apparatus is in the form of a long proboscis, coiled and inserted into a special case on the ventral side.

Biology. Females are viviparous - they give birth to mobile vagrant larvae (I instar), which find a suitable place for feeding and stick to the plant. The larva of the 1st instar begins to secrete wax filaments, forming a "white shield", soon the shield darkens ("gray shield"), and after 7-8 days the larva molts. Differences between the sexes appear after the first molt. The second instar female larva has no eyes, antennae, legs; the larval skin is attached to the inner part of the scutellum; it is distinguished from the adult female by the absence of a vaginal slit. Females form a round shield, under which they remain until the end of their lives. Males molt 4 times, going through successively more stages of pronymph (the construction of an oblong scutellum ends), nymphs of the 1st stage (the rudiments of legs, antennae, wings are already visible) and nymphs of the 2nd stage, after which they turn into adults. At all stages of development, males have eyes.

Distribution methods. With planting and grafting material (seedlings, cuttings). "Tramps" can crawl from tree to tree along the branches, be carried on people's clothes, but their life time is limited - a few hours.

Quarantine measures and control measures. Inspection of imported planting material. Fumigation of seedlings. Timely identification of foci, localization and elimination. Monitoring is carried out using pheromone traps. Treatment of populated plantations with mineral-oil emulsions, organophosphorus and pyrethroid preparations.

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