



Pacific Pests, Pathogens & Weeds - 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.

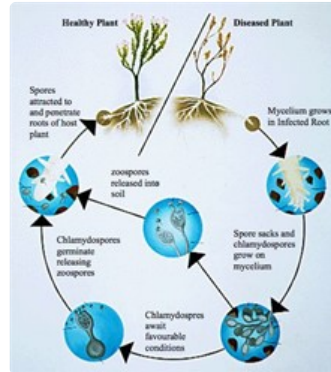


Diagram. Life cycle of *Phytophthora cinnamomi*, the cause of avocado dieback disease. Note that mycelium refers to the body or the cottony growth of the water mould. Zoospores have "tails" and can swim short distances through soil water; chlamydospores and oospores are long-term survival spores.

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 sprays. Get advice on methods and timing.

Common Name

Avocado dieback

Scientific Name

Phytophthora cinnamomi

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Information from Gerlach WWP (1988) *Plant diseases of Western Samoa. Samoan German Crop Protection Project, Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) 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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