



EUROPEAN FOOD SAFETY AUTHORITY

# Plant Health Newsletter on HORIZON SCANNING October 2024

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Science, safe food, sustainability

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# Introduction

Following a request from the European Commission<sup>1</sup>, 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<sup>2</sup>. 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<sup>3</sup>.

The monitoring system is based on the automatic public health surveillance platform <u>MEDISYS (Medical Information System)</u>, 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<sup>4</sup> 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 <u>EU plant health legal</u> <u>acts</u> or present in the <u>EPPO Alert</u>, <u>A1</u> and <u>A2</u> 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<sup>6</sup> 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<sup>7</sup>, CABI Crop Protection Compendium<sup>8</sup> and previous EFSA outputs<sup>9</sup> are fundamental tools supporting this decision process.

<sup>&</sup>lt;sup>1</sup> 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).

<sup>&</sup>lt;sup>2</sup> EPPO Bulletin accessible from https://onlinelibrary.wiley.com/journal/13652338

<sup>&</sup>lt;sup>3</sup> The Horizon Scanning Dashboard is accessible from https://www.efsa.europa.eu/en/powerbi/plant-health-horizon-scanningdashboard

<sup>&</sup>lt;sup>4</sup> 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

<sup>&</sup>lt;sup>5</sup> 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.

<sup>&</sup>lt;sup>6</sup> Minutes of the meetings are available here <u>https://www.efsa.europa.eu/sites/default/files/wgs/plant-health/wg-plh-horizon-</u> scanning.pdf

<sup>&</sup>lt;sup>7</sup> EPPO, 2023. EPPO Global Database (available online). <u>https://gd.eppo.int</u>

<sup>&</sup>lt;sup>8</sup> CABI, 2023. Crop Protection Compendium. Wallingford, UK: CAB International. <u>www.cabi.org/cpc</u>

<sup>&</sup>lt;sup>9</sup> EFSA Journal <u>https://efsa.onlinelibrary.wiley.com/</u>

The newsletter is composed of three parts:

- 1. a summary of the content of the newsletter in the form of a table, with icons and bookmarks in order to facilitate the navigation of the newsletter.
- a presentation of the main issues of the month, 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 PeMo scoring (EFSA, 2022<sup>10</sup>) with positive result, with a few details on their biology and reasons supporting the positive score.
- 3. a list with active links to the selected articles: they are organised by regulation and EPPO lists where they appear, then by taxonomy. Each item is accompanied by a brief text provided by the EFSA working group experts, summarising the main content of the article. 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.)

<sup>&</sup>lt;sup>10</sup> 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

# **1.** Summary

Table legend													
PeMoScoring		Host range		Main hosts		Damage and symptoms		EU distribution					
	Negative PeMo scoring	,	Monophagous / One host plant	1	Fruit plants		Qualitative losses	~	Present in the EU				
A	Positive PeMo scoring	Positive	Positive	Positive	Positive PeMo		Oligophagous / Restricted range	۲	Vegetables	•	Quantitative losses	×	Absent from the
			of host plants	1	Cereals	Damage leading		EU					
				Wide range of host plants	2	Oil and fibre plants	V Vector						
			·	<b></b>	Forest plants	-							
				<b>?</b>	Ornamental and flower plants								
₹		*	Other plants										

