EUROPEAN FOOD SAFETY AUTHORITY

Plant Health Newsletter on HORIZON SCANNING

July 2023

European Food Safety Authority (EFSA)
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Science, safe food, sustainability

Introduction

Following a request from the European Commission[1], EFSA provides here the Horizon Scanning Newsletter summarising the monthly results of the horizon scanning activity for threats in the field of plant health, that were published on the web during the previous month (e.g. the newsletter of February 2023 covers the period 1-31 January 2023). The aim is to identify in a timely manner relevant information on plant pests that might be of concern to the EU and therefore may require consideration by risk assessors and risk managers.

The monitoring system is based on the automatic public health surveillance platform MEDISYS (Medical Information System), scanning more than 20,900 sources in 79 languages from 204 countries, covering all world's regions. At this moment, 2,496 plant pests (pests regulated in the EU, pests listed by EPPO and new plant pests) have been daily monitored in media, scientific literature and social media (EFSA, 2021[2] and data from September 2021).

The monitored plant pest species include

1 regulated pests listed in Annexes IIA and IIB of the Commission Implementing Regulation (EU) 2019/2072[3] and later amendments, in other EU plant health legal acts or present in the EPPO Alert, A1 and A2 lists.

2 Pests not regulated in the EU neither part of EPPO lists.

3 Newly identified taxa: as soon as included in a newsletter, they are also added to the list of monitored pests.

The final selection of articles and main issues for the newsletter is conducted by a dedicated EFSA working group meeting once a month[4] with the support of EFSA staff and contractors. The EPPO Global Database[5], CABI Crop Protection Compendium[6] and previous EFSA outputs[7] are fundamental tools supporting this decision process.

The newsletter is composed of three parts:

1. a summary of the content of the newsletter.
2. a presentation of the main issues of the month, identified and selected by a group of experts. They include the most relevant news, in particular: i) new threats represented by non-regulated pests, ii) first findings of pests regulated in the EU. In the first category are included pests screened by the PeMoScoring (EFSA, 2022[8]) with positive result, with a few details on their biology and reasons supporting the positive score.

[1] European Commission – Directorate General for Health and Food Safety, Request to provide a scientific and technical assistance on a horizon scanning exercise in view to crisis preparedness on plant health for the EU territory (M-2017-0012, EFSA-Q-2017-00037).

[2] EFSA (European Food Safety Authority), Mannino M R, Larenaudie M, Linge J P, Candresse T, Jaques Miret J A, Jeger M J, Gachet E, Maiorano A, Muñoz Guajardo I, Stancanelli G, 2021. Horizon Scanning for Plant Health: report on 2017-2020 activities. EFSA supporting publication 2021:EN-2010. 113 pp. doi:10.2903/sp.efsa.2021.EN-2010

[3] Commission implementing Regulation (EU) 2019/2072 of 28 November 2019 establishing uniform conditions for the implementation of Regulation (EU) 2016/2031 of the European Parliament and the Council, as regards protective measures against pests of plants, and repealing Commission Regulation (EC) No 690/2008 and amending Commission Implementing Regulation (EU) 2018/2019. Official Journal of the European Union L 319, latest consolidated version.

[4] Minutes of the meetings are available here https://www.efsa.europa.eu/sites/default/files/wgs/plant-health/wg-plh-horizon-scanning.pdf

[5] EPPO, 2023. EPPO Global Database (available online). https://gd.eppo.int

[6] CABI, 2023. Crop Protection Compendium. Wallingford, UK: CAB International. www.cabi.org/cpc

[7] EFSA Journal https://efsa.onlinelibrary.wiley.com/

[8] EFSA (European Food Safety Authority), Tayeh C, Mannino MR, Mosbach-Schulz O, Stancanelli G, Tramontini S, Gachet E, Candresse T, Jaques Miret JA and Jeger MJ, 2022. Scientific Report on the proposal of a ranking methodology for plant threats in the EU. EFSA Journal 2022;20 (1):7025, 59 pp. https://doi.org/10.2903/j.efsa.2022.7025

3. a list with active links to the selected articles: they are organised by regulation and EPPO lists where they appear, then by taxonomy. A coloured shape to the side of each article will help identifying the type of source:

   - ● Scientific publication
   - ■ Official media (digital newspapers, magazines), grey sources (reports, government documents, working papers, etc)
   - ◆ Social media, blogs, email alerts (bulletins, news, discussion fora, etc)

This newsletter will serve the EC and Member States in addressing phytosanitary questions. Moreover, it will benefit professionals working in the field and the informed public.

