ORGANISATION EUROPEENNE
ET MEDITERRANEENNE
POUR LA PROTECTION DES PLANTES

EUROPEAN AND
MEDITERRANEAN
PLANT PROTECTION
ORGANIZATION

EPPO Reporting Service

NO. 3 PARIS, 2018-03

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2018/046 Appointment of the new Director-General of EPPO

EPPO is beginning the recruitment procedure for a new Director-General due to join the EPPO Secretariat in January 2019. The procedure and terms of appointment of the EPPO Director-General can be obtained from the EPPO website:
https://www.eppo.int/News&Events/director2018.htm

Candidates should submit their applications to the Secretariat not later than 2018-05-18. Any application received after this deadline will not be considered.

Source: EPPO Secretariat (2018-03).

2018/047 EPPO Codes Monthly Newsletter: a new newsletter for EPPO Codes users

The EPPO Secretariat is pleased to announce that a free monthly newsletter summarizing the main changes that are made to the EPPO Codes (i.e. creation of new codes, deactivation of codes that are no longer recommended) is ready to be launched. EPPO Codes are computer codes developed for plants and pests which are important in agriculture and plant protection. This harmonized coding system, originally created by Bayer, aims to facilitate the management of plant and pest names in computerized databases, as well as data exchange between IT systems.

Any interested person can obtain this newsletter by registering via the EPPO Global Database as follows:

1. If not already done, create your own free account in the EPPO Global Database (home page, see top right button 'Register')
2. Login and go to your dashboard
3. Under 'Newsletters': tick the box 'EPPO Codes'

Source: EPPO Secretariat (2018-03).

What are EPPO Codes?
https://www.eppo.int/DATABASES/GD&Codes/eppo_codes.htm

Additional key words: EPPO, databases

2018/048 Correction to the EPPO Code for '*Candidatus* Phytoplasma americanum'

During discussions with Bayer about the use of the code PHYPAM, it appeared that along the database history this code had been used for different organisms ('*Candidatus* Phytoplasma americanum' and *Physopella ampelopsidis*) which is against the coding rules. In order to correct this exceptional situation, the code PHYPAM has been deactivated and a new code has been created for '*Candidatus* Phytoplasma americanum' = **PHYPAE**.

The case of *Physopella ampelopsidis* had been resolved earlier, as due to the taxonomic revision of the *Phakopsora* rusts made in the 2000s (EPPO RS 2002/030), *Physopella ampelopsis* had been transferred into the list of synonyms of *Phakopsora ampelopsidis* (ampelopsis rust) for which a new code had been created (PHAKAM).
From now on, these important changes will be announced only in the EPPO Codes Monthly Newsletter (see EPPO RS 2018/047).

Source: EPPO Secretariat (2018-03).

Additional key words: database **Computer codes:** PHYPAE

2018/049 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 Brazil, *Grapevine Pinot gris virus* (*Trichovirus*, GPGV) was detected for the first time in samples collected from several grapevine collections (largely based on material imported from other countries during the last 25 years). It was also shown that GPGV isolates from Brazil showed a low genetic variability. Further studies should be performed to better determine the incidence and the prevalence of this virus in Brazilian commercial vineyards (Fajardo *et al.*, 2017). **Present, no details.**

In Costa Rica, *Iris yellow spot virus* (*Tospovirus*, IYSV – formerly EPPO Alert List) was detected for the first time in 2013 on onion (*Allium cepa*) crops. In 2013 and 2014, several onion crops in 2 provinces (Cartago and San José) showed straw-coloured and elongated leaf lesions, as well as tip dieback and extensive drying of leaves. Laboratory tests confirmed the presence of IYSV (Montero-Astúa *et al*., 2017). **Present, only in some areas (Cartago and San José provinces).**

In Madagascar, *Meloidogyne graminicola* (EPPO Alert List) was found for the first time in 3 different sites during a survey conducted in rice (*Oryza sativa*) fields from October to November 2014 (Chapuis *et al*., 2016). **Present, only in some areas (3 sites).**

