

BIOSECURITY SA – Plant Health

**Exotic Plant Pest Hotline:** 1800 084 881 (available 24 hours)Email [PIRSA.biosecuritysa@sa.gov.au](mailto:PIRSA.biosecuritysa@sa.gov.au)

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BIOSECURITY SA  
PIRSA

## GLASSY-WINGED SHARPSHOOTER (GWSS)

### *Homalodisca vitripennis*

- Glassy-winged sharpshooter (GWSS) (*Homalodisca vitripennis*) is an exotic plant pest and is not present in Australia.
- This insect is a serious threat to Australia's grape, citrus, olive and stonefruit industries

The GWSS is a xylem feeding leafhopper that causes direct damage to plants through its feeding activities.

However, the greatest threat is its potential to vector the bacterium *Xylella fastidiosa*. Over 100 plant species are hosts of GWSS including many commercial hosts like citrus, olives, almond and peach as well as several ornamentals. These hosts would be severely threatened if GWSS became established in Australia, particularly if it is carrying *X. fastidiosa*.

*Xylella fastidiosa*, a bacterium, is an important plant pathogen that causes Olive quick decline syndrome (OQDS) in olives, and citrus variegated chlorosis disease (CVC) in citrus.

### Subspecies

Subspecies name	Host(s)	Associated disease(s)	Found in
Subsp. <i>fastidiosa</i>	Alfalfa, almond, grape, maple	Almond leaf scorch, Pierce's disease of grapevines	North America, Central America, Iran, Taiwan
Subsp. <i>multiplex</i>	Almond, blueberry, elm, peach, pigeon grape, plum, sycamore	Phony disease of peach, plum leaf scald	North and South America, France
Subsp. <i>pauca</i>	Citrus, coffee, olive	Citrus variegated chlorosis	South America, Italy
Subsp. <i>sandyi</i>	Oleander	Oleander leaf scorch	North America
Subsp. <i>Morus</i> (proposed)	Mulberry	Mulberry leaf scorch	North America
Subsp. <i>Tashke</i> (proposed)	Chitalpa (ornamental hybrid)		North America
Pear leaf scorch	Pear	Pear leaf scorch	Taiwan

### What does it look like?

Glassy-winged sharpshooters are 12-14 mm long and easily seen with the naked eye. They are dark brown to black with yellow dots on their head and body. Their wings are translucent with distinct reddish veins visible. 'Clutches' of up to 27 eggs are laid on the underside of leaves in a side-by-side arrangement. Eggs are deposited just under the leaf surface giving it a blister-like appearance.



Top view of adult insect, showing reddish veins present in the translucent wings  
Photo: PaDIL (N. Hummel)

## What should I look for?

The large insects can be spotted easily with the naked eye following infestation, particularly as they commonly sit on leaf and stem surfaces. 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, leaf scorch symptoms may also be evident.



Egg masses of the GWSS on the underside of leaf  
Photo courtesy: The Regents of The University of California

## What can it be confused with?

There are a number of sharpshooters that are native to Australia that share features with the Glassy-winged sharpshooter. Head shape and size is one key distinguishing feature of the Glassy-winged sharpshooter, but an expert would be required to identify this pest to the species level.

## How does it spread?

Adult GWSS are strong fliers and can move rapidly from plant to plant. Nymphs are wingless but can distribute themselves by walking and jumping through the canopy or dropping from plants and walking to new hosts. Most rapid and long distance movement occurs through viable egg masses in nursery stock of either crop or ornamental plants.



White washed appearance of citrus fruit covered in GWSS excrement  
Photo courtesy: The Regents of The University of California

## 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.

## Reporting

If you suspect GWSS:

Call the Exotic Plant Pest Hotline

