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2018/152 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 Greece, *Aleurocanthus spiniferus* (Hemiptera: Aleyrodidae - EPPO A2 List) was reported for the first time in July 2016 near Alepou on the island of Corfu (Kypriotis *et al.*, 2017). **Present, no details.**

In Greece, during studies on *Dryocosmus kuriphilus*, *Gnomoniopsis smithogilvyi* (= *G. castaneae*) has also been detected. This the first time that this fungus is reported from Greece (Memtsas *et al.*, 2017). **Present, no details.**

The NPPO of Cyprus recently reported the presence of *Chrysolina americana* (Chrysomelidae) on its territory. In March 2018, the insect was found in a botanical garden in Athalassa (Nicosia district) on rosemary (*Rosmarinus officinalis*) plants (NPPO of Cyprus, 2018). The official pest status of *Chrysolina americana* in Cyprus is officially declared as: **Transient, actionable, under surveillance.**

- **Detailed records**

Drosophila suzukii (Diptera: Drosophilidae - EPPO A2 List) also occurs in the areas of the island of Cyprus that are not under the effective control of the government of the Republic of Cyprus (i.e. Northern part of Cyprus). The pest was first found in September 2016 on apricot (*Prunus armeniaca*) in Morfou. During 2016/2017, the pest was caught in vinegar traps which had been placed in various fruit tree orchards in Lefke and Morfou, (Özbeck Çatal *et al.*, 2018).

In Spain, *Dryocosmus kuriphilus* (Hymenoptera: Cynipidae - EPPO A2 List) was first reported in 2012 in Cataluña (EPPO RS 2014/067), and then in Cantabria and Galicia. In 2018, *D. kuriphilus* was found for the first time in Castilla y León, in the Valle del Tiétar (province of Ávila). It is also noted that in Galicia, biological control with *Torymus sinensis* has been intensified with the release of 790 000 individuals in 2018 (133 000 in 2017, 65 000 in 2016, 1 500 in 2015) (Anonymous, 2018).

In Crete (Greece), *Zaprionus tuberculatus* (Diptera: Drosophilidae - EPPO Alert List) was recorded for the first time in 2008. The insect was found again during summer 2014 in mature figs (Leivadaras *et al.*, 2017). **Present, no details.**

- **Host plants**

In Northern Italy, *Halyomorpha halys* (Heteroptera: Pentatomidae - formerly EPPO Alert List) has increasingly been observed in the rice-growing areas of the Po valley. From August to October 2016, visual observations were made in paddy rice (*Oryza sativa*) fields in Lombardia region. *H. halys* was observed on rice panicles in Linarolo and Zeme (both in Pavia province) in September and October 2016, respectively. Probing activity of the insect on rice grain, provides evidence that *H. halys* is attracted to rice for feeding. These observations and the fact that *H. halys* continues to spread within rice-growing areas suggest that rice might act

as a host plant. However, more studies are needed to determine the nature and extent of feeding damage that *H. halys* could inflict on rice (Lupi *et al.*, 2017).

In Spain, *Halyomorpha halys* (Heteroptera: Pentatomidae - formerly EPPO Alert List) was first found in autumn 2016 in Cataluña (EPPO RS 2017/093). In 2017, numerous specimens were caught in Cataluña (Anonymous, 2018).

- **New pests and taxonomy**

A new root-lesion nematode associated with maize (*Zea mays*) has recently been described in Rwanda and called *Pratylenchus rwandae* s.sp. (Singh *et al.*).

- Sources:**
- Anonymous (2018) *Halyomorpha halys*, una nueva plaga que afecta los cultivos en Cataluña. *Phytoma-España* no. 299, p 4.
 - Anonymous (2018) La avispiña del castaño llega al Valle del Tiétar. *Phytoma-España* no. 300, p 14.
 - Kypriotis A, Katerinis S, Andreadis SS, Navrozidis E (2017) Presence, description and developmental characteristics of the newly emerging quarantine pest *Aleurocanthus spiniferus* in Corfu. Abstract of a poster presented at the Panhellenic Entomological Congress (Athens, GR, 2017-09-19/22), p 74.
 - Leivadaras J, Leivadara EI, Vontas J (2017) A new insect, drosophila *Zaprionus tuberculatus* (Diptera: Drosophilidae), affects the figs on Crete. Abstract of a paper presented at the Panhellenic Entomological Congress (Athens, GR, 2017-09-19/22), p 27.
 - Lupi D, Dioli P, Limonta L (2017) First evidence of *Halyomorpha halys* (Stål) (Hemiptera Heteroptera, Pentatomidae) feeding on rice (*Oryza sativa* L.). *Journal of Entomological and Acarological Research* 49(1), 67-71.
<https://www.pagepressjournals.org/index.php/jear/article/view/6679/6491>
 - Memtsas GI, Melika G, Tziros GT, Petsopoulos D, Avtzis DN (2017) *Dryocosmus kuriphilus* in Greece - Identification of native natural enemies and *Gnomoniopsis castanea*. Abstract of a paper presented at the Panhellenic Entomological Congress (Athens, GR, 2017-09-19/22), p 30.
 - NPPO of Cyprus (2018-05).
 - Özbeck Çatal B, Helvacı M, Çalışkan Keçe AF, Ulusoy MR (2018) First record of *Drosophila suzukii* in the areas of the Republic of Cyprus not under the effective control of the government of the Republic of Cyprus. *Bulletin OEPP/EPPO Bulletin* 48(2), 274-276.
 - Singh, PR, Nyiragatara A, Janssen T, Couvreur M, Decraemer W, Bert W (2018) Morphological and molecular characterisation of *Pratylenchus rwandae* n. sp. (Tylenchida: Pratylenchidae) associated with maize in Rwanda. *Nematology*. DOI: <https://doi.org/10.1163/15685411-00003175> (via PestLens).