In Argentina, peach (*Prunus persica*) trees showing leaf chlorosis, curling and mid-rib thickening were observed during the 2015 growing season in orchards located in Tres Porteñas, San Martín and Tupungato (Mendoza province). Laboratory analysis confirmed the presence of a strain of '*Candidatus* Phytoplasma pyri' (EPPO A2 List). This is the first time that this phytoplasma is reported from Argentina (Fernández *et al*., 2017). **Present, only in some areas (on peach in Mendoza province).**

The red palm mite, *Raoiella indica* (Acari: Tenuipalpidae – formerly EPPO Alert List), is reported for the first time from Guatemala. In 2017, it was found in the departments of Petén and Izabal infesting *Cocos nucifera, Adonidia merrillii* and *Phoenix roebelenii* (Ochaeta, 2017). **Present, only in some areas (departments of Petén and Izabal).**

- **Detailed records**

In Hungary, *Halyomorpha halys* (Hemiptera: Pentatomidae – formerly EPPO Alert List) was first recorded in 2013 in Budapest (EPPO RS 2014/046). In 2015, the pest was found in other locations (Budakalász and Martonvásár) near Budapest. As a result of a public survey initiated in autumn 2016, the pest was reported to occur in additional sites in various parts of Hungary. However, large populations were only recorded in Budapest and its surroundings

and in Pécs (Southern Hungary). In 2016, a study was conducted at the experimental and research farm of the Szent István University of Budapest to assess the impact of *H. halys* on untreated plots of common beans (*Phaseolus vulgaris*) for dry production and pepper (*Capsicum annuum*). Results showed that 94% of the bean seeds and 100% of the capsicum fruits were damaged by *H. halys* (Vétek and Korányi, 2017).

A recent taxonomic study confirms the presence of *Naupactus xanthographus* (Coleoptera: Curculionidae - EPPO Alert List) in Brazil and Paraguay. This study included several specimens which had been collected from the Brazilian states of Río Grande do Sul and Santa Catarina, as well as from the departments of Itapúa and Paraguarí in Paraguay. In this study, it is also mentioned that one of the main native hosts of *N. xanthographus* is *Erythrina crista-galli*, and that the distribution of the weevil approximately matches the range of this host plant, which has been introduced in Central Chile and Southeastern USA as an ornamental (Lanteri and del Río, 2017).

- **Taxonomy**

It has recently been proposed that the phytoplasma associated with a witches' broom disease of loofah (*Luffa cylindrica* = *L. aegyptica*) in Taiwan should be considered as a new and distinct taxon, and called '*Candidatus* Phytoplasma luffae' (Davis *et al*., 2017).

Sources:

Chapuis E, Besnard G, Andrianasetra S, Rakotomalala M, Nguyen HT, Bellafiore S (2016) First report of the root-knot nematode (*Meloidogyne graminicola*) in Madagascar rice fields. *Australasian Plant Disease Notes* **11**(32). https://doi.org/10.1007/s13314-016-0222-5

Davis R, Zhao Y, Wei W, Dally E, Lee I (2017) '*Candidatus* Phytoplasma luffae', a novel taxon associated with witches' broom disease of loofah, *Luffa aegyptica* Mill. *International Journal of Systematic and Evolutionary Microbiology* **67**, 3127-3133. DOI: 10.1099/ijsem.0.001980 (via PestLens).

Fajardo TVM, Eiras M, Nickel O (2017) First report of *Grapevine Pinot gris virus* infecting grapevine in Brazil. *Australasian Plant Disease Notes* **12**(45). https://doi.org/10.1007/s13314-017-0270-5

Fernández FD, Marini D, Farrando R, Conci L R (2017) First report of a '*Candidatus* phytoplasma pyri' strain in Argentina. *Australasian Plant Disease Notes* **12**(8). https://doi.org/10.1007/s13314-017-0228-7

Lanteri AA, del Río MG (2017) *Naupactus xanthographus* (Germar) species group (Curculionidae: Entiminae: Naupactini): a comprehensive taxonomic treatment. *Journal of Natural History* **51**, 27-28, 1557-1587.

Montero-Astúa M, Dejuk-Protti N, Vásquez E, Garita L, Moreira L (2017) First report of *Iris yellow spot virus* in Costa Rica. *Australasian Plant Disease Notes* **12**(18). https://doi.org/10.1007/s13314-017-0243-8

Ochaeta JG (2018) Primer registro de *Raoiella indica* Hirst, 1924 (Acari: Tenuipalpidae) en Guatemala. *Insecta Mundi* **0607**, 1-3 (via PestLens).

