***Phytophthora pluvialis*****pest report[[1]](#footnote-1)**

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| Field | Detail |
| Pest species name | *Phytophthora pluvialis* (Reeser, Sutton & Hansen, 2013) |
| Pest species name Taxon (order, family) | Peronosporales, Peronosporaceae |
| Pest common name | *Phytophthora pluvialis; red needle cast disease of radiata pine* |
| Country | United Kingdom |
| Report status *(first, update number or final. Include date.)* | First |
| Host(s) present on | Western hemlock (*Tsuga heterophylla*); Douglas fir (*Pseudotsuga menziesii*) |
| Host range (indicate if the host is major, wild-weed, alternate, experimental, or doubtful, if known) | Major – UK woodland |
| Pest status (as per ISPM 8)[[2]](#footnote-2) | Present: not widely distributed and under official control |
| Geographical distribution | Limited distribution – first found in a woodland site in Cornwall, England, UK. |
| Official control in place | Under powers conferred by The Official Controls (Plant Health and Genetically Modified Organisms) (England) Regulations 2019, the Forestry Commission has introduced a demarcated area around the confirmed outbreak site and introduced movement restrictions on materials capable of spreading the disease using the Plant Health (*Phytophthora pluvialis*) (Demarcated Area No. 1) which came in to force on the 27th October 2021. |
| Summary (nature of the finding and phytosanitary measures taken) | • As part of the surveillance programme for *Phytopthora ramorum*, aerial survey flights undertaken in late August identified a stand of western hemlock in Cornwall which appeared to be expressing very characteristic symptoms of this pathogen on a significant scale. Although western hemlock is a known host, disease expression on this scale and intensity has not previously been observed. Follow-up ground surveys by the Forestry Commission identified symptoms characteristic of Phytophthora and subsequent laboratory analysis confirmed *Phytophthora pluvialis* was present.  • This is the first report of this pathogen in Europe, as well as the first published report on western hemlock.  • At this stage it is unknown if *P. pluvialis* it is the causal agent of the observed symptoms in the western hemlock. Further sampling and diagnostic analysis is underway to determine the cause. Additional surveillance activity is ongoing, including to investigate other sites, and eradication action is likely to be required.  • The Forestry Commission has introduced a demarcated area in Cornwall, to restrict the movement of materials capable of spreading the disease. A Notice came into force on the 27th October 2021 prohibiting the movement of any wood, isolated bark and trees (tanoak, western hemlock, pine and Douglas-fir) originating from within the demarcated area, and any plants for planting that has originated or resides within the demarcated area. |
| Danger/risk posed | *Phytophthora pluvialis* is reported to cause needle cast, shoot dieback, stem lesions, and has also been isolated from soil and rainwater. On the UK Plant Health Risk Register, the pathogen has a high unmitigated risk rating of 60, with a high likelihood of spread should it be introduced, and a high impact, particularly given the potential commercial value of trees at risk.  A risk assessment has been done by the UK Plant Health Risk Group, which has concluded that *Phytophthora pluvialis* meets the criteria to be classified as a GB quarantine pest for regulatory purposes. |
| Report files | None (link to this report pdf) |
| Website(s) | https://www.gov.uk/guidance/phytophthora-pluvialis |

1. [International Standard for Phytosanitary Measures (ISPM) 17 Pest reporting](https://www.fao.org/3/y4224e/y4224e.pdf) [↑](#footnote-ref-1)
2. [International Standard for Phytosanitary Measures (ISPM) 8 Determination of pest status in an area](https://www.fao.org/3/x2968e/x2968e.pdf) [↑](#footnote-ref-2)