Additional key words: new record, detailed record, host plant, new pest, taxonomy

Computer codes: ALECSN, CRYSAM, DROSSU, DRYCKU, GNMPCA, HALYHA, PRATRW, ZAPRTU, CY, ES, GR, IT, RW

2018/153 Conference on 'Preparing Europe for invasion by the beetles emerald ash borer and bronze birch borer' (Vienna, 2018-10-01/04)

A conference on 'Preparing Europe for invasion by the beetles emerald ash borer and bronze birch borer' will be organised in Vienna, Austria, in 2018-10-01/04. The event is sponsored by the OECD Co-operative Research Programme, co-funded by the UK government (Defra - Department for Environment, Food & Rural Affairs) and organised within the framework of the Euphresco project 'Risk-based strategies to prepare for and manage invasive tree borers - Pest risk evaluation and pest management systems' (PREPSYS). The conference will bring together expertise from a wide range of countries, representing the native and invaded ranges of the two pests (*Agrilus planipennis* and *A. anxius*). The deadline for registration is: 2018-09-07.

More information can be found on the Conference website:
<https://bfw.ac.at/rz/bfwcms.web?dok=10361>

Source: EPPO Secretariat (2018-08).

Additional key words: conference

Computer codes: AGRLPL, AGRLAX, AT

2018/154 First report of *Spodoptera frugiperda* in India

The fall armyworm, *Spodoptera frugiperda* (Lepidoptera: Noctuidae - EPPO A1 List) has been identified for the first time in India. This is also a first record for Asia. In May 2018, the presence of the pest was noted in maize (*Zea mays*) fields within the campus of the University of Agricultural and Horticultural Sciences in Shivamogga, Karnataka. *S. frugiperda* was then observed in different districts of Karnataka. In August 2018, *S. frugiperda* was also reported in Andhra Pradesh. Damage and insect larvae were found in sweet maize grown at the farm of the Agricultural College of Tirupati, as well as in maize fields in the Pathasanambatla village (Chandragiri mandal, Chittoor district). On the Internet, records of *S. frugiperda* in other Indian states (Maharashtra, Tamil Nadu, and Telangana) were also published in August 2018 but need to be confirmed.

Considering the phytosanitary crisis caused by the introduction *S. frugiperda* in Africa, its discovery in India, in a rapidly growing number of States, is raising serious concerns.

- Source:** INTERNET
- Acharya N.G. Ranga Agricultural University (ANGRAU) Pest Alert (2018-08-09) Fall armyworm, *Spodoptera frugiperda* (J.E. Smith) (Lepidoptera: Noctuidae), an invasive pest on maize. <https://www.angrau.ac.in/pdf/Pest%20Alert-%20FAW-1.pdf>
- CABI. The invasive blog (2018-08-02) CABI warns of rapid spread of crop-devastating fall armyworm across Asia. <https://blog.invasive-species.org/2018/08/02/cabi-warns-of-rapid-spread-of-crop-devastating-fall-armyworm-across-asia/>
- CIMMYT (2018-08-13) 'Fall armyworm reported in India: battle against the pest extends now to Asia' by Cowan C and Johnson J. <https://www.cimmyt.org/fall-armyworm-reported-in-india-battle-against-the-pest-extends-now-to-asia/>
- ICAR-NBAIR. Pest Alert (2018-07-03) *Spodoptera frugiperda* (J. E. Smith) (Insecta: Lepidoptera). http://www.nbair.res.in/recent_events/Pest%20Alert%2030th%20July%202018-new1.pdf
- IITA (2018-08-04) Fall armyworm has reached the Indian subcontinent! <http://www.iita.org/news-item/fall-armyworm-has-reached-the-indian-subcontinent/>
- University of Agricultural and Horticultural Sciences in Shivamogga (2018-07-20) 'Presence of fall armyworm, *Spodoptera frugiperda* (JE Smith) (Lepidoptera: Noctuidae), an invasive pest on maize in University jurisdiction' by Sharanabasappa and Kalleshwara Swamy CM. <https://drive.google.com/file/d/1hEW58nhZViHPnRduCjRHVifWhGASHLSH/view>
- Internet News (Maharashtra, Tamil Nadu and Telengana)**
- The Hindu (2018-08-20) Fall armyworm spreads to maize fields in Tiruchi. <https://www.thehindu.com/todays-paper/tp-national/tp-tamilnadu/fall-armyworm-spreads-to-maize-fields-in-tiruchi/article24733851.ece>
- The New Indian Express (2018-08-22) North American pest makes a debut in Telangana, officials worried. <http://www.newindianexpress.com/states/telangana/2018/aug/22/north-american-pest-makes-a-debut-in-telangana-officials-worried-1861078.html>

Pictures: *Spodoptera frugiperda*. <https://gd.eppo.int/taxon/LAPHFR/photos>

Additional key words: new record

Computer codes: LAPHFR, IN

2018/155 First report of *Xylotrechus chinensis* in Spain

Xylotrechus chinensis (Coleoptera: Cerambycidae - Tiger longicorn beetle) is a wood borer originating in Eastern Asia which has recently been found in Spain, first in Cataluña and then in Comunidad Valenciana.

