EUROPEAN FOOD SAFETY AUTHORITY

Plant Health Newsletter on HORIZON SCANNING

December 2024

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 2024 covers the period 1-31 January 2024). 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. This newsletter will first of all serve the EC and Member States in addressing phytosanitary questions and, for this reason, attention is given in avoiding duplicating information already provided to National Plant Protection Organisations (NPPOs) by official channels, such as the EPPO Bulletin[2]. Moreover, it will benefit professionals working in the field and the informed public, to which is also dedicated the interactive dashboard in the EFSA website[3].

The monitoring system is based on the automatic public health surveillance platform MEDISYS (Medical Information System), scanning more than 25,000 sources in 79 languages from 204 countries, covering all world's regions. At this moment, 2,762 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[4] 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[5] 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.

A dedicated EFSA working group meets once a month[6] with the support of EFSA staff and contractors, in order to compose and validate the content of the newsletter: the articles to be included, the main issues, the PeMo scoring and the brief text summarizing the content of each item. The EPPO Global Database[7], CABI Crop Protection Compendium[8] and previous EFSA outputs[9] are fundamental tools supporting this decision process.

[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] EPPO Bulletin accessible from https://onlinelibrary.wiley.com/journal/13652338

[3] The Horizon Scanning Dashboard is accessible from https://www.efsa.europa.eu/en/powerbi/plant-health-horizon-scanning-dashboard

[4] 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

[5] 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.

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

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

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

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

The newsletter is composed of two parts:

1. The summary table where the selected items of the month are given: the main order is by category of pest according to EU regulation, followed by the alphabetical order of the pest species. For each pest, information on its taxonomical identity, host range and biology, distribution and topic of the selected article(s) is provided. Furthermore, icons and bookmarks support the navigation of the newsletter. An active link is available within the topic of each item, to open the original article which triggered its selection.
2. The list of the references connected to each item.

1. Summary

Table legend

Category	PeMoScoring	Host range	Main hosts	Damage	EU distribution
Bacteria	Negative PeMo scoring	Monophagous / One host plant	Fruit plants	Qualitative losses	Present in the EU
Fungi and oomycetes	Positive PeMo scoring	Oligophagous / Restricted range of host plants	Vegetables	Quantitative losses	Absent from the EU
Insects and mites		Polyphagous / Wide range of host plants	Cereals	Damage leading to plant death	
Molluscs			Oil and fibre plants	Vector	
Nematodes			Forest plants		
Viruses, viroids and phytoplasmas			Ornamental and flower plants		
			Other plants		

→ Main issues of the month: this icon highlights items that have been identified as the most relevant for EU plant health system among those included in the newsletter. In the case of "not listed" pests, it corresponds to pests which scored positive by PeMo screening.

Pest	Hosts range	Main hosts	Damage and symptoms	EU regulatory status and distribution	Topic
Colletotrichum perseae	Bell pepper (*Capsicum annuum*), grape (*Vitis vinifera*), olive (*Olea europaea*).		Anthracnose, brown necrotic lesions on fruits.	Not listed × Absent from the EU	First finding [1]
	This study marks the first report of *Colletotrichum perseae* as a causal agent of anthracnose in avocado fruits in Türkiye. In May and June 2023, anthracnose symptoms were observed in avocados from commercial markets in Mardin, a southeastern province of Türkiye. Twenty symptomatic fruits were collected for analysis. Morphological and molecular analyses identified the pathogen as *C. perseae*, and Koch's postulates were successfully fulfilled. This finding expands the known geographical distribution of the species and aligns with similar reports from other avocado producing regions, such as Israel and New Zealand, where *C. perseae* has been identified as a pathogen affecting avocado crops. Pest Categorisation published by EFSA in August 2022: https://efsa.onlinelibrary.wiley.com/doi/full/10.2903/j.efsa.2022.7529				
Diaporthe goulteri	Sunflower (*Helianthus annuus*), *Vitex trifolia.*		Diaporthe disease.	Not listed × Absent from the EU	First finding and new host plant [2]
	The fungus *Diaporthe goulteri* is reported for the first time on soybean in southern Germany, expanding the known host range of this recently described species. Initially isolated from sunflower seeds in Australia in 2015, *D. goulteri* has since been rarely reported. During a survey in Germany, soybean plants exhibiting typical *Diaporthe* symptoms, such as pycnidia or perithecia appearing as black dots on the stems, were collected just before harvest. Molecular analyses and morphological observations confirmed the presence of *D. goulteri*. Pathogenicity tests demonstrated the ability of *D. goulteri* to infect soybean, fulfilling Koch's postulates.				
→ ***Fusarium asiaticum***	Wheat (*Triticum* spp.), barley (*Hordeum vulgare*), Italian ryegrass (*Lolium multiflorum*), maize (*Zea mays*), millet (*Setaria italica*), rice (*Oryza sativa*).		Fusarium head blight.	Not listed × Absent from the EU	New host plant [3]
	The fungus *Fusarium asiaticum* is reported as the causal agent of leaf spot disease on blue honeysuckle (*Lonicera caerulea*) in Heilongjiang Province, China, representing a first finding on this host. Morphological and molecular analyses identified the pathogen, and Koch's postulates were successfully fulfilled.				