	Host	Main	Damage	EU	Regulatory	
Pest	range	hosts	and symptoms	distribution	status	Торіс
<u>Bromovirus CCMV</u>		*		×	Not listed	First finding (BR) and new host plant
	Soybean ( <i>Glycine max</i> ), bean ( <i>Phaseolus</i> <i>vulgaris</i> ), peanut ( <i>Arachis hypogaea</i> ), florida beggarweed ( <i>Desmodium tortusom</i> ), chinese bushclover ( <i>Lespedeza cuneata</i> ), cowpea ( <i>Vigna</i> <i>unguiculata</i> ).		Bright chlorosis, or yellow coloring, in the leaves, reduction in leaf mass.	Absent from the EU		
<u>Clavibacter</u> <u>tessellarius</u>	<i>,</i>	<i>*</i>	• •	×	Not listed	First finding (AR)
	Wheat ( <i>Triticum aestivum</i> ).		Yellow lesions on leaves.	Absent from the EU		
<u>Colletotrichum</u> <u>caladii sp. nov.</u>	<i>,</i>	<del>})</del>		×	Not listed	New pest
	<i>Caladium</i> s	p.	Anthracnose leaf spot and blight.	Absent from the EU		
<u>Colletotrichum</u> <u>fructicola</u>		<b>é</b>		~	Not listed	New host plant
	Apple ( <i>Malus domestica</i> ), pepper ( <i>Capsicum</i> <i>annuum</i> ), watermelon ( <i>Citrullus lanatus</i> ), tangerine ( <i>Citrus</i> <i>reticulata</i> ), fig ( <i>Ficus</i> <i>carica</i> ). pineapple ( <i>Ananas comosus</i> ), peanut ( <i>Arachis</i> <i>hypogaea</i> ), papaya ( <i>Carica papaya</i> ).		Dark brown stem and fruit spots, pre- and post-harvest fruit rot, spotting and wilting of leaves.	FR, IT		
<u>Cytospora</u> <u>longiostiolata</u>	<b></b>	•	• •	×	Not listed	First finding (IR) and new host plant
	Crack willow ( <i>Salix fragilis</i> ).		Canker, dieback, and discolored bark and wood.	Absent from the EU		
<u>Cytospora mali-</u> <u>domesticae sp.</u> nov.	<b>,</b>	-	• •	×	Not listed	New pest
<u>Cytospora</u> <u>michailidesiana sp.</u> nov.	Apple (Mal	us domestica).	Canker, dieback, and discolored	Absent from the EU		
<u>Cytospora</u> <u>miyandoabensis</u> <u>sp. nov.</u>			bark and wood.			

<u>Erwinia papayae</u>		<b>1</b>		×	Not listed	First finding (US)
	Papaya ( <i>Carica papaya</i> ).		Dieback of papaya, canker.	Absent from the EU		
<u>Fusarium</u> <u>kyushuense</u>		🍯 🧪 🗳		×	Not listed	New host plant
	Rice ( <i>Oryza sativa</i> ), <i>Triticum</i> sp., maize ( <i>Zea</i> <i>mays</i> ) and tobacco ( <i>Nicotiana tabacum</i> ).		Fusarium wilt, ear rot and leaf spot.	Absent from the EU		
<u>Heterodera</u> <u>luodingensis sp.</u> nov.		<i>*</i>	• •	×	Not listed	New pest
	Rice (Oryza	a sativa).	Cyst and holes in roots	Absent from the EU		
<u>Mucor</u> <u>xinjiangensis sp.</u> nov.		<b>•</b>		×	Not listed	New pest
	Plum ( <i>Prunus domestica</i> )		Small, scattered red and brown spots after the onset of the fruit that can lead to fruit falling.	Absent from the EU		
<u>Neoscytalidium</u> <u>dimidiatum</u>		هم ه ن		×	Not listed	New host plant
	<i>Citrus</i> spp., tomato ( <i>Solanum lycopersicum</i> ), fig ( <i>Ficus carica</i> ), walnut ( <i>Juglans regia</i> ), <i>Lavender</i> spp., <i>Prunus</i> spp., mango ( <i>Mangifera</i> <i>indica</i> ), kaki ( <i>Diospyros</i> <i>kaki</i> ), <i>Pinus</i> spp., <i>Quercus</i> spp.		Prominent dark brown to black lesions on stems, gummosis, yield loss.	Absent from the EU		
<u>Paraleyrodes minei</u>		<b>`</b>	( •••••)	~	Not listed	New finding and new host plant
Mainly <i>Citrus</i> spp., avocado ( <i>Persea</i> <i>americana</i> ) and mango ( <i>Mangifera indica</i> )		Sap sucking from phloem, and excrete honeydew, attracting sooty mold	CY, ES (also in Canary Islands), GR, HR, IT, MT, PT (also in Madeira and Azores)			
<u>Phenacoccus</u> <u>solenopsis</u>		<b>Ö</b>	•	~	Not listed	New host plant
	Bell pepper annuum), (Solanum I Hibiscus sp spp.	r (Capsicum Tomato Ycopersicum), pp., Lantana	Large populations cause dieback and yield reduction	FR, IT, GR, CY Canary Islands (ES)		

