

## Notification of the presence of a harmful organism – update

1 General information	
1.1 Title	Update of an outbreak of <i>Ralstonia pseudolanacearum</i> in Germany (Hesse)
1.2 Executive summary	<p>In 2021, <i>Ralstonia pseudosolanacearum</i> has been found for the first time in Germany. The pathogen was detected in a research institution in Hesse. The staff of the research institution found symptoms on ginger plants in a greenhouse and performed a quick test for <i>Ralstonia</i>, which was positive. The plant protection service was informed and the identification of <i>Ralstonia pseudosolanacearum</i> was carried out in the official laboratory and in the National Reference Laboratory. In addition, a sample from tomato plants without symptoms was finally tested positive in the National Reference Laboratory. The tomato plants were pre-cultivated in a side compartment of the greenhouse where the infested ginger was located.</p> <p>The source of the infestation is not known so far. However, one option could be infested planting material that was originally imported from Peru as ginger for consumption. Official eradication measures are being taken.</p> <p><b>In 2022, research facility staff noted symptoms on ginger plants in a greenhouse and conducted a rapid test for <i>Ralstonia</i>, which was positive. The plant protection service was informed and identification of <i>Ralstonia pseudosolanacearum</i> was carried out at the official laboratory and the National Reference Laboratory. A sample of cucumber plants was also tested positive in the official laboratory.</b></p> <p><b>The infestation was confined to one greenhouse and the planting material showed partial symptoms of wilting. The source of the infestation is not known, nor whether it is a carry-over from last year's occurrence or a new introduction.</b></p>

	<b>Official eradication measures and a survey are currently being implemented.</b>
<b>2 Information concerning the single authority and responsible persons</b>	
2.1 Notification from	Julius Kühn-Institut (JKI), Institute for National and International Plant Health, Germany
2.2 Official contact:	Katrin Kaminski, Tel: +49(0) 39 46 47 7515, <a href="mailto:outbreaks@julius-kuehn.de">outbreaks@julius-kuehn.de</a>
<b>3 Location</b>	
3.1 Location	In Hesse
<b>4 Reason of the notification and the pest status</b>	
4.1 First finding in Germany or in the area	First confirmed presence of the pest in the territory of Germany.
4.2 Pest status of the area where the harmful organism has been found present, after the official confirmation.	Present: under eradication, in specific parts of the area where host plants are grown
4.3 Pest status in Germany before the official confirmation of the presence, or suspected presence, of the harmful organism.	Absent: no pest records
4.4 Pest status in Germany after the official confirmation of the presence of the harmful organism.	Present: under eradication, only in some parts of Germany, only in one location
<b>5 Finding, sampling, testing and confirmation of the harmful organism</b>	
5.1 How the presence or appearance of the harmful organism was found.	Information submitted by professional operators, laboratories or other persons.  The staff of the University carried out a <i>Ralstonia</i> quick test on symptomatic ginger plants and informed the plant protection service.
5.2 Date of finding:	13-04-2021
5.3 Sampling for laboratory analysis.	Date of sampling: 14-04-2021  Plant samples were taken from ginger and turmeric plants and from irrigation water from different locations within the greenhouses. Some whole ginger plants with varying degrees of symptoms were taken and shoots of ginger and turmeric.

