

Fact vs Fiction

Fiction: The whole rainforest is under threat from phytophthora.

Fact: Wrong! Two hundred outbreaks have been identified and up to 14% of the World Heritage Area has been identified as susceptible. Phytophthora is mainly found in granite soils in higher altitudes.

Fiction: Phytophthora spreads throughout the tree, eventually killing it.

Fact: Wrong! Phytophthora attacks the fine root system stopping the tree absorbing water and minerals. The tree may eventually die from lack of water and nutrients.

Fiction: Feral pigs are the major cause of the spread of phytophthora.

Fact: Wrong! Feral pigs and other animals can contribute to the spread of phytophthora, but the micro-organism is also spread through contaminated soil on vehicles, camping equipment, footwear and road maintenance machinery.

Stamp out Phytophthora

Rainforest dieback in the
Wet Tropics World Heritage Area



Australia's Tropical
Rainforests

WORLD HERITAGE

How you can help stop the spread of phytophthora

Hikers, cyclists and 4WDs

It is vital that you do not carry soil from one area to another, risking the spread of phytophthora.

- Start your trip with clean, dirt-free gear.
- Remove dirt from vehicles, boots, bushwalking and camping equipment and bike tyres.
- Wear soft-soled shoes. Soft-soled shoes transport less mud and minimise your impact on tracks.
- Carry your own hygiene kit: a hard brush and a spray bottle of disinfectant, such as diluted methylated spirits. Don't use disinfectants in waterways.
- Be vigilant if visiting high altitude or summit areas. Wash equipment before entering new areas.
- Follow conditions on permits, obey track signs and road closed signs, respect locked gates and restricted access areas.

Land managers and contractors

It is most important to minimise the disturbance and spread of soil.

- Where possible carry out maintenance in dry conditions.
- Use disease-free gravel and quarry soil.
- Maintain drains so they don't pool, allowing phytophthora to flourish.
- Where practical, use methods that do not disturb the soil - mow and slash or use an appropriate herbicide in preference to grading and blading.
- Minimise risk by separating work areas with machinery wash-downs.

For more information on phytophthora contact the Rainforest CRC on (07) 4042 1246 or visit their website at www.rainforest-crc.jcu.edu.au

What we know about phytophthora

What is phytophthora?

Phytophthora is a micro-organism that causes forest dieback. Dieback is identified by groups of withered trees. Lightning strikes, insects and drought are also known to cause dieback. There are a number of species of phytophthora, but *Phytophthora cinnamomi* is considered to be the major cause of small patches of dieback in the Wet Tropics World Heritage Area.

How it operates

The phytophthora micro-organism moves through soil or water in search of plants to feed on. It destroys the plant's fine root system by stopping water intake, eventually killing the plant. It then uses its tail to 'swim' through the soil in search of more living tree roots.

What we know

Phytophthora has been identified in 65 countries including Australia. It can be carried in contaminated soil on boots, tent pegs or vehicles and quickly spreads through water drainage lines. It can also be transported in mud carried by animals such as feral pigs.

The triggers that cause phytophthora to become active and kill patches of rainforest are still unknown to scientists. Stresses on vegetation such as drought may leave the forest more susceptible to phytophthora. Researchers have produced a report warning that significant sections of the World Heritage Area are already infected. Up to 14% or 126,000 hectares has been identified as susceptible to outbreaks. Over 200 patches of phytophthora have been located in the Tully Falls, Mount Lewis, Koombooloomba, Kirrama and Rumula areas. High mountain environments seem to be highly susceptible.

Susceptible plants

Phytophthora may only affect particular species of vulnerable plants. There are concerns that increased infection could result in the loss of these vulnerable plant species. When it is highly virulent, the micro-organism will kill the majority of plant species regardless of their vulnerability. Infected patches are being closely monitored to assess their recovery.

The Wet Tropics Management Authority is working with the Queensland Parks and Wildlife Service (QPWS) to reduce the spread of phytophthora in the World Heritage Area through hygiene and education programs. Construction in infected areas is carefully controlled and transport of soil between sites has been reduced by washing down machines and equipment after use.



Queensland Government
Environmental Protection Agency
Queensland Parks and Wildlife Service

An outbreak of phytophthora is identified by groups of trees withering, losing branches and an orange-brown stain under the bark. If you see an infected area, contact the Authority on (07) 4052 0555 or QPWS on (07) 4046 6601.