

ORGANISATION EUROPEENNE ET MEDITERRANEENNE POUR LA PROTECTION DES PLANTES

EUROPEAN AND MEDITERRANEAN PLANT PROTECTION ORGANIZATION

EPPO Reporting Service

No. 4 Paris, 2017-04

General	
2017/072 2017/073 2017/074	New data on quarantine pests and pests of the EPPO Alert List New factsheet on <i>Xylella fastidiosa</i> published on the IPPC website European Conference on <i>Xylella fastidiosa</i> : finding answers to a global problem (Palma de Mallorca, ES, 2017-11-13/15)
Pests	
2017/075 2017/076 2017/077 2017/078 2017/079 2017/080 2017/081	First report of Meloidogyne mali in the USA First report of Halyomorpha halys in Chile First report of Halyomorpha halys in Georgia First report of Xylosandrus crassiusculus in Spain First reports of Xylosandrus crassiusculus in Argentina and Uruguay Tecia solanivora found in Asturias (ES) First reports of Drosophila suzukii and Zaprionus indianus in Cyprus, and confirmation of the
2017/082 Diseases	presence of <i>Z. tuberculatus</i> First report of <i>Dactylopius opuntiae</i> in Cyprus
2017/083 2017/084 2017/085 2017/086 2017/087	Updated situation of <i>Xylella fastidiosa</i> in Islas Baleares, Spain Suspected presence of <i>Xylella fastidiosa</i> in a single plant of <i>Polygala myrtifolia</i> imported into the Czech Republic First report of <i>Ralstonia solanacearum</i> on roses in Switzerland <i>Cryphonectria parasitica</i> found in Bavaria, Germany 'Candidatus Phytoplasma pruni' detected in apple (<i>Malus domestica</i>)
Invasive plants	
2017/088 2017/089 2017/090 2017/091	Scoring environmental and socioeconomic impacts of alien plants invasive in Europe Integrated approach to control glyphosate-resistant <i>Ambrosia trifida</i> in North America First report of the establishment of the biocontrol agent <i>Trichilogaster acaciaelongifoliae</i> in Portugal 3 rd International Congress on Biological Invasions (2017-11-19/23 Hangzhou, China)
	3

Tel: 33 1 45 20 77 94

Fax: 33 1 70 76 65 47

E-mail: hq@eppo.int

Web: www.eppo.int

2017/072 New data on quarantine pests and pests of the EPPO Alert List

By searching through the literature, the EPPO Secretariat has extracted the following new data concerning quarantine pests and pests included (or formerly included) on the EPPO Alert List, and indicated in bold the situation of the pest concerned using the terms of ISPM no. 8.

New records

In the Republic of Korea, 25 grapevine samples exhibiting foliar symptoms of mottling, yellowing, reddening, and malformation, and 5 asymptomatic samples were collected in July 2014 in Suwon and Gyeongsan, respectively. Molecular tests confirmed the presence of *Grapevine red blotch-associated virus* (*Geminiviridae*, GRBaV - EPPO Alert List) in 2 samples which showed leaf mottling and yellowing. This is the first time that GRBaV is reported from the Republic of Korea. So far, GRBaV had only been reported from Canada and the USA (Lim *et al.*, 2016). Present, only in some areas.

Little cherry virus 1 (Velarivirus, LChV-1 - EU Annexes) is reported for the first time from Spain. LChV-1 was detected in symptomatic samples of sweet cherry (*Prunus avium*) which had been collected in 2012 in Valle del Jerte (Cáceres province - Extremadura) and Ponferrada (León province - Castilla y León). It is noted that the prevalence of LChV-1 in the cherry-growing areas of Spain remains to be determined (Ruiz-García *et al.*, 2016). **Present**, only in some areas (Castilla y León, Extremadura).

In the Republic of Korea, *Liriomyza huidobrensis* (Diptera: Agromyzidae - EPPO A2 List) was found during a survey of potato pests carried out in 2011-2012. Localized outbreaks were observed in in potato fields in Miryang and Goryeong counties. This is the first published record of *L. huidobrensis* in the Republic of Korea, however some infestations on greenhouse crops had been observed earlier (Maharjan *et al.*, 2014). **Present**, **only in some areas** (**Miryang and Goryeong counties**).

In Kenya, *Meloidogyne enterolobii* (EPPO A2 List) was first found during surveys conducted from May to June 2015 to determine the incidence of root-knot nematodes on *Solanum scabrum*. *M. enterolobii* was found in Yatta (Machakos county) on *S. scabrum* plants showing leaf yellowing, leaf drop and stunted growth (Chitambo *et al.*, 2016). **Present, only in some areas (Machakos county)**.

In Lebanon, a living specimen of *Monochamus sutor sutor* (a potential vector of *Bursaphelenchus xylophilus*) was detected in 2014. The adult female was found in the town of Jdaidet near Beirut. This is the first time that a *Monochamus* sp. is reported from Lebanon. It is noted that *M. sutor sutor* might have been introduced with wood packaging or timber import, and that it could represent a threat to pine forests in Lebanon (Moussa *et al.*, 2016). Present, a single live specimen found near Beirut.

