EUROPEAN FOOD SAFETY AUTHORITY

Plant Health Newsletter on HORIZON SCANNING

August 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 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.
2. 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[10]) 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.)

[10] 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	Fruit plants	Qualitative losses	Present in the EU
Positive PeMo scoring	Oligophagous / Restricted range of host plants	Vegetables	Quantitative losses	Absent from the EU
	Polyphagous / Wide range of host plants	Cereals	Damage leading to plant death	
		Oil and fibre plants	Vector	
		Forest plants		
		Ornamental and flower plants		
		Other plants		

Pest	Host range	Main hosts	Damage and symptoms	EU distribution	Regulatory status	Topic
Aulacaspis alisiana	Indonesian cinnamon (*Cinnamomum burmannii*), *Machilus chinensis,* japanese silver tree *(Neolitsea sericea).*		White, waxy coverings, sticky residue, stunted growth, yellowing leaves, and plant deformation.	✕ Absent from the EU	Not listed	First finding (IN)
Bravothrips mexicanus	Tejocote (*Crataegus* mexicana), alfalfa (*Medicago sativa*), peach (*Prunus persica*), cabbage rose (*Rosa centifolia*).		Feeding on flowers, leaves and pollen.	✕ Absent from the EU	Not listed	First finding (CO)
Caliothrips phaseoli	Carrot (*Daucus carota*), soybean (*Glycine max*), bean (*Phaseolus vulgaris*), maize (*Zea mays*).		Leaf scarring, stunted growth, and pod deformation.	✕ Absent from the EU	Not listed	First finding (CO)
Chili pepper mild mottle virus	Pepper (*Capsicum annuum*), pigeon pea (*Cajanus cajan*), calibrachoa (*Calibrachoa* spp.).		Chlorosis, mottling, leaves necrosis, fruit deformation, colour-break of flowers.	✕ Absent from the EU	Not listed	First finding (ES)
Diaporthe aspalathi ⚠	Soybean (*Glycine max*), tomato (*Solanum lycopersicum*), black nightshade (*S. nigrum*), wheat (*Triticum aestivum*).		Reddish-brown stem lesions expand, darken, and girdle, causing plant death. Leaves develop interveinal chlorotic streaks turning necrotic.	✔ IT	Not listed	New host plant
Duplaspidiotus claviger	*Citrus* spp., *Ficus* sp., cape Jasmine (*Gardenia jasminoides*), rose mallow (*Hibiscus* sp.), waxleaf privet (*Ligustrum lucidum*), pomegranate (*Punica granatum*), *Viburnum* sp.		Raised, circular, grayish-brown areas on bark, with white ventral scales, stunting plant growth.	✕ Absent from the EU	Not listed	First finding (IN)

Frankliniella tuberosi	Potato (*Solanum tuberosum*).	Feeding on flowers and leaves leading to yield loss.	✕ Absent from the EU	Not listed	First finding (CO)
Kuwanaspis howardi	Hedge bamboo (*Bambusa multiplex*), common reed grass (*Phragmites australis*), golden bamboo (*Phyllostachys aurea),* black bamboo (*Phyllostachys nigra*).	Causes bamboo to turn white and encrusted with scales, reducing plant vigor and causing unsightly appearance.	✕ Absent from the EU	Not listed	First finding (IN)
Lepidosaphes laterochitinosa	Tea plant (*Camellia sinensis*), *Citrus* spp., corn plant (*Dracaena fragrans*), mango (*Mangifera indica*), cassava (*Manihot esculenta*), dragon-tail plant (*Monstera pinnata*), ivy tree (*Schefflera heptaphylla*), grapevine (*Vitis vinifera*).	Yellowing, browning, stunted growth, leaf drop, honeydew production, and in severe infections death.	✕ Absent from the EU	Not listed	First finding (IN)
Pseudomonas marginalis	Pineapple (*Ananas comosus*), onion (*Allium cepa*), garlic (*A. sativum*), celery (*Apium graveolens*), cabbage (*Brassica oleracea*), pepper (*Capsicum* spp.), strawberry (*Fragaria* x *ananassa*), pear (*Pyrus communis*), tomato (*Solanum lycopersicum*), sorghum (*Sorghum bicolor*).	Leaf blight, soft rot, necrosis, blossom blight, and stem rot.	✔ IT, CZ, BG	Not listed	First finding (IR)
Pyrenophora avenicola	Oat (*Avena sativa*) and barley (*Hordeum vulgare*).	Leaf spot as light brown necrosis with irregular margins surrounded by a yellow halo.	✔ SE	Not listed	First finding (IN)
Rutherfordia malloti	Kamala tree (*Mallotus philippensis*).	White, cottony spots on leaves and twigs, leading to plant weakening.	✕ Absent from the EU	Not listed	First finding (IN)

