



# Plant Health Newsletter Scientific Literature Monitoring

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## Introduction

Following a request from the European Commission<sup>1</sup>, EFSA provides here the 24<sup>th</sup> scientific newsletter summarising its Plant Health scientific literature monitoring. The aim is to identify relevant information on plant pests that might be of concern to the EU and therefore may require consideration by risk assessors and risk managers.

Scientific literature is screened using the [MEDISYS \(Medical Information System\)](#) IT platform. Additional articles may be added as a result of literature searches in the [Scopus](#) database or based on input from plant health experts. The topics covered include the scientific articles published on the plant pests listed in Annexes IIA and IIB of the Commission Implementing Regulation (EU) 2019/2072<sup>2</sup>, in other [EU Plant Health legal acts](#) and in the [EPPO Alert](#), [A1](#) and [A2](#) lists. Selected articles may concern pests which do not appear in any of the above-mentioned texts, but which are of potential interest to the European Union.

This 24<sup>th</sup> scientific newsletter covers the period from 1<sup>st</sup> November to 30<sup>th</sup> November 2020. During this period, 17 relevant articles links were selected and included in this newsletter.

Selected items from the scientific literature have been grouped into sections corresponding to main groups of host plants/crops. The pests are described by their scientific name, taxonomy and listing in the European Union legislation or in the EPPO lists. Additional information on host plants, feeding habits, impacts and presence in the EU are given using icons. The text displayed for each article represents the first lines of the article text, not always extracted from the abstract.

### Icons used in this newsletter

<b>Main crops/ plants affected</b>		Forest plants
		Fruit plants
		Vegetables
		Ornamentals and flower plants
		Cereals
		Oil plants
		Other plants
<b>Host range/feeding habit</b>		Monophagous
		Oligophagous
		Polyphagous
<b>Type of impact</b>		Pest causing the death of affected plant
		Pest causing quantitative production losses
		Pest causing qualitative production losses
<b>Presence in EU</b>		Pest present, Pest under official control (i.e. eradication, containment)

<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>2</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, consolidated version of 06.10.2020, p. 1–258.

	<b>X</b>	Pest absent
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## 1. Selected articles

### 1.1. Forest

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- ***Amasa sp. near truncata***  
Insecta, Coleoptera, Curculionidae  
Not listed

First finding

[Bark beetles and pinhole borers recently or newly introduced to France \(Coleoptera: Curculionidae, Scolytinae and Platypodinae\)](#)

**Zootaxa** [fr] [de] **09.Nov.2020**

We present an annotated list of 11 Scolytinae and Platypodinae species newly or recently introduced to France. Four species are recorded for the first time as interceptions: *Euplatypus hintzi* (Schaufuss), *Euplatypus parallelus* (Fabricius), *Xyleborus affinis* Eichhoff and *Xyleborus ferrugineus* (Fabricius). Two are possibly naturalised: *Xyleborus bispinatus* Eichhoff and *Cryphalus dilutus* Eichhoff, while *Cyclorhipidion distinguendum* (Eggers) and *Xyloterinus politus* (Say) are confirmed as species newly established in Europe. Moreover, an unidentified species of *Amasa* Lea, collected previously in Spain, is recorded for the first time in France: *Amasa sp. near truncata* (Erichson). [\(more\)](#)

- ***Bursaphelenchus xylophilus*** (Steiner & Bührer) Nickle  
Chromadorea, Rhabditida, Aphelenchoididae  
Commission Implementing Regulation (EU) 2019/2072 – Annex IIB

Control measure

[EFFECTS OF PRESCRIBED BURNING ON PINE WOOD NEMATODE \(\*BURSAPHELENCHUS XYLOPHILUS\*\)](#)

**APPLIED ECOLOGY AND ENVIRONMENTAL RESEARCH**  
[fr] [de] **29.Jul.2020**

*Bursaphelenchus xylophilus* became one of the most damaging forest pests in recent years in Hunan province, and caused remarkable losses of pine tree. In order to explore the effect of fire disturbance on the prevention of *Monochamus alternatus* and *B. xylophilus*. forests dominated by *Pinus massoniana* were taken as the object of the study in Daolin town, Ningxiang city, Hunan province, China. Three kinds of forest were selected, such as healthy forest of *Pinus massoniana* (Control I), infected forest without prevention (II), and infected forest with prevention (III). [\(more\)](#)



