

**Notification of the presence of a harmful organism (closing note)**

<b>1 General information</b>	
1.1 Title	<b>Eradication of the first outbreak of Tomato brown rugose fruit virus (ToBRFV) in Germany (North Rhine-Westphalia)</b>
1.2 Executive summary	<p>ToBRFV has been confirmed in 7 greenhouses with tomatoes in North Rhine-Westphalia. Additionally, on further greenhouse with tomatoes is suspected to be infested. This is the first finding of ToBRFV in Germany. The infested tomato plants in this nurseries were used for tomato fruit production. Eradication measures are in progress.</p> <p><b>Update 15-07-2019: In May and June 2019, the affected greenhouses were extensively sampled. The samples were tested in the laboratory of the Chamber of Agriculture of North Rhine-Westphalia. All samples were tested negative. No ToBRFV could be found. ToBRFV is considered eradicated.</b></p>
<b>2 <u>Information concerning the single authority and responsible persons.</u></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)531 299 3378, <a href="mailto:outbreaks@julius-kuehn.de">outbreaks@julius-kuehn.de</a>
<b>3 Location</b>	
3.1 Location	In North Rhine-Westphalia
<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 harmful organism in the territory of Germany

4.2 Pest status of the area where the harmful organism has been found present, after the official confirmation.	<b>Absent, pest found but eradicated</b>
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.	<b>Absent, eradicated</b>
<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: Samples were taken by the plant protection service of North Rhine-Westphalia.
5.2 Date of finding:	05-10-2018
5.3 Sampling for laboratory analysis.	08-10-2018
5.4 Name and address of the Laboratory	Landwirtschaftskammer NRW Pflanzenschutzdienst Siebengebirgsstraße 200 53229 Bonn Germany
5.5 Diagnostic method	RT-PCR with tobamovirus-specific primers and following sequencing
5.6 Date of official confirmation of the harmful organism's identity.	26-10-2018
<b>6 Infested area, and the severity and source of the outbreak in that area.</b>	
6.1 Size and delimitation of the infested area.	25 ha (50,000 plants)

6.2 Characteristics of the infested area and its vicinity.	Physically closed conditions: greenhouse
6.3 Infested plant(s), plant product(s) and other object(s).	<i>Solanum lycopersicum</i> (plant already planted, not to be reproduced, for fruit production)
6.4 Severity of the outbreak.	The infection spread very fast within the greenhouses. About 10 % of the plants showed symptoms.
6.5 Source of the outbreak	Unknown. Trace back investigations are ongoing. The young plant were not produced in Germany.
<b>7 Official phytosanitary measures.</b>	
7.1 Adoption of official phytosanitary measures.	Official phytosanitary measures will be taken: - Clearing of the greenhouses of all tomato plants. - Destruction of the whole plant material. Disinfection of all greenhouse surfaces and all objects that were involved in tomato production and the material that was used in the clearance of the greenhouses.  <b>Update 15-07-2019: Official phytosanitary measures have been completed.</b>
7.2 Date of adoption of the official phytosanitary measures.	26-10-2018
7.3 Objective of the official phytosanitary measures.	Eradication
7.4 Measures affecting the movement of goods.	Measures do not affect import into or movement within the Union of goods
7.5 Specific surveys.	no
<b>8 Pest risk analysis/assessment</b>	Preliminary pest risk analysis exists: The tobamovirus tomato brown rugose fruit virus (ToBRFV) was discovered in Jordan in 2015 but already occurred in Israel in 2014. ToBRFV infects tomato plants and leads to mosaic staining of the leaves as well as discoloration and deformations of the fruits. The virus can

	<p>affect up to 100 % of a stock. The available resistance genes in conventional tomato varieties against other tobamoviruses are ineffective against ToBRFV. So far, too little is known about the virus to exclude possible damage on other host plants. The virus can establish in greenhouse cultures of tomatoes in Germany and other EU Member States. Outdoors, potential host plants occur, which can serve at least as reservoir for new infections. Because of its high damaging potential for tomato production, ToBRFV poses a significant phytosanitary risk for Germany and other EU Member States.</p>
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