Plant Health AUSTRALIA

Fact sheet

Almond leaf scorch (ALS)

What is it?

Xylella fastidiosa can infect almonds and cause leaf scorch (also called 'golden death'). Other strains infect grapes (Pierce's disease), citrus (variegated chlorosis), peach, pecans, plums, and some perennial ornamentals trees. No strains of this bacterium are present in Australia.

This bacterial pathogen is spread through grafting or by sap-feeding (xylem) insect vectors (such as spittlebugs, sharpshooters and leafhoppers). Vectors pick up the bacterium by feeding on infected plants.

It is possible that natural vectors of this pathogen may exist in Australia, but the most efficient vector overseas (Glassy-winged sharpshooter) is not currently found in Australia – and needs to be kept out. Green and red-headed sharpshooters are also proven vectors of the almond strain overseas.

What to look for?

Look for both the symptoms and the presence of sharpshooter or spittlebug vectors. These potential vectors are large enough to see with the naked eye.

Jack Kelly Clark, UC Statewide IPM Program

Almond leaf scorch symptoms showing zonate pattern

Jack Kelly Clark, UC Statewide IPM Program

Marginal scorching of leaves

Where is it found?

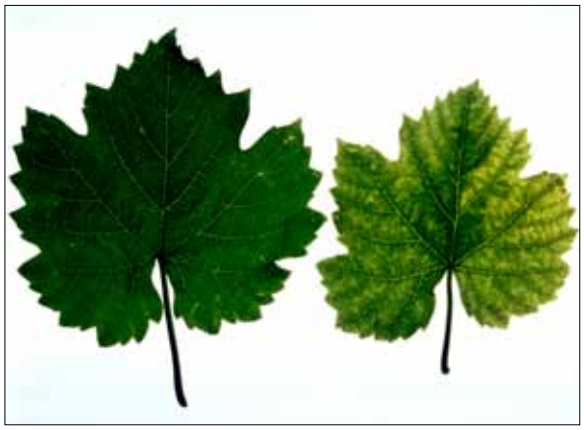
This pest occurs in North and South America, Europe and the Mediterranean and infects a variety of plant species. Winter severity affects bacterial and vector survival. Australian winters in all zones would allow both to persist.

Scholefield Robinson HORTICULTURAL SERVICES

ALMOND BOARD OF AUSTRALIA

Rebecca A. Melanson

Leaf scorch symptoms on pecan trees



Alex H. Purcell, University of California

Pierce's disease symptoms in grapevine

ENSA – Montpellier archive

Yellowing and dessication of grapevine leaves, and wilting of bunchers, due to Pierce's disease

Glassy winged sharpshooter and other sharpshooter eggs may be laid on a wide range of plants and therefore any imported host plant material needs thorough inspection.

Almond leaf scorch symptoms first develop as 'burn and bleaching' at the leaf tip and margins. They progress towards the mid rib and leaf base, leaving zones of necrotic tissue and a golden band between the part of the leaf still green and the scorched area. Unlike salt burn, almond leaf scorch symptoms are not uniform along the leaf margin. Even when dead, the ALS-affected leaves stay attached until autumn. Infected trees are stunted, less productive, have reduced terminal growth and may also bloom and leaf out later than healthy trees.

What is the best protection for my orchard?

Ensure windbreaks and neighbouring ornamentals are not preferred hosts of either the bacterium or its vectors. Some reservoir hosts do not develop symptoms.

Inspect in-coming plant material thoroughly for any symptoms or egg masses. Keep delivery, label and health-status testing records. If a range of cultivar/rootstock combinations are received, keep a field map of their planting. This assists traceability to nurseries, should an incursion occur.

Check your orchard frequently for the presence of new pests and unusual symptoms. Make sure you are familiar with common pests so you can tell if you see something different.

If you see anything unusual, call the Exotic Plant Pest Hotline on 1800 084 881.

EXOTIC PLANT PEST HOTLINE
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