	<p>The ginger plants with symptoms and the corresponding irrigation water samples were tested positive. In addition, tomato plants from a foil greenhouse and <i>Salicornia</i> plants were sampled and tested in the official laboratory. One tomato sample was tested slightly positive in the official laboratory. Afterwards, one DNA sample from tomato plants transmitted to the National Reference Laboratory was tested positive for <i>R. pseudosolanacearum</i>. The tomato plants did not show any symptoms. They were pre-cultivated in a side compartment of the greenhouse where the ginger was located and were then planted out in another greenhouse. This was announced to the plant protection service on 21 April and the sampling of the tomatoes took place on the same day. The turmeric and <i>Salicornia</i> plants were tested negative.</p> <p><b>In 2022, plant samples were collected from ginger and cucumber plants and irrigation water from various locations in the greenhouses. Some whole ginger plants with different symptoms and shoots of ginger were collected. 3 ginger samples and 1 cucumber mixture sample were tested positive. All positive plants were sampled from the same greenhouse.</b></p> <p><b>Two ginger samples were sent to the National Reference Laboratory and were tested positive for <i>R. pseudosolanacearum</i>. The research institution had a rapid test carried out on 29<sup>th</sup> June 2022 by the Geisenheim University of Applied Sciences. The plant protection service was informed about the positive result on the same day. Official sampling of the plant protection service was carried out on 30<sup>th</sup> June, 08<sup>th</sup> July and 02<sup>nd</sup> August 2022.</b></p> <p><b>The official confirmation of the plant protection service took place on 26<sup>th</sup> July 2022.</b></p>
5.4 Name and address of the Laboratory	<p>Regierungspräsidium Gießen – Pflanzenschutzdienst Schanzenfeldstrasse 98 35578 Wetzlar Germany</p> <p>Julius Kühn-Institut – Institut für nationale und internationale Angelegenheiten der Pflanzengesundheit Stahnsdorfer Damm 81 14532 Kleinmachnow Germany</p>

5.5 Diagnostic method	According to peer reviewed protocols PM 7/21 (2) – <i>Ralstonia solanacearum</i> , <i>Ralstonia solanacearum</i> species complex and PM 7/129 (2) – DNA Barcoding.
5.6 Date of official confirmation of the harmful organism's identity	20-04-2021
<b>6 Infested area, and the severity and source of the outbreak in that area</b>	
6.1 Characteristics of the infested area and its vicinity.	Physically closed conditions: greenhouse Plant to be (re)planted or reproduced.
6.2 Host plants in the infested area and its vicinity	<i>Zingiber officinale</i> , <i>Salicornia</i> , <i>Curcuma</i> , <i>Solanum lycopersicum</i>
6.3 Infested plant(s), plant product(s) and other object(s).	<i>Zingiber officinale</i> (300 m <sup>2</sup> ), <i>Solanum lycopersicum</i> (100 m <sup>2</sup> )  Update 2022: <i>Zingiber officinale</i> (1000 pce), <i>Cucumis sativus</i> (160 pce)
6.4 Severity of the outbreak.	Part of the ginger plants of the whole lot were infested and showed wilting symptoms. The infested tomato plants did not show any symptoms.  <b>Update 2022: Part of the ginger plants of the two lots were infested and showed wilting symptoms, the infested cucumber plants partly showed mild symptoms.</b>
6.1 Source of the outbreak	The source of the outbreak could not be finally clarified. However, the ginger tubers used for planting were purchased as ginger for consumption, that was probably imported from Peru via another Member State. This information was on a label on the delivery boxes.  <b>Update 2022: The source of the infestation could not be finally determined. Most of the ginger plants used for planting were pre-picked at a nursery in southern Germany and tested before. There is an official negative test result for a large part of the planting material. A smaller part of the ginger plants originated from another Member State and was pre-cultivated there. For this part, no proof of freedom from an infestation was submitted to the plant protection service yet. Nevertheless, the infestation occurred in both lots. It also cannot be excluded that the new infestation originates from the infestation in 2021 in the same research facility despite the eradication measures that were carried out.</b>

<b>7 Official phytosanitary measures</b>	
7.1 Adoption of official phytosanitary measures.	<p>Official phytosanitary measures have been taken inside the demarcated area.</p> <p>Infested material is destroyed by burning in a waste incineration facility. Quarantine is imposed until eradication is completed.</p> <p><b>Update 2022: Infested material is destroyed by burning in a waste incineration plant. Quarantine is imposed until eradication is completed.</b></p>
7.2 Date of adoption of the official phytosanitary measures.	20-04-2021
7.3 Identification of the area covered by the official phytosanitary measures.	400 m <sup>2</sup>
7.4 Objective of the official phytosanitary measures.	Eradication
7.5 Measures affecting the movement of goods.	Measures do not affect import into or movement within the Union of goods.
7.6 Specific surveys.	<b>Yes, official survey and controls in the concerned premises for at least 3 years.</b>
<b>8 Pest risk analysis/assessment</b>	Pest risk assessment is not required. Harmful organism is listed in Annex II A of Regulation (EU) 2019/2072.