<u>Phytophthora</u> <u>platani</u>	ø	<b>•</b>	• •	✓	Not listed	New pest
	Plane tree orientalis).	<i>(Platanus</i>	Chocolate- brown tongue- shaped lesions in the bark and orange-brown to pink discolourations in limb. Dieback.	IT (Sicily)		
<u>Spodoptera</u> <u>ornithogalli</u>	₩ <b>. . . . . . . . . .</b>			×	Not listed	Identification and new host plant
	Allium spp (Capsicum Cucurbitac potato (Ipo batatas), r sativa), be (Phaseolus tomato (So lycopersicu (Solanum maize (Zea cotton (Go	, bell pepper annuum), eae, sweet omoea ice (Oryza ans vulgaris), olanum im), potato tuberosum), a mays) and ssypium spp.).	Damage plants, skeletonizing leaves and consuming foliage, fruits, and flowers.	Absent from the EU		
<u>Bactrocera dorsalis</u>		<b></b>	•	~	Priority pest	Surveillance
	Very large including C pepper (Ca frutescens) (Cucumis r persimmor kaki), loqu japonica), domestica) (Phaseolus	host range Citrus spp., apsicum ), melon melo), n (Diospyros at (Eriobotrya apple (Malus ), bean a vulgaris).	Oviposition punctures on fruits, internal feeding of larvae, fruit rotting and premature fruit drop.	Under official control in FR and IT		
<u>Bursaphelenchus</u> <u>xylophilus</u>		<b>•</b>	⊗	~	Priority pest	Detection method
	Pine (Pinus (Abies bals (Cedrus at deodara).	spp.), fir samea), cedar lantica and C.	Dieback and plant death.	ES, PT		
<u>Spodoptera</u> frugiperda		🍯 🧨 🥁	•	~	Priority pest	Management
	Maize (Zea (Oryza sati (Glycine m sugarcane officinarum (Vitis vinife (Sorghum (Panicum r	mays), rice iva), soybean ax), ( <i>Saccharum</i> n), grapevine era), sorghum bicolor), millet miliaceum).	Loss of foliar surface due to larval feeding.	Under eradication in GR, CY, RO Under official control in Canary Islands (ES) and Madeira (PT)		

<u>Begomovirus</u> gossypimultanense	<b>M</b>	ar 🖉 🏶	•	×	Quarantine pest	New host plant
	Rose mallo rosa-sinens fruit (Passi cotton (Gos hirsutum).	w (Hibiscus sis), passion flora edulis), ssypium	Leaf curling and enations from the leaf veins.	Absent from the EU		
<u>Scirtothrips</u> aurantii	<b>V</b> -	<b></b>		~	Quarantine pest	Surveillance
	Within its h there are n species, an host is swe ( <i>Citrus x a</i> <i>sinensis</i> ).	nost range nany fruit nd the major eet orange <i>urantium</i> var.	Leaf silvering due to sucking injury, feeding marks (rings) on fruits. Leaf senescence and fruit distortion.	ES, PT		
<u>Zeugodacus</u> <u>cucurbitae</u>	<b>V</b> -	<b>é</b>	• •	×	Quarantine pest	Surveillance
	Mainly Citra Prunus spp Solanaceae	us spp., o. and e.	Black or brown lesions (oviposition and emergence holes), drop of immature fruits.	Absent from the EU		

# 2. Main issues of October 2024

## Bactrocera dorsalis and Zeugodacus cucurbitae

*Bactrocera dorsalis* is a priority insect pest listed in Annex II A of the Commission Implementing Regulation (EU) 2019/2072. This newsletter contains one article regarding this fly.

Zeugodacus cucurbitae is a pest listed in Annex II A of the Commission Implementing Regulation (EU) 2019/2072. This newsletter includes one article about this insect.

The scientific article presents new insights for fruit flies surveillance. This study indicates that the combined presentation of methyl eugenol (ME) and raspberry ketone (CL) in polymeric wafers was as effective as the deployment of ME and CL in separate traps in capturing *B. dorsalis* and *Z. cucurbitae*.

All the articles on *B. dorsalis* are available on the webpage of <u>MEDISYS EFSA Plant Health</u> and on *Z. cucurbitae* are available on the webpage of <u>MEDISYS EFSA Plant Health</u>.

## Fusarium kyushuense

A PeMo Positive

*Fusarium kyushuense* is a plant pathogenic fungus not listed in any EU legal acts or EPPO lists. This newsletter includes one article about this pathogen.

The scientific article included describes the finding in China of infected sweet persimmon (*Diospyros kaki*) by this pest, extending its host range.