1. Summary

Table legend				
PeMoScoring	**Host**	**Host range**	**Damage**	**EU distribution**
Negative PeMo Scoring Positive PeMo Scoring	Forest plants Fruit plants Vegetables Ornamental and flower plants Cereals Oil and fibre plants Other plants	Monophagous / One host plant Oligophagous / Restricted range of host plants Polyphagous / Wide range of host plants	Qualitative losses Quantitative losses Damage leading to plant death Vector	Present in the EU Absent from the EU

Pest	Hosts	Host range	Damage	EU distribution	Regulatory status	Topic
Bacillus pumilus	Potato, bean, pine tree, oak, muskmelon,		Soft rot	ES	Not listed	First finding
Colletotrichum fructicola	Many cultivated host plants (sweet pepper, Citrus sp., cucumber, fig…)		Dark brown stem and fruit spots, pre- and post-harvest fruit rot, spotting and wilting of leaves	FR, IT	Not listed	New host plant
					Not listed	First finding

High Plains wheat mosaic virus	Mainly wheat and maize	Poaceae	On wheat : Mild to severe mosaic, chlorosis and necrosis On maize : red striping and chlorotic streaks, possible plant death	Absent from the EU		
Kyuri green mottle mosaic virus ⚠	Cucumber, watermelon, melon, squash, gourd	Cucurbitaceae	Severe yield reduction	✕ Absent from the EU	Not listed	First finding
Pseudomonas allii	Onion, Chinese yam		Bacterial rot	✕ Absent from the EU	Not listed	First finding
Pseudomonas alliivorans	Onion		Dark-brown water soaked lesions	✕ Absent from the EU	Not listed	New finding
Cucumber vein yellowing virus	Mainly cucumber	Among Cucurbitaceae	Vein clearing, chlorosis and general necrosis, sudden death can occur.	✔ ES, CY, PT	EPPO A2 list	First finding
Candidatus Liberibacter asiaticus, C. L. africanus and C. L. americanus	Citrus species		Reduced size and green colour of the fruits, premature fruit drop, dieback and dwarfing of the plan	✕ Absent from the EU	Priority pest	Detection method
Popillia japonica	Mainly maize, soybean, grapevine, cherry trees, ornamental trees and shrubs		Feeding symptoms and damages closely related to the host	✔ Under official control in IT, PT (Azores)	Priority pest	Spread
Xylella fastidiosa	Mainly almond, citrus, grapevine, olive		Dieback/reduced growth/plant death. Asymptomatic in some species or cvars.	✔ Under official control in ES, FR, IT and PT	Priority pest	Modelling New finding Modelling

Bretziella fagacearum	Oak and chestnut	Fagaceae	Foliar wilt and necrosis, plant death	✗ Absent from the EU	Quarantine pest	First finding
Choristoneura fumiferana	White spruce, balsam fir	Coniferous	When defoliation is severe growth reduction and mortality	✗ Absent from the EU	Quarantine pest	Modelling
Diaphorina citri	Fruit and ornamental species	Rutaceae	V Vector of Citrus greening disease	✗ Absent from the EU	Quarantine pest	Vector management
Globodera rostochiensis and G. pallida	Eggplant, potato, tomato	*Solanum* sp.	Root cysts, patches of poor growth foliage yellowing, tubers' reduced size	✓ Under official control	Quarantine pest	Identification method
Meloidogyne enterolobii	Sweet potato, beans, tomato and other vegetables		Root galling and stunting	✓ PT	Quarantine pest	Potential distribution
Scirtothrips dorsalis	Bell pepper, tea		Young leaves distortion	✓ ES, NL	Quarantine pest	First finding
Tomato leaf curl New Delhi virus	Mainly cucurbits, pepper, tomato		Chlorotic mottling, curling and crinkling of leaves, vein clearing or thickening, reduced size of leaves and internodes, plant stunting	✓ ES, IT, GR, PT	Quarantine pest	New finding
Tomato Leaf Curl Taiwan Virus	Tomato		Leaf curling and stunting	✗ Absent from the EU	Quarantine pest	Epidemiology
Tomato Yellow Leaf Curl Thailand	Bell pepper	Solanaceae	Leaf curling, yellowing and stunting	✗ Absent from the EU	Quarantine pest	Epidemiology
				✓		Surveillance