Basil downy mildew caused by *Peronospora belbahrii* is reported for the first time from the Republic of Korea. The disease was first observed in November 2015 on sweet basil (*Ocimum basilicum*) plants growing in plastic greenhouses in Gwangmyeong (Choi *et al.*, 2016). Present, only in some areas (Gwangmyeong).

Detailed records

In Arkansas (US), the mortality of approximately 20 sassafras trees (Sassafras albidum) observed near Warren (Bradley county) in December 2015 has been investigated. Results

showed that these trees were infected by *Raffaelea lauricola* (EPPO Alert List). The insect vector, *Xyleborus glabratus*, was also present (Olatinwo *et al.*, 2016).

In Brazil, bacterial fruit blotch caused by *Acidovorax citrulli* (EPPO A1 List) was first reported in 1990 in a watermelon (*Citrullus lanatus*) field in São Paulo state. The disease was then reported in melon (*Cucumis melo*) and watermelon crops in the states of Bahia, Ceará, Minas Gerais, Pernambuco, Rio Grande do Norte, Rio Grande do Sul, and Roraima. Outbreaks have only occurred sporadically in watermelon fields, but significant yield losses have been common in melon-producing areas during the rainy season, in particular in Rio Grande do Norte and Ceará which account for more than 80% of the Brazilian production of melons (Silva *et al.*, 2017).

In autumn 2015, *Thekopsora minima* (EPPO Alert List) was detected for the first time in Oregon (US) in samples of *Vaccinium corymbosum* (cvs. Blue Crop, Jelly Bean, Peach Sorbet) which had been collected from different locations (Wiseman *et al.*, 2016).

Diagnostics

Nested and real-time PCR tests have been developed in the USA for the detection of *Ceratocystis fagacearum* (EPPO A1 List) in the sapwood of wilting oak trees (*Quercus alba*, *Q. ellipsoidalis*, *Q. macrocarpa*, *Q. rubra*), as well as from plant tissues taken the year following branch or whole-tree death (Yang & Juzwik, 2017).

Host plants

During autumn 2015, grapevine plants (*Vitis vinifera*) showing leaf yellowing, veinal necrosis, and in some cases fruit shrivelling, were observed in a vineyard located in Piura, Northwestern Peru. As these symptoms resembled those of grapevine yellows, molecular tests for phytoplasma infection were implemented. Results revealed the presence of phytoplasma strains related to *'Candidatus* Phytoplasma brasiliense'. According to the authors, this is the first time that a *'Ca. P. brasiliense'-related strain* is associated with grapevine yellows (Wei *et al.*, 2017).

In Spain, *Erwinia amylovora* (fireblight - EPPO A2 List) has been detected for the first time on the Iberian wild pear (*Pyrus bourgaeana*). *P. bourgaeana* is a deciduous tree growing in Mediterranean forests and evergreen open woodlands. Affected trees showed typical symptoms of fireblight, including blossom necrosis, leaf and shoot blight, fruit mummification and internal necrosis of twigs and branches (Marco-Noales *et al.*, 2017).

Modelling

The potential world distribution of *Drosophila suzukii* (Diptera: Drosophilidae - EPPO A2 List) has been studied using a predictive model. Results indicated high environmental suitability mainly in temperate and subtropical areas in Asia, Europe, North and South America, where *D. suzukii* has already been recorded. However, some areas in Africa and coastal Australia, where the pest is still absent, were also found to be at risk (dos Santos *et al.*, 2017).

Sources:

Chitambo O, Haukeland S, Fiaboe KKM, Kariuki GM, Grundler FMW (2016) First report of the root-knot nematode *Meloidogyne enterolobii* parasitizing African nightshades in Kenya. *Plant Disease* 100(9), p 1954.