All the articles on *F. kyushuense* are available on the webpage of <u>MEDISYS EFSA Plant</u> <u>Health.</u>

# **3. Selected articles**

## 3.1. New EU threats

## 3.1.1 Non-regulated pests in the EU

## Bacteria

## Clavibacter tessellarius

Authority: (Carlson & Vidaver) Li et al. Actinobacteria, Micrococcales, Microbacteriaceae

First finding (AR)

Genomic analysis identifies five pathogenic bacterial species in Argentinian wheat

## Tropical Plant Pathology 11.September.2024

Bacterial isolation followed by genomic characterization was performed from leaf lesion collected in Argentina. Besides *Xanthomonas translucens* and *Pseudomonas syringae* pv. *atrofaciens* which were already known to be present in Argentina the study identified for the first time *Clavibacter tessellarius* presence in Argentina. Two other bacterial species were also identified, *Pantoea ananatis* and *Curtobacterium flaccumfaciens* pv. *flaccumfaciens* but their ability to cause symptoms in wheat remains in question. (more)

## Erwinia papayae

Authority: Gardan *et al*. Gammaproteobacteria, Enterobacterales, Erwiniaceae

First finding (US)

First report of Erwinia papayae associated with papaya mushy canker disease in Guam

## Plant Disease 19.September.2024

The article extends the known distribution of *Erwinia papayae* by reporting its finding in Guam where it is associated with papaya mushy canker disease. (more)

## **Fungi and oomycetes**

*Colletotrichum caladii* sp. nov. Authority: M.V. Marin & N.A. Peres Sordariomycetes, Glomerellales, Glomerellaceae

New pest

#### <u>Colletotrichum caladii</u> sp. nov. causing anthracnose leaf spot of <u>Caladium × hortulanum</u> (Araceae) in Florida, U.S.A.

#### Plant Disease 19.September.2024

A newly identified species, *Colletotrichum caladii*, has been reported as the cause of anthracnose leaf spot on the ornamental plant *Caladium* × *hortulanum* (Caladium) in a field trial in Florida, U.S.A. Phylogenetic analysis revealed it as a distinct species within the *C. truncatum* complex. Pathogenicity tests confirmed *C. caladii* as the causal agent of the anthracnose symptoms. (more)

## *Colletotrichum fructicola*<sup>11</sup>

Authority: Prihastuti, L. Cai & K.D. Hyde Sordariomycetes, Glomerellales, Glomerellaceae

#### • New host plant (*Jasminum nudiflorum*)

First report of anthracnose caused by *Colletotrichum fructicola* on winter jasmine (*Jasminum nudiflorum*) in China

#### Plant Disease 12.September.2024

The fungus *Colletotrichum fructicola* is reported for the first time causing anthracnose on *Jasminum nudiflorum* (winter jasmine) in China. From 2020 to 2021, symptoms of anthracnose including brown necrotic spots, enlarged irregular lesions, and leaf blight were observed on winter jasmine shrubs in a public garden in Shenzhen, China. The isolates obtained displayed morphological characteristics consistent with *Colletotrichum* spp. Molecular analysis confirmed their identity as *C. fructicola*, with Koch's postulates also subsequently fulfilled. (more)

## *Cytospora longiostiolata; Cytospora mali-domesticae* sp. nov.; *Cytospora michailidesiana* sp. nov. and *Cytospora miyandoabensis* sp. nov.

Authority: Norphanphoun, Bulgakov, T.C. Wen & K.D. Hyde | R. Azizi, Y. Ghosta & A. Ahmadpour | R. Azizi, Y. Ghosta & A. Ahmadpour | R. Azizi, Y. Ghosta & A. Ahmadpour Sordariomycetes, Diaporthales, Valsaceae

• New pests and for *Cytospora longiostiolata* new host plant (*Malus domestica*) and first finding (Iran)

Cytospora species associated with apple canker and dieback disease in Iran with the description of three new species

#### Mycological Progress 27.September.2024

This study investigated the diversity of *Cytospora* species causing canker, die-back, and decline disease in apple trees in West Azarbaijan province, Iran, identifying five species: *C. mali-domesticae* sp. nov., *C. michailidesiana* sp. nov., *C. miyandoabensis* sp. nov., *C. longiostiolata*, and *C. parasitica*. Pathogenicity tests confirmed their role in disease development, with apple being a newly recorded host for *C. longiostiolata*. (more)