Pine, fir and cedar



Among Pinaceae



Dieback and death of the plant



ES, PT, under official control

- ***Geosmithia morbida*** Kolarík, Freeland, Utley & Tisserat **and its vector**  
***Pityophthorus juglandis*** Blackman  
Sordariomycetes, Hypocreales, Bionectriaceae and Insecta, Coleoptera,  
Curculionidae  
Commission Implementing Regulation (EU) 2019/2072 – Annex IIB

Detection method

[A duplex real-time PCR with probe for simultaneous detection of \*Geosmithia morbida\* and its vector \*Pityophthorus juglandis\*](#)

**PLOS ONE** [fr] [de] **23.Oct.2020**

The cultivation of walnuts (*Juglans* sp.) in Europe retains high economic, social, and environmental value. The recent reporting of the Thousand Cankers Disease (TCD) fungus, *Geosmithia morbida*, and of its vector, *Pityophthorus juglandis*, in walnut trees in Italy is alarming the whole of Europe. Although Italy is at present the only foothold of the disease outside North America, given the difficulties inherent in traditional identification of both members of this beetle/fungus complex, a rapid and effective protocol for the early detection and identification of TCD organisms is an absolute priority for Europe. ([more](#))



Mainly among  
*Juglans* spp



Polyphagous among  
the Juglandaceae  
family



Responsible for the  
thousand canker  
disease of walnut -  
leaf yellowing and  
thinning, branch  
dieback, bark  
cankers, tree dieback



IT

## 1.2. Fruit plants

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- ***Cherry virus F***  
*Viruses, Secoviridae, Fabavirus*  
Not listed

First finding

[First report of Cherry virus F infecting Japanese plum in Korea](#)

**Plant Disease** [fr] [de] **03.Nov.2020**

Cherry virus F (CVF) is a tentative member of the genus Fabavirus in the family Secoviridae, consisting of two RNA segments (Koloniuk et al. 2018). To date, CVF has been documented in only sweet cherry (*Prunus avium*) in the Czech Republic (Koloniuk et al. 2018), Canada, and Greece. In May 2014, we collected leaf samples from four symptomatic (leaf spots and dapple fruits) and two asymptomatic Japanese plum cultivars (Sun and Gadam) grown in an orchard in Hoengseong, South Korea, to identify viruses and viroids infecting plum trees. ([more](#))

- ***Diaphorina citri*** Kuwayana  
Insecta, Hemiptera, Liviidae  
Commission Implementing Regulation (EU) 2019/2072 – Annex IIA

Natural enemy

[Effectiveness of the Brown Lacewing, \*Sympherobius barberi\* Banks as a Biological Control Agent of the Asian Citrus Psyllid \*Diaphorina citri\* Kuwayama](#)

**Frontiers in Plant Science** [fr] [de] **14 Oct.2020**

The Asian citrus psyllid (ACP) *Diaphorina citri* Kuwayama is an economically important pest of citrus because it vectors the causal pathogens of huanglongbing (HLB) or citrus greening disease. Biological control is an important component of citrus pest management but requires consistent strengthening of its impact on pest complex. The brown lacewing *Sympherobius barberi* Banks is a known predator of several insect pests from Asia, Europe, and America. However, there is not much information about its effectiveness against *D. citri*. We evaluated *S. barberi* against the *D. citri* and frozen eggs of the Mediterranean flour moth *Ephestia kuehniella*, the latter is a common diet used for rearing predators in laboratories. ([more](#))



Major hosts *Citrus* spp, *Citroncirus webberi* and *Murraya paniculata*



Mainly within the Rutaceae family



Vector of Citrus greening



Absent from the EU

- ***Erysiphe corylacearum*** (U. Braun & S. Takamatsu)  
Leotiomycetes, Erysiphales, Erysiphaceae  
Not listed