- Choi YJ, Choi IY, Lee KJ, Shin HD (2016) First report of downy mildew caused by *Peronospora belbahrii* on sweet basil (*Ocimum basilicum*) in Korea. *Plant Disease* 100(11), p 2335.
- dos Santos LA, Mendes MF, Krüger AP, Blauth ML, Gottschalk MS, Garcia FRM (2017) Global potential distribution of *Drosophila suzukii* (Diptera, Drosophilidae). *PLoS ONE* 12(3): e0174318. https://doi.org/10.1371/journal.pone.0174318
- Lim S, Igori D, Zhao F, Moon JS, Cho IS, Choi GS (2016) First report of *Grapevine red blotch-associated virus* on grapevine in Korea. *Plant Disease* 100(9), p 1957.
- Maharjan R, Oh HW, Jung C (2014) Morphological and genetic characteristics of *Liriomyza huidobrensis* (Blanchard) (Diptera: Agromyzidae) infesting potato crops in Korea. *Journal of Asia-Pacific Entomology* 17, 281-286.
- Marco-Noales E, Peñalver J, Navarro I, Gorris MT, Morente MC, Balguerías C, Ramírez JA, Recio C, Ruiz de la Hermosa T, Sancho R, Aedo C, López MM (2017) Iberian wild pear (*Pyrus bourgaeana*) is a new host of *Erwinia amylovora*, the causal agent of fire blight. *Plant Disease* 101(3), p 502.
- Moussa Z, Cocquempot C, Yammouni D (2016) First detection of pine wood nematode vector, *Monochamus sutor sutor* (Linnaeus, 1758) in Lebanon (Coleoptera, Cerambycidae, Lamiinae). *Bulletin de la Société entomologique de France* **121**(4), 455-460.
- Olatinwo R, Barton C, Fraedrich SW, Johnson W, Hwang J (2016) First report of laurel wilt, caused by *Raffaelea lauricola*, on sassafras (*Sassafras albidum*) in Arkansas. *Plant Disease* 100(11), p 2331.
- Ruiz-García AB, Martínez C, Santiago R, García MT, de Prado N, Olmos A (2016) First report of *Little cherry virus 1* (LChV-1) in sweet cherry in Spain. *Plant Disease* 100(11), p 2340.
- Silva GM, Souza RM Yan L, Rui S Jr, Medeiros FHV, Walcott RR (2016) Strains of the group I lineage of *Acidovorax citrulli*, the causal agent of bacterial fruit blotch of cucurbitaceous crops, are predominant in Brazil. *Phytopathology* **106**(12), 1486-1494
- Wei W, Pérez-López E, Bermúdez-Díaz L, Davis RE, Granda-Wong C, Zhao Y (2017) First report of a new grapevine yellows disease in Peru and its association with infection by a 'Candidatus Phytoplasma brasiliense'-related phytoplasma strain. Plant Disease 101(3) p 502.
- Wiseman MS, Gordon MI, Putnam ML (2016) First report of leaf rust caused by *Thekopsora minima* on Northern highbush blueberry in Oregon. *Plant Disease* **100**(9), p 1949.
- Yang A, Juzwik J (2017) Use of nested and real-time PCR for the detection of *Ceratocystis fagacearum* in the sapwood of diseased oak species in Minnesota. *Plant Disease* **101**(3), 480-486.

Additional key words: new record, detailed record, diagnostics, host plant, modelling

Computer codes: CERAFA, DROSSU, ERWIAM, GRBAVO, LCHV10, LIRIHU, MELGMY, MONCSU, PEROBE, PHYPBA, PSDMAC, RAFFLA, THEKMI, XYLBGR, BR, ES, ES, KE, KR, LB, PE, US

2017/073 New factsheet on Xylella fastidiosa published on the IPPC website

In 2017-04-21, the IPPC Secretariat published a new factsheet on *Xylella fastidiosa*: 'Facing the threat of *Xylella fastidiosa* together'. It can be freely downloaded from the Internet: https://www.ippc.int/static/media/uploads/IPPC_factsheet_Xylella_final.pdf

Source: EPPO Secretariat (2017-04).

Additional key words: publication Computer codes: XYLEFA

2017/074 European Conference on *Xylella fastidiosa*: finding answers to a global problem (Palma de Mallorca, ES, 2017-11-13/15)

A Conference on 'Xylella fastidiosa: finding answers to a global problem' will be held in Palma de Mallorca, Spain, from the 13th to the 15th of November 2017. The conference is being organised jointly by EFSA, the University of the Balearic Islands, the Euphresco network for phytosanitary research coordination and funding, and the EU Horizon 2020 projects POnTE and XF-ACTORS. This Conference will focus on the situation of *X. fastidiosa* in Europe.

The main topics will be the following:

- X. fastidiosa: biology, genetics and taxonomy;
- Vectors;
- Epidemiology;
- Control strategies, disease management and mitigation measures.

The deadline to submit abstracts for presentations or posters is the 31st of May.

For more information: https://www.efsa.europa.eu/en/events/event/171113

Source: EPPO Secretariat (2017-04).

Additional key words: conference Computer codes: XYLEFA, ES

2017/075 First report of Meloidogyne mali in the USA

In April 2016, *Meloidogyne mali* (EPPO Alert List) was detected for the first time in the USA. This is also the first record for North America. The nematode was identified in a root sample which had been collected from a declining hedge of *Euonymus kiautschovicus* (Celestraceae) growing in a private garden in Harrison, New York state. Laboratory studies (morphology, PCR, sequencing) confirmed the identity of the nematode. The origin of this infestation is not known, but as is the case in Europe, it is hypothesized that the nematode might have been introduced with elm planting material within the framework of breeding programmes against Dutch elm disease. It is noted that delimiting surveys are necessary to determine the current distribution of *M. mali*, to trace back the possible origin of its introduction into North America, and to determine its potential economic impact.

The situation of *Meloidogyne mali* in the USA can be described as: Present, detected in a root sample of *Euonymus kiautschovicus* collected from New York state.

Source: Eisenback JD, Graney LS, Vieira P (2017) First report of the apple root-knot nematode

(Meloidogyne mali) in North America, found parasitizing Euonymus in New York. Plant

Disease 101(3), p 510.

