Institut für nationale und internationale Angelegenheiten der Pflanzengesundheit

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Federal Research Centre for Cultivated Plants

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Notification of the presence of a harmful organism (2876) - closing note

1 General information	
1.1 Title	Closing note on an outbreak of <i>Brenneria goodwinii</i> and <i>Gibbsiella quercinecans</i> in Germany (Hamburg)
1.2 Executive summary	The plant protection service Hamburg reported an outbreak of "acute oak decline" (AOD). Typical symptoms of AOD were detected on an individual <i>Quercus robur</i> tree by a gardening and landscaping company. The tree is located in the back garden of a residential building in Hamburg-Eimsbüttel. Bark material was sampled and tested by the official laboratory in Hamburg. The bacteria <i>Brenneria goodwinii</i> and <i>Gibbsiella quercinecans</i> were identified by gene sequencing analysis (NCBI-Blast). They are known to be involved in AOD. Appropriate measures are taken to contain the infestation.
	AOD has been observed also in Saxony-Anhalt, Bavaria, Thuringia, and Lower Saxony and the finding of <i>B. goodwinii</i> has been published from several locations. We presume that the disease and the pathogens involved are present in some parts of Germany. It is unknown whether <i>B. goodwinii</i> is native or was introduced into Europe. In 2018, the bacterium was identified in Switzerland on oaks that were imported in 2017 from Germany, without any detection of the pathogen in Germany. In 2018, infested trees with AOD symptoms were found in Latvia, in 2020 in Spain, in 2021 in Poland, in 2022 in Portugal and in 2024 in France. In 2022, the pathogen was firstly found in Thuringia together with <i>Rahnella victoriana</i> and <i>R. victoriana</i> .
	Brenneria goodwinii is not classified as potential quarantine pest any longer and therefore no official phytosanitary measures are taken. However, <i>B. goodwinii</i> is considered to contribute to the severe AOD. The pathogen attacks oaks and can severely damage trees of different age and lead to their death. The bacterium was also detected on <i>Fagus orientalis</i> in 2024. In order to slow

		down the spread as much as possible, it is nevertheless recommended to destroy infected plants as far as possible.
2	Information concerning the single au	thority
2.1	Notification from	Julius Kühn-Institut (JKI), Institute for National and International Plant Health, Germany
3	Location	
3.1	Location	In Hamburg
4	Reason of the notification and the pest status	
4.1	First finding in Germany or in the area	Confirmed appearance of the pest in part of the territory of Germany, in which its presence was previously unknown.
4.2	Pest status of the area where the harmful organism has been found present, after the official confirmation.	Present: only in specific parts of the area concerned
4.3	Pest status in Germany before the official confirmation of the presence, or suspected presence, of the harmful organism.	Absent: no pest records Only symptoms were observed and findings were reported without official identification of the bacteria.
4.4	Pest status in Germany after the official confirmation of the presence of the harmful organism.	Present: only in some parts of Germany
5	Finding, sampling, testing and confirmation of the harmful organism	
5.1	How the presence or appearance of the harmful organism was found.	Information submitted by professional operators, laboratories or other persons. Symptoms were detected on the trunk of the oak tree by a gardening and landscaping company. The company informed the plant protection service of Hamburg and sent
		photos and bark material.
5.2	Date of finding:	25-07-2024
5.3	Sampling for laboratory analysis.	Date of sampling:12-08-2024
5.4	Name and address of the Laboratory	Behörde für Wirtschaft und Innovation Referat Pflanzenschutzdienst Sachgebiet Diagnose Brennerhof 123 22113 Hamburg Germany
5.5	Diagnostic method	Gene sequencing analysis (NCBI-Blast)

5.6	Date of official confirmation of the harmful organism's identity.	06-09-2024
6	Infested area, and the severity and source of the outbreak in that area	
6.1	Characteristics of the infested area and its vicinity.	Open air – other: private garden Plant already planted, not to be reproduced or moved
6.2	Host plants in the infested area and its vicinity	Quercus robur
6.3	Infested plant(s), plant product(s) and other object(s).	Quercus robur (1 pce)
6.4	Severity of the outbreak.	Numerous lesions of acute oak decline were found on the whole length of the trunk of the infested tree. Slight signs of wilting and lightening of the foliage could be detected.
6.5	Source of the outbreak	Unknown, investigations are ongoing.
7	Official phytosanitary measures	
7.1	Adoption of official phytosanitary measures.	No official phytosanitary measures have been taken. AOD meanwhile is reported from several countries in Europe. Successful eradication should therefore no longer be possible and the pathogen is not classified as potential quarantine pest. Regardless of this, the plant protection service gives the advice to protect neighbouring host plants from an infestation.
7.2	Specific surveys.	Yes, a survey is in the planning phase. The survey is to be carried out as part of regular tree inspections by the responsible district office.
8	Pest risk analysis/assessment	Preliminary pest risk assessment exists. An Express-PRA for <i>Brenneria goodwinii</i> was conducted in 2019 on the occasion of an import for research purposes. <i>B. goodwinii</i> was considered a potential quarantine pest. The Express-PRA was now revised and <i>B. goodwinii</i> is no longer classified as relevant for Art. 29 PHR (Express-PRA).