First finding

[First report of \*Erysiphe corylacearum\* on \*Corylus avellana\* and \*C. colurna\* in Austria](#)

**New Disease Reports** [fr] [de] **07.Nov.2020**

In September 2020, prominent powdery mildew disease symptoms were seen on leaves of *Corylus avellana* (hazelnut) and *C. colurna* (Turkish hazelnut) at several localities in eastern and southern Austria (Burgenland, Carinthia, Lower Austria, Styria, Vienna). The symptoms differed from those previously observed (caused by *Phyllactinia guttata*) by mycelia on the upper leaf surface and by smaller chasmothecia with branched appendices. The disease was observed on *Corylus* spp. growing in mixed deciduous forests, hedges as well as city gardens and parks. ([more](#))

- **Grapevine vein clearing virus and its vector *Aphis illinoisensis***

Shimer

*Viruses, Caulimoviridae, Badnavirus* | Insecta, Hemiptera, Aphididae

Commission Implementing Regulation (EU) 2019/2072 – Annex IIA (12.h Non European virus of *Vitis*) | Not listed

New vector

[Grapevine vein clearing virus is prevalent and genetically variable in grape aphid \(\*Aphis illinoisensis\* Shimer\) populations](#)

**Plant Disease** [fr] [de] **11.Nov.2020**

Grapevine vein clearing virus (GVCV) causes severe stunting and death of cultivated grapevines and is prevalent in native *Vitis* spp. and *Ampelopsis cordata* in the Midwest region of the USA. GVCV can be transmitted from wild *A. cordata* to *Vitis* spp. by grape aphid (*Aphis illinoisensis*) under greenhouse conditions, but its prevalence, genetic composition and genome number in native grape aphids are unknown. In this study, we collected grape aphids from native Vitaceae across the state of Missouri in 2018 and 2019, and conducted diagnostic, genetic and quantitative analyses. GVCV was detected in 91 (87%) of the 105 randomly sampled communities on 71 Vitaceae plants. [\(more\)](#)



Grapevine



Within the genus *Vitis*



Leaves and shoots chlorosis, reduced growth, vine decline



Absent from the EU

- ***Leipothrix argutae* sp. nov.**

Arachnida, Acari, Eriophyidae

Not listed

New pest

[A new \*Leipothrix\* \(Trombidiformes: Eriophyoidea\) infesting \*Actinidia\* fruit trees in Jilin province, Northeastern China](#)

**International Journal of Acarology** [fr] [de] **26.Aug.2020**

A new mite species belonging to Eriophyidae (Trombidiformes: Eriophyoidea) from Jilin Province, northeastern China, is described and illustrated. *Leipothrix argutae* sp. nov. causes rust on its host plant, *Actinidia arguta* (Siebold & Zucc.) Planch. ex Miq. (Actinidiaceae), commonly known as hardy kiwi fruit. [\(more\)](#)

- **Plum bark necrosis stem pitting-associated virus**

Viruses, Closteroviridae, Ampelovirus

Not listed

New host plant

[First report of Plum bark necrosis stem pitting-associated virus infecting grapevine in China](#)

**Virology Journal** [fr] [de] **18.Nov.2020**

Virus disease is one of the main diseases in grapevine, and there has been no report on Plum bark necrosis and stem pitting-associated virus infecting grapevine in China. [\(more\)](#)



Stone fruits



Within the genus *Prunus*



Decline, gummosis, flattening of scaffold branches, stem necrotic pits



BG, ES

- ***Thekopsora minima*** (Arthur) Sydow & P. Sydow  
Pucciniomycotina, Pucciniales, Pucciniastraceae  
EPPO A2 list

First finding

[First Report of Blueberry Leaf Rust Caused by \*Thekopsora minima\* on \*Vaccinium corymbosum\* in Peru](#)

**Plant Disease [fr] [de] 31.Aug.2020 – Vol. 104, No. 11, November 2020**

*Thekopsora minima* P. Syd. & Syd. (Sydow and Sydow 1915) is a heteroecious rust included in the A1 list of quarantine pests for Peru. It can cause severe defoliation on blueberry (*Vaccinium corymbosum* L.), reducing the yields, and can represent a limitation in the exportation to those countries where it is regulated. Blueberry is becoming an important agricultural export commodity for Peru, showing remarkable growth and development in the last years. ([more](#))