<sup>&</sup>lt;sup>11</sup> Pest Categorisation published by EFSA in August 2021: <u>Pest categorisation of Colletotrichum fructicola - - 2021 - EFSA Journal - Wiley</u> <u>Online Library</u>

## Fusarium kyushuense

Authority: O'Donnell & T. Aoki Sordariomycetes, Hypocreales, Nectriaceae

🔺 PeMo Positive

## New host plant (Diospyros kaki)

First report of Fusarium kyushuense causing leaf spot on sweet persimmon in China

## Plant Disease 17.September.2024

The fungus *Fusarium kyushuense* has been reported for the first time as a cause of leaf spot on *Diospyros kaki* (sweet persimmon) in China, thereby expanding the known host range of this pathogen. Leaf spot symptoms were observed affecting 20 to 30% of the trees in a commercial orchard in Gongcheng City, Guangxi. Molecular and morphological analyses confirmed the identity of the pathogen as *F. kyushuense*, and Koch's postulates were successfully fulfilled. (more)

## Mucor xinjiangensis sp. nov.

Authority: B. Song & M. Raza Mucoromycotina, Mucorales, Mucoraceae

### New pest

<u>A new brown rot disease of plum caused by *Mucor xinjiangensis* sp. nov. and screening of its chemical control</u>

## Frontiers in Microbiology 10.September.2024

A novel species, *Mucor xinjiangensis*, was identified as the causative agent of brown rot in *Prunus domestica* (European plums) grown in southern Xinjiang, China. The disease manifests initially as small, scattered red spots on the fruit, which progress to browning, wrinkling, and eventual fruit drop under favourable conditions. Following morphological analysis of isolates from infected fruit, molecular phylogenetic analysis determined *M. xinjiangensis* as a distinct species, with pathogenicity tests confirming its ability to infect *P. domestica*. (more)

## *Neoscytalidium dimidiatum*<sup>12</sup>

Authority: (Penzig) Crous & Slippers Dothideomycetes, Botryosphaeriales, Botryosphaeriaceae

## • New host plant (*Populus euphratica*)

First report of stem canker disease caused by *Neoscytalidium dimidiatum* on *Euphrates poplar* in Xinjiang, China

## Plant Disease 12.September.2024

The fungus *Neoscytalidium dimidiatum* is reported for the first time as the cause of stem canker on *Populus euphratica* (Euphrates poplar) in China. Diseased branch samples were collected from a *P. euphratica* forest in Xinjiang in June 2023, and the pathogen was confirmed as *N. dimidiatum* through morphological and molecular analyses, with Koch's postulates also successfully fulfilled. *N. dimidiatum* has been reported in China before and

<sup>&</sup>lt;sup>12</sup> Pest Categorisation published by EFSA in May 2023: <u>Pest categorisation of Neoscytalidium dimidiatum - - 2023 - EFSA Journal - Wiley</u> <u>Online Library</u>

has been recorded on a wide range of woody perennial crops including other poplar species. (more)

## Phytophthora platani

Authority: T. Jung, A. Pérez-Sierra, S.O. Cacciola & M. Horta Jung Oomycetes, Peronosporales, Peronosporaceae

#### New pest

<u>First report of *Phytophthora platani* causing bark canker and dieback on London plane in the United Kingdom</u>

#### New Disease Reports 20.September.2024

The oomycete *Phytophthora platani* is reported for the first time in the UK causing bark canker and dieback on a mature London plane tree. The pathogen, previously only reported in Italy, was confirmed through isolation and DNA sequencing from bark, wood, and soil samples. Koch's postulates were fulfilled. Despite a thorough survey, *P. platani* was only recovered from one plane tree in the UK. (more)

## **Insects and mites**

## Paraleyrodes minei

Authority: Iaccarino Insecta, Hemiptera, Aleyrodidae

• New host plant (*Saccharum officinarum*) and new finding (CH)

<u>First report of the nesting whitefly, *Paraleyrodes minei* Iaccarino (Homoptera: Aleyrodidae), a new sugarcane pest in Yunnan, China</u>

#### Phytoparasitica 25.September.2024

*Paralyrodes minei* is reported for the first time in Yunnan, China as a sugarcane pest. The results of the study provide basic data for rapid identification of *P. minei*. (more)