Tomato brown rugose fruit virus	Mainly pepper and tomato	Solanaceae	Foliar chlorosis, mosaic and mottling, necrotic spots on peduncles, calyces and petioles, yellow or brown spots on fruits	Under official control	Emergency control measures	

2. Main issues of July 2023

Bacillus pumilus

⚠ Positive PeMoScoring

Bacillus pumilus is a bacterium, currently not listed in any EU legal acts or EPPO lists. This newsletter includes one article about this pest.

The selected article reports the first finding of the pest in Tunisia. Potato tubers with soft rot were seen between 2018 and 2020 and were further examined. *Bacillus pumilus* was identified in 19 different isolates. The bacterium has been previously reported on common bean in Spain in 2010. This pest was included in the PeMoScoring screening and scored positive.

All the articles on *Bacillus pumilus* are available on the webpage of MEDISYS EFSA Plant Health

Bretziella fagacearum

Bretziella fagacearum is a fungus listed in ANNEX II A of the Commission Implementing Regulation (EU) 2019/2072. This newsletter includes one article about this pest.

The article reports the first finding in Canada on oak trees in Niagara Falls. Previously, it had only been reported in the United States.

All the articles on *Bretziella fagacearum* are available on the webpage of MEDISYS EFSA Plant Health.

Xylella fastidiosa

Xylella fastidiosa is a plant pathogenic bacterium regulated as a priority pest and listed in Annex II B of the Commission Implementing Regulation (EU) 2019/2072, subject of EU emergency measures (Commission Implementing Regulation (EU) 2020/1201. This newsletter includes three articles concerning this bacterium.

The first article reports a new finding in Europe, in Apulia (Italy). The other two articles describe modelling applications for the pest. While one research paper examines the distribution and habitat preferences of the vector, the other uses Bayesian Model-Averaging to estimate the pathogen dynamics.

All the articles on *Xylella fastidiosa* are available on the webpage of MEDISYS EFSA Plant Health

3. Selected articles

3.1. New EU threats

3.1.1 Non-regulated pests in the EU

Bacteria

Bacillus pumilus
Authority: Meyer & Gottheil
Firmicutes, Bacillales, Bacillaceae

⚠ Positive PeMoScoring

● First finding (TN)

Characterisation of Pectinolytic *Bacillus pumilus* and *Paenibacillus amyloliticus* Strains, New Pathogens of Potato in Tunisia

Agriculture 20.Jun.2023

Soft rot disease in potato is a major problem in fields and warehouses all over the world. Although it is known that bacteria from the genera *Pectobacterium* and *Dickeya* are the main causative agents of soft rot diseases, recent studies indicate the involvement of pectinolytic *Bacillus* and *Paenibacillus* in this disease. In the present research, samples of potato with soft rot symptoms were collected from eight governorates of Tunisia. (more)

Pseudomonas allii and *Pseudomonas alliivorans*
Authority: Sawada et al. 2021 | Zhao et al. 2022
Gammaproteobacteria, Pseudomonadales, Pseudomonadaceae

● First finding (US) and New finding (US)

Isolation and Characterization of Bacteria Associated with Onion and First Report of Onion Diseases Caused by Five Bacterial Pathogens in Texas, U.S.A.

Plant Disease 05.Jun.2023

Bacterial diseases pose a severe challenge to growers and cause significant loss to the billion-dollar onion industry in the United States. Texas is the sixth largest onion producing state, yet the bacterial communities associated with short-day onion crops grown in Texas have not been studied. (more)

Fungi and oomycetes

Colletotrichum fructicola

Authority: Prihastuti, L. Cai & K.D. Hyde

Sordariomycetes, Glomerellales, Glomerellaceae

EFSA pest categorization of *Colletotrichum fructicola*

- New host plant

First Report of *Colletotrichum fructicola* Causing Anthracnose on *Punica granatum* in China