Mainly on  
*Vaccinium* spp.,  
also some  
Ericaceae e.g.  
*Rhododendron* spp



Polyphagous



Leaves rust, can  
lead to defoliation



Decline in fruit  
yield



BE, DE, ES, NL, PT

- ***Xanthomonas citri* subsp. *citri*** (Hasse) Constantin, Cleenwerck, Maes, Baeyen, Van Malderghem, De Vos, Cottyn  
Gammaproteobacteria, Xanthomonadales, Xanthomonadaceae  
Commission Implementing Regulation (EU) 2019/2072 – Annex IIA

Detection method

[Canine Olfactory Detection of a Non-Systemic Phytobacterial Citrus Pathogen of International Quarantine Significance](#)

**Entropy [fr] [de] 09.Nov.2020**

For millennia humans have benefitted from application of the acute canine sense of smell to hunt, track and find targets of importance. In this report, canines were evaluated for their ability to detect the severe exotic phytobacterial arboreal pathogen *Xanthomonas citri* pv. *citri* (Xcc), which is the causal agent of Asiatic citrus canker (Acc). Since Xcc causes only local lesions, infections are non-systemic, limiting the use of serological and molecular diagnostic tools for field-level detection. This necessitates reliance on human visual surveys for Acc symptoms, which is highly inefficient at low disease incidence, and thus for early detection. In simulated orchards the overall combined performance metrics for a pair of canines were 0.9856, 0.9974, 0.9257 and 0.9970, for sensitivity, specificity, precision, and accuracy, respectively, with 1–2 s/tree detection time. ([more](#))



Main hosts trifoliolate  
orange, grapefruit  
and lime



Mainly within the  
Rutaceae family



Canker lesions on  
leaves, twigs and  
fruits. Fruits lesions  
and premature drop.



Absent from Europe

### 1.3. Vegetables

- **Tomato brown rugose fruit virus**

*Viruses, Virgaviridae, Tobamovirus*

Commission Implementing Regulation (EU) 2020/1191

Control method

[Disinfection treatments eliminated tomato brown rugose fruit virus in tomato seeds](#)

**European Journal of Plant Pathology** [fr] [de] **31.Oct.2020**

Tomato brown rugose fruit virus (ToBRFV), belonging to the genus *Tobamovirus*, is a highly-virulent emerging virus species, causing disease outbreaks and significant crop losses worldwide. No effective measure has been identified to control ToBRFV infection. Therefore, the objectives of this study were to investigate the effectiveness of three seed disinfection treatments on the elimination of ToBRFV in tomato seeds and their effect on seed quality. Seeds extracted from ToBRFV-infected fruits were treated with 2% hydrochloric acid (HCl) for 30 min, 10% trisodium phosphate (TSP) for 3 h, dry heat at 72 °C for 72 h, or their combinations; then, the seeds were tested for the presence of the virus using serological, molecular, and biological assays. ([more](#))



Mainly *Capsicum annuum* and *Solanum lycopersicum*



Within the Solanaceae family



Foliar chlorosis, mosaic and mottling. Necrotic spots on peduncles, calyces and petioles. Yellow or brown spots on fruits



CY, CZ, DE, ES, FR, GR, IT, NL, UK

### 1.4. Ornamental and flower plants

- ***Agrobacterium pusense*** (Panday et al. 2011) Mousavi et al. 2016

Alphaproteobacteria, Rhizobiales, Rhizobiaceae

Not listed

New pest

[Agrobacterium pusense, a new plant tumour-inducing pathogen isolated from Lawson cypress](#)

**Forest Pathology** [fr] [de] **20.Nov.2020**

Lawson cypress (*Chamaecyparis lawsoniana*), an important landscape tree, is widely planted in gardens and parks throughout Iran. Crown gall disease on Lawson cypress trees was observed in Sari and Juybar Counties, Mazandaran province, northern Iran, in 2017. ([more](#))

