

Questions and Answers

Phytophthora ramorum in the New Forest

1. What is *Phytophthora ramorum*?

It is a fungus-like pathogen from the large *Phytophthora* group of organisms. It causes 'bleeding cankers', or oozing lesions, on the trunks of infected trees, and necrosis (dieback) of leaf tips, stem wilt and stem lesions on infected shrubs and plants, and some trees. It is spread through the air, probably in rain-splash and mist-laden winds, or via watercourses.

2. Where exactly in the New Forest is this incidence of the disease?

The disease has been found on three rhododendron bushes growing near the Tall Trees Trail, on the Rhinefield Drive at Brockenhurst. The infected bushes were identified during a routine plant health inspection of the area.

3. How bad is the New Forest infection?

Initial surveys show moderately severe infection of the plants, but we need to do more survey work to get the full picture.

4. When was the disease found?

A routine plant health inspection identified a possible infection on 26 November 2008. Samples taken during that inspection have since been tested to confirm that the disease is *Phytophthora ramorum*.

5. What are the authorities doing about it?

A survey of the immediate area is taking place, during which further samples from symptomatic plants will be taken for analysis. Over the next few weeks a more detailed survey will be carried out across an area within a radius of 3km from the site of this incident.

6. Why three kilometres?

This is the standard procedure we follow whenever infected plants are found anywhere in Britain. If more infection is confirmed within this area, the survey zone will be extended outwards again until we have a 3-kilometre infection-free zone.

7. What action is being taken on the infected plants?

Infected rhododendron plants are removed and destroyed, either by burning on site or deep burial in a landfill. Herbicide is applied over at least three years to prevent any re-growth and ultimately to kill the root system. If any infected trees are found they will either be pruned and monitored afterwards, or felled.

8. How does this affect people visiting the New Forest?

The public are free to continue visiting the New Forest. In the area where the disease has been found there are notices asking people to stay on the main paths, not to take plant cuttings, and to keep dogs on leads. There is no risk to human health from this disease.

9. Why do people need to stay on paths or keep dogs on leads?

As a precaution to help prevent the spread of the disease. *Phytophthora ramorum* can be found in leaf litter and in soil up to a depth of 15cm, so it can be moved about on the footwear of humans and possibly on the feet of animals, and potentially by vehicles.

10. What are the effects on the visitor attractions of the New Forest?

None. The public may continue to enjoy the New Forest's attractions as usual, although small areas will be cordoned off for safety reasons during plant removal operations.

11. How could the disease affect the trees and woods of the New Forest?

Experience so far in Britain is that only a small number of trees have been infected with *Phytophthora ramorum*. With few exceptions, infected trees do not themselves pose a risk of further spread, because they do not produce inoculum. The key to preventing its spread is the removal of *Rhododendron ponticum*, which produces spores which can be spread by rain-splash or the movement of infected plants. However, some tree species display only foliar (leaf) infection, which does produce spores, and in these cases the treatment is pruning of the affected branches and continued monitoring.

Although the risk to native oaks is small, there is evidence that other native species such as ash and beech trees, and some non-native species which occur in the New Forest, are susceptible to *Phytophthora ramorum*. Beech in particular is a characteristic species of the ancient pasture woodlands of the New Forest, so we are keen to take steps to minimise their risk of exposure to the organism.

12. Which trees are most at risk?

Our experience in Britain is that beech is the most susceptible tree species, but only 26 infected beech trees have been found since the disease was first found here in 2002.

13. Will this mean the end of the tall trees and rhododendrons of the Rhinefield drive?

We currently have no reason to believe the tall trees are at risk, or that any of them are infected, but we will know more once our wider survey has been completed. However, all infected rhododendron bushes, and others in the immediate vicinity, will have to be destroyed to get rid of the infection and prevent the organism from spreading, although it is too early to say exactly how

many. This, as well as continued surveillance, should help to ensure the long-term future of the trees on Rhinefield Drive.

14. How did the disease get into the New Forest?

It is too early to draw any conclusions about how the disease reached the New Forest. We do know that the principal pathway is by movement of infected planting stock.

15. Are there any impacts from the disease on commoning or the free-roaming livestock of the New Forest?

No. The disease has been found within one of the New Forest woodland inclosures (an area not grazed by commoning stock), so the practice of commoning is not affected.

16. Are there any potential impacts from the disease for the New Forest's heathlands?

Yes. Among the non-tree species that have been affected in other parts of Britain are vaccinium species, which are reasonably common on the New Forest's heaths. This is another reason why we are anxious to control this infection before it spreads.

17. Why is this disease sometimes called "sudden oak death"?

Phytophthora ramorum got its nickname in the United States because it has killed significant numbers of tanoak trees (*Lithocarpus densiflorus*, which are not true oaks at all) and oaks (*Quercus* species) native to North America. However, Britain's two native oak species have proved much less susceptible than their American cousins. Britain's native oaks usually only become infected if they are standing very close to heavily infected shrubs such as *Rhododendron ponticum*. (Our native oak species are sessile oak - *Quercus petraea* - and pedunculate oak - *Quercus robur* - which is also known as English or common oak).

18. What should people do if they suspect a tree or shrub has *Phytophthora ramorum*?

A number of other plant diseases and disorders can cause similar symptoms to those caused by *Phytophthora ramorum*, so the public should not jump to the conclusion that an unhealthy-looking tree or plant is infected with it. If they are concerned about a particular plant or plants, we recommend they first consult the on-line information at www.defra.gov.uk/planth/pramorom4.htm.

If they continue to be concerned, they should contact the relevant authorities as follows:

- For suspect symptoms on plants (i.e. not trees), contact Defra's Plant Health HQ on 01904 455174 or the local Defra Plant and Seeds Inspector. Contact details are available at www.defra.gov.uk/planth/offices.pdf;

- For suspect symptoms on trees, contact the Forestry Commission's Plant Health Service on 0131 314 6414.

18. Where can I get further information?

There are a number of sources of further information about *Phytophthora ramorum*:

- The plant health section of the Forestry Commission's website, www.forestry.gov.uk/planthealth - click on the "pests and diseases" link on the left-hand side of the screen;
- The Defra website, www.defra.gov.uk/planth/pramorom4.htm
- The Forest Research website, <http://www.forestresearch.gov.uk/fr/INFD-737ESG>.

**Forestry Commission
December 2008**