Cataluña

Adults of *X. chinensis* were first observed in Cataluña in July 2013, which suggests that the species was probably introduced in 2012 or earlier. The insect is considered to be established in an area located 12-15 km to the North-West of Barcelona city within the district of Valles Occidental. Its presence was recorded in October 2014 in the towns of Cerdanyola del Vallès, Badia del Vallès and Barberà del Vallès (Province of Barcelona). In February 2018, *X. chinensis* was also reported from the town of Ripollet. As of July 2018, the pest had been detected in 5 municipalities covering 58 km². Damage caused by the wood boring larvae was observed on mulberry trees (*Morus alba*, *M. nigra*). Both tree species are commonly planted in private gardens, recreational areas and along the streets. Depending on the towns concerned, between 10 and 45% of mulberry trees surveyed were found to be infested. Infested trees are weakened and finally die. Municipalities affected have initiated control with insecticide treatments by endotherapy, and removal of the most affected trees.

Comunidad Valenciana

In June 2018, a phytosanitary company informed the Regional Plant Protection Service of the presence of damage on *Morus* sp. and of an adult *X. chinensis* in the municipality of Quartell (Province of Valencia). A delimiting survey conducted in July 2018 found 11 *Morus* trees infested and one adult beetle. Identification of the pest was confirmed by the national reference laboratory. Further surveys detected the pest in Sagunto (Province of Valencia) and Almenara (Province of Castellón). A preliminary Pest Risk Assessment is being conducted to decide on phytosanitary measures to be applied.

The pest status of *Xylotrechus chinensis* in Spain is officially declared as: **Present, only in some parts of the country.**

Source: NPPO of Spain (2018-08).

INTERNET

Sarto i Montey V (2018) El escarabajo-avispa, nueva especie invasora en Europa. *Adelantos Digital* 1-6. <http://www.adelantosdigital.com/web/escarabajo-avispa-nueva-especie-invasora-europa/>

Sarto i Montey V, Torras i Tutusaus G (2018) A new alien invasive longhorn beetle, *Xylotrechus chinensis* (Cerambycidae), is infesting mulberries in Catalonia (Spain). *Insects* 9(2). <https://doi.org/10.3390/insects9020052>

Pictures: *Xylotrechus chinensis*. <https://gd.eppo.int/taxon/XYLOCH/photos>

Additional key words: new record

Computer codes: XYLOCH, ES

2018/156 First report of *Xylotrechus chinensis* in Crete, Greece

In spring 2017, mulberry trees (*Morus* sp.) near the harbour of Heraklion in Crete (Greece) were found to be heavily infested by a cerambycid species. The pest was identified as *Xylotrechus chinensis* (Coleoptera: Cerambycidae - Tiger longicorn beetle) by morphological and molecular methods. So far, about 200 trees have been recorded as infested by *X. chinensis*. Of these trees, about 15% exhibited complete desiccation while the rest exhibited typical symptoms of infestation (e.g. exit holes). Infested trees are being removed and destroyed to try to eradicate the outbreak. It is considered that the pest may have been present since 2014-2015.

The situation of *Xylotrechus chinensis* in Greece can be described as follows: **Present, restricted distribution, under official control.**

Source: Leivadara E, Leivadaras I, Vontas I, Trichas A, Simoglou K, Roditakis E, Avtzis DN (2018) First record of *Xylotrechus chinensis* (Coleoptera, Cerambycidae) in Greece and in the EPPO region. *Bulletin OEPP/EPPO Bulletin* 48(2), 277-280.
<https://doi.org/10.1111/epp.12468>

Pictures: *Xylotrechus chinensis*. <https://gd.eppo.int/taxon/XYLOCH/photos>

Additional key words: new record

Computer codes: XYLOCH, GR

2018/157 *Xylotrechus chinensis* (Coleoptera: Cerambycidae): addition to the EPPO Alert List

Why: *Xylotrechus chinensis* (Coleoptera: Cerambycidae - Tiger longicorn beetle) is an Asian wood borer which has recently been found in two EPPO countries (Spain, Greece), causing mortality of *Morus* trees. In its area of origin, other reported hosts include *Malus* spp. (apple), *Pyrus* spp. (pear), and *Vitis vinifera* (grapevine). Considering the importance of the host plants in the EPPO region, and its recent introduction in several places almost simultaneously, the EPPO Secretariat considered that *X. chinensis* should be added to the EPPO Alert List.

Where: *X. chinensis* originates from East Asia. In Spain, it was first found in 2013 in Cataluña where it is considered to be established, and in 2018 it was also observed in Comunidad Valenciana. In Greece, the pest was discovered in 2017 near the harbour of Heraklion in Crete.

EPPO region: Spain (Cataluña, Comunidad Valenciana), Greece (Crete only).