Pictures: Meloidogyne mali. https://gd.eppo.int/taxon/MELGMA/photos

Additional key words: new record Computer codes: MELGMA, US

2017/076 First report of Halyomorpha halys in Chile

In Chile, *Halyomorpha halys* (Hemiptera: Pentatomidae - formerly EPPO Alert List) was found for the first time in March 2017 in the city of Santiago (Metropolitan region). All specimens were collected from private homes, in 3 different locations in the city centre. As for the moment the pest has only been found in an urban environment, there is no report of damage to crops. It is noted that prior to this first record, *H. halys* had been intercepted on a few occasions in Chile (i.e. first in 2011, at an entry point (Iquique city) in Northern Chile on goods imported from the USA, and then in a few other instances). This record in Chile is also the first record of *H. halys* in South America.

The situation of *Halyomorpha halys* in Chile can be described as follows: **Present**, **first found** in 2017 in the city of Santiago (Metropolitan region).

Source: Faúndez El, Rider DA (2017) The brown marmorated stink bug *Halyomorpha halys*

(Stål, 1855) (Heteroptera: Pentatomidae) in Chile. Arquivos Entomolóxicos 17, 305-

307.

Pictures: Halyomorpha halys. https://gd.eppo.int/taxon/HALYHA/photos

Additional key words: new record Computer codes: HALYHA, CL

2017/077 First report of Halyomorpha halys in Georgia

In Georgia, *Halyomorpha halys* (Hemiptera: Pentatomidae - formerly EPPO Alert List) was identified for the first time in October 2016. An outbreak was reported in the municipality of Khobi (Samegrelo-Zemo Svaneti region), as well as in Pitsunda (Abkhazia). However, it is noted that the presence of the bug had already been observed in 2015. This is the first time that *H. halys* is reported from Georgia.

The situation of *Halyomorpha halys* in Georgia can be described as follows: **Present**, **first** found in 2016 in the municipality of Khobi (Samegrelo-Zemo Svaneti region) and Pitsunda (Abkhazia).

Source: Gapon DA (2017) First records of the brown marmorated stink bug *Halyomorpha*

halys (Stål, 1855) (Heteroptera: Pentatomidae) in Russia, Abkhazia, and Georgia.

Entomological Review 96(8), 851-854.

Pictures: Halyomorpha halys. https://gd.eppo.int/taxon/HALYHA/photos

Additional key words: new record Computer codes: HALYHA, GE

2017/078 First report of Xylosandrus crassiusculus in Spain

During the 22nd meeting of the Panel on Quarantine Pests for Forestry, the presence of *Xylosandrus crassiusculus* (Coleoptera: Scolytidae - EPPO Alert List) in Spain was reported for the first time. The insect has been detected in 6 carob trees (*Ceratonia siliqua*) located in a residential area of the municipality of Benifaió, province of Valencia (Comunidad Valenciana). As a preventive measure, and before the confirmation of the insect identity, it has been recommended to fell and debark the dead carob trees. Additional measures will be implemented such as: complete destruction of the affected trees, delimiting surveys in the surroundings of the infested site (possibly with kairomone traps).

The situation of *Xylosandrus crassiusculus* in Spain can be described as follows: Present, first found in the municipality of Benifaió on a small number of trees (6 *Ceratonia siliqua*), under official control.

Source: Communication made during the EPPO Panel on Quarantine Pests for Forestry (Paris,

2017-03-20/22).

Pictures: Xylosandrus crassiusculus. https://gd.eppo.int/taxon/XYLBCR/photos

Additional key words: new record Computer codes: XYLBCR, ES

2017/079 First reports of Xylosandrus crassiusculus in Argentina and Uruguay

In South America, the presence of *Xylosandrus crassiusculus* (Coleoptera: Scolytidae - EPPO Alert List) has been detected only recently, with one record in French Guiana in 2009 and several records from Northern and Southern Brazil since 2012 (EPPO RS 2017/058). Recent surveys have revealed its presence in Argentina and Uruguay, thus illustrating its spread in South America. Insect specimens were collected in both countries by direct search or trapping, and their identity was confirmed by morphological and molecular analyses.

- In Argentina: 16 female specimens of *X. crassiusculus* were collected in 2 localities in the department of Campana on *Carya illinoinensis* and *Populus deltoides*.
- In Uruguay: 10 female specimens of *X. crassiusculus* were collected on *Pinus taeda* in 3 localities.

It is concluded that further studies would be needed to better determine the distribution of *X. crassiusculus* and the possible source(s) of this biological invasion in the Americas.

The situation of *Xylosandrus crassiusculus* in Argentina can be described as follows: Present, first specimens found in the department of Campana in 2013.

The situation of *Xylosandrus crassiusculus* in Uruguay can be described as follows: Present, first specimens found in the departments of Paysandú (in 2010), Rivera (2013), and San José (2015).