Zaprionus tuberculatus	  Sweet orange (*Citrus sinensis*), fig (*Ficus carica*), strawberry (*Fragaria* x *ananassa*), litchee (*Litchi chinensis*), and other fruits.	 Infests overripe, fallen or rotting fruit.	✔ BG, CY, FR, GR, IT, ES, MT, RO	Not listed	New host plants
Bactrocera dorsalis	  Very large host range including *Citrus* spp., pepper (*Capsicum frutescens*), melon (*Cucumis melo*), persimmon (*Diospyros kaki*), loquat (*Eriobotrya japonica*), apple (*Malus domestica*), bean (*Phaseolus vulgaris*).	 Oviposition punctures on fruits, internal feeding of larvae, fruit rotting and premature fruit drop.	✔ Under official control in FR, IT	Priority pest	Management and Surveillance Identification method
Popillia japonica	  Very large host range including herbaceous and woody plants. Among them important EU crops such as soybean (*Glycine max*), *Prunus* spp., grapevine (*Vitis vinifera*), 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.	✔ IT, and PT (Azores).	Priority pest	First finding (SI)
Xylella fastidiosa	  Very large host range including herbaceous and woody plants. Among them important EU crops such as *Citrus* spp., olive (*Olea europaea*), almond (*Prunus dulcis*), grapevine (*Vitis vinifera*).	 Dieback / reduced growth / plant death. Asymptomatic in some host plants.	✔ Under official control in ES, FR, IT and PT	Priority pest	New finding (ES) Surveillance
Bactrocera tsuneonis	  Mainly tangerine (*Citrus reticulata*)	 Black or brown lesions on fruits, internal feeding of larvae, fruit rotting and premature fruit drop.	✖ Absent from the EU	Quarantine pest	Management

Ceratothripoides claratris	  Many Cucurbitaceae (cucumber, melon) and Solanaceae (eggplant pepper, tomato), lettuce (*Lactuca sativa*), bean (*Phaseolus vulgaris*) and green pea (*Pisum sativum*).	 Direct by feeding, indirect transmitting virus. scarring, malformation, necrosis, and mosaics.	✕ Absent from the EU	Quarantine pest	First finding (CO)
Closterovirus tristezae	  Mainly *Citrus* spp.	 Decline syndrome (canopy wilting, leaf shedding, branch dieback), stem pitting, dieback.	✔ CY, ES, FR (also Corsica), GR, HR, IT (also Sicily), MT, PT	Quarantine pest	New finding (IT, Sardinia)
Fusarium circinatum	  Mainly coniferous trees (*Abies alba*), pinus (*Pinus nigra* and *P. sylvestris*), douglas fir (*Pseudotsuga menziesii*) and maize (*Zea mays*).	 Seedling rotting and death. Uniform loss of foliage colour, canker and dieback of small stems.	✔ ES, PT	Quarantine pest	Management
Ilarvirus APLPV	  *Prunus* spp.: apricot (*P. armeniaca*), sweet cherry (*P. avium*), plum (*P. domestica*), peach (*P. persica*).	 Leaves with various patterns that usually fade by summer. Synergic effects when occuring in complex with other viruses.	✔ IT, NL	Quarantine pest	First finding (IN)
Lycorma delicatula	  Very large host range including herbaceous and woody plants. Preference is known for *Acer* spp., *Ailanthus altissima*, *Juglans* sp., *Salix* spp. and *Vitis* spp. Other hosts of EU relevance are *Alnus* spp., *Castanea* spp., *Malus domestica*, *Prunus* spp., *Pyrus* spp., *Quercus* sp., *Rosa* sp., *Rubus* spp.	 Oozing wounds on the trunk, wilting and branch dieback from the feeding activity of nymphs and adults.	✕ Absent from the EU	Quarantine pest	Spread

