

Issued on behalf of Defra and the Forestry Commission

We need your help!

Please look out for the plant diseases

Phytophthora ramorum* & *Phytophthora kernoviae



Figure 1 Rhododendron bushes infected with *Phytophthora ramorum*

Areas affected?

These notifiable fungal like diseases are increasing in the UK, threatening our gardens, parks, heathlands and woodlands. In Staffordshire there are a number of known infected sites, including a woodland site at Loggerheads where *Phytophthora ramorum* has been confirmed.

How are the diseases spread?

Movements of infected plants and cuttings from site to site are a key means of spreading the disease over long distances.

Phytophthora. ramorum can also be spread over several miles in mists, air currents and watercourses .

We also know that *Phytophthora* can be spread on footwear, bicycle wheels, vehicles, tools and equipment .

Symptoms to look out for

The commonest shrub host is wild *Rhododendron ponticum* where *P. ramorum* infects the leaves and shoots. It can also infect ornamental shrubs such as *Rhododendron* hybrids ,*Magnolia*, *Viburnum*, *Pieris* and *Camellia* in a similar way .The infected leaves of 'foliar hosts' can generate many spores, and in sufficient numbers these spores can then infect surrounding plants and certain tree species including Larch, Beech and Chestnut.

Typical symptoms on Rhododendron include leaf-blackening, wilted shoots and die-back. On individual leaves, blackening of the leaf stalk usually extends into the leaf along the mid-vein, although blackening at the leaf tip can also occur. The progress of the disease can be rapid, causing shoots to suddenly wilt and the leaves hang down.

Symptoms on Wild Bilberry, (*Vaccinium*) can be seen on both the leaves and stems of plants. The leaves show blackening and dying symptoms, and the stems show dark brown bands or lesions which are followed by shoot die-back.

On trees, common symptoms include bleeding cankers on the trunk, which exude fluid from infected bark. This is visible as dark liquid in patches on the bark that can dry to a crust on the trunk. The inner bark under this bleeding area is usually discoloured and dying. Trees die when the lesions become extensive on the main trunk.

Infection on Japanese larch can take two forms. Shoots and foliage can be affected, visible as wilted, withered shoot tips with blackened needles. The infected shoots shed their needles prematurely (Larch are deciduous so naturally lose their needles in the autumn). Trees with dieback can have numerous resinous cankers on the branches and upper trunk.

Why such a big problem?

These diseases are not native to the UK and were first identified here in 2002, probably originating from Asia. They are now a significant problem throughout South West England and in South Wales. The western half of Britain has the optimum climatic conditions for the disease, being generally mild and wet. Although we are very concerned about the impacts of *P ramorum* on larch trees in forestry plantations, the disease can also affect a range of shrubs and trees within parks, gardens, woodlands, moors and plant nurseries.

The diseases do not affect humans or animals.

Current position?

In Staffordshire there are now 20 confirmed infected sites, the majority of which are *Phytophthora ramorum* outbreaks in wild Rhododendron (*Rhododendron ponticum*)

Private landowners, who we are already working with, have been extremely helpful and are dealing with the disease very responsibly. Working closely with us, they are taking the action required to fell infected trees and remove infected plants. We would urge any owners of private gardens and land with Rhododendron or Larch who have not yet done so, to inspect for signs of infection and contact us if they have any concerns.

The best scientific advice tells us that felling infected trees and removing infected shrubs is the most effective way to prevent them passing the diseases on to other trees and plants and to minimise the risk of infection spreading more widely.

Concern for heathland species has also increased following findings of *P. ramorum* and *P. kernoviae* on Bilberry (*Vaccinium*) in woodland and on heathland in Cornwall. Following surveys elsewhere in England and Wales a number of sites have been found outside of the South West.

Are there any precautionary measures that can be taken?

Owners and visitors to any known infected sites, gardens, parks, woodlands and heathland can help to prevent or minimise the spread of the disease by following these simple precautions:

- keeping to marked paths
- keeping dogs on leads
- not removing any plant material
- removing soil and mud from your boots and shoes before leaving site;
- thoroughly washing your boots, shoes and bicycle wheels before visiting other susceptible areas, such as woodlands, gardens or garden centres and nurseries.

Please read & follow signage on infected sites, which will provide advice on the most appropriate action to take and who to contact if you suspect the disease may be in other areas. Access to infected woodlands will be restricted while trees are being felled, which is normal practice for safety reasons.

Who to contact?

Anyone who suspects the presence of *P. ramorum* on trees anywhere in Great Britain (England, Scotland and Wales) must immediately notify the Forestry Commission's Plant Health Service by:

Telephone: 0131 314 6414; or

e-mail: plant.health@forestry.gsi.gov.uk.

Anyone who suspects *P. ramorum* or *P. kernoviae* in gardens, parks and heathlands in England and Wales must contact the Food & Environment Research Agency (FERA) on:

Telephone: 01904 465625; or

email: planthealth.info@fera.gsi.gov.uk.

Further information is available on the following websites:

FERA: www.fera.defra.gov.uk/plants/plantHealth/pestsDiseases/phytophthora/

Forestry Commission: www.forestry.gov.uk/fpestsanddiseases