Source: Landi L, Gómez D, Braccini CL, Pereyra VA, Smith SM, Marvaldi AE (2017)

Morphological and molecular identification of the invasive *Xylosandrus crassiusculus* (Coleoptera: Curculionidae: Scolytinae) and its South American range extending into Argentina and Uruguay. *Annals of the Entomological Society of America*. DOI:

10.1093/aesa/sax032

Pictures: Xylosandrus crassiusculus. https://qd.eppo.int/taxon/XYLBCR/photos

Additional key words: new record Computer codes: XYLBCR, AR, UY

2017/080 Tecia solanivora found in Asturias (ES)

In Spain, *Tecia solanivora* (Lepidoptera: Gelechiidae - EPPO A2 List) was first found in Islas Canarias (EPPO RS 2001/129). In 2015, it was observed in mainland Spain in Galicia, in the province of La Coruña (EPPO RS 2015/202, 2016/031). More recently, it has been found in the Principality of Asturias in several municipalities (Castropol, Cudillero, Navia, San Tirso de Abres, Taramundi, Valdés, Vegadeo). An eradication programme was approved in March 2017 and will be implemented in mainland Spain. In the meantime, official control measures are being applied in potato fields and potato stores in Asturias.

The situation of *Tecia solanivora* in Spain can be described as: Present, only in some areas; Islas Canarias (under official control), Asturias (under eradication) and Galicia (under eradication).

Source: Anonymous (2017) El Gobierno aprueba el program nacional de control y

erradicación de la polilla guatemalteca. Phytoma España no. 288, p 4.

INTERNET

Gobierno del Principado de Asturias.

- Boletín Oficial del Principado de Asturias no. 62 (2017-03-16). https://sede.asturias.es/bopa/2017/03/16/2017-02853.pdf

- Boletín Oficial del Principado de Asturias no. 33 (2017-02-10). https://sede.asturias.es/bopa/2017/02/10/2017-01425.pdf

Ministerio de Agricultura y Pesca Alimentación y Medio Ambiente. Boletín Oficial del Estado no. 54 (2017-03-04). https://www.boe.es/boe/dias/2017/03/04/pdfs/BOE-A-0017-0310-y-lf

2017-2312.pdf

Pictures: Tecia solanivora. https://gd.eppo.int/taxon/TECASO/photos

Additional key words: detailed record Computer codes: XYLEFA, ES

2017/081 First reports of *Drosophila suzukii* and *Zaprionus indianus* in Cyprus, and confirmation of the presence of *Z. tuberculatus*

The NPPO of Cyprus recently informed the EPPO Secretariat of the occurrence of *Drosophila suzukii* (Diptera: Drosophilidae - EPPO A2 List), *Zaprionus indianus* and *Z. tuberculatus* (both Diptera: Drosophilidae - EPPO Alert List) on its territory. Insect specimens were trapped in October 2016 and their identity was confirmed by laboratory studies (morphology, PCR, sequencing) in January 2017. No official control measures will be taken against these species.

- *D. suzukii* was detected for the first time in Cyprus in traps placed in commercial crops (unspecified deciduous plants) in Nicosia district.
- Zaprionus indianus was caught for the first time in Cyprus in traps placed in fig trees (Ficus carica) in private gardens in Limassol district.
- Zaprionus tuberculatus was caught in traps placed in commercial fig crops (F. carica) in Nicosia district.

The pest status of the three drosophilid species, *Drosophila suzukii*, *Zaprionus indianus*, and *Z. tuberculatus*, in Cyprus is officially declared as: **Present**, **only in some areas**.

Source: NPPO of Cyprus (2017-03).

Pictures: Drosophila suzukii. https://gd.eppo.int/taxon/DROSSU/photos

Zaprionus indianus. https://gd.eppo.int/taxon/ZAPRIN/photos Zaprionus tuberculatus. https://gd.eppo.int/taxon/ZAPRTU/photos

Additional key words: new record, detailed record Computer codes: DROSSU, ZAPRIN, ZAPRTU, CY

2017/082 First report of *Dactylopius opuntiae* in Cyprus

Dactylopius opuntiae (Hemiptera: Dactylopiidae) feeds on Opuntia species. This scale has been used as a biocontrol agent against Opuntia spp. where these plants are considered as weeds. However, in areas where Opuntia spp. are grown as crops, the presence of this scale can cause severe damage. The NPPO of Cyprus recently informed the EPPO Secretariat of the first record of D. opuntiae on its territory. In September 2016, its occurrence was confirmed in the Famagusta district on Opuntia ficus-indica plants growing in public gardens and fields. The identity of the pest was confirmed by the laboratory of Fera (GB) in collaboration with the Department of Agriculture in Cyprus. Observations made after this initial finding have showed that the pest is widespread in the Famagusta district, causing quality problems to Opuntia. Official control measures will be taken, including insecticide treatments in the infested areas, surveys across the whole island, and an information campaign for Opuntia growers and owners.

The pest status of *Dactylopius opuntiae* in Cyprus is officially declared as: **Present**, **subject** to official control.

Source: NPPO of Cyprus (2017-03).

