Avocado thrips

EXOTIC PEST – CALL THE EXOTIC PLANT PEST HOTLINE IF SUSPECTED

What is Avocado thrips?

Avocado thrips (*Scirtothrips perseae*) is the major thrips pest of avocados in California, causing large economic losses.

What does it look like?

- Small, slender bodies around 1 mm long.
- Adults are straw yellow with a thin dark line across the upper abdomen and brown wings.
- Often seen on upper leaf surfaces of immature leaves, but move to leaf edges and undersides when disturbed.
- Can also be found on young fruit.

What damage does it do?

- Bronze-colored damage initially follows leaf veins, later seen in random patterns between veins.
- Heavily damaged leaves become cup-shaped and may abscise prematurely.
- Both larvae and adults feed on young developing fruit (<3 cm in diameter) hidden under the calyx.
- Main source of economic loss is scarring of immature fruit.
- Feeding scars develop from the calyx and radiate toward the top of the fruit.
- Severe scarring can render the entire fruit surface brown and corky, with an 'alligator skin' appearance.
- In 1997, infested orchards in California experienced 50-80% crop damage.
- Management costs have reduced California avocado industry revenues by 12% and increased production costs by 4.5%.

What can it be confused with?

Scirtothrips perseae is similar in color to the Californian species *S. aceri*, which is also exotic. *S. perseae* is different from most thrips as both adult and immature stages are readily observed on upper leaf surfaces.

An adult *Scirtothrips perseae*

Larvae and adult avocado thrips, *Scirtothrips perseae*

Scarred fruit caused by *Scirtothrips perseae*

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Where is it now?

Native to Guatemala and Mexico, also present in Colombia, and restricted distribution in the USA (California and Hawaii).

Serious pest of avocado, particularly in California where it has infested 99% of fruit bearing avocado acreage.

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

- Natural spread can occur over short distances by flying or walking; air currents may carry thrips long distances.
- Human-assisted spread through movement of planting material is the most likely method of long-distance dispersal.
- Eggs laid in soft plant tissue, young fruit, fruit pedicels, and immature leaves.
- Insects or infested plant material on shared equipment, vehicles, or clothing could spread the pest.
- Low risk of spread through trade in mature fruit.
- Pupation occurs on the tree in cracks and crevices, but about three-fourths drop to pupate in dry leaf litter so soil and litter are also considered risk materials.

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 avocado thrips 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 material appropriately on-site.

Bronzing damage to avocado leaf caused by *Scirtothrips perseae*

"Alligator skin" symptoms on avocado

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

EXOTIC PLANT PEST HOTLINE
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Use trees from ANVAS accredited nurseries

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