Monochamus alternatus	Mainly *Pinus* spp. (*P. nigra*, *P. pinaster*, *P. radiata*), fir (*Abies fabri* and *A. firma*) and common spruce (*Picea abies*).	Adults feed on healthy twigs and oviposit on dying trees. Larvae create galleries leading to visible frass and exit holes.	✕ Absent from the EU	Quarantine pest	Detection method
Oligonychus perditus	Tea (*Camellia sinensis*), false cypress (*Chamaecyparis* sp.), junipers (*Juniperus* sp.), japanese plum (*Prunus salicina*).	Feeding scars on scale leaves. Heavily infested plants show browning and distorted growth.	✕ Absent from the EU	Quarantine pest	First finding (RS)
Scirtothrips dorsalis	Very large host range including many crops: kiwi (*Actinia deliciosa*), onion (*Allium cepa*), *Capsicum* spp., *Citrus* spp., strawberry (*Fragaria* x *ananassa*), mango (*Mangifera indica*), grapevine (*Vitis vinifera*).	Leaf and fruit distortion with consequent defoliation.	✔ ES	Quarantine pest	New host plant
Thrips palmi	Polyphagous pest, especially of Cucurbitaceae and Solanaceae. It infests many ornamental species and even weeds.	Stunted leaves,scarred anddeformed fruits.	✕ Absent from the EU	Quarantine pest	New host plant
Zeugodacus cucurbitae	Cauliflower (*Brassica oleracea*), bell pepper (*Capsicum annuum*), chilli (*C. frutescens*), melon (*Cucumis melo*), cucumber (*C. sativus*), pumpkin (*Cucurbita moschata*), fig (*Ficus carica*), bean (*Phaseolus vulgaris*), peach (*Prunus persica*), tomato (*Solanum lycopersicum*), eggplant (*S. melongena*), blueberries (*Vaccinium* sp.), jujube (*Ziziphus jujuba*).	Internal feeding in fruits, inflorescence, roots, stems and leaves, black or brown lesions on fruits. Fruit rotting.	✕ Absent from the EU	Quarantine pest	Surveillance

2. Main issues of August 2024

Diaporthe aspalathi

⚠ PeMo Positive

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

The article selected reports chickpea (*Cicer arietinum*) as a new host plant for the pathogen, thus extending its known host range.

All the articles on *D. aspalathi* are available on the webpage of MEDISYS EFSA Plant Health.

Oligonychus perditus

Oligonychus perditus, the common spider mite on conifers, is a quarantine mite listed in Annex II A of the Commission Implementing Regulation (EU) 2019/2072. This newsletter contains one article regarding this spider.

The scientific article reports the first finding in Serbia, and therefore in Europe, of *O. perditus* on juniper trees.

All the articles on *O. perditus* 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 A of the Commission Implementing Regulation (EU) 2019/2072. This newsletter includes two articles about this pathogen.

The selected media article reports a new finding of *X. fastidiosa* in Spain, in the region of Extremadura (western Spain). The selected scientific publication details the surveillance on the bacterium carried out in the Apulia region of Italy.

All the articles on *X. 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

Pseudomonas marginalis

Authority: (Brown) Stevens

Gammaproteobacteria, Pseudomonadales, Pseudomonadaceae

- First finding (IR)

First report of *Pseudomonas marginalis* causing tuber soft rot of potato in Iran

Journal of Plant Protection Research 25.July.2024

The article reports bacterial characterization efforts that provide the first documented case of *Pseudomonas marginalis* causing a soft rot disease in potatoes in Iran. (more)

Fungi and oomycetes

Diaporthe aspalathi

Authority: Jansen, Castlebury & Crous

Sordariomycetes, Diaporthales, Diaporthaceae

⚠ PeMo Positive

- New host plant (*Cicer arietinum*)

An emerging disease of chickpea, basal stem rot caused by *Diaporthe aspalathi* in China

MDPI Plants 16.July.2024

The fungus *Diaporthe aspalathi* (syn.: *D. phaseolorum* var. *meridionalis*) has been reported on *Cicer arietinum* (chickpea) for the first time. During field surveys in 2017 in Qiubei County, Yunnan Province, China, chickpea plants were observed with basal stem rot and wilt symptoms. Three fungal isolates from the infected plants were confirmed as *D. aspalathi* through morphological and molecular analyses. Pathogenicity tests confirmed that these isolates are highly pathogenic to chickpea. (more)

Pyrenophora avenicola

Authority: Y. Marín & Crous
Dothideomycetes, Pleosporales, Pleosporaceae

● First finding (IN)