Asia: China (Anhui, Beijing, Fujian, Gansu, Guangdong, Guangxi, Hebei, Henan, Hong Kong, Hubei, Jiangsu, Jiangxi, Liaoning, Shaanxi, Shandong, Shanghai, Shanxi, Sichuan, Xizhang, Yunnan, Zhejiang), Japan (Hokkaido, Honshu, Kyushu, Ryukyu, Shikoku), Korea (Dem. People's Republic of), Korea (Republic of), Taiwan.

In Japan, some authors consider that two subspecies (*X. chinensis kobayashii* and *X. chinensis kurosawai*) are present on the archipelago. However, the status of these subspecies needs to be clarified.

On which plants: *Morus* spp. (mulberries), in particular *M. alba*, *M. bombycis*, *M. nigra* are considered as major hosts. *Malus* spp. (apple), *Pyrus* spp. (pear), and *Vitis vinifera* (grapevine) are considered as hosts in some publications but without direct evidence. In preliminary experiments conducted in Spain on *V. vinifera* plants with trunks of less than 5 cm diameter, *X. chinensis* did not use them as host plants.

Damage: *X. chinensis* is not reported as a pest in China. In Spain and Greece, infestations and damage were reported only from mulberry trees. Feeding activity of larvae disrupts the transportation of water and nutrients in the tree, which results in a gradual weakening of the tree that can result in its death. Infested trees exhibit multiple exit holes.

Studies on the life history of *X. chinensis* have been conducted in Japan and in Cataluña. *X. chinensis* is univoltine (one generation per year). Adults emerge from June to August (mostly in July in Cataluña) through circular exit holes (5-6 mm diameter). Adults (about 15-25 mm long) are black and yellow, mimicking the appearance of a hornet. Eggs (about 2 mm long, 0.7 mm wide) are white, elongated and rounded at poles. Each female can lay about 80 eggs throughout its life time. Immediately after hatching, larvae bore into the bark and enter the phloem and xylem of mulberry trees, either along the trunks or at the base of the main branches. Cracks in the bark and frass may be observed. Mature or old trees are preferred. In Spain and Greece, the pest was reported to infest healthy trees, but larvae may also develop in cut trees. *X. chinensis* overwinters in the wood of its host trees as larvae. At the end of spring when larvae have finished their development, they tunnel a new cavity into the xylem where they pupate. The life cycle lasts for one year.

Pictures are available in the EPP0 Global Database: <https://gd.eppo.int/taxon/XYLOCH>

Dissemination: There is little information about the natural spread of the pest, but adults can fly. Females are attracted to males by a male pheromone. Over long distances, trade of infested plants, wood and wood products can disseminate *X. chinensis*. On at least 3 occasions, the pest has been intercepted in trade. In 2007, Germany intercepted *X. chinensis* on wood packaging material (box) imported from China, from which 2 live beetles emerged. In 2011, USA intercepted the pest on wooden spools holding steel wire rope imported from China. In 2017, Germany intercepted again *X. chinensis* in a container of wooden decoration items (made of *Betula* and *Salix* - which are not considered hosts).

Pathways: Plants for planting, wood, wood packaging material (including dunnage), wood chips from countries where *X. chinensis* occurs.

Possible risks: *Morus* trees are widely distributed in the EPP0 region where they are grown as ornamentals, as well as for their edible fruit, wood and foliage (for animal feed). They are also present in forests. In addition, there is a marginal cultivation for silkworm feeding for example in Turkey and Central Asia. In the infested area in Cataluña, up to 45% of mulberry trees were recorded as severely infested and tree mortality was observed. Infested trees are more prone to wind breakage, which may be problematic where trees are used in parks and along streets. Wood quality is also affected. So far, *X. chinensis* has not been reported on apple, pear and grapevine in the Spanish and Greek outbreaks, but these hosts have a major economic importance in the EPP0 region. Control is difficult as the insect spends most of its life cycle hidden in the wood. Possible control options include removal of infested trees, insecticide sprays on the trunks to prevent oviposition, or insecticide trunk injection to kill larvae. Sexual confusion may be considered as a male pheromone has been identified. In Cataluña, a native wasp, *Stephanus serrator* (Hymenoptera: Stephanidae), is considered as a possible parasitoid of *X. chinensis*. Finally, its recent introduction into two EPP0 countries, the observation of tree mortality, and the fact that *X. chinensis* has been intercepted in wood packaging material suggest that particular attention should be paid to *X. chinensis* to prevent its further spread within the EPP0 region.

Sources

Benker U (2008) Stowaways in wood packaging material. Current situation in Bavaria. *Forstschutz Aktuell* 4, 30-31.