## Phenacoccus solenopsis<sup>13</sup>

Authority: Tinsley Insecta, Hemiptera, Pseudococcidae

#### • New host plant (*Tecomella undulata*)

<u>Tecomella undulata (Sm.) Seem (Lamiales: Bignoniaceae), a new host plant for</u> <u>Phenacoccus solenopsis Tinsley (Hemiptera: Pseudococcidae)</u>

#### National Academy Science Letters 23.September.2024

In a survey conducted during rainy and post rainy season 2023 in Jodhpur, Rajasthan, India, *Phenacoccus solenopsis* was recorded for the first time on the rohida tree, *Tecomella undulata*. (more)

<sup>&</sup>lt;sup>13</sup> Pest Categorisation published by EFSA in August 2021: <u>Pest categorisation of Phenacoccus solenopsis - - 2021 - EFSA Journal - Wiley</u> <u>Online Library</u>

## Spodoptera ornithogalli

Authority: (Guenée) Insecta, Lepidoptera, Noctuidae

Identification and new host plant (Mentha spicata)

<u>Spodoptera ornithogalli (Guenée) (Noctuidae): larval and pupal morphological identification guide with confirmation of a new hostplant species and family, Mentha spicata (L.) (Lamiales: Lamiaceae)</u>

## BioOne 09.September.2024

This paper reports the first record of *Spodoptera ornithogalli* on spearmint, *Mentha spicata* (Lamiales: Lamiaceae) in North Carolina, USA. Larval, pupal, and adult morphological characters of the original specimen found on *M. spicata* are provided and discussed as a means of distinguishing *S. ornithogalli* from related species throughout its range. (more)

## Nematodes

Heterodera luodingensis sp. nov.

Authority: Wen Y, Liu F, Zhen H, Ye W, Ni C, Xu C, Peng D. Chromadorea, Rhabditida, Heteroderidae

New pest

<u>A new cyst nematode, Heterodera luodingensis n. sp. (Nematoda: Heteroderinae) from</u> rice in China

## Plant Disease 10.September.2024

A new cyst nematode species, *Heterodera luodingensis* sp. nov., has been described following its isolation from rice roots in Luoding County, Guangdong Province, China. Morphological and molecular phylogenetic analyses revealed it to be significantly distinct from all previously known cyst nematode species. Parasitism tests confirmed that *H. luodingensis* is capable of completing its life cycle on rice. (more)

## Viruses, viroids and phytoplasmas

Bromovirus CCMV (= cowpea chlorotic mottle virus)

Viruses, Bromoviridae, Bromovirus

A PeMo Negative

• First finding (BR) and new host plant (*Arachis pintoi*)

Detection and characterization of the *cowpea chlorotic mottle virus* in forage peanut (Arachis pintoi) in Brazil

## Australasian Plant Pathology 02.September.2024

Characterization of the viruses affecting forage peanut (*Arachis pintoi*) in Brazil allowed the identification of *Bromovirus CCMV* (= *cowpea chlorotic mottle virus*), extending *CCMV* distribution to Brazil and its known natural host range to *A. pintoi*. (more)

## 3.2. Regulated pests

## 3.2.1. Priority pests<sup>14</sup>

## **Insects and mites**

## Bactrocera dorsalis

Authority: (Hendel) Insecta, Diptera, Tephritidae

## Surveillance

Attractiveness, longevity, and release rates of multilure wafers for trapping males of the oriental fruit fly and melon fly (Diptera: Tephritidae)

## Journal of Insect Science 30.September.2024

This study indicates that the combined presentation of methyl eugenol (ME) and raspberry ketone (a hydrolyzed form of Cue-Lure, CL, RK) in polymeric wafers was as effective as the deployment of ME and CL in separate traps in capturing *Bactrocera dorsalis* and *Zeugodacus cucurbitae*. Traps baited with ME/RK wafers were as attractive as fresh lure to both species even after the wafers were weathered for 18 wk, a duration 3 times the recommended interval for lure replacement. Thus, combining ME and RK in a solid device may both reduce the number of traps required in a trapping program as well as extend the re-baiting intervals, thus reducing the amount of lure required over time. (more)

## Spodoptera frugiperda

Authority: (Smith) Insecta, Lepidoptera, Noctuidae

## Management

Fall armyworm management in a changing climate: an overview of climate-responsive integrated pest management (IPM) strategies for long-term control

