



# Pacific Pests and Pathogens - Mini Fact Sheet Edition

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## Avocado dieback (120)



Photo 1. Dieback of avocado, *Phytophthora cinnamomi*; note that this tree is losing its leaves, so that the fruit are exposed. The branches will rapidly die from the tips.

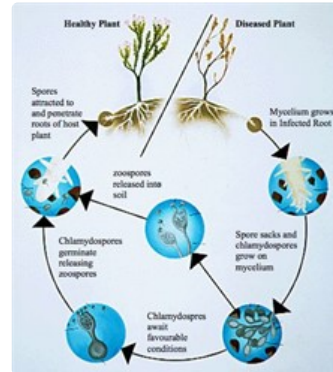


Diagram. Life cycle of *Phytophthora cinnamomi*, the cause of avocado dieback disease. Note that mycelium refers to the body or the cottony growth of the water mould, oomycete, not a fungus, kills the fine roots, causing loss of leaves, fruit, dieback and death (3-5 years). An important disease. Zoospores have "tails" and can swim short distances through soil water; chlamydospores and oospores are long-term survival spores.

### Summary

- Worldwide distribution. On avocado and many other fruit, nut and forest trees, and ornamentals. A water mould, oomycete, not a fungus, kills the fine roots, causing loss of leaves, fruit, dieback and death (3-5 years). An important disease.
- Spread in ground water, soil on machinery, shoes, horticultural trade.
- Cultural control: use pasteurised soil in nursery, clean pots, tools and water; choose well-drained sites (dig hole, fill with water, and check water drains away in an hour); avoid spread in soil on plants, tools, footwear and vehicles; add organic matter as mulches, manures or composts, at planting and regularly thereafter; use gypsum; check availability of tolerant varieties.
- Chemical control: use phosphorous acid as trunk injection or spays. Get advice on methods and timing.

### Common Name

Avocado dieback

### Scientific Name

*Phytophthora cinnamomi*

AUTHOR Grahame Jackson

Information from Gerlach WWP (1988) *Plant diseases of Western Samoa. Samoan German Crop Protection Project, Deutsche Gesellschaft für Technische Zusammenarbeit (GIZ) GmbH, Germany*. Photo 1 *Diseases of fruit crops in Australia* (2009). Editors, Tony Cooke, Denis Persley, Susan House. CSIRO Publishing. Diagram Rudman T (2005) *Interim Phytophthora cinnamomi management guidelines*. Nature Conservation Report 05/7, Biodiversity Conservation Branch, Department of Primary Industries, Water and Environment, Hobart.

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The mobile application is available from the Google Play Store and Apple iTunes.