Additional key words: new record Computer codes: DACLOP, CY

2017/083 Updated situation of *Xylella fastidiosa* in Islas Baleares, Spain

At the end of October 2016, *Xylella fastidiosa* (EPPO A1 List) was found for the first time in Islas Baleares (EPPO RS 2016/213). The bacterium was detected in samples collected from sweet cherry (*Prunus avium*) in a garden centre on the island of Mallorca. Since then, *X. fastidiosa* has been found in other locations in Mallorca, and other islands of the archipelago (Ibiza, Formentera, and Menorca). On the island of Ibiza, trapping studies have confirmed the presence of the insect vector, *Philaenus spumarius*. In Baleares, *X. fastidiosa* has been found infecting several plant species, including: *Acacia saligna, Lavandula dentata* (lavender), *Nerium oleander* (oleander), *Olea europaea* and *O. europaea* var. *sylvestris* (cultivated and wild olive), *P. domestica* (plum), *P. dulcis* (almond), *Polygala myrtifolia*, *Prunus avium* (cherry), *Rosmarinus officinalis* (rosemary) and *Westringia* sp. The following subspecies have been identified: *X. fastidiosa* subsp. *fastidiosa*, *X. fastidiosa* subsp. *multiplex*, *X. fastidiosa* subsp. *pauca* (on *A. saligna*, *L. dentata* and *P. myrtifolia*). An action plan has been elaborated and official phytosanitary measures are being taken to contain the disease in Islas Baleares.

The situation of *Xylella fastidiosa* in Spain can be described as follows: **Present**, **only in Islas Baleares**, **under official control**.

Source:

Anonymous (2017) Detectada en Ibiza la subespecie de *Xylella fastidiosa* causante de la muerte de miles de olivos en Italia. *Phytoma España* no. 287, p 2. INTERNET

Govern Illes Balears.

- Brotes de *Xylella fastidiosa* en las Islas Baleares (2017-01-24). http://www.caib.es/sites/sanitatvegetal/es/brotes/
- Legislación en lo referente a Xylella fastidiosa.
 http://www.caib.es/sites/sanitatvegetal/es/legislacion/
- http://www.caib.es/eboibfront/es/2017/10615/590782/resolucion-delconsejero-de-medio-ambiente-agricul

Landa BB, Navas Cortés JA, Montes Borrego M (2017) *Xylella fastidiosa* y la enfermedad de Pierce de la vid: ¿una amenaza para la viticultura española? *Phytoma España* no. 288, 34-37.

Pictures: Xylella fastidiosa. https://gd.eppo.int/taxon/XYLEFA/photos

Additional key words: detailed record Computer codes: XYLEFA, ES

2017/084 Suspected presence of *Xylella fastidiosa* in a single plant of *Polygala*myrtifolia imported into the Czech Republic

The NPPO of the Czech Republic recently informed the EPPO Secretariat of a suspected detection of *Xylella fastidiosa* (EPPO A1 List) in a single plant of *Polygala myrtifolia* in a private house in the village of Husinec. In February 2017, the NPPO of Spain informed the NPPO of the Czech Republic that 56 plants of *P. myrtifolia* had been bought by a Czech company in May 2016 from 2 nurseries in Andalucia where suspicions of *X. fastidiosa* were being investigated. Results of these investigations concluded that the bacterium was not present in these two nurseries. However, one *P. myrtifolia* plant in poor health condition could be traced forward in the Czech Republic and located in the village of Husinec. The owner of this plant informed the Czech NPPO that it had been kept, after its delivery, inside the house for the rest of the 2016 season, and later moved into a winter garden. The plant was extensively damaged, most probably by frost during its stay in the winter garden, and thus was not eligible for immediate testing. The plant was kept in quarantine conditions in the official laboratory for possible recovery. After more than two weeks, a slight

regeneration was observed and samples could be taken from young and old shoots with leaves, and from xylem tissues taken from the base of the plant and roots. Two screening methods based on ELISA and PCR were used and gave positive results for *X. fastidiosa*. One of the positive PCR results has already been confirmed by sequencing (as of 10 March 2017). For other positive samples, sequencing is ongoing. The decision as to whether official phytosanitary measures should be taken is pending the final conclusions of the laboratory analysis.

Source: NPPO of the Czech Republic (2017-03).

Pictures: Xylella fastidiosa. https://gd.eppo.int/taxon/XYLEFA/photos

Additional key words: phytosanitary incident Computer codes: XYLEFA, CZ

2017/085 First report of Ralstonia solanacearum on roses in Switzerland

The NPPO of Switzerland recently informed the EPPO Secretariat of the first record of Ralstonia solanacearum (EPPO A2 List) on its territory. In December 2016, the presence of R. solanacearum (race 1) was confirmed in 2 sites of cut flower production of roses (Rosa spp.) in the cantons of Bern and Solothurn. The bacterium was identified in several varieties of Rosa plants (Dali, Savannah, Alpe d'Huez, Hypnotic, and SR 75965) grown in greenhouses. This finding results from tracing forward investigations triggered by the fact that the Dutch NPPO had provided the Swiss NPPO with a list of potentially infected lots of *Rosa* plants. These plants had been delivered by Dutch propagation companies between June 2015 and August 2016. Several inspections of these suspicious Rosa plants and other potential host plants took place between mid-November and mid-December 2016. Plants were visually inspected but none displayed typical symptoms of R. solanacearum. Samples were collected from plants (stems), as well as from irrigation water, and were taken to the laboratory for analysis (PCR, sequencing, isolation on selective media, pathogenicity test are also under way). The bacterium was not detected in irrigation water but, as explained above, it was found in 2 production sites. The number of infected plants and the size of the area affected are still under investigation, and intensive testing of symptomless plants is currently being carried out. In particular, the situation of 3 other companies which had also received suspicious lots is still under investigation. Eradication measures will be taken and surveys will continue until eradication is achieved. All plants belonging to lots which have been found to be infected by R. solanacearum will be destroyed and strict hygiene measures will be taken in the greenhouses concerned.

