Fact sheet

Plant Health AUSTRALIA

Greenhouse whitefly

What is Greenhouse whitefly?

Greenhouse whiteflies (*Trialeurodes vaporariorum*) are a serious pest of most greenhouse vegetables and many ornamentals. These pests are able to complete their life cycle and feed on the underside of host plant leaves.

Both the adult and immature life cycle stages feed on the host plants sap. The immature nymphs are the most damaging and their feeding can cause yellowing and mottling of leaves. Honeydew excreted by the feeding insects promotes sooty mould growth.

What does it look like?

The mobile juvenile instars are white to pale yellow and resemble scale insects. The juveniles become immobile and develop distinctive red eyes. At maturity, adults are small (about 1.5 mm long), white and moth-like in appearance.

What can it be confused with?

Greenhouse whitefly is very similar in appearance to the Ash whitefly and Silverleaf whitefly, but the latter prefers a hotter climate.

What should I look for?

Look for whitefly populations, which may include adults, larvae, nymphs and eggs, on the undersides of leaves. Infested plants usually become yellow (chlorotic) and they lose vigour with leaves dropping prematurely.

The presence of honeydew and the development of sooty mould on leaves is an indication of feeding activity.

David Cappaert, Michigan State University, Bugwood.org

Adult insects are white and around 1.5 mm in length

W. Billen, Pflanzenbeschaustelle, Weil am Rhein, Bugwood.org

Nymphs (depicted alongside an adult) are yellow/white with red eyes

Peter Bryant, University of California

Adults and nymphs are typically found on the underside of leaves

How does it spread?

Whiteflies are spread with infested plant material and attached to people and equipment. Greenhouse whiteflies are not strong fliers and will not spread large distances without assistance.

Where is it now?

Greenhouse whitefly is widespread in the southern states of Australia and it continues to cause problems in protected horticulture and nursery operations.

How can I protect my farm from Greenhouse whitefly?

Monitor for the presence of Greenhouse whiteflies through the use of yellow sticky traps. Regular inspections of plant material, particularly the undersides of leaves, will also increase the chances of detecting populations early.

Maintain good farm and greenhouse hygiene measures, including checking clothing for the presence of whiteflies, and where appropriate changing them, before entering clean greenhouse and farm areas. Dispose of crop residues and waste appropriately, and remove volunteers and weeds prior to planting, to limit the breeding environments for this pest.

Peter Bryant, University of California

Pupa on the underside of a leaf

Peter Bryant, University of California

Pupae cuticles often remain on the underside of leaves after the departure of the young nymphs

Whitney Cranshaw, Colorado State University, Bugwood.org

Multiple life cycle stages can be found on an infested leaf