



Pacific Pests, Pathogens & Weeds - Fact Sheets

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Kauri rust (236)



Photo 1. Raised spots or galls of kauri rust showing pustules (aecia) of *Aecidium fragiforme*.



Photo 1. Close-up of raised spot or galls of kauri rust, *Aecidium fragiforme*, containing aecia.

Common Name

Kauri rust

Scientific Name

Aecidium fragiforme

Distribution

Narrow. Southeast Asia and Oceania. It is recorded from Australia, Fiji, New Caledonia, Solomon Islands, and Vanuatu.

Hosts

Agathis species (kauri).

Symptoms & Life Cycle

The fungus forms raised galls, up to 20 mm diameter, and 5 mm high (Photos 1). The lower surface is often depressed. White to yellow pustules are formed within the galls, usually on the upper surface of the leaf (Photo 2). The pustules contain spores of the rust fungus.

There are two types of spore-forming structures that occur on the raised spots or galls: pycnia and aecia. The pycnia are small, 0.1 mm diameter. They produce spores which are exchanged - a form of mating - between pycnia, probably by insects. This "mating" produces the aecia, which are much larger, 1 mm diameter (Photos 1&2). From aecia, aeciospores form, and these are spread in wind and rain to infect other parts of the same leaf, other leaves, or other trees.

Impact

The galls are more common on younger plants, sometimes causing leaves to fall. However, this is not an important disease, although details of its impact are not well reported.

Detection & inspection

Look for raised yellow spots on the leaves becoming reddish brown, circular, up to 2 cm diameter.

Management

There is no treatment for this disease.

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Photos 1&2 Kohler F, Pellegrin F, Jackson G, McKenzie E (1997) *Diseases of cultivated crops in Pacific Island countries*. South Pacific Commission. Pirie Printers Pty Limited, Canberra, Australia.

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