

Persea mite

EXOTIC PEST – CALL THE EXOTIC PLANT PEST HOTLINE IF SUSPECTED

What is Persea mite?

Persea mite is a serious pest with a wide host range that causes defoliation of avocado trees. It is particularly damaging to the Hass cultivar, but also affects Gwen and Reed. Mexican varieties like Fuerte, Bacon, and Zutano show fewer symptoms.

What does it look like?

- Adult mites grow to approximately 0.5 mm in size.
- Females are oval-shaped and slightly flattened, yellowish-green with several dark spots in the abdominal region. Old females are dark green, inactive, and reduced in size.
- Males are smaller, pear-shaped, and yellowish in color, occasionally with small dark spots.
- Immature stages are yellowish or greenish, with two or more small dark spots in the abdominal region.
- Persea mites form densely layered web canopies along midribs and veins on the underside of leaves.

What damage does it do?

- Persea mites feed on leaves, causing defoliation and yield loss. They do not attack fruit.
- Symptoms of Persea mite feeding present as circular necrotic spots (1–5 mm in diameter) on leaves, yellow spotting patterns on upper leaf surfaces, protective webbing on necrotic spots.
- Severe infestations lead to leaf drop and litter of yellow-spotted leaves on the ground.
- A 20% yield loss was reported in Israel at an infestation rate of 250 mites per leaf.

What can it be confused with?

Persea mites resemble six-spotted mites (*Eotetranychus sexmaculatus*), which are present in Australia. Six-spotted mite colonies do not form densely layered web canopies. Persea mites prefer feeding adjacent to midribs and large lateral veins, causing irregular purplish necrotic spotting."



Scott Nelson, University of Hawaii

Damage causes leaves to drop. A heavily infested tree will have a litter of yellow-spotted leaves on the ground.



Scott Nelson, University of Hawaii

Feeding on upper leaf surfaces cause a yellow spotting pattern



Scott Nelson, University of Hawaii

Leaf drop may occur in heavy infestations



Where is it now?

- Persea mite is thought to have originated in Central America but is now present in;
- Africa (Morocco).
- Europe (Italy, Portugal and Spain).
- North and Central America (USA, Mexico and Costa Rica).
- Middle East (Israel).
- It is particularly damaging in avocado growing regions of California, Israel and Spain.

What are the risk materials and pathways it can move around on?

- Human-assisted spread through the movement of infested planting material.
- Mites or plant material adhering to shared equipment, vehicles, or clothing can facilitate spread.
- Persea mites can move short distances by walking or ballooning between trees.
- Low risk of movement via fruit as Persea mites do not feed on fruit and avocados are harvested without leaves.

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 Persea mite include:

- Monitor regularly and maintain comprehensive records of pest and disease monitoring.
- Use planting material from accredited nurseries.
- Have a visitor and staff register.
- Wash footwear and vehicles to reduce the risk of spread and avoid sharing equipment.
- Dispose of pruning and other plant waste material appropriately.

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Persea mite with its webbing open.

UC Statewide IPM Project; Photo: Jack Kelly Clark

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

**EXOTIC PLANT
 PEST HOTLINE
 1800 084 881**

Use trees from ANVAS accredited nurseries