Vétek G, Korányi, D (2017) Severe damage to vegetables by the invasive brown marmorated stink bug, *Halyomorpha halys* (Hemiptera: Pentatomidae), in Hungary. *Periodicum Biologorum* **119**(2), 131-135.

Additional key words: new record, detailed record, taxonomy

Computer codes: GPGV00, HALYHA, IYSV00, MELGGC, NAUPXA, PHYP58, PHYPLU, PHYPPY, RAOIIN, AR, BR, BR, CR, GT, HR, MG, PY

2018/050 EPPO report on notifications of non-compliance

The EPPO Secretariat has gathered below the notifications of non-compliance for **2017** received since the previous report (EPPO RS 2017/208). Notifications have been sent via Europhyt for the EU countries and Switzerland. The EPPO Secretariat has selected notifications of non-compliance made because of the detection of pests. Other notifications of non-compliance due to prohibited commodities, missing or invalid certificates are not indicated. It must be pointed out that the report is only partial, as many EPPO countries have not yet sent their notifications. When a consignment has been re-exported and the country of origin is unknown, the re-exporting country is indicated in brackets. When the occurrence of a pest in a given country is not known to the EPPO Secretariat, this is indicated by an asterisk (*).

Pest	Consignment	Type of commodity	Country of origin	Destination	nb
Acidovorax citrulli	*Cucumis melo*	Seeds	China	Italy	1
Anthonomus eugenii	*Solanum melongena*	Vegetables	Mexico	Netherlands	1
Aphelenchoides	*Khaya senegalensis*	Plants for planting	Ghana	United Kingdom	1
Bemisia tabaci	*Adenium obesum*	Plants for planting	Spain	United Kingdom	1
	Ajuga reptans	Plants for planting	Netherlands	United Kingdom	1
	Capsicum	Vegetables	Egypt	United Kingdom	1
	Capsicum	Vegetables	Turkey	United Kingdom	2
	Capsicum annuum	Cuttings	Netherlands	United Kingdom	1
	Capsicum annuum	Vegetables	Turkey	United Kingdom	1
	Cestrum	Cut flowers	Israel	Netherlands	1
	Cestrum	Vegetables (leaves)	Suriname	Netherlands	7
	Corchorus olitorius	Vegetables (leaves)	Laos	United Kingdom	1
	Corchorus olitorius	Vegetables (leaves)	Malaysia	United Kingdom	1
	Crossandra	Plants for planting	Netherlands	United Kingdom	1
	Crossandra infundibuliformis	Plants for planting	Netherlands	United Kingdom	1
	Euphorbia pulcherrima	Plants for planting	Netherlands	United Kingdom	9
	Helianthus	Cut flowers	Israel	Netherlands	1
	Hibiscus	Vegetables	Congo, Dem. Rep.	Belgium	2
	Hibiscus	Cut flowers	Israel	Netherlands	1
	Hibiscus rosa-sinensis	Plants for planting	Netherlands	United Kingdom	1
	Hibiscus sabdariffa	Vegetables	Nigeria	United Kingdom	1
	Mandevilla sanderi	Plants for planting	Morocco	Spain	1
	Manihot esculenta	Vegetables	Gambia	United Kingdom	1
	Manihot esculenta	Vegetables	Indonesia	Netherlands	2
	Mentha	Stored products	Israel	Netherlands	1
	Mentha	Vegetables (leaves)	Morocco	Belgium	1
	Ocimum	Vegetables (leaves)	Israel	Netherlands	1
	Ocimum	Vegetables (leaves)	Israel	United Kingdom	1
	Ocimum	Vegetables (leaves)	Kenya	United Kingdom	1
	Ocimum basilicum	Vegetables (leaves)	Israel	Switzerland	1
	Ocimum basilicum	Vegetables (leaves)	Spain (Canary Isl.)	Switzerland	2
	Ocimum gratissimum	Vegetables (leaves)	Togo	Belgium	1
	Ocimum tenuiflorum	Vegetables (leaves)	Laos	Sweden	2
	Ocimum tenuiflorum	Vegetables (leaves)	Laos	United Kingdom	1
	Ocimum tenuiflorum	Vegetables (leaves)	Malaysia	Netherlands	4
	Origanum	Vegetables (leaves)	Israel	Netherlands	2
	Origanum vulgare, Salvia officinalis	Vegetables (leaves)	Israel	Netherlands	1
	Piper	Vegetables	Laos	United Kingdom	1

