

# Laurel wilt

EXOTIC PEST – CALL THE EXOTIC PLANT PEST HOTLINE IF SUSPECTED

## What is Laurel wilt?

Laurel wilt is a disease caused by the fungus *Raffaelea lauricola*, spread by the ambrosia beetle *Xyleborus glabratus*. It affects trees in the Lauraceae family, like avocado, causing wilting, decline, and eventual death. The disease spreads as female beetles carry fungal spores into the wood while creating galleries for their eggs.

## What does it look like?

### Redbay Ambrosia Beetle:

- Female adults are small (~2mm long), slender, and black-brown; males are smaller and flightless. Larvae are white, C-shaped, legless, with amber head capsules.

### Symptoms on Trees:

- Freshly attacked trees show few symptoms, but frass tubes and fallen frass may appear near the base.
- Bark removal may reveal shotholes with dark stains extending into the xylem.
- Advanced symptoms: wilted, discoloured leaves (red/purple to brown), leaf drop or retention, tree decline, and eventual death.
- Borer holes and protruding wood fibers may be visible externally, while internally dark-stained xylem and tunnels are present.
- Can be confused with drought/water stress or other diseases.

## What damage does it do?

- Beetles bore into xylem, creating galleries and introducing fungi that block vascular tissue, leading to wilting of leaves and stems.
- Infected trees die, causing significant yield loss. Control measures often require destruction of hosts.

## What can it be confused with?

- Redbay ambrosia beetle looks similar to other ambrosia beetles present in Australia; however, these do not cause Laurel wilt.
- Symptoms resemble Verticillium wilt. It is common for trees to recover from Verticillium wilt unlike Laurel wilt.



Female adult *Xyleborus glabratus* adults.



Male adult *Xyleborus glabratus* adults.



Avocado trees killed by Laurel wilt in Florida



### Where is it now?

Native to Southeast Asia, the Redbay Ambrosia Beetle is now an invasive pest causing significant damage in the USA.

### What are the risk materials and pathways they move around on?

- Primary risk of dispersal is through infested plant material and raw or manufactured timber products (firewood, waste wood, pallets and crates).
- Laurel wilt fungus spreads through beetle vectors or root grafts between neighboring trees.
- Plants for planting and wood chips are low-risk pathways.
- Female beetles are the only life stage outside the host and care rarely move on non-host material or fly short distances.
- Due to their reproductive biology, one female can establish a population.

### On-farm biosecurity practices

Developing an on-farm biosecurity plan and making sure staff follow good biosecurity practices are functional ways to reduce the risk of pests and diseases entering your orchard. Suggested practices for Redbay ambrosia beetle and Laurel wilt include:

- Monitor regularly and maintain comprehensive records of pest and disease monitoring.
- Use planting material from accredited nurseries.
- Avoid sharing equipment.
- Restrict movement of raw timber and waste wood.
- Inspect wood packaging for signs of infestation.



Symptoms of *Xyleborus glabratus* and Laurel wilt disease: (A) leaf wilting; (B) frass tubes; (C) dieback; (D) sapwood stain from fungal growth.

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



Use trees from ANVAS accredited nurseries



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