- CBP (2011) U.S. Customs and Border Protection. <https://www.cbp.gov/newsroom/local-media-release/philly-cbp-intercepts-nations-first-xylotrechus-chinensis-beetle>
- Danilevsky M (2018) Catalogue of Palaearctic Cerambycoidea, 6. <http://www.cerambycidae.net/catalog.pdf>
- Han Y & Lee D (2010) Taxonomic review of the genus *Xylotrechus* (Coleoptera: Cerambycidae: Cerambycinae) in Korea with a newly recorded species. *Korean Journal of Applied Entomology* 49(2), 69-82. <https://doi.org/10.5656/KSAE.2010.49.2.069>
- Leivadara E, Leivadaras I, Vontas I, Trichas A, Simoglou K, Roditakis E, Avtzis DN (2018) First record of *Xylotrechus chinensis* (Coleoptera, Cerambycidae) in Greece and in the EPPO region. *Bulletin OEPP/EPPO Bulletin* 48(2), 277-280. <https://doi.org/10.1111/epp.12468>
- Lin M (2014) Some new localities of Chinese longhorn beetles (Coleoptera, Cerambycidae). *Les Cahiers Magellanes, NS, 16*, 110-150.
- Lim J, Jung S-Y, Lim J-S, Jang J, Kim K-M, Lee Y-M, Lee B-W (2014) A review of host plants of Cerambycidae (Coleoptera: Chrysomeloidea) with new host records for fourteen Cerambycids, including the Asian longhorn beetle (*Anoplophora glabripennis* Motschulsky), in Korea. *Korean Journal of Applied Entomology* 53(2), 111-133. <https://doi.org/10.5656/KSAE.2013.11.1.061>
- Makihara H (1979) Tribe Clytini of Okinawa Prefecture (Coleoptera: Cerambycidae). *Esaki* 14, 149-173. <http://www.cerambycoidea.com/titles/makihara1979.pdf>
- Sarto i Monteys V, Torras i Tutusaus G (2018) A new alien invasive longhorn beetle, *Xylotrechus chinensis* (Cerambycidae), is infesting mulberries in Catalonia (Spain). *Insects* 9(2). <https://doi.org/10.3390/insects9020052>
- Sarto i Monteys V (2018) El escarabajo-avispa, nueva especie invasora en Europa. *Adelantos Digital*, 1-6. <http://www.adelantosdigital.com/web/escarabajo-avispa-nueva-especie-invasora-europa/>
- Schrader G (JKI) (2017) Express - PRA zu *Xylotrechus chinensis*. https://pflanzengesundheit.julius-kuehn.de/dokumente/upload/b75e3_xylotrechus-chinensis_express-pra.pdf

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Additional key words: Alert List

Computer codes: XYLOCH

2018/158 First report of *Rhagoletis completa* in Slovakia

The NPPO of Slovakia recently informed the EPPO Secretariat of the first record of *Rhagoletis completa* (Diptera: Tephritidae - EU Annexes) on its territory. During official surveys, the insect was caught in a trap in July 2018. This trap was situated in Bratislava on a parking lot next to a garden centre. The same month, *R. completa* was caught in another trap situated in Veselé, also near a garden center. In August 2018, *R. completa* was found in Košice on 2 walnut (*Juglans regia*) trees in a private garden; these infested plants will be burnt. The pest status of *Rhagoletis completa* in Slovakia is officially declared as: **Transient, non-actionable**.

Source: NPPO of Slovakia (2018-08).

Pictures: *Rhagoletis completa*. <https://gd.eppo.int/taxon/RHAGCO/photos>

Additional key words: new record

Computer codes: RHAGCO, SK

2018/159 First report of *Dasineura oxycoccana* in Germany

The NPPO of Germany recently informed the EPP0 Secretariat of the first record of *Dasineura oxycoccana* (Diptera: Cecidomyiidae - formerly EPP0 Alert List) on its territory. The insect was found in a fruit production site in Brandenburg on 50 plants of *Vaccinium corymbosum* cv. Liberty. On these plants, some twig tips showed necrosis, and in some cases, larvae were found inside these symptomatic twigs. The owner of the production site destroyed the infested parts of the plants. The source of this outbreak could not be ascertained, as *Vaccinium* plants of the infested plot originated from different origins. The pest status of *Dasineura oxycoccana* in Germany is officially declared as: **Present, only in some parts of the Member State concerned.**

Source: NPPO of Germany (2018-08).

Additional key words: new record

Computer codes: DASVVA, DE

2018/160 Incursion of *Thaumatotibia leucotreta* in Germany

The NPPO of Germany recently informed the EPP0 Secretariat of the first record of *Thaumatotibia leucotreta* (Lepidoptera: Tortricidae - EPP0 A2 List) on its territory. In June 2018, a single male specimen of *T. leucotreta* was caught in a trap during an official survey carried out in Saxony. This pheromone trap was placed in a glasshouse (400 m²) producing sweet pepper (*Capsicum annuum*). In this glasshouse, sweet pepper plants had been planted in May/June, and at the time of the pest finding, fruit harvest had not started. The origin of this incursion is unknown, but it is presumed that the pest escaped from a waste container of a supermarket which was located nearby and contained various fruit and vegetable waste. Official phytosanitary measures have been taken. The NPPO noted that *T. leucotreta* is not expected to survive outdoors in Saxony and that in addition, the glasshouse concerned is not heated during winter.

The pest status of *Thaumatotibia leucotreta* in Germany is officially declared as: **Transient only 1 specimen at 1 location, actionable, under eradication.**

Source: NPPO of Germany (2018-08).