First report of *Pyrenophora avenicola* causing leaf spot of oat in India

New Disease Reports 16.July.2024

The fungus *Pyrenophora avenicola* has been reported for the first time in India as a cause of leaf spot on *Avena sativa* (oat). In autumn 2022, oat plants in Ludhiana, Punjab, displayed leaf spot and blight symptoms, and subsequent surveys confirmed the disease in 52 fields. The pathogen was identified as *P. avenicola* through both morphological and molecular analyses, with pathogenicity tests confirming it as the causative agent. *P. avenicola* has previously been reported on oats in Sweden and China. (more)

Insects and mites

Aulacaspis alisiana; *Duplaspidiotus claviger*; *Kuwanaspis howardi*; *Lepidosaphes laterochitinosa* and *Rutherfordia malloti*

Authority: Takagi | (Cockerell) | (Cooley) | Green | (Rutherford)
Insecta, Hemiptera, Diaspididae

● First finding (IN)

First encounters with five non-native diaspidids in India

Research Square 16.July.2024 – Not peer-reviewed

Five species of diaspidids, namely *Duplaspidiotus claviger, Lepidosaphes laterochitinosa, Kuwanaspis howardi, Rutherfordia malloti,* and *Aulacaspis alisiana* have been found in India. *D. claviger* was originally described from South Africa, but now has spread to Indo-Australian, Palearctic, Oriental, and Nearctic regions and can affect several economically important fruits such as *Citrus*, *Punica*, *Syzygium*, and ornamentals like *Hibiscus*, *Gardenia*, etc. *L. laterochitinosa* was first recorded from UK (but not found in UK according to *Scalenet*) and is known to occur in 16 additional countries of Palearctic, Neotropical, Indo-Australian, and Oriental regions. It infests important fruit crops like mango, jackfruit, guava, citrus, grapes, and coconut. *K. howardi* has been reported in countries in Palearctic, Oriental, and Nearctic regions mainly causing damage to host plants in the Poaceae. Even if restricted to a single plant family, it is considered as an important pest. *R. malloti* is known to occur in China, Nepal and Sri Lanka infesting trees and lianas belonging to Connaraceae, Euphorbiaceae and Lamiaceae. However, this scale is not considered of any economic importance *A. alisiana* has been reported from the Palearctic, Oriental region, and Hawaiian Islands on cinnamon. (more)

Bravothrips mexicanus; Caliothrips phaseoli and *Frankliniella tuberosi*

Authority: (Priesner) | Hood | Moulton

Insecta, Thysanoptera, Thripidae

● First finding (CO)

Updated checklist of the order Thysanoptera in Colombia

Zootaxa 31.July.2024

This article reports 183 Thysanoptera species for Colombia. The field work revealed 38 new species records for the country. From these, at least five have been reported as pests elsewhere and are not present in the EU: *Bravothrips mexicanus* is a presumed pallinophagous species found in flowers of different Rosaceae, *Caliothrips phaseoli* is a polyphagous pest, same as *Ceratothripoides claratris*, which is the only Union QP from these five, *Frankliniella tuberosi* is a pest of potatoes, and *Thrips florum* is a polyphagous pest of young fruit. (more)

Zaprionus tuberculatus

Authority: Malloch

Insecta, Diptera, Drosophilidae

● New host plants

Zaprionus tuberculatus (Diptera, Drosophilidae): A generalist species that deserves attention

Journal of Applied Entomology 18.July.2024

A revision of existing literature and new fieldwork carried out in Brazil allowed the identification of 61 plant species from 25 botanical families as potential hosts for *Zaprionus tuberculatus.* From this list, 23 species are new hosts. Because *Z. tuberculatus* had a high density on certain fruits, its potential as a pest of these species cannot be ruled out. (more)

Viruses, viroids and phytoplasmas

Chili pepper mild mottle virus

Viruses, Virgaviridae; Tobamovirus

■ First finding (ES)

Un nuevo virus del pimiento se introduce en la península

A new pepper virus is introduced in the (Iberian) Peninsula

Phytoma 12.July.2024

Chili pepper mild mottle virus is a tobamovirus initially described in Peru in 2011 and further identified in the United States. The article reports its identification in Spain in pepper plants in Bizkaia and Granada, thus representing the first finding of this virus in the EU. (more)

