

Pest and Disease Management

Pest and disease management can be one of the major challenges in an intensive pear orchard. Management of pests and diseases requires growers to:

- understand the life cycle of pests,
- know diseases and their predators,
- monitor pest and disease levels in orchards using appropriate tools/techniques,
- keep good records of pest/disease levels,
- take action if damage reaches an unacceptable level,
- evaluate control methods at the end of each season,
- plan ahead for the next season.

There are numerous resources already available for growers to understand pest and disease identification and management in pears. Rather than duplicate existing work, the aim of this page is to provide links to pest and disease management information.

The most important pests and diseases found in Australian pear orchards:

- Codling moth
- Light-brown apple moth
- Pear and cherry slug
- Pear-leaf blister mite
- Pear scab
- Queensland Fruit fly
- San Jose scale
- Two-spotted mite
- European red mite
- Thrips
- Oriental fruit moth
- Long-tailed mealy bug

The most important viruses in Australian pear orchards:

- Apple chlorotic leaf spot virus
- Apple mosaic virus
- Apple stem grooving virus
- Apple stem pitting virus



Figure 1: Two-spotted mite damage in Williams pear trees

Pest and disease forecasting models

- [Codling moth](#)
- [Pear scab](#)

Information is also contained in IPM for pears:

<http://www.dpi.nsw.gov.au/agriculture/horticulture/pomes/ipm-apples-pears>

Diagnostic services (fee-for-service)

- NSW: Plant Health Diagnostic Services. Ph: (02) 4640 6327; Agricultural Scientific Collections Unit. Ph: (02) 6391 3800; <http://www.dpi.nsw.gov.au/agriculture/horticulture/pomes/ipm-apples-pears>.
- QLD: Grow Help Australia (fee-for-service). Mail: Attn: Grow Help Australia, DAFF Ecosciences Precinct 41 Boggo Rd Loading Dock, Basement 3(off Joe Baker Street), Dutton Park Qld 4102. Ph: (07) 3255 4365. Email: growhelp@daff.qld.gov.au <http://www.daff.qld.gov.au/plants/health-pests-diseases/grow-help>
- Tas: TASAG ELISA Testing Services. Entomology Ph: Mobile 0418 379 726 (Lionel Hill); Pathology Ph: Mobile 0417 387 370 (Dr Dean Metcalf).
- Victoria: Crop Health Services. Mail: Attn Crop Health Services, AgriBio Specimen Reception, Main Loading Dock, 5 Ring Road, La Trobe Uni, Bundoora 3083. Ph: (03) 9032 7515. <http://www.depi.vic.gov.au/agriculture-and-food/pests-diseases-and-weeds/diagnostic-services>
- WA: AGWEST Plant Laboratories. Mail: Attn AGWEST Plant Laboratories, Department of Agriculture and Food, Baron Hay Court, South Perth WA 6151. Ph: (08) 9368 3721.

Further information

These Australian and international sites may be useful for growers. However they are intended as an information source only. Any specific recommendations may be outdated or irrelevant for Australian conditions and growers should seek local advice.

Australian Resources

A range of useful articles on pests and diseases for Australian growers can be found in *Tree Fruit* magazine: <http://www.treefruit.com.au/index.php>

DPI Victoria AgNotes: Department of Primary Industries Victoria has a number of fact sheets about pests and diseases for pears: <http://www.depi.vic.gov.au/agriculture-and-food/horticulture/fruit-and-nuts/pome-fruit>

Crop diseases application for smartphones: <http://www.depi.vic.gov.au/agriculture-and-food/grains-and-other-crops/crop-diseases-application-for-smartphones>

DPI NSW AgFacts: Department of Primary Industries New South Wales also has a range of fact sheets about pests and diseases for pears: <http://www.dpi.nsw.gov.au/agriculture/horticulture/pomes/apple-and-pear-scab>

IPM for pears: <http://www.dpi.nsw.gov.au/agriculture/horticulture/pomes/ipm-apples-pears>

A-Z list of horticultural diseases: <http://www.daff.qld.gov.au/plants/fruit-and-vegetables/a-z-list-of-horticultural-diseases-and-disorders>

A-Z list horticultural pests: <http://www.daff.qld.gov.au/plants/fruit-and-vegetables/a-z-list-of-horticultural-insect-pests>

<http://www.daff.qld.gov.au/plants/fruit-and-vegetables/diseases-of-fruit-crops-in-australia>

<http://www.depi.vic.gov.au/agriculture-and-food/pests-diseases-and-weeds/pest-insects-and-mites>

Queensland Fruit Fly

<http://www.depi.vic.gov.au/agriculture-and-food/pests-diseases-and-weeds/pest-insects-and-mites/queensland-fruit-fly>

http://www.pir.sa.gov.au/biosecuritysa/planthealth/fruit_fly

'Orchard Plant Protection Guide for Deciduous Fruits in New South Wales': A valuable resource developed by the Department of Primary Industries New South Wales.

Department of Agriculture and Food Western Australia: Information on pests and diseases for pears.

International Resources

Online guide to plant disease control: Oregon state university extension: <http://ohioline.osu.edu/hyg-fact/3000/>

Tree fruit and small fruit disease fact sheets: Cornell university collection of fact sheets from a range of university programs in the USA: <http://plantclinic.cornell.edu/factsheets.html>