- **Palm lethal yellowing phytoplasmas**

Mollicutes, Acholeplasmatales, Acholeplasmataceae  
Commission Implementing Regulation (EU) 2019/2072 – Annex IIA

Detection method

[Detection of Lethal Bronzing Disease in Cabbage Palms \(\*Sabal palmetto\*\) Using a Low-Cost Electronic Nose](#)

**Biosensors** [fr] [de] **23.Nov.2020**

Lethal Bronzing Disease (LB) is a disease of palms caused by the 16SrIV-D phytoplasma. A low-cost electronic nose (eNose) prototype was trialed for its detection. It includes an array of eight Taguchi-type (MQ) sensors (MQ135, MQ2, MQ3, MQ4, MQ5, MQ9, MQ7, and MQ8) controlled by an Arduino NANO® microcontroller, using heater voltages that vary sinusoidally over a 2.5 min cycle. Samples of uninfected, early symptomatic, moderate symptomatic, and late symptomatic infected palm leaves of the cabbage palm were processed and analyzed. [\(more\)](#)



Mainly coconut, palm trees



Polyphagous



After a symptomless phase, inflorescences necrosis, fruit fall, leaves yellowing and death, plant basal rot and dieback



Absent from the EU

- **Tulip streak virus**

Viruses, Bunyavirales, Phenuiviridae  
Not listed

New pest

[Characterization of tulip streak virus, a novel virus associated with the family Phenuiviridae](#)

**JOURNAL OF GENERAL VIROLOGY** [fr] [de] **23.Nov.2020**

In Japan, tulip-growing areas have been plagued by viral diseases for decades, but the viruses causing the damage remain undescribed. In this study, *Nicotiana benthamiana* and *Chenopodium quinoa* plants mechanically inoculated with crude sap from a symptomatic tulip flower exhibited necrosis symptoms. Additionally, flexuous and filamentous virus particles were detected by electron microscopy analysis. Moreover, we determined the complete sequences of two genomic segments of the tulip streak virus (TuSV), which is a new virus associated with streaking symptoms, on the basis of a next-generation sequencing analysis. [\(more\)](#)

## 1.5. Other plants

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- ***Brachyplatys subaeneus*** Westwood

Insecta, Hemiptera, Plataspidae  
Not listed

First finding

[First report of \*Brachyplatys subaeneus\* \(Westwood\) \(Hemiptera: Heteroptera: Plataspidae\) in the United States](#)

**Insecta Mundi** [fr] [de] **30.Oct.2020**

*Brachyplatys subaeneus* (Westwood) (Hemiptera: Plataspidae), is reported from Miami Beach, FL, the first report from the United States. It was noticed first on a photo-sharing site (iNaturalist) providing an example of the importance of these sites for helping to track introduced species. Information on distribution, host plants and potential spread are

provided along with photos and taxonomic characters to assist with identification of this recently introduced species. [\(more\)](#)

- **Candidatus Phytoplasma aurantifolia** Zreik, Bové & Garnier  
Mollicutes, Acholeplasmatales, Acholeplasmataceae  
Commission Implementing Regulation (EU) 2019/2072 – Annex IIA

New host plant

[First report of \*Alhagi maurorum\* as a new plant host of 'Candidatus Phytoplasma aurantifolia' \(subgroup 16SrII-C\) in Iran](#)

**Journal of Plant Pathology** [\[fr\]](#) [\[de\]](#) 25.Nov.2020

Camelthorn (*Alhagi maurorum*, Fabaceae) is an important perennial weed in Iran. It is used as herbal medicine and more recently cultivated as a crop to feed the animals. During 2017-18, camelthorn witches' broom disease was observed in Abarkooh area (Yazd province, Iran). [\(more\)](#)



Major host lime



Host in several families including Fabaceae and Rosaceae



New growth of small chlorotic leaves and highly proliferated shoots. Leaves abscission, distorted twigs (witches' broom). Tree dieback



Absent from the EU

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### Disclaimer

The selection of articles reflects their publication in the scientific literature during the monitored time period. 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.

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For feedback on this Newsletter please write to  
[alpha@efsa.europa.eu](mailto:alpha@efsa.europa.eu)