3.2. Regulated pests

3.2.1. Priority pests[11]

Bacteria

Xylella fastidiosa

Authority: Schaad, Postnikova, Lacy, Fatmic & Chang

Gammaproteobacteria, Lysobacterales, Lysobacteraceae

■ New finding (ES)

La Junta actúa rápidamente con un programa de erradicación contra la *Xylella fastidiosa* subespecie *fastidiosa* en monte de Valencia de Alcántara que no afecta a olivo

The Board acts quickly with an eradication program against the *Xylella fastidiosa* subspecie *fastidiosa* in the Valencia de Alcántara forest that does not affect olive trees

Junta Extremadura 04.July.2024

This media article reports the identification of *Xylella fastidiosa* subsp. *fastidiosa* in a few plants of *Cistus* and *Lavandula* near Valencia de Alcántara in the province of Extremadura, close to an area in which the bacteria has been detected in Portugal. This finding extends the number of Spanish provinces in which *X. fastidiosa* has been detected. (more)

● Surveillance

An integrated strategy for pathogen surveillance unveiled *Xylella fastidiosa* ST1 outbreak in hidden agricultural compartments in the Apulia region (Southern Italy)

Research Square 03.July.2024 – Not peer-reviewed

The article reports the results of an integrated surveillance approach implemented in the Apulia Region of Italy, coupling plant-based surveys with monitoring and testing insect vectors for *Xylella fastidiosa*. This allowed the identification of infective *Philaenus spumarius* in an area considered *Xylella*-free and, in turn, identification of a previously not identified outbreak of *X. fastidiosa* subsp. *fastidiosa* ST1[12] in almonds and grape vines, demonstrating the interest of vector-based surveillance efforts. (more)

[11] 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

[12] The new finding of *Xylella fastidiosa* subsp. *fastidiosa* ST1 in Italy was reported in the Plant Health Newsletter on Horizon Scanning March 2024 issue: https://www.efsa.europa.eu/en/supporting/pub/en-8736

Insects and mites

Bactrocera dorsalis

Authority: (Hendel)

Insecta, Diptera, Tephritidae

● Management and Surveillance

Field longevity of methyl eugenol and cue-lure plugs and associated insecticidal strips: captures of *Bactrocera dorsalis* and *Zeugodacus cucurbitae* (Diptera: Tephritidae) in Hawaii

Environmental Entomology 02.July.2024

The present study investigates whether methyl eugenol (ME) and cue-lure (CL) plugs weathered for up to 24 weeks were effective in capturing males of *Bactrocera dorsalis* (Hendel) and *Zeugodacus cucurbitae* (Coquillett), respectively. For *B. dorsalis*, 6 g ME plugs were as effective as the control treatment (fresh liquid ME on a wick) for up to 12 weeks of weathering. For *Z. cucurbitae*, 3 g CL plugs were as effective as the control treatment (fresh CL plugs) for up to 18 weeks of weathering. (more)

● Identification method

A simple PCR-based quick detection of the economically important oriental fruit fly, *Bactrocera dorsalis* (Hendel) from India

Frontiers in Plant Science 09.July.2024

The accurate identification of *Bactrocera dorsalis* is challenging at the egg, maggot, and pupal stages, due to lack of distinct morphological characters similar to other fruit flies. A species-specific primer (SSP), DorFP1/DorRP1, for its identification has been developed and validated with *B. dorsalis* specimens from various locations in India and tested for cross-specificity with other economically significant fruit fly species in India (*B. correcta, B. digressa, B. zonata, Zeugodacus cucurbitae,* and *Z. tau*). The developed SSP reliably identifies *B. dorsalis* across all developmental stages and sexes. (more)

Popillia japonica

Authority: Newman

Insecta, Coleoptera, Scarabaeidae

■ First finding (SI)

Potrjena najdba japonskega hrošča v Sloveniji

Confirmed finding of the Japanese beetle in Slovenia

Gov SI 16.July.2024

Popillia japonica was found for the first time in Slovenia in a pheromone trap at the Lukovica highway rest area, where it was probably carried by a vehicle from an area in northern Italy where this pest is widespread. (more)

3.1.2 Quarantine pests[13,14]

Annex II Part A

Insects and mites

Bactrocera tsuneonis

Authority: (Miyake)

Insecta, Diptera, Tephritidae

- Management

Control of the Japanese orange fly, *Bactrocera tsuneonis* (Diptera: Tephritidae), through several preharvest management practices: establishment of a phytosanitary measure for citrus fruits for export