The pest status of *Ralstonia solanacearum* in Switzerland is officially declared as: **Transient**, actionable, under eradication.

Source: NPPO of Switzerland (2017-03).

Pictures: Ralstonia solanacearum. https://gd.eppo.int/taxon/RALSSO/photos

Additional key words: new record Computer codes: RALSSO, CH

2017/086 Cryphonectria parasitica found in Bavaria, Germany

In June 2016, *Cryphonectria parasitica* (EPPO A2 List) was found on *Castanea sativa* (sweet chestnut) in Bavaria, Germany. Before this finding, the fungus was known to occur in Germany only in parts of Baden-Württemberg and Rhineland-Palatinate. The infection was detected on 2 trees growing in a forest during a research project on sweet chestnuts, and then notified to the plant protection service. The 2 infected trees were destroyed in November 2016 and the forestry district concerned was informed. No further phytosanitary measures are taken due to the presence of the fungus in the Southwestern parts of Germany where sweet chestnut trees are grown in significant numbers.

The pest status of *Cryphonectria parasitica* in Germany is officially declared as: Present, only in parts of Germany (Baden-Württemberg, Bavaria, Rhineland-Palatinate).

Source: NPPO of Germany (2017-03).

Pictures: Cryphonectria parasitica. https://gd.eppo.int/taxon/ENDOPA/photos

Additional key words: detailed record Computer codes: ENDOPA, DE

2017/087 'Candidatus Phytoplasma pruni' detected in apple (Malus domestica)

During a study conducted from 2013 to 2015 in Pennsylvania (US), more than 40 blocks of apple (*Malus domestica*) orchards from 9 counties were surveyed for phytoplasmas. Out of 218 tested samples, results showed that 3 mature apple trees belonging to different varieties and from 2 farms were infected by phytoplasmas. Affected trees showed abnormally small fruits, clumps of small leaves, leaf curling, and premature reddening. Molecular tests (PCR tests, sequencing, RFLP) revealed the presence of 'Candidatus Phytoplasma pruni' (associated with X-disease - EPPO A1 List). This is the first time that 'Ca. P. pruni' is detected in *M. domestica*. It is noted that with a set of only 3 positive trees, the extent of the disease on apple trees remains undetermined. However, the detection of 'Ca. P. pruni' in apple might have important epidemiological and quarantine consequences for the fruit tree industry.

Source: Nikolaeva EV, Welliver R, Rosa C, Jones T, Peter K, Costanzo S, Davis RE (2017) First

report of apple (Malus domestica) as a host of 'Candidatus Phytoplasma pruni' in

the United States. Plant Disease 101(2), p 378.

Pictures: 'Candidatus Phytoplasma pruni'. https://gd.eppo.int/taxon/PHYPPN/photos

Additional key words: new host plant Computer codes: PHYPPN, US

2017/088 Scoring environmental and socioeconomic impacts of alien plants invasive in Europe

The categorization of invasive alien species based on their impact is an important way of improving the management of biological invasions. The impact of 128 alien species of plants in Europe was evaluated using the Generic Impact Scoring System (GISS) originally developed for mammals. Based on information in the literature, their environmental and socioeconomic impacts were assessed and assigned to one of six different categories. In each category, the impact was classified on a five-degree scale, which reflects the impact intensity. To identify species with the greatest impacts, the maximum score recorded in each category and their sums was used. Data from the whole invaded range were considered, which resulted in scoring the potential impact of each species, not necessarily currently reached in Europe. Environmental impacts are most often manifested via competition with native species (recorded for 83 % of the species), while socioeconomic impacts are associated mostly with human health (78 %). The sums of environmental and socioeconomic impacts were significantly correlated, indicating that the same suite of species traits is associated with both types of impacts. In terms of plant life forms, annual plants have on average lower environmental impacts than perennial plants, and aquatic species have a higher socioeconomic impact than other life forms. Applying the GISS to plants, the most speciesrich taxonomic group of alien organisms in Europe, is an important step towards providing managers and policymakers with a robust tool for identifying and prioritizing alien species with the highest impact.

Source: Rumlerová Z, Vilà M, Pergl J, Nentwig W, PyŠek (2016) Scoring environmental and

socioeconomic impacts of alien plants invasive in Europe. Biological Invasions 18,

3697-3711.