Pictures: *Thaumatotibia leucotreta*. <https://gd.eppo.int/taxon/ARGPLE/photos>

Additional key words: new record, incursion

Computer codes: ARGPLE, DE

2018/161 First report of *Pomacea* sp. in France

The NPPO of France recently informed the EPP0 Secretariat of the first record of *Pomacea* sp. (Ampullariidae, apple snails - EU emergency measures) on its territory. In July 2018, approximately 60 egg masses were discovered in a humid area located in the municipality of Fréjus (Var department). Eradication measures will be taken.

The pest status of *Pomacea* sp. in France is officially declared as: **Transient, actionable, under eradication.**

Source: NPPO of France (2018-07).

Pictures: <https://gd.eppo.int/taxon/POMASP/photos>

Additional key words: new record

Computer codes: POMASP, FR

2018/162 First report of *Cydalima perspectalis* in Georgia

In Georgia, *Cydalima perspectalis* (Lepidoptera: Crambidae - formerly EPPO Alert List) was first found during a survey conducted in June and October 2014 in natural populations of boxwood (*Buxus colchica*) in the Mtirala National Park and the Kintrish Protected Area (both in the Autonomous Republic of Adjara). In summer and autumn 2015, further studies were conducted in natural forests of boxwood in 6 (out of 9) regions of Georgia. Substantial damage (defoliation) was observed in 4 regions (Autonomous Republic of Adjara, Guria, Imereti, Samegrelo-Zemo Svaneti). Observations suggest that the pest is spreading into native boxwood forests from the Black Sea coastal region towards the central part of Georgia. Considering its establishment in the Western part of Georgia and its rapid spread towards the East, *C. perspectalis* represents a serious threat to boxwood species, and in particular to the native *B. colchica* forests, in the Caucasus region.

Source: Matsiakh I, Kramarets V, Mamardashvili G (2018) Box tree moth *Cydalima perspectalis* as a threat to the native populations of *Buxus colchica* in Republic of Georgia. *Journal of the Entomological Research Society* 20(2), 29-42 (via PestLens). <http://www.entomol.org/journal/index.php?journal=JERS&page=article&op=view&path%5B%5D=1262&path%5B%5D=560>

Pictures: *Cydalima perspectalis*. <https://gd.eppo.int/taxon/DPHNPE/photos>

Additional key words: new record

Computer codes: DPHNPE, GE

2018/163 First report of *Phytophthora ramorum* in Slovakia

The NPPO of Slovakia recently informed the EPPO Secretariat of the first record of *Phytophthora ramorum* (EPPO A2 List) on its territory. In June 2018, the presence of *P. ramorum* was confirmed in 1 plant within a lot of 64 *Rhododendron* plants, in a garden centre located in the municipality of Kvetoslavov. This finding was made during an official survey. The source of this infection is probably linked to imports of infested plant material from abroad. Phytosanitary measures have been taken to eradicate the disease, and a communication campaign has been launched to raise public awareness on *P. ramorum*. The pest status of *Phytophthora ramorum* in Slovakia is officially declared as: **Transient, actionable, under eradication.**

Source: NPPO of Slovakia (2018-07).

Pictures: *Phytophthora ramorum*. <https://gd.eppo.int/taxon/PHYTRA/photos>

Additional key words: new record

Computer codes: PHYTRA, SK

2018/164 First report of *Dothistroma pini* in Germany

The NPPO of Germany recently informed the EPPO Secretariat of the first record of *Dothistroma pini* on its territory. The pathogen was detected in February 2018 in 3 *Pinus* sp. plants in a private garden in the municipality of Thiessow (Mecklenburg-Western Pomerania). The owner of the garden had sent plant samples to the plant protection service for identification and phytosanitary inspectors later took an official sample. Only *D. pini* was identified in the affected pine trees (*D. septosporum* and *Lecanostica acicola* were not found). This is the first time that *D. pini* is reported from Germany. Phytosanitary measures will be taken to eradicate the pathogen. The plants will be treated with fungicides and inspected intensively, and a survey will take place in the surroundings of the infected garden.

The pest status of *Dothistroma pini* in Germany is officially declared as: **Present, under eradication.**

Source: NPPO of Germany (2018-08).

Additional key words: new record

Computer codes: DOTSPI, DE

2018/165 Plum pox virus strain M detected in Japan

In Japan, *Plum pox virus* (*Potyvirus*, PPV - EPPO A2 List) was first found in 2009 in several orchards of Japanese apricots (*Prunus mume*) in the prefectures of Tokyo, Ibaraki and Kanagawa (EPPO RS 2011/086). At that time, only PPV-D was detected. Following this initial detection, an eradication programme and a nationwide survey were initiated. In June 2016, symptoms of PPV were observed on several apricot trees (*P. mume* and *P. armeniaca*), peach trees (*P. persica*) and 1 *P. tomentosa* tree in Yokohama city. Symptomatic trees were located in a small area of Yokohama city, most of them were grown in home gardens, and some were planted along roadsides, in parks and orchards. The age of these trees ranged from 5 to 20 years old (or more). In total, 133 symptomatic leaf samples were collected and tested (serological and molecular tests). All tested samples were found to be infected by PPV and the proportions of *P. mume*, *P. persica*, *P. armeniaca*, and *P. tomentosa* were 114 (85.7%),

3 (2.2%), 15 (11.2%) and 1 (0.75%), respectively. Sequencing of total RNAs extracted from 1 infected *P. mume* tree, revealed the presence of PPV-M. This is the first time that this type of isolate is detected in Japan.