Applied Entomology and Zoology 29.July.2024

Infestation of *Citrus unshiu* fruits by *Bactrocera tsuneonis* was almost entirely suppressed by preharvest management consisting of selecting orchards unsuitable for its occurrence (= sunny orchards not surrounded by thickets), spraying pesticides, and removing suspected infested fruits. These findings highlight the possibility of establishing *B. tsuneonis*–free orchards by using a systems approach, thus allowing the export of citrus fruits from regions where the occurrence of *B. tsuneonis* has been confirmed. (more)

Ceratothripoides claratris

Authority: (Shumsher)

Insecta, Thysanoptera, Thripidae

- First finding (CO)

Updated checklist of the order Thysanoptera in Colombia

Zootaxa 31.July.2024

This paper reports 183 Thysanoptera species for Colombia. The fieldwork revealed 38 new species records for the country. From these, at least five have been reported as pests elsewhere and are not present in the EU: *Bravothrips mexicanus* is a presumed pallinophagous species found in flowers of different Rosaceae, *Caliothrips phaseoli* is a polyphagous pest, same as *Ceratothripoides claratris*, which is the only Union QP from these five, *Frankliniella tuberosi* is a pest of potatoes, and *Thrips florum* is a polyphagous pest of young fruit. (more)

[13] 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

[14] 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.

Lycorma delicatula

Authority: (White)

Insecta, Hemiptera, Fulgoridae

■ Spread

It's been a decade since the lanternfly landed in Pennsylvania. Is it as bad as we feared?

The Philadelphia Inquirer 26.July.2024

After a decade of living with *Lycorma delicatula* in Pennsylvania, New Jersey, and Delaware, some things are better than feared, and some are worse. While extremely disruptive to the wine and grape industry, *L. delicatula* is not as damaging to hardwood trees used for timber as previously thought, according to 2023 research from Penn State's Entomology Department. (more)

Monochamus alternatus

Authority: Hope

Insecta, Coleoptera, Cerambycidae

● Detection method

Non-destructive molecular methods to identify *Monochamus alternatus* (Coleoptera: Cerambycidae), a major vector of *Bursaphelenchus xylophilus* (Nematoda: Aphelenchoididae)

Journal of Applied Entomology 07.July.2024

In this study, a primer pair of Mal-SF/Mal-SR and probe of Mal-P for *Monochamus alternatus*. TaqMan probe-based qPCR was developed to identify the occurrence of *M. alternatus* in forests by amplifying the DNA samples obtained from its adult, larva, frass, excreta and exuviae. The amplification results were very effective. The lowest amount of *M. alternatus* DNA that could be detected with a Cq of 31.93 in the mixed samples was 0.64 pg. This assay can easily identify *M. alternatus* from other wood borers using its frass and exuviae, providing a new diagnostic protocol for monitoring the occurrence and distribution of *M. alternatus* in forests. (more)

Oligonychus perditus

Authority: Pritchard & Baker

Arachnida, Acarida, Tetranychidae

● First finding (RS)

First distribution records of the quarantine mite pest *Oligonychus perditus* (Acari: Tetranychidae) in Europe

International Journal of Acarology 04.July.2024

Between 2020 and 2023 *Oligonychus perditus* was found for the first time in Serbia. The mite was identified in 16 sampling locations on plants of the genus *Juniperus*, as well as in 16 additional sampling locations on plants of the genera *Prunus* and *Malus*. Collections took place on individual trees in backyards, gardens, and orchards, as well as in ruderal habitats. Populations were small and had no economic impact. (more)

Scirtothrips dorsalis and *Thrips palmi*

Authority: Hood | Karny

Insecta, Thysanoptera, Thripidae

● New host plant (*Morus alba*)

Transient composition of the thrips species (Thysanoptera: Thripidae) infesting mulberry in southern India: first report of two, including the dominating invasive pest *Thrips parvispinus*

Journal of Integrated Pest Management 26.July.2024

The composition of thrips species damaging *Morus alba* in the south Indian states of Andhra Pradesh, Karnataka, and Tamil Nadu from 2017 to 2023 was investigated. The five species found included two previously recognized mulberry pests — *Bathrips melanicornis* and *Pseudodendrothrips darci* —and three newly encountered pests, namely *Scirtothrips dorsalis*, *Thrips palmi* and *Thrips parvispinus*. (more)

Zeugodacus cucurbitae (=*Bactrocera cucurbitae*)

