# Glassy-winged Sharpshooter

NOT KNOWN TO OCCUR IN IDAHO



Common Name: Glassy-winged sharpshooter

Scientific Name: Homalodisca vitripennis (formerly H. coagulata)

The glassy-winged sharpshooter, *Homalodisca vitripennis*, is a large leafhopper species native to the southeastern United States. It is one of the main vectors of the bacterium *Xylella fastidiosa*, a plant pathogen that causes a variety of plant diseases, including phony peach disease of peach and Pierce's disease of grape. Though usually not a serious pest in the area of its native distribution, the glassy-winged sharpshooter has recently been introduced into southern California, where it has become a serious threat to viticulture due to its ability to vector Pierce's disease.

## **Description**

The glassy-winged sharpshooter measures 1.5 to 2 cm, mostly brown-colored on the dorsal side, with ivory and black markings under the abdomen. Glassy-winged sharpshooters have large smoky-brown wings with red markings and are very good flyers, making them able to transmit plant diseases further than other vector leafhoppers such as the blue-green leafhopper (*Graphocephala atropunctata* (Signoret)). The face and legs of the glassy-winged sharpshooter are yellow-orange in color. Nymphs are wingless and gray, having a body shape similar to the adults.

## Life Cycle

The female glassy-winged sharpshooter lays her eggs in groups of three to 28 eggs just under the epidermis layer of several well-chosen leaves. Preferred plants for oviposition may include holly, sunflower and citrus. Strict nutrient requirements for young nymphs are believed to be important factors in the choice of plants for oviposition. As the female lays her eggs, she covers them with a white material scraped from deposits on her fore wings. Populations reach their peak around the summer months, and begin to decline late August. As winter approaches, adults migrate into forest areas and undergo incomplete hibernation in wait of spring. Mating occurs in the spring and summer.

### Feeding

*H.* coagulata feeds in the xylem, the water conducting tissue of both herbaceous and woody plants. Its known host range is vast, including more than 100 plant species. Preferred plants depend on the season and locality, but, in general, the preferred species include crape myrtle, citrus, and holly. Glassy-winged sharpshooters tend to feed on last-year's growth and meristematic growth and excrete copious amounts of liquid as they feed. The sharpshooters ingest 100 to 300 times their dry body weight in xylem fluid per day, and in large populations, their high volume of excreta ("leafhopper rain") can become a problem,

leaving white residue on leaves. Due to the dilute nutrient content of xylem fluid, glassy-winged sharpshooters must have special adaptations to obtain the proper balance of nutrients. Feeding times are thus orchestrated to coincide with the period of peak nutrient content in the host plant.

#### Other resources

http://www.ipm.ucdavis.edu/PMG/PESTNOTES/pn7492.html

http://gwss.ucanr.org/

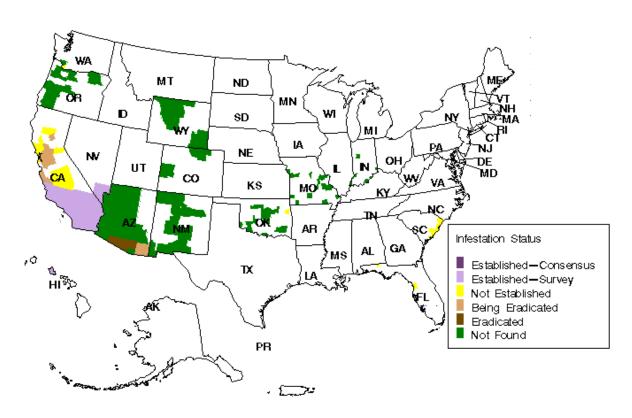
http://creatures.ifas.ufl.edu/fruit/glassywinged\_sharpshooter.htm

http://www.ars.usda.gov/is/AR/archive/nov01/sharp1101.htm

http://edis.ifas.ufl.edu/in552

Reported Status of
Glassywinged Sharpshooter , Homalodisca vitripennis (coagulata)
in US and Puerto Rico

Data retrieved from National Agricultural Pest Information System on 01/17/2012



The Center for Environmental and Regulatory Information Systems does not certify the accuracy or completeness of the map.