

***Phytophthora ramorum*, Experience and Approach in the Netherlands**

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Phytophthora ramorum has been found for the first time in the Netherlands in 1993. In 2002, the EU decided that the host plants *Rhododendron* and *Viburnum* only could be traded after growing-season inspections and with a plant passport. During the season 2002/2003, 4% of the nurseries growing these host plants were found infested. During the season 2003/2004 this percentage was reduced to 1.5. The season 2004/2005 shows the same development as last season. In general the conclusion can be drawn that the current measures are successful at the nurseries. If new information becomes available, e.g. regarding the risk of irrigation water, additional measures may be necessary.

A large survey was conducted in 2002/2003 to investigate the spread of *Phytophthora ramorum* in the Netherlands outside the nurseries. 1500 locations spread over the country were inspected, 1400 with *Rhododendron* and 100 with *Vaccinium myrtillus*. 2% of the sites with *Rhododendron* were found infested. No infections were found in *Vaccinium*.

In case of suspicious symptoms samples were taken for diagnosis. For the detection of *P. ramorum*, a real-time ITS-PCR diagnostic test is used. Positive results are confirmed by isolation on artificial media, according to the EC guidelines. 90 Dutch isolates were tested with PCR-RFLP based on the Cytochrome oxidase subunit 1 gene for characterisation of the molecular type. All isolates proved to be the European type of *P. ramorum*. In mating tests using other *Phytophthora* species as tester strains, all isolates proved to be A1 mating type.

The follow-up survey at the infected sites was aimed at detecting infestations on other host plants and assessing the effectiveness of the measures taken. The effectiveness of the measures was negatively influenced by the infections in the regrowth and the too narrow delimitation. At 50% of the sites regrowth was found infested.

At 2 sites *Quercus rubra* was found infested. The disease has not been found on other plants than *Rhododendron* and *Quercus rubra*.

On the basis of the results of the surveys and the experiences with the eradication at the larger sites, end of 2003 the conclusion was drawn that it is not possible to eradicate *Phytophthora ramorum* from the territory of the Netherlands. Further it was concluded that especially the larger infected sites with a high inoculum pressure pose a risk for our indigenous plants. This conclusion stressed the need to minimize the inoculum pressure. To gain more experience with the large infestations, a targeted survey to trace these infestations was conducted in 2004.

The finding of the eight infected *Quercus rubra* trees at one location in the middle of 2004 induced the start of a national campaign in addition to the regular programme arising from the EU-directive.