Pest	Consignment	Type of commodity	Country of origin	Destination	nb
B. tabaci (cont.)	*Piper betle*	Vegetables	Thailand	United Kingdom	1
	Rosa	Cut flowers	Kenya	Netherlands	1
	Spinacia oleracea	Vegetables	Togo	Belgium	1
	Thlaspi	Cut flowers	Israel	United Kingdom	1
	Vernonia	Vegetables (leaves)	Nigeria	United Kingdom	1
Helicoverpa armigera	*Capsicum frutescens*	Vegetables	Angola	Portugal	1
Helicoverpa zea	*Momordica charantia*	Vegetables	Mexico	Netherlands	1
Insecta	*Theobroma cacao*	Fruits	Côte d'Ivoire	Italy	1
Leucinodes	*Solanum aethiopicum*	Vegetables	Côte d'Ivoire	Italy	1
	Solanum aethiopicum	Vegetables	Ghana	Italy	1
Leucinodes africensis	*Solanum aethiopicum*	Vegetables	Ghana	Italy	1
Liriomyza	*Artemisia vulgaris*	Vegetables (leaves)	Laos	United Kingdom	1
	Chrysanthemum	Cut flowers	Colombia	United Kingdom	1
	Ocimum	Vegetables (leaves)	Egypt	United Kingdom	1
	Ocimum	Vegetables (leaves)	Laos	United Kingdom	1
	Ocimum basilicum	Vegetables (leaves)	Israel	United Kingdom	2
	Ocimum basilicum	Vegetables (leaves)	Jordan	United Kingdom	1
	Ocimum basilicum	Vegetables (leaves)	South Africa	United Kingdom	1
	Sauropus	Vegetables (leaves)	Vietnam	United Kingdom	1
Liriomyza huidobrensis	*Apium graveolens*	Vegetables	Laos*	Sweden	1
	Celosia	Cut flowers	Kenya	Netherlands	1
	Gypsophila	Cut flowers	Ecuador	Netherlands	2
Liriomyza sativae	*Apium graveolens*	Vegetables	Suriname*	Netherlands	1
	Artemisia dracunculus	Vegetables (leaves)	Israel	Netherlands	1
	Ocimum basilicum	Vegetables (leaves)	Thailand	Denmark	1
	Ocimum tenuiflorum	Vegetables (leaves)	Malaysia	Netherlands	1
Liriomyza trifolii	*Gypsophila*	Cut flowers	Israel	Belgium	1
	Gypsophila	Cuttings	Israel	Netherlands	1
	Ranunculus	Cut flowers	Israel	Netherlands	1
Noctuidae	*Capsicum annuum*	Vegetables	India	United Kingdom	1
	Rosa	Cut flowers	India	United Kingdom	1
Phyllosticta citricarpa	*Citrus sinensis*	Fruits	South Africa	Netherlands	2
Pospiviroid	*Capsicum frutescens*	Seeds	India	United Kingdom	1
Spodoptera cosmioides	*Ananas*	Plants for planting	Costa Rica	Netherlands	1
Spodoptera eridania	*Solanum macrocarpon*	Vegetables	Suriname	Netherlands	1
Spodoptera frugiperda	*Capsicum annuum*	Vegetables	Suriname	Netherlands	2
	Capsicum chinense	Vegetables	Suriname	Netherlands	1
	Solanum macrocarpon	Vegetables	Suriname	Netherlands	3
	Solanum melongena	Vegetables	Suriname	Netherlands	1
Spodoptera littoralis	*Rosa*	Cut flowers	Uganda	Netherlands	1

Pest	Consignment	Type of commodity	Country of origin	Destination	nb
Spodoptera litura	*Limnophila aