

# Bioecology, Crystal Pharmaceutical Support and Efficiency of California Shield

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**Abstract:** *Conservation of plants in the Republic of Uzbekistan is extensively carried out. The basis of this system is to fully protect crops from harmful organisms in a particular phyto-sanitary environment and to ensure the adequacy of this agro-ecosystem. This means not only destroy the harmful organisms in nature, but also balance the biological diversity and species in agrobiocenosis. When pheromone handles are used against the first generation of Californian shield, it is most effective because in nature, the number of rocks is usually 1:1 and the male shields are reduced to 50-60%, resulting in 70% fertilization.*

**Key Words:** Fruit garden, mature breed, generation, larva, damage, tackle, entomophag, pheromone.

**Introduction.** Bioecology of Californian shield has been studied in Kibray district of Tashkent region of the Republic of Uzbekistan. They are mainly found in fruit trees, causing serious damage to apple, pear, plum, cherry, peach, cherries, plum, black currant, forest and ornamental forest trees, roses, flowers, flowers and red fruit trees. The Californian shield's homeland is located in the North-East Asia, Khabarovsk, Primorye, Russian Federation and Korea [1,4].

**Literature analysis.** Californian pelicans are pearls of the genus *Real Nucleus (Homortera)*, a family of genuine shields

(*Diaspididae*). The shield of the females is ovals, almost round, width and length can be equal or slightly larger. The size of the shield varies strongly depending on the type of plant and the nutritional value. Its size is about 2 mm. The shield of the male is much shorter than the shield of the females, with a length of 0.6 - 0.7 mm. The size of the shield does not change depending on the type of plant species and nutritional location. The color of the shield is light gray to brown, sometimes black, and white to black, or white to black [4,5]

The females' shield is round and has the same length and width. The body of the man is long and the shield is in the same shape. The females and the male body are the same as a lemon. As the females do not have legs and wings, they are still moody, and their mustaches become rudimentary. The mouthpiece consists of a suit-type, well-developed, a truncheon and a shield, three times the size of its body. The female transplants the stages of developmental development (larval period and mature insect), and the male takes complete developmental phase (larva, pronimfa, nymfa and mature insect). The mature male insect has a bright orange color, has three legs, a mustache of 11 parts, and a pair of wings, his eyes clearly visible, and the mouth device is not well developed. In our country there is also a fake californian shield similar to the California shield, pink yellow shield, pear red shield, and

southern pocket poplars. In the parks of our country there is another species of southern puppy which does not differ from the California shield. The females of this species are wintered.

These can only be distinguished from combinations of microbes at the end of the abdomen [2,3,6].



*Californian shield damage to apples.*

**Research results.** The California Calabash can be fully or partially based on the climatic conditions of the fourth generation, which will give a total of three generations a year. The first-year larva grows under a dark shield. At a temperature of + 7.3 ° C, the first development period begins with the first buds of the apple [4.5].

At the first development period from 12th to 16th day, the second development period the longer it goes. During this time, the male begins to fly shields, and the females are sexually transmitted. Male shields live very few hours. He dies after joining the female. The appearance of male and female shields will last from March to April, depending on the temperature. It is important to determine the time for the appearance of insect pigs, so pheromone handles should be put in the optimal time, because the male insects are only for a few days. Sometimes the majority

of male insects fly over two to three days. The female insect is only two and a half months older. After fertilization of the females of the insect, the egg cells develop [3,4,7].

*The phenolic calendar of the development of Californian shields.*

Generations	March			April			May			June			July			August			September			October					
	I	II	III	I	II	III	I	II	III	I	II	III	I	II	III	I	II	III	I	II	III	I	II	III			
1st Generation																											
2nd generation																											
3rd generation																											

Egg   
 Larva   
 Imago   
 Reproduction Stage

(This table is based on the Tashkent region.) In the southern part of the country, the retreat of the California shield was on the 1st day of February, and the wintering was observed in November.)



It is well known that in the new areas, California's pelicans are spread out with sowing materials and fruits. Regional expansion is made by wind. Therefore, the velocity, the direction of the wind and the position of the raft are of great importance. In valleys, shields are spread faster than mountainous areas. They are mainly spread in gardens of intensive (intensive) gardens. California Calabria harms different plants - trees, shrubs and herbaceous plants. Californian shrubs are more harmful to apple, pear and beetle than fruit plants on forest plants. The floristic plants are more common in beans, carrots, raspberries and gourds, and they grow to the end of the vegetation period and die in the same season as the season ends. It is characteristic of appearance of red spots on the fruits of the herbs, horns, on the bark of young branches. In the old bark, red spots can not be seen, and

when descending to the longitudinal, dark spots may appear on the gray or dark brown, and on the surface there may be darkness in the nourishing parts of the shrub. In addition to the spots on the bark, combs and teeth appear, so the bark becomes uneven. If the plant is damaged by long-term shield, not only the bark, but also the internal tissues, will also affect the healthy growth of the plant [1,4,5].

As a result, cracks appear, become brown beard and resemble an old tree bark. As a result of the long-term damage to the colonies of the shingles, some of the bark, horns and whole tree truncates. The red spots in the fruits can also be influenced by shields like the California shield. These spots are usually scattered on the fruits. The California Caldwell has a balloonlike ball. They should be sent to the entomology laboratory for accurate diagnosis [1,4,7].



***Prospaltella (Prospaltella perniciosi)***

In nature, 22 coral and 3 parasite infections have been detected in the California shield. Examples of coccinellites that are effectively beneficial to the calf are chilocorus

renipustulatus scrib and two-point octocorus (*Chilocorus bipustulatus L.*), seven-point kennel daughter (*Sossinella septempunctata L.*). In some gardens, the number of shields is significantly

reduced by chrysopaprazine (*Chysopaprasina Burni*) (spring), simple chrysopa (*Chrysopa carnea Steph*) and seven point chrysopen (*Septempunctata*

*Weam*) (summer). Parasite entomophagy: *Aphitis proclia* Wlk, *Ap.Mytilaspidis* Baron and *Prospaltella perniciosi* Tow. can be found in [1,2,6].



*Control of the Californian shield by pheromone traps.*

**Summary, suggestions and recommendations.** Determination of the appearance of California shield is carried out in all orchards, forest and ornamental shrubs. The main thing - apples, plums, pears, currants and other trees should be thoroughly checked. Wild trees and ornamental shrubs are primarily of Rosemary family: hawthorn, honey, tern, wild pear, apple, and others. Measures taken to combat identified areas are being implemented. Alttinoz larvae give good results against stomach larvae. In highly contaminated areas, insectocides are used against the shield. In the late autumn, strongly damaged rods and branches are cut off and burned in specific areas. The pheromone handles can be used not only for controlling but also as a fight against the shield. It is mainly used for the first generation, which gives a good result, since the shields start collaborating together in 6-7 days. The female populace can only

grow sexually. 50-60% of male shields resulted in 70% of females being fertilized.

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