# Glassy-winged sharpshooter



# What is the glassy-winged sharpshooter?

The glassy-winged sharpshooter (GWSS) (Homalodisca vitripennis) is a xylem feeding leafhopper that causes direct damage to citrus plants through its feeding activities. However, the greatest threat is its potential to vector the bacterium Xylella fastidiosa subsp. pauca a fatal plant disease.

Over 350 plant species are hosts of GWSS including many commercial hosts like grapes, citrus, almonds and peaches as well as several ornamentals. These hosts would be severely threatened if GWSS became established in Australia, particularly if it is carrying *Xylella*.

# What does it look like?

Adult GWSS are easily visible with the naked eye, measuring about 12–14 mm long with a dark brown to black colouring and a lighter underside. The upper parts of the head and back are dotted with ivory or yellowish spots and their wings are partly transparent with reddish veins. Watery excrement often collects on the sides of the insect, appearing as large white spots.

Clutches of up to 27 eggs are laid on the underside of leaves in a side-by-side arrangement and are dusted with a layer of whitish powder. After hatching they change in appearance from green water blisters to tan or brown scars on the leaves. The immature nymphs that hatch from the eggs are wingless.

# What can it be confused with?

Australian leafhoppers from the Auchenorrhyncha suborder share some features with GWSS including larger size, brown colouration and large head with prominent eyes.



Adult GWSS showing white spots of excrement

Reyes Garcia III, USDA Agricultural Research Service, Bugwood.org



Adult GWSS on leaf surface

Johnny N. Dell, Bugwood.org



Adult GWSS on stem

Charles Ray, Auburn University, US, Bugwood.org





Yellowing of leaves in citrus infected with citrus variegated chlorosis

Alexander Purcell, University of California, Bugwood.org



GWSS egg mass on leaf ready to hatch

Reyes Garcia III, USDA Agricultural Research Service

# IF YOU SEE ANYTHING UNUSUAL, CALL THE EXOTIC PLANT PEST HOTLINE

**(** 1800 084 881

## What should I look for?

GWSS excretes copious amounts of liquid that can make leaves, stems and fruit appear white washed when dry. Look for egg masses that are usually laid into recently expanded foliage. Older foliage will contain the distinctive tan or brown scars left after the eggs have hatched. If *X. fastidiosa* enters Australia with the GWSS, the symptoms of citrus variegated chlorosis, such as leaf yellowing, brown lesions on the underside of leaves, leaf drop and small, hard fruit may be observed.

# How does it spread?

Adult GWSS are strong fliers and can move rapidly from plant to plant. Nymphs are wingless but can spread throughout the orchard by walking and jumping through the canopy or along the ground to a new host.

Most rapid and long distance movement occurs through the transportation of viable egg masses on nursery stock of either crop or ornamental plants.

### Where is it now?

GWSS is found in eastern and western USA, Mexico, Tahiti, French Polynesia and Hawaii. It has most recently spread to Easter Island and the Cook Islands.

# How can I protect my orchard from the glassy-winged sharpshooter?

Check your orchard frequently for the presence of new pests and unusual symptoms. Make sure you are familiar with common citrus pests so you can tell if you see something different. All staff and visitors adhere to orchard biosecurity and hygiene practices.



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