## Egyptian Journal of Biological Pest Control 11.September.2024

This review article focuses on the compilation of IPM methods, combining agro-ecological practices and biological control agents for the management of fall armyworm (FAW). Approaches such as intercropping, agronomic practices, and the use of parasitoids and viruses have shown promising results in controlling FAW. (more)

<sup>&</sup>lt;sup>14</sup> 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

## Nematodes

## Bursaphelenchus xylophilus

Authority: (Steiner & Bührer) Nickle Chromadorea, Rhabditida, Aphelenchoididae

Detection method

Establishment of a sensitive and reliable droplet digital PCR assay for the detection of *Bursaphelenchus xylophilus* 

## MDPI Plants 26.September.2024

A droplet digital PCR (ddPCR) assay was developed to improve the detection sensitivity of *Bursaphelenchus xylophilus* (pine wood nematode). The ddPCR assay demonstrated higher sensitivity and was less susceptible to inhibitors compared to quantitative PCR (qPCR) detection methods. (more)

Licens

## **3.2.2. Quarantine pests<sup>15,16</sup>** Annex II Part A

## **Insects and mites**

## Scirtothrips aurantii

Authority: Faure Insecta, Thysanoptera, Thripidae

### Surveillance

Monitoreo de Scirtothrips aurantii Monitoring of *Scirtothrips aurantii* IVIA September.2024

This study was triggered by claims from farmers who stated that blue and even white sticky traps used to monitor *Scirtothrips aurantii* were highly effective. The results of field assays where the Valencian PPO challenged the efficacy of yellow, blue, white, and brown sticky traps confirmed that contrary to farmers' beliefs but in agreement with existing literature, yellow sticky traps were much more attractive than the other tested colours. (more)

## Zeugodacus cucurbitae

Authority: (Coquillett) Insecta, Diptera, Tephritidae

## Surveillance

Attractiveness, longevity, and release rates of multilure wafers for trapping males of the oriental fruit fly and melon fly (Diptera: Tephritidae)

## Journal of Insect Science 30.September.2024

This study indicates that the combined presentation of methyl eugenol (ME) and raspberry ketone (a hydrolyzed form of Cue-Lure, CL, RK) in polymeric wafers was as effective as the deployment of ME and CL in separate traps in capturing *Bactrocera dorsalis* and *Zeugodacus cucurbitae*. Traps baited with ME/RK wafers were as attractive as fresh lure to both species even after the wafers were weathered for 18 wk, a duration 3 times the recommended interval for lure replacement. Thus, combining ME and RK in a solid device may both reduce the number of traps required in a trapping program as well as extend the re-baiting intervals, thus reducing the amount of lure required over time. (more)

<sup>&</sup>lt;sup>15</sup> 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

<sup>&</sup>lt;sup>16</sup> 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.

## Viruses, viroids and phytoplasmas

Begomovirus gossypimultanense ( = cotton leaf curl Multan virus) Viruses, Geminiviridae, Begomovirus

• New host plant (*Petunia hybrida*)

First report of Cotton leaf curl Multan virus infecting petunia in India

## Journal of Plant Pathology 15.September.2024

The article reports the identification of the *Begomovirus gossypimultanense* ( = *Cotton leaf curl multan virus*) from symptomatic petunia in Bathinda, India, thus extending the known natural host range of this Bemisia-borne virus. (more)

• New host plant (*Spinacia oleracea*)

First report of Cotton leaf curl Multan virus of spinach in China

## Plant Disease 29.September.2024

The article reports the identification of spinach as a new natural host for the *Bemisia tabaci* borne begomovirus *Begomovirus gossypimultanense* in China. (more)

## 3.3. General interest

<u>Climate covariate selection influences MaxEnt model predictions and predictive accuracy</u> <u>under current and future climates</u>

### Ecological Modelling 13.September.2024

This study examines the influence that covariate selection and model parameters can have on the predictive performance of species distribution models (SDMs), particularly for invasive species like *Diaphorina citri*. Climatically suitable areas for *D. citri* differed by as much as two-fold between the best and worst-performing models in selected areas. (more) Product created using Text and Data Mining based on EMM Open Source Monitoring Engine by European Commission, Joint Research Centre (JRC)

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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 <u>EFSA Virtual Issue "Horizon Scanning for Plant Health"</u>

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