

Assessment of potential quarantine plant pest status for Great Britain within the meaning of regulation 21(3) of the Official Controls (Plant Health and Genetically Modified Organisms) (England) Regulations 2019

Pest name: *Phytophthora pluvialis*

Date: October 2021

Criterion	<i>Further explanation</i>	Criterion met, and how met
Identity of pest	<p><i>The taxonomic identity of the pest shall be clearly defined or, alternatively, the pest shall have been shown to produce consistent symptoms and to be transmissible. The taxonomic identity of the pest shall be defined at species level or, alternatively, a higher or lower taxonomic level, where that taxonomic level is scientifically appropriate based on its virulence, host range or vector relationships.</i></p>	<p>Yes.</p> <p><i>Phytophthora pluvialis</i> is a defined taxonomic entity.</p>
Presence of the pest in Great Britain	<p><i>The pest is not previously known to be present in Great Britain. Based on the information available to the competent authorities, the pest is also not previously known to be present in Great Britain, or is considered to fulfil the one of the following conditions:</i></p> <ul style="list-style-type: none"> <i>• the pest is not known to be present in the territory in question, except in a limited part of it;</i> <i>• the pest is not known to be present in the territory in question, except for scarce, irregular, isolated and infrequent presences in it.</i> 	<p>Yes.</p> <p><i>Phytophthora pluvialis</i> is present in Great Britain, but only in a very limited area. It is currently known from a single site in the south west of the country.</p>
Probability of establishment of the pest in Great Britain territory, or the specific part(s) of Great Britain	<p><i>Based on the information available to the competent authorities, the pest meets the criteria defined below.</i></p> <p><i>The pest shall be considered capable of ‘establishment’ in the territory in question, or, if present but not widely distributed, in the part of that territory where it is absent, if all of the following conditions are fulfilled:</i></p> <ul style="list-style-type: none"> <i>• hosts of the pest and, where relevant, vectors for transmission of the pest are available;</i> <i>• the decisive environmental factors are favourable for the pest concerned and, where applicable, its vector, enabling it to survive periods of climatic stress and complete its life cycle;</i> <i>• cultivation practices and control measures applied in that territory are favourable;</i> <i>• the survival methods, reproductive strategy, genetic adaptability of the pest and its minimum viable population size support its establishment.</i> 	<p>Yes.</p> <p>Note that this pest is established elsewhere in countries with climates similar to those found in Great Britain (e.g. Oregon and southern Washington State in the USA; New Zealand including parts of the South Island).</p>

<p>Probability of spread of the pest in Great Britain territory, or the specific part(s) of Great Britain</p>	<p><i>The pest shall be considered capable of territorial spread in the territory in question, or, if present but not widely distributed, in the part of that territory where it is absent, if one or more of the following conditions is fulfilled:</i></p> <ul style="list-style-type: none"> • <i>the environment is suitable for natural spread of the pest;</i> • <i>barriers to natural spread of the pest are insufficient;</i> • <i>commodities or conveyances allow for movement of the pest;</i> • <i>hosts and, where relevant, vectors of the pest are present;</i> • <i>cultivation practices and control measures applied in that territory are favourable; natural enemies and antagonists of the pest are not present or not sufficiently capable of suppressing the pest.</i> 	<p>Yes.</p> <p>Environmental factors such as high rainfall in Great Britain are considered favourable for the pest.</p> <p>The means by which <i>P. pluvialis</i> spreads are not well known, though spread via water splash and similar means is plausible, therefore there are unlikely to be natural barriers for spread with Great Britain.</p> <p>Suitable hosts (e.g. <i>Pseudotsuga menziesii</i>) are widespread in Great Britain.</p>
<p>Potential economic, social and environmental impact of the pest</p>	<p><i>Based on the information available to the competent authorities, the pest would have an unacceptable economic, social and/or environmental impact on Great Britain if it established and spread in Great Britain.</i></p> <p><i>In particular, the entry, establishment and spread of the pest in the territory in question, or, if present but not widely distributed, in the part of that territory where it is absent, shall have an unacceptable economic, social and/or environmental impact on that territory, or the part of that territory where it is not widely distributed, as regards one or more of the following points:</i></p> <ul style="list-style-type: none"> • <i>crop losses in terms of yield and quality;</i> • <i>costs of control measures;</i> • <i>costs of replanting and/or losses due to the necessity of growing substitute plants;</i> • <i>effects on existing production practices;</i> • <i>effects on street trees, parks and natural and planted areas;</i> • <i>effects on native plants, biodiversity and ecosystem services;</i> • <i>effects on the establishment, spread and impact of other pests, for example due to the capacity of the pest concerned to act as a vector for other pests.</i> 	<p>Yes.</p> <p>Yield and quality losses: In particular, this pathogen causes premature needle drop in infected conifers. There are recorded yield losses in its current range. Similar levels of damage could be expected in Great Britain.</p>



Left. Mature *Tsuga heterophylla* showing dieback. Right. Canker on twig of *Tsuga heterophylla*. Both images © Joan Webber, Forest Research.