

Pest Profile



Photograph: Whitney Cranshaw, Colorado State University, Bugwood.org

Common Name: Eugenia psyllid

Scientific name: *Trioza eugeniae*. The Eugenia psyllid is a hemipteran of the suborder Heteroptera. They belong in the family Psyllodea. Eugenia psyllids are a pest of Eugenia plants (bush cherry).

Identifying Characteristics: The psyllid lifecycle is incomplete where the yellow egg is laid under the surface of the leaves. The nymphs are scale-like and flat in nature with small white hairs around the margins that are found on top of the leaves. The adults are tan orange to brown in color and have wings. The adult psyllid resembles an aphid.

Host range: Feeds on Eugenia, a flowering plant in the myrtle family. It has also been observed to cause damage on the New Zealand Christmas tree.



Photograph with permission: Jack Kelly Clark

Description of Damage: Eugenia psyllids feed and reproduce on Eugenia plants. Psyllids suck plant juices with their piercing-sucking mouthparts. The adult female lays her eggs on new leaves. After they hatch, the nymphs crawl to the underside of the leaves and become immobile. They begin sucking the plant juices, creating a pit where they will stay and continually feed. The leaves twist and distort with the pits resembling a reddish “blister” on the top surface of the leaves. The nymphs create tiny white excrement pellets made of honeydew. Honeydew will collect on the leaves and can become black, sooty mold. High populations can reduce the growth of the plant.

Life History: Psyllids have an incomplete lifecycle that starts with gold colored eggs laid on leaves of Eugenia. Once they hatch, the nymphs then start out as crawlers and are mobile. They move to the underside of the leaves where they will create a “pit” and begin to feed on new growth. There are five instars before the nymph becomes an adult. In areas where psyllids were first introduced, like California, the Spring is when there is new growth of the Eugenia plants and the first cycle begins. Psyllids typically go through two generations per year but are considered a year-round insect.

Distribution: Feeds on Eugenia plants (bush cherry) and are native to Australia but were imported to the United States (1988, California) via imported plant material.

Sampling Techniques: Monitoring for psyllids is important to managing their outbreaks. Most of the damage is aesthetic and visual inspection alone can identify a psyllid problem. Regular use of sticky yellow monitoring cards to capture adults can help quantify the number of adults present and may assist in determining whether a pesticide is needed. Branch beating, or shaking the foliage to dislodge adults, is another technique that in addition to dislodging adult psyllids may also reveal natural predators.

Management: Natural predators such as a parasitic wasp (*Tamarix dahlse*) can assist in the reduction of psyllids; however, some cooler climates may prevent the predator numbers from keeping up with psyllid numbers. Regular shearing of terminals can reduce the number of psyllids if performed every three weeks after maximum growth. Clippings from the shearings left at the base of the tree can help the natural predators by allowing them to complete their lifecycle within the psyllid nymphs that have already been laid on those cuttings. The psyllid eggs and nymphs on that cut plant material will die. No pesticide can correct the pits or leaf distortion once they have been damaged. Systemic insecticides have had some success in minimizing psyllid populations but can be quite costly.

References:

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