The situation of *Plum pox virus* in Japan can be described as follows: **Present, only in some areas, under eradication.**

Source: Oishi M, Inoue Y, Kagatsume R, Shukuya T, Kasukabe R, Oya H, Hoshino S, Ushiku S, Fujiwara Y, Motokura Y, Maeda Y (2018) First report of *Plum pox virus* strain M in Japan. *Plant Disease* 102(4), p 829.

Pictures: *Plum pox virus*. <https://gd.eppo.int/taxon/PPV000/photos>

Additional key words: detailed record

Computer codes: PPV000, JP

2018/166 First report of *Hymenoscyphus fraxineus* on *Phillyrea* spp. and *Chionanthus virginicus* in the United Kingdom

In May 2018, *Hymenoscyphus fraxineus* (formerly EPPO Alert List) was detected on a non-*Fraxinus* host in South East England, United Kingdom. Symptomatic hosts comprised trees of *Phillyrea latifolia*, part of a hedge in a private property. The trees had been planted in August 2011 but had recently developed symptoms of dying branches and showed discolouration of the wood in the cross section of the affected branches. The identification of *H. fraxineus* was confirmed by isolation, ITS sequencing and real-time PCR. Two additional findings of *H. fraxineus* were detected on *P. angustifolia* and *Chionanthus virginicus* in a tree collection in South West England. The location of these findings on non-ash hosts was in the vicinity of many native ash trees affected by *H. fraxineus*. Both *Phillyrea* and *Chionanthus* belong to the Oleaceae family, as does *Fraxinus*. *P. angustifolia* is native to the western and central Mediterranean Basin, from Portugal to Albania. *P. latifolia* is native to the entire Mediterranean Basin, from Portugal to Syria. *C. virginicus* is native to southern North America. The findings of infection by *H. fraxineus* on *Phillyrea* spp. and *C. virginicus* are the first non-ash host records worldwide. Koch's postulates and the susceptibility of different hosts within the Oleaceae family are ongoing at the Forest Research UK.

Source: INTERNET
Forest Research (2018-08-07) Chalara ash dieback on different ash species and non-ash hosts. <https://www.forestresearch.gov.uk/news/chalara-ash-dieback-different-ash-species-and-non-ash-hosts/>

GOV.UK (2018-08-07) Ash dieback found on three new host species of tree in the UK. <https://www.gov.uk/government/news/ash-dieback-found-on-three-new-host-species-of-tree-in-the-uk--2>

Pictures: *Hymenoscyphus fraxineus*. <https://gd.eppo.int/taxon/CHAAFR/photos>

Additional key words: host plants

Computer codes: CHAAFR, GB

2018/167 Human perception of pine invasions in Chilean *Araucaria araucana* forests

Tree invasions are increasing on a global scale, causing major problems for biodiversity, ecosystem services and human well-being. In South America, conifer invasions occur across many ecosystems and while studies have addressed the ecological consequences of these invasions, little is known about social perceptions and people's attitudes toward their control. The social perceptions on the negative impact of invasive conifers can include recreational, cultural and conservation aspects. A questionnaire was handed to visitors at the Malalcahuello National Reserve (Araucania region of Chile) during both summer and winter months to evaluate perceptions about invasive pine species (*Pinus* spp.) and their effects on the endangered *Araucaria araucana* forests. In these endangered forests, *Pinus contorta* and other cold-tolerant non-native pines have invaded the region and reduce native biodiversity. The questionnaire included images of summer and winter landscapes showing both native trees and non-native pines. Both summer and winter visitors preferred *Araucaria araucana* dominated forests. The majority (63%) of winter respondents said they were aware of pine invasion in the Reserve and this was even higher for summer visitors (86%). Almost half (46.5%) of all the visitors expressed their willingness to pay for pine control and after being given a brief explanation about impacts of pine species, this number rose to 79%. The results show that there is a variation in how people assess the threat of invasive pine species in natural areas, but education, even in a very brief format can help to increase awareness of the problem and build social and financial support for their control.

Source: Bravo-Vargas V, Garcia RA, Pizarro JC, Pauchard A (2018) Do people care about pine invasions? Visitor perceptions and willingness to pay for pine control in a protected area. *Journal of Environmental management*. DOI:10.1016/j.jenvman.2018.07.018

Additional key words: invasive alien plants

Computer codes: ARUAR, PIUCN CL

2018/168 Why does the abundance of native and invasive plants vary along rivers?

Riparian habitats are among those most prone to invasion by invasive alien plants due to their transitional nature, connectedness and history of fluvial and human disturbance. One species commonly found along rivers in Europe is *Impatiens glandulifera* (Balsaminaceae; EPPO List of Invasive Alien Plants), an annual species native to the western Himalayas and widespread and invasive within the EPPO region. In 2014, vegetation surveys were conducted along 20 lowland rivers in central Scotland where the presence of native and non-native species with their percentage cover were estimated. In addition, environmental data was collected at each site. The results showed that *I. glandulifera* is more sensitive to environmental conditions than dominant native vegetation. High soil moisture was a key determinant of *I. glandulifera* cover, having negative effects across the riparian zone. Spatially, *I. glandulifera* and dominant native vegetation responded differently to environmental conditions. Sites with steeper banks had less dominant native vegetation at the water's edge, potentially favouring *I. glandulifera* cover through reduced competition. In general, greater abundance of dominant native vegetation presented a more invasion-resistant community. Maintaining dominant native vegetation at high abundance is thus key to preventing large monospecific *I. glandulifera* stands from forming.