Plant Disease 17.Jun.2023

Punica granatum L. (Pomegranate), a deciduous shrub, is widely cultivated as a fruit tree and decorative plant in China. Its flowers, leaves, roots and fruit bark also has been widely used for the treatment of different types of human disease because of the high anti-inflammatory and antibacterial activitiy (Tehranifar et al. 2011). In October 2022, leaf spot symptoms were observed on *P. granatum* leaves in a landscaped area on the campus of Jiangxi Agricultural University (28.75°N, 115.83°E), Nanchang, Jiangxi Province, China. (more)

Viruses, viroids and phytoplasmas

High Plains wheat mosaic virus

Viruses, Fimoviridae, Emaravirus

- First finding (IR)

First report of *High Plains wheat mosaic virus* in Iran

New Disease Reports 21.June.2023

High Plains wheat mosaic virus (HPWMoV, genus Emaravirus) has an octopartite, negative-sense RNA genome, each segment encoding a single open reading frame. The virus is transmitted by the wheat curl mite (*Aceria tosichella*) (Tatineni et al., 2014). HPWMoV has been reported from Argentina, Australia, Canada, New Zealand, Ukraine and the USA (Abdullahi et al., 2020; Snihur et al., 2020). (more)

Kyuri green mottle mosaic virus

Viruses, Virgaviridae, Tobamovirus

⚠Negative PeMoScoring

- First finding (TR)

Kyuri green mottle mosaic virus detected for the first time in Turkey

Australasian Plant Disease Notes 08.Jun.2023

Turkey is among the top 10 producers of cucumber, melon, watermelon, and squash in the world. Lately, seed-borne viruses have become a major issue in greenhouse and field-grown cucurbits. In this study, the incidence of *kyuri green mottle mosaic virus* (*KGMMV*)

was determined in seeds from various species (cucumber, melon, watermelon, summer squash, bottle gourd, winter squash) of Cucurbitaceae. (more)

3.1.2 EPPO lists

Cucumber vein yellowing virus[9]

Viruses, Potyviridae, Ipomovirus

- First finding (IQ)

First report of *Cucumber vein yellowing virus* in Iraq

New Disease Reports 13.Jun.2023

Courgette (*Cucurbita pepo*) is one of the main cucurbit crops grown in Iraq for local consumption. Viruses are a major threat to cucurbit production in Iraq, particularly whitefly-transmitted viruses (Mohammed et al., 2021). In the 2022 growing season, courgette plants with extensive leaf vein-yellowing symptoms (Figure 1), associated with whitefly infestation, were observed in fields around Al-Yusufiyah, Baghdad Province, Iraq. (more)

[9] EPPO A2 list : https://www.eppo.int/ACTIVITIES/plant_quarantine/A2_list

3.2. Regulated pests

3.2.1 Priority pests[10]

Candidatus Liberibacter asiaticus, *C.* L. africanus and *C.* L. americanus

Authority: Jagoeix, Bové & Garnier | Jagoeix, Bové & Garnier | Teixeira, Saillard, Eveillard, Danet, da Costa, Ayres & Bové

Alphaproteobacteria, Rhizobiales, Phyllobacteriaceae

- Detection method

Real-time on-site detection of the three '*Candidatus* Liberibacter' species associated with HLB disease: a rapid and validated method

Frontiers in Plant Science 07.Jun.2023

Huanglongbing (HLB) is a devastating disease that affects all commercial citrus species worldwide. The disease is associated with bacteria of three species of the genus '*Candidatus* Liberibacter' transmitted by psyllid vectors. To date, HLB has no cure, so preventing its introduction into HLB-free areas is the best strategy to control its spread. (more)

Popillia japonica

Authority: Newman

Insecta, Coleoptera, Scarabaeidae

- Spread

Tracing the dispersal route of the invasive Japanese beetle *Popillia japonica*

Journal of Pest Science 26.Jun.2023

The Japanese beetle, *Popillia japonica*, is a highly polyphagous Scarabaeidae native to Japan that colonized North America and Azores in the last century and has recently invaded Italy and Switzerland. Considering its economic impact on the horticulture and turfgrass industries, this species was ranked within the EU priority pests list in 2019. (more)

