

Institute for National and International Plant Health

JKI, Messeweg 11/12, 38104 Braunschweig, Germany



Federal Research Centre for Cultivated Plants www.julius-kuehn.de

14-09-2022

Notification of the presence of a harmful organism - update

1 General information	
1.1 Title	Update of an outbreak of <i>Meloidogyne chitwoodi</i> in Germany (Lower Saxony)
1.2 Executive summary	On 22 nd March 2022, symptoms were detected on potato tubers indicating an infestation with <i>Meloidogyne</i> in a propagation project (variety Godzilla) as part of the certification procedure for seed potatoes. The tubers suspected of being infested were sent to the Plant Protection Service of the Lower Saxony Chamber of Agriculture for laboratory examination. On 29 th March 2022, <i>Meloidogyne chitwoodi</i> was detected in the samples by qPCR (further tests were subsequently performed). On 7 th April 2022, the National Reference Laboratory of the Julius Kühn-Institute (JKI) officially confirmed <i>Meloidogyne chitwoodi</i> on symptomatic seed potato tubers. It is the first official finding of this pest in Lower Saxony.
	Due to the infestation on the seed potato lot of Godzilla variety, plant health inspectors intensively inspected the other propagation projects of the affected farm on 5 th April 2022. In addition, samples were taken from all propagation projects of the affected farm and examined for the presence of <i>Meloidogyne</i> in the laboratory of the Plant Protection Service. During these examinations, <i>M. chitwoodi</i> was detected in another propagation project (variety Pirol). The areas on which the two infested seed potato lots were produced (=infested areas) are located at a distance of approx. 700 m from each other. No infestation was detected on other seed potato lots or propagation projects.
	A demarcated area containing the infested zone is established. Phytosanitary measures have been initiated in accordance with Regulation (EU) 2016/2031.
	In August 2022, potatoes were sampled at the grower at which infestation with <i>M. chitwoodi</i> has been detected in spring 2022. In two of these samples

		(variety 'Amanda' and 'Gala') infestation with <i>M. chitwoodi</i> was detected by the laboratory of the plant protection service of Lower Saxony. The date of the official confirmation of the pest was 7 th September 2022. The infested potatoes were grown on the same field, which is not far away from the two demarcated areas established in spring 2022. A new demarcated area containing the infested zone was established. Phytosanitary measures have been initiated in accordance with Regulation (EU) 2016/2031.
2	Information concerning the single aut	thority and responsible persons
2.1	Notification from	Julius Kühn-Institut (JKI), Institute for National and International Plant Health, Germany
2.2	Official contact:	Florian Kunze, Tel: +49 39 46 47 7517, outbreaks@julius-kuehn.de
3	Location	
3.1	Location	In Lower Saxony
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.
	Pest status of the area where the harmful organism has been found present, after the official confirmation.	Present: under eradication
	Pest status in Germany before the official confirmation of the presence, or suspected presence, of the harmful organism.	Present: under eradication
	Pest status in Germany after the official confirmation of the presence of the harmful organism.	Present: under eradication
5	Finding, sampling, testing and confirmation of the harmful organism	
	How the presence or appearance of the harmful organism was found.	Official inspection for purposes other than phytosanitary ones.
		Symptoms were detected on tubers indicating infestation with <i>Meloidogyne</i> in a propagation project as part of the certification procedure for seed potatoes.
5.2	Date of finding:	25-03-2022

5.3	Sampling for laboratory analysis.	22-03-2022
5.5	Sampling for laboratory analysis.	The official seed potato certification body took the sample. On 28th March 2022, the plant protection service took further samples of variety Godzilla. The variety Pirol was sampled on 5th April 2022.
		The varieties 'Amanda' and 'Gala' were sampled by the plant protection service on 24th August 2022.
5.4	Name and address of the Laboratory	Landwirtschaftskammer Niedersachsen – Pflanzenschutzamt Wunstorfer Landstraße 9 30453 Hannover Germany
		Julius Kühn-Institut – Institut für nationale und internationale Angelegenheiten der Pflanzengesundheit Messeweg 11-12 38104 Braunschweig Germany
5.5	Diagnostic method	According to peer reviewed protocols PM 7/41 (2) - Meloidogyne chitwoodi and Meloidogyne fallax
		Diagnosis in combination with PM 7/119 (1) Nematode extraction.
		The molecular identification was carried out according to PM 7/41 (3).
5.6	Date of official confirmation of the harmful organism's identity.	07-04-2022
6	Infested area, and the severity and source of the outbreak in that area	
6.1	Size and delimitation of the infested area.	8.7 ha
6.2	Characteristics of the infested area and its vicinity.	Open air - production area: field (arable, pasture)
		Plant to be (re) planted or reproduced.
6.3	Host plants in the infested area and its vicinity	Solanum tuberosum
6.4	Infested plant(s), plant product(s) and other object(s).	Solanum tuberosum ('Godzilla' 1.7 ha, 'Pirol' 4 ha, 'Amanda' and 'Gala' 3 ha)
6.5	Severity of the outbreak.	Approximately 5% of the lot of seed potato tubers variety Godzilla showed clear symptoms. In contrast, the tubers of the variety Pirol showed no clear symptoms attributable to an infestation with <i>M. chitwoodi</i> .

		Update September 2022: Approximately 3.5 % ('Gala') and 0.5 % ('Amanda') of the sampled potato tubers were infested with <i>M. chitwoodi</i> .
6.6	Source of the outbreak	Since two different seed potato lots have shown infestation, but differ in their infestation level and expression, it can be assumed now that there was already an infestation at the initial location where the variety Godzilla was grown. Seed potatoes, which may have been infested, had already been delivered. Trace-forward investigations were initiated immediately.
		Update September 2022: It can be assumed that the infestation resulted from a spread of the pest within the territory of the affected grower.
7	Official phytosanitary measures	
7.1	Adoption of official phytosanitary measures.	Official phytosanitary measures will be taken Initial phytosanitary measures (quarantine of seed potatoes suspected of being infested, tracking and determination of seed potatoes suspected of being infested that had already been delivered, orders to dispose of infested seed potatoes) were initiated immediately. Further measures (e.g. cleaning of machines and equipment that have been in contact with an infested area or with infested tubers, overall requirements for the movement of soil or soil material, prohibition of cultivation on the infested areas) will be carried out in a timely manner. Update September 2022: Official measures were implemented in all infested areas as follows: Restrictions for the movement/utilisation of the infested potatoes Prohibition of cultivation of seed potatoes and other crops/plants (e.g. main host plants, plants that are harvested with soil) in the infested area Cleaning of machines and equipment that have been in contact with the infested area or with
7.2	Identification of the area covered by the official phytosanitary measures.	11 ha
7.3	Objective of the official phytosanitary measures.	Eradication

7.4	Measures affecting the movement of goods.	Measures affect import into or movement within the Union of goods.
7.5	Specific surveys.	Yes
8	Pest risk analysis/assessment	Pest risk assessment is not required. Harmful organism is listed in Annex II B of Regulation (EU) 2019/2072.