

# Phytophthora

## DON'T LET IT DESTROY OUR ENVIRONMENT



### How does it spread?

Infected plants produce microscopic spores, which can infect healthy plants when they come into contact with them. The spores are washed into the soil and leaf litter by rain, where they can be picked up on footwear, on the feet of animals (e.g. dogs, horses), and on the tyres of bikes or vehicles. In addition, moving infected plants or cuttings to uninfected areas can also spread spores.



### How can I help stop the spread?

There are a few basic steps you can take when visiting parks and gardens, or when out enjoying the countryside:

-  **DO** keep to marked paths – to help reduce the chances of picking up contaminated soil and plant debris on footwear.
-  **DO** pay attention to any site notices – infected areas may be signed or cordoned off.
-  **DO** clean your footwear – remove soil and plant debris from footwear after each visit.
-  **DO** clean the tyres of bikes and vehicles - after off-roading, to remove soil and plant debris.
-  **DO** avoid taking plants or cuttings – you could inadvertently introduce infected material into your own garden.
-  **DO** monitor the health of your own plants – familiarise yourself with the symptoms of Phytophthora and report any suspected findings.

### Who do I contact?

Regional teams are working to identify and eradicate outbreaks of the diseases, as part of a wide-reaching programme to manage the impact of *Phytophthora ramorum* and *Phytophthora kernoviae* in the UK.

This programme is being run by The Food and Environment Research Agency (Fera), on behalf of the Department for Environment Food and Rural Affairs.

You can help us by reporting any suspected findings to Fera. If you discover any plants showing the symptoms illustrated in this leaflet:

-  Make a note of the location.
-  Take a photograph if possible.
-  Don't touch the plant or take a cutting.
-  Use the contact information below:

**Telephone: 01904 465625**

**Email: [planthealth.info@fera.gsi.gov.uk](mailto:planthealth.info@fera.gsi.gov.uk)**



# Phytophthora

## What is it?

Phytophthora is a devastating fungus-like organism, that causes disease in a range of plants. Recently two species of Phytophthora - *Phytophthora ramorum* and *Phytophthora kernoviae* - have been causing significant damage to our environment.

*Phytophthora ramorum* was first identified in 2001 as the cause of widespread destruction of wild oak trees in the USA, and was found in the UK in 2002. In 2003, *Phytophthora kernoviae* was discovered in Cornwall.

## Why the concern?

Although initially concentrated in the South West, since the first findings the diseases have continued to spread across the UK. If left unchecked they could change our landscape forever with the loss of many trees, shrubs and heathland plants.

## Where is it found?

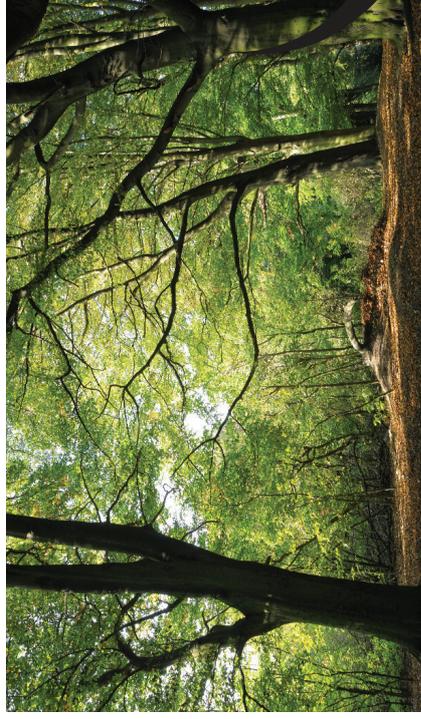
*Phytophthora ramorum* and *Phytophthora kernoviae* mainly affect shrubs, such as rhododendron, viburnum and camellia, and trees such as magnolia, beech, and horse chestnut. The diseases have been found in plant nurseries, garden centres, parks and historic gardens, as well as woodland environments in the wild. Recently, bilberry has also been found to be affected in heathland and woodland situations, and other heathland plants are known to be susceptible.

## What are the symptoms?

Symptoms can vary with the type of plant infected. On shrubs, typical symptoms can include blackening of leaves around the midrib and at the tips, and/or wilting and dieback of shoots. Trees can show black lesions (called cankers) on the bark, which 'bleed' a dark sap



Garden shrubs, such as rhododendron, can show blackening of leaves



Native trees, such as beech, can suffer lethal trunk 'cankers' that 'bleed' black sap



Heathland plants, such as bilberry, can suffer severe dieback



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