Xylella fastidiosa and its vectors

Authority: Wells, Raju, Hung, Weisburg, Parl & Beemer

Gammaproteobacteria, Lysobacterales, Lysobacteraceae

- Modelling

[10] Commission Delegated Regulation (EU) 2019/1702 of 1 August 2019 supplementing Regulation (EU) 2016/2031 of the European Parliament and of the Council by establishing the list of priority pests. OJ L 260, 11.10.2019, p. 8–10

Forecasting Pathogen Dynamics with Bayesian Model-Averaging: Application to *Xylella fastidiosa*

Bulletin of Mathematical Biology 10.Jun.2023

Forecasting invasive-pathogen dynamics is paramount to anticipate eradication and containment strategies. Such predictions can be obtained using a model grounded on partial differential equations (PDE; often exploited to model invasions) and fitted to surveillance data. This framework allows the construction of phenomenological but concise models relying on mechanistic hypotheses and real observations. (more)

■ New finding (IT)

La Xylella è arrivata alle porte di Bari: «Mai rilevata così a Nord»

Xylella has arrived at the gates of Bari: «Never detected so far in the North»

La gazzetta del mezzogiorno 26.Jun.2023

Lotta alla Xylella: prorogato al 10 luglio il termine per il secondo trattamento insetticida contro la Philaneus Spumarius, la cosiddetta Sputacchina, vettore che per la prima volta viene segnalato alle porte di Bari, nei campi di Triggiano. Le nuove disposizioni sono state autorizzate in 20 comuni delle province di Bari, Brindisi e Taranto. (more)

Fight against Xylella: the deadline for the second insecticide treatment against Philaneus Spumarius, the so-called Sputacchina, a vector which for the first time is reported close to Bari, in the fields of Triggiano, has been extended to 10 July. The new provisions have been authorized in 20 municipalities in the provinces of Bari, Brindisi and Taranto.

● Modelling

Bioclimatic and Landscape Factors drive the Potential Distribution of *Philaenus spumarius*, *Neophilaenus campestris* and *N. lineatus* (Hemiptera, Aphrophoridae) in Southeastern Iberian Peninsula

Insects 30 June 2023

Philaenus spumarius and *Neophilaenus campestris* are the main vectors of the invasive bacteria *Xylella fastidiosa* and key threats to European plant health. Previous studies of the potential distribution of *P. spumarius* reveal that climatic factors are the main drivers of its distribution on the Mediterranean Basin scale. Other local studies reveal that the landscape could also have a role in the distribution of both species of *P. spumarius* and *N. campestris*. (more)

3.2.2 Quarantine pests[11,12]

Annex II Part A

Fungi and oomycetes

Bretziella fagacearum

Authority: (Bretz) Z.W. de Beer, Marincowitz, T.A. Duong & M.J. Wingfield

Sordariomycetes, Microascales, Ceratocystidaceae

■ First finding (CA)

Oak wilt found in Canada for first time, sparking concern disease could spread and kill trees

Digitpatrox 28.Jun.2023

For the primary time, federal authorities officers say a fungal illness referred to as oak wilt has been confirmed to be in Canada — a discovery that's sparking concern about the way it might affect oak bushes. (more)

Insects and mites

Choristoneura fumiferana

Authority: (Clemens)

Insecta, Lepidoptera, Tortricidae

● Modelling

Species distribution model identifies influence of climatic constraints on severe defoliation at the leading edge of a native insect outbreak

Forest Ecology and Management 21.Jun.2023

Eastern North America is in the midst of a spruce budworm (*Choristoneura fumiferana* Clem., SBW) epidemic. SBW is one of the most important forest insects with regard to outbreak coverage and impacts to the forest industry in this region. Numerous bioclimatic, vegetation, and spatial–temporal variables can influence the distribution and outbreak patterns of phytophagous insects such as SBW. (more)

[11] Commission Implementing Regulation (EU) 2019/2072 of 28 November 2019 establishing uniform conditions for the implementation of Regulation (EU) 2016/2031 of the European Parliament and the Council, as regards protective measures against pests of plants, and repealing Commission Regulation (EC) No 690/2008 and amending Commission Implementing Regulation (EU) 2018/2019. OJ L 319, consolidated version 16.12.2021, p. 1–258

[12] Commission Implementing Regulation (EU) 2021/2285 of 14 December 2021 amending Implementing Regulation (EU) 2019/2072 as regards the listing of pests, prohibitions and requirements for the introduction into, and movement within, the Union of plants, plant products and other objects, and repealing Decisions 98/109/EC and 2002/757/EC and Implementing Regulations (EU) 2020/885 and (EU) 2020/1292. OJ L 458, 22.12.2021, p. 173–283.