Source: Pattison Z, Vallejo-Marin M, Willby N (2018) Riverbanks as battlegrounds: Why does the abundance of native and invasive plants vary? *Ecosystems*, DOI: <https://doi.org/10.1007/s10021-018-0288-3>.

Pictures *Impatiens glandulifera*. <https://gd.eppo.int/taxon/IPAGL/photos>

Additional key words: invasive alien plants

Computer codes: IMPAL, GB

2018/169 Broad associations between *Pennisetum setaceum* and arbuscular mycorrhizal fungi support invasions

Pennisetum setaceum (EPPO List of Invasive Alien Plants) is a mycorrhizal C4 Poaceae, native to Northeast Africa and the Middle East. This perennial bunch grass has a rapid growth and high tolerance to drought and arid conditions. In Spain, its ornamental use in gardens has caused its naturalization and spread to the surrounding ruderal habitats. It is a very aggressive plant forming monospecific stands and outcompeting native plants by reducing available space and taking scarce water and nutrients. It also increases fuel loads, and becomes extremely inflammable in winter, increasing the intensity and spread of fire, resulting in severe damage to native dry forest species which are adapted to less extreme fire regimes. The present study compared the arbuscular mycorrhizal fungi (AMF) communities hosted by *P. setaceum* with those from the co-occurring native *Hyparrhenia hirta* at five sites with different edaphic characteristics. Illumina technology was used to investigate AMF colonisation in the roots and a subsequent multivariate analysis showed that although there were differences in AMF communities between sites, native and non-native host plants shared a similar AMF composition. The results suggest that in the invaded range, *P. setaceum* is flexible in its association with local AMF and this may support the species in finding suitable niches in a variety of ecosystems outside its native range.

Source: Rodríguez-Caballero, Roldan FCA (2018) The unspecificity of the relationships between the invasive *Pennisetum setaceum* and mycorrhizal fungi may provide advantages during its establishment at semiarid Mediterranean sites. *Science of the total environment* 630, 1464-1471.

Additional key words: invasive alien plants

Computer codes: HYRHI, PESSA, ES

2018/170 Evaluating the status of eucalypt species in Brazil

Risk analysis was conducted for 16 eucalypt species (*Eucalyptus* and *Corymbia* species listed in the table below) cultivated in Brazil using a protocol adapted from an Australian model to Brazilian conditions. The risk assessment protocol consisted of 45 questions divided into 8 topics: cultivation, climate, records of occurrence and invasion, undesirable attributes, habit and competition potential, reproduction, dispersal mechanisms and attributes of persistence. Within the risk assessment protocol, each question is scored and a species score can range from 0 to 49. Risk is low if the score is between 0 and 8 points, in which case the system recommends that the species is accepted for introduction; risk is moderate if the score is between 9 and 20 points, which means the species behaves as a ruderal and may become invasive (or not), creating uncertainty; and risk is high if the score is between 21 and 49 points, when the system recommends that the species is not accepted for introduction. Results indicate high risk for 7 species, moderate risk for 8 species and low risk for 1 species. The only low risk species was *Eucalyptus dunnii*, while the highest risk scores were obtained for *Corymbia torelliana*, *E. tereticornis* and *E. grandis*. These results are consistent with the history of invasion of the species around the world and should be considered for plantations especially when investment capacity to prevent and permanently control spread is low or not associated with forest certification standards.

Results of risk assessment for 16 species of *Eucalyptus* and *Corymbia* introduced to Brazil

Species	Risk level	Score
<i>Eucalyptus dunnii</i>	Low	5
<i>Eucalyptus cloeziana</i>	Moderate	9
<i>Eucalyptus benthamii</i>	Moderate	11
<i>Eucalyptus viminalis</i>	Moderate	11
<i>Eucalyptus pellita</i>	Moderate	13
<i>Corymbia maculata</i>	Moderate	14
<i>Eucalyptus globulus</i>	Moderate	18
<i>Eucalyptus urophylla</i>	Moderate	18
<i>Corymbia citriodora</i>	Moderate	20
<i>Eucalyptus brassiana</i>	High	21
<i>Eucalyptus camaldulensis</i>	High	22
<i>Eucalyptus robusta</i>	High	22
<i>Eucalyptus saligna</i>	High	22
<i>Corymbia torelliana</i>	High	24
<i>Eucalyptus tereticornis</i>	High	24
<i>Eucalyptus grandis</i>	High	26

Source: Ziller SR, Sa Dechoum M, Zenni RD (2018) Predicting invasion risk of 16 species of eucalypts using a risk assessment protocol developed for Brazil. *Austral Ecology*, DOI: 10.1111/aec.12649

Additional key words: invasive alien plants

Computer codes: EUCDU, EUCCI, EUCBN, EUCSA, EUCRO, EUCCM, EUCCZ, EUCBE, EUCGL, EUCPJ, EUCMA, EUCGD, EUCTR, EUCUP, EUCVI, KMBTO, BR