Authority: (Coquillett)

Insecta, Diptera, Tephritidae

● Surveillance

Field longevity of methyl eugenol and cue-lure plugs and associated insecticidal strips: captures of *Bactrocera dorsalis* and *Zeugodacus cucurbitae* (Diptera: Tephritidae) in Hawaii

Environmental Entomology 02.July.2024

The present study investigates whether methyl eugenol (ME) and cue-lure (CL) plugs weathered for up to 24 weeks were effective in capturing males of *Bactrocera dorsalis* (Hendel) and *Zeugodacus cucurbitae* (Coquillett), respectively. For *B. dorsalis*, 6 g ME plugs were as effective as the control treatment (fresh liquid ME on a wick) for up to 12 weeks of weathering. For *Z. cucurbitae*, 3 g CL plugs were as effective as the control treatment (fresh CL plugs) for up to 18 weeks of weathering. (more)

Viruses, viroids and phytoplasmas

Closterovirus tristezae (= *Citrus tristeza virus*)

Viruses, *Closteroviridae*, *Closterovirus*

■ New finding (IT)

Presenza confermata in Sardegna del virus *Citrus tristeza virus* (isolati non europei),genotipo RB (Resistance breaking) - Definizione dell'area delimitata n. 2/2024 ai sensi dell'articolo 18 del Regolamento (UE) 2016/2031 del Parlamento e del Consiglio del 26 ottobre 2016.

Confirmed presence in Sardinia of the *Citrus Tristeza Virus* (non-European isolates), genotype RB (Resistance breaking) - Definition of the demarcated area n. 2/2024 pursuant to Article 18 of Regulation (EU) 2016/2031 of the Parliament and of the Council of 26 October 2016.

Regione Autonoma della Sardegna17.July.2024

According to this release from the Sardinian authorities, the Sardinian Regional Phytosanitary Service has confirmed the identification of resistance-breaking (RB) isolates of *Citrus tristeza virus* in Sardinia, where CTV was previously considered to be no longer present. (more)

Ilarvirus APLPV

Viruses, Bromoviridae, Ilarvirus

- First finding (IN)

Virome analysis deciphered the infection of *American plum line pattern virus*, *Little cherry virus 1* and *Plum bark necrosis stem pitting-associated virus* in plum from India

European Journal of Plant Pathology 04.July.2024

HTS-based indexing of plum samples in India revealed for the first time the presence of *American plum line pattern virus* (APLPV) and *Plum bark necrosis and stem pitting-associated virus* (PBNSPaV) in India, thus extending the known geographical distribution of these viruses. (more)

Annex II Part B

Fungi and oomycetes

Fusarium circinatum

Authority: Nirenberg & O'Donnell

Sordariomycetes, Hypocreales, Nectriaceae

- Management

From lab to nursery: novel approaches of seed disinfection for managing pine pitch canker propagation

MDPI Forests 03.July.2024

This study evaluated the effectiveness of different seed disinfection treatments on Pinus seeds inoculated with *Fusarium circinatum*. Four treatments were tested: MennoFlorades (a surface disinfectant with fungicidal efficacy), Captan (a fungicide), ethanol at various concentrations, and hot water at different temperatures. Hot water at 60 °C, MennoFlorades at 4 % (v/v), and Captan at 1.9 g/L showed promising results and were selected for subsequent germination tests in vitro and in nursery trials. Of these, hot water at 60 °C for 15 minutes was identified as an ideal candidate for use in nurseries as a preventive measure against *F. circinatum* due to its negligible impact on seedlings, eco-friendly nature, ease of implementation, and cost-effectiveness. (more)[15]

[15] A media article highlighting the development of this project was reported in the Plant Health Newsletter on Horizon Scanning October 2023 issue: https://www.efsa.europa.eu/en/supporting/pub/en-8380

3.3. General interest

Pre-invasion assessment of potential invasive wood borers on North American tree species in Chinese sentinel gardens

Entomologia Generalis 29.July.2024

This study suggests that sentinel gardens are effective for pest prevention prioritization. Three methodological improvements for pre-invasion assessments are recommended: 1) documenting the vitality of specific colonized tissues to avoid misrepresenting secondary colonizers as primary pests, 2) using fully digital data-management from tree planting to insect identification, and 3) routinely identifying pests using DNA. (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 EFSA Virtual Issue "Horizon Scanning for Plant Health"

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