Diaphorina citri

Authority: Kuwayama

Insecta, Hemiptera, Psyllidae

■ Vector management

Primeros casos de psílidos resistentes a insecticidas en Brasil

First cases of insecticide-resistant psyllids in Brazil

Phytoma 19.Jun.2023

Un estudio ha confirmado los primeros psílidos resistentes a piretroides y neonicotinoides en Brasil, lo que puede complicar el control de *Diaphirina [Diaphorina] citri*, transmisor del HLB. Este hallazgo supone el primer caso de resistencia a estos insecticidas en el país sudamericano, pero ya se han confirmado 123 casos para nueve ingredientes activos diferentes en otros países y regiones, como Florida (EE UU), México, China y Pakistán. (more)

A study has confirmed the first presence of psyllids resistant to pyrethroids and neonicotinoids in Brazil, which may complicate the control of Diaphirina [Diaphorina] citri, the transmitter of HLB. This finding represents the first case of resistance to these insecticides in the South American country, but 123 cases have already been confirmed for nine different active ingredients in other countries and regions, such as Florida (USA), Mexico, China and Pakistan.

Scirtothrips dorsalis

Authority: Hood

Insecta, Thysanoptera, Thripidae

● First finding (PE)

Primer registro de *Scirtothrips dorsalis* Hood, 1919 (Thysanoptera: Thripidae) en Perú, y su potencial riesgo fitosanitario para la agricultura chilena

First record of *Scirtothrips dorsalis* Hood, 1919 (Thysanoptera: Thripidae) in Peru, and its potential phytosanitary risk for Chilean agriculture

Se informa el primer registro del trips del chile *Scirtothrips dorsalis* en Perú, con base en ejemplares recolectados durante julio y abril 2022-2023 sobre plantas de arándano. La identificación específica se fundamentó en los caracteres morfológicos del adulto y de evidencia molecular. (more)

The first record of the chilli thrips Scirtothrips dorsalis in Peru is reported, based on specimens collected during July and April 2022-2023 on blueberry plants. The specific identification was based on the morphological characters of the adult and molecular evidence.

Nematodes

Meloidogyne enterolobii

Authority: Yang & Eisenback

Chromadorea, Rhabditida, Meloidogynidae

● Potential distribution

Potential global distribution of the guava root-knot nematode *Meloidogyne enterolobii* under different climate change scenarios using MaxEnt ecological niche modeling

Journal of Integrative Agriculture 28 June 2023

In recent years, *Meloidogyne enterolobii* has emerged as a major parasitic nematode infesting many plants in tropical or subtropical areas. However, the regions of potential distribution and the main contributing environmental variables for this nematode are unclear. Under the current climate scenario, we predicted the potential geographic distributions of *M. enterolobii* worldwide and in China using a Maximum Entropy (MaxEnt) model with the occurrence data of this species. (more)

Viruses, viroids and phytoplasmas

Tomato Leaf Curl Taiwan Virus, Tomato Yellow Leaf Curl Thailand Virus and *Tomato leaf curl New Delhi virus* (annexII partB)

Viruses, Geminiviridae, Begomovirus

● Epidemiology

Seed and Pollen Transmission of *Tomato Leaf Curl New Delhi Virus*, *Tomato Leaf Curl Taiwan Virus*, and *Tomato Yellow Leaf Curl Thailand Virus* in Cucumbers and Tomatoes

Plant Disease 21.Jun.2023

Understanding the seedborne nature of plant viruses is essential for developing disease control strategies and is impactful to the seed market. Here, we investigated seed transmissibility of *tomato leaf curl New Delhi virus*-cucumber isolate (ToLCNDV-CB) and -oriental melon isolate (ToLCNDV-OM) in cucumber and seed transmissibility of *tomato leaf curl Taiwan virus* (ToLCTV) and *tomato yellow leaf curl Thailand virus* (TYLCTHV) in tomato. (more)