Additional key words: invasive alien plants

2017/089 Integrated approach to control glyphosate-resistant *Ambrosia trifida* in North America

Ambrosia trifida (Asteraceae, EPPO List of Invasive Alien Plants) is native to North America and within the EPPO region the species is regarded as mainly transient with populations observed in Austria, Belarus, Belgium, Czech Republic, Denmark, the United Kingdom, Estonia, France, Ireland, Latvia, Lithuania, Moldova, Norway, Poland, Slovakia, Slovenia and the Ukraine. In Israel, the plant was found during summer 2001 and was eradicated with herbicide treatments. Even in the native range, the species is problematic and in the US the species is declared as a noxious weed. In the US, glyphosate resistant A. trifida is a competitive and difficult to control annual broad-leaved weed in several field crops in the Midwestern USA and in Ontario, Canada. Treatments for the control of A. trifida were evaluated in field experiments conducted in 2013 and 2014. Tillage prior to maize sowing resulted in 80-85 % control compared to no tillage. Tillage followed by pre-emergent application of saflufenacil plus dimethenamid-P with or without atrazine resulted in 99 % control compared with 86-96 % control with pre-emergent herbicides alone at 7 and 21 days after application respectively. Tillage alone or post emergent herbicide treatment alone may resulted in 4-14 A. trifida plants per m², whereas a pre- and post-emergent programme had less than 3 plants per m². Maize yield was greatest with tillage followed by pre- and post-emergent herbicide application. It is concluded that the combination of tillage with pre- and post-emergent herbicide reduces A. trifida density and biomass accumulation early in the season and provides an integrated approach for effective management.

EPPO Reporting Service 2017 no. 4 – *Invasive Plants*

Source: Ganie ZA, Lindquist JL, Jugulam M, Kruger GR, Marx DB, Jhala AJ (2017) An integrated

approach to control glyphosate-resistant Ambrosia trifida with tillage and herbicides

in glyphosate-resistant maize. Weed Research 57, 112-122.

Pictures: Ambrosia trifida. https://gd.eppo.int/taxon/AMBTR/photos

Additional key words: invasive alien plants Computer codes: AMBTR, US, CA

2017/090 First report of the establishment of the biocontrol agent *Trichilogaster* acaciaelongifoliae in Portugal

Acacia longifolia (Fabaceae) is native to Australia and was introduced into Europe between the late 19th and early 20th centuries. Since its introduction in Portugal, the species has become one of the most widespread invasive species. In Portugal, its forms extensive populations within coastal ecosystems which act to displace native plant communities. A. longifolia alters soil chemistry, reduces forest productivity, and increases the potential for natural fires. Due to similar negative impacts recorded throughout its introduced range, the species has been the target for classical biological control. In South Africa, A. longifolia has been successfully controlled over the last 30 years using the bud-galling wasp *Trichilogaster* acaciaelongifoliae (Hymenoptera: Pteromalidae). In Portugal, T. acaciaelongifoliae was released in 8 sites along the Portuguese coast in 2015 following extensive research to ensure host specificity. Over 450 female wasps were released onto 150 trees. During the postrelease monitoring at the release sites in April-July 2016, 56 galls were detected on 11 trees spread over 4 sites. During this phase of monitoring, all galls were still intact with no emergence holes. During a second monitoring phase (July and August 2016), the previously observed galls had changed their appearance, starting to desiccate and shrivel with some already turning brown, and some with emergence holes. In January 2017, immature second galls were observed. Compared to the southern generation T. acaciaelongifoliae, completes its life cycle quicker in Portugal, where it takes just 8-9 months compared to 12 months in South Africa. Although the number of galls is currently low, it is encouraging that the population is showing signs establishment at the release sites and *T. acaciaelongifoliae* is adjusting its life cycle to the northern hemisphere season.

Source: Marchante H, López-Núñez FA, Freitas H, Hoffmann JH, Impson F, Marchante E (2017)

First report of the establishment of the biocontrol agent *Trichilogaster* acaciaelongifoliae for control of invasive Acacia longifolia in Portugal. EPPO Bulletin,

DOI: 10.1111/epp.12373.

Additional key words: biological control, invasive alien plants

Computer codes: ACALO, TRLGAC, PT

2017/091 3rd International Congress on Biological Invasions (2017-11-19/23 Hangzhou, China)

The 3rd International Congress on Biological Invasions will be held in Hangzhou, China between the 19 and 23rd November 2017. The theme of the congress is 'Building capacity to manage biological invasions and facilitate trade'. There will be 8 sessions and 2 satellite meetings.

EPPO Reporting Service 2017 no. 4 – *Invasive Plants*

Sessions:

- 1. Big data, Risk Analysis and Early Warning of Biological Invasions,
- 2. Global Change and the Ecological Basis of Biological Invasions,
- 3. Mechanisms of Biological Invasions in the Omics Age,
- 4. Controlling and Managing IAS: Novel Techniques and Methods,
- 5. Biological Invasions and Trade: From Policy to Technology,
- 6. Biological Invasions and Human Health,
- 7. Sustainable Management of Biological Invasions in Developing Countries,
- 8. Biological Invasions in South Pacific Region.

Satellite meetings:

- Launch Meeting for 'One Belt and One Road' Plant Protection International Consortium (OBOR-PPIC)
- 2. Genomics Working Group for Key IAS Management

Early registration is open until 15th June. Abstracts are being received until 20th September.

Source: Conference website: http://www.icbi2017.org

Additional key words: invasive alien plants, conference Computer codes: CH