



National Plant Protection Organization, the Netherlands

Quick scan number: QS. Myc.2016.03

Quick scan date: 17 November 2016		
1	What is the scientific name (if possible up to species level + author, also include (sub)family and order) and English/common name of the organism?	<i>Phytophthora foliorum</i> Donahoo & Lamour (2006)
2	What prompted this quick scan?	First finding of this organism in Europe. It was found on wild rhododendron in the United Kingdom (Schlenzig et al., 2016) and on two-year-old azalea plants in an ornamental nursery in Spain (Jung et al., 2016).
3	What is the current area of distribution?	The United States of America (Tennessee and California)(Donahoo et al, 2006), Spain (Jung et al. 2016) and United Kingdom (Schlenzig et al., 2016) are the only countries where the organism has been discovered.
4	What are the host plants?	Only known to occur on <i>Rhododendron</i> spp. (including <i>Azaleae</i> spp).
5	Does the organism cause any kind of plant damage in the current area of distribution and/or does the consignment demonstrate damage suspected to have been caused by this organism?	Yes, damage has been reported on <i>Rhododendron</i> species. In the USA, leaf blight has been reported and in the UK the organism was found to cause stem lesions on <i>Rhododendron ponticum</i> (Donahoo et al, 2006; Schlenzig et al., 2016)
6	Assess the probability of establishment in the Netherlands (NL) (i.e. the suitability of the environment for establishment). a. In greenhouses (low, medium, high) b. Outdoors (low, medium, high) c. Otherwise (e.g. storage facilities, human environment)	The organism is likely able to establish wherever <i>Rhododendron</i> species are present.

7	Assess the probability of establishment in the EU (i.e. the suitability of the environment for establishment).	The organism is likely able to establish wherever <i>Rhododendron</i> species are present.
8	What are the possible pathways that can contribute to spread of the organism after introduction? How rapid is the organism expected to spread (by natural dispersal and human activity)?	Movement of infected plants is the most likely pathway for introduction and spread over long distances. If <i>Phytophthora foliorum</i> is able to sporulate on its host, local spread could be rapid. However, no information on the sporulating ability of this organism was found in the literature.
9	Provide an assessment of the type and amount of direct and indirect damage (e.g. lower quality, lower production, export restrictions, threat to biodiversity, etc.) likely to occur if the organism would become established in NL and the EU, respectively?	<p><i>Rhododendron</i> species are the only known hosts. <i>Phytophthora foliorum</i> was reported in the USA in 2006 for the first time and since then there have been no further reports, until the recent discoveries in the United Kingdom and Spain.</p> <p>In an experiment in the UK, the same <i>Rhododendron</i> species was inoculated with several <i>Phytophthora</i> species and <i>P. foliorum</i> appeared to be less aggressive than <i>P. ramorum</i> and <i>P. kernoviae</i> but more aggressive than <i>P. syringae</i> and <i>P. gonapodyides</i> (Schlenzig et al., 2016).</p> <p>Worldwide, <i>Phytophthora foliorum</i> seems to have a limited distribution and indirect economic losses are possible if third countries would impose export restrictions.</p>
10	Has the organism been detected on/in a product other than plants for planting (e.g. cut flowers, fruit, vegetables)? If "no", go to question 12	No
11	If the organism has been found on/in a product other than plants for planting (e.g. cut flowers, fruit, vegetables), what is the probability of introduction (entry + establishment)? Only to be answered in case of an interception or a find.	
12	Additional remarks	
13	References	<p>Donahoo et al. (2006) <i>Phytophthora foliorum</i> sp.nov., a new species causing leaf blight of azalea, Mycological Research 110, issue 11, November 2006, pages 1309-1322</p> <p>Jung et al. (2016) Widespread <i>Phytophthora</i> infestations in European nurseries put forest,</p>

		semi-natural and horticultural ecosystems at high risk of <i>Phytophthora</i> diseases, Forest Pathology Volume 46, Issue April 2016 pages 134–163 Schlenzig A, Purser E, Perez-Sierra A (2016) First finding of <i>Phytophthora foliorum</i> in the UK, New Disease Report (2016)
14	Conclusions	This Quicksan was prompted after the report of the finding of a for Europe new <i>Phytophthora</i> species (<i>P. foliorum</i>) affecting Rhododendron in the United Kingdom. The species seems less aggressive than two <i>Phytophthora</i> species that are already present in Europe and its potential impact limited.
15	Follow-up measures	Communication