Annex II Part B

Nematodes

Globodera pallida

Authority: (Stone) Behrens

Chromadorea, Rhabditida, Heteroderidae

■ First finding (LV)

Latvijā pirmo reizi konstatēta kartupeļu bālā cistu nematode

Potato pale cyst nematode was detected for the first time in Latvia

LV portals 02.Jun.2023

Kādā Zemgales kartupeļu audzēšanas saimniecībā Valsts augu aizsardzības dienesta (VAAD) pārbaudes laikā ņemtā kartupeļu paraugā pēc laboratoriskās testēšanas konstatēts Eiropas Savienības karantīnas organisms – kartupeļu bālā cistu nematode (*Globodera pallida*). Organisms atrasts kartupeļu audzēšanas laukā 10,33 ha platībā. (more)

In a potato sample taken during an inspection by the State Plant Protection Service (VAAD) at a potato growing farm in Zemgale, a European Union quarantine organism - the potato pale cyst nematode (Globodera pallida) - was found and confirmed with laboratory testing. The organism was found in a potato cultivation field on an area of 10.33 ha.

Globodera pallida and *Globodera rostochiensis*

Authority: (Stone) Behrens | (Wollenweber) Behrens

Chromadorea, Rhabditida, Heteroderidae

- Identification method

Development of SNP-based assays for identification of *Globodera rostochiensis* and *Globodera pallida*

Journal of Plant Diseases and Protection 12.Jun.2023

Potato cyst nematodes (PCNs), *Globodera rostochiensis* and *G. pallida*, are one of the major pathogens of potato and cause significant losses worldwide. These species, which are on the worldwide quarantine list, can survive in infected areas for more than 20 years. Therefore, these species need to be identified accurately and quickly. (more)

3.2.3 EU emergency measures

Tomato brown rugose fruit virus

Viruses, Virgaviridae, Tobamovirus

- Surveillance

Detection of *tomato brown rugose fruit virus* is influenced by infection at different growth stages and sampling from different plant parts

Plant Pathology 19.June.2023

Since the first report of the virus in 2014, *tomato brown rugose fruit virus* (ToBRFV) has spread widely through Europe, the Americas and Asia. Within Europe there is currently a requirement for annual surveillance for the virus. However, little is known about the relative impact of sampling strategy with respect to timing of infection and the detection of virus from different plant parts. (more)

3.3. Articles of general interest

Development and Validation of a High-Throughput Sequencing Test for Mitogenome and rDNA Assembly and Annotation, and Its Use in Support of Nematode Identification of Regulatory Concern

PhytoFrontiers 11.May.2023

Nematoda is a diverse phylum, and representatives are found in most habitats, including in and on animals and plants. Nematodes are regarded as the most abundant group in terms of individuals in marine and terrestrial sediments. Plant-parasitic nematodes are globally responsible for an annual yield loss of $125 billion. Reliable species identification is essential to take appropriate phytosanitary measures. (more)

Multivariate Bayesian analysis to predict invasiveness of *Phytophthora* pathogens

Ecosphere 23.June.2023

Global concerns are many for the invasive impacts of *Phytophthora* pathogens on native vegetation, agriculture, nurseries, and urban parks and gardens. We compiled a database of 32 traits on 204 species of *Phytophthora* including data on each species' taxonomy (clade and subclade), historical knowledge (years since first described), impacted ecosystems, microenvironments inhabited, dispersal mode, physiology, and morphology. (more)

Product created using Text and Data Mining based on Europe Media Monitoring (EMM)
Unit I.3 – European Commission, Joint Research Centre (JRC), Ispra, Italy

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Disclaimer

The selection of articles reflects the media and scientific coverage during the one-month time period in question. It does not reflect EFSA opinion on the articles' content, the presence of plant pests in a particular country and/or concerning a particular plant or plant product and/or endorsement of proposed control practices.

Note to the reader

This newsletter combines and substitutes the two pre-existent monthly publications: "Plant Health Newsletter: Media Monitoring" (58 published items) and "Plant Health Newsletter: Scientific Literature Monitoring" (37 published items), all accessible from the EFSA Virtual Issue "Horizon Scanning for Plant Health"

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