Neopestalotiopsis rosae	Tangerine (*Citrus reticulata*), strawberry (*Fragaria ananassa*), pomegranate (*Punica granatum*), blueberry (*Vaccinium* sp.).	Necrosis and dieback.	Not listed ✔ ES, IT (Sicilia), PT	First finding [4]
	The emerging fungal pathogen *Neopestalotiopsis rosae* was identified for the first time as the cause of leaf spot and fruit rot in strawberries in Germany. The species was identified through morphological and molecular analyses, with the pathogenicity tests performed successfully fulfilling Koch's postulates. This study marks the first documented occurrence of *N. rosae* in Germany. Recently, *N. rosae* has also been confirmed on strawberries in Albania, following earlier reports on this host from Mexico, China, the USA (Florida), and Taiwan.			
Xanthomonas euroxanthea	Walnut (*Juglans regia*), tomato (*Solanum lycopersicum*), pecan (*Carya illinoiensis*), common bean (*Phaseolus vulgaris*).	Blight symptoms in leaves and fruits.	Not listed ✔ PT, BG	New host plant [5]
	Xanthomonas euroxanthea is a relatively poorly known species that has previously been detected in walnut, pecan, tomato and common bean. The article reports its finding in Bulgaria in symptomatic sunflower and the subsequent completion of Koch's postulates, thus extending the known natural host range of *X. euroxanthea.*			
Popillia japonica	Very large host range, including herbaceous and woody plants. Among them important EU crops such as *Prunus* spp., grapevine (*Vitis vinifera*), soybean (*Glycine max*), maize (*Zea mays*), and various ornamental trees and shrubs.	Skeletonised leaves by adult feeding; larval feeding on roots results in thinning, yellowing and wilting of grass. In maize, adult feeding on silk results in malformed kernels.	Priority pest ✔ IT, PT (Azores), SI	New finding [6]
	A publication from the Bavarian State Office for Agriculture (BSOA) reports the finding at the beginning of August 2024 of one adult male of *P. japonica* in a trap near Lindau (Bavaria, Germany). In mid-August, two more adult males were caught in traps: one again near Lindau, about 4.5 km from the first beetle, and one at a rest area on the A93 in Kiefersfelden. The BSOA currently assumes that all beetles are individual specimens that traveled on means of transport from neighbouring countries.			
Diaphorina citri	Very large host range, mainly citrange (*Citroncirus webberi*), pummelo (*Citrus maxima*), lemon (*C. lemon*), tangerine (*C. reticulata*).	V Vector of *Candidatus* Liberibacter (CL) asiaticus, CL americanus and CL africanus, which cause the HLB disease.	Quarantine pest ✔ Under eradication in CY	Control measure [7]

<table>
<tr><td></td><td colspan="4">This paper reports a series of lab and semi-field assays to evaluate the potential of a wettable powder formulation of the fungus Purpureocillium lilacinum ZJPL08 against the citrus psylla. The semi-field trial showed that this strain of P. lilacinum had a high efficiency (97.8 %), which was not different from a 30 % thiamethoxam WP (control reference (100 %). Although this species (active substance) is authorised in the EU, the strain ZJPL08 is not. Moreover, many additional assays should be performed before this product could be eventually used in the field.</td></tr>
<tr><td rowspan="2">Ralstonia solanacearum
  </td><td>  </td><td>  </td><td>  </td><td>Quarantine pest
✔ BE, BG, DE, ES, FR, HU, IT, NL, PL, PT, NL, RO, RS, SE, SI, SK</td><td>New finding [8]</td></tr>
<tr><td colspan="2">Capsicum spp., Cucumis spp., Cucurbita spp., eggplant (Solanum melongena), potato (S. tuberosum), tomato (S. lycopersicum).</td><td colspan="3">Foliage wilting, plant dieback and death, brown rot of tubers for potatoes.</td></tr>
<tr><td></td><td colspan="5">Ralstonia solanacearum has previously been recorded in Sweden in 2009 then eradicated by 2019. The media article reports its discovery in Sweden in a seed potatoes production plot planted with material originated from the Netherlands.</td></tr>
<tr><td>General interest</td><td colspan="4">Catching invasives with curiosity: the importance of passive biosecurity surveillance systems for invasive forest pest detection

First detections of non-native insect species are often made by curious members of the public rather than by specialists or trained professionals. Passive surveillance is a crucial component of national biosecurity surveillance, highlighted by early detection case studies of several prominent non-native arthropod pests (e.g., Anoplophora glabripennis, Lycorma delicatula in the USA). Data from historical and recent accounts of first detections of different invasive forest pests underscore the need to invest in passive surveillance reporting systems and fully integrate public observations into existing surveillance frameworks. Biodiversity monitoring platforms, such as iNaturalist, provide a focal point for community engagement and aggregate verified public observations. Empowering proactive reporting of biological novelty provides needed support for early detection of invasive species. Embracing the public as active members of the surveillance community can be cost effective and lead to the greatest gains in the proactive management of invasive species worldwide.</td><td>Surveillance [9]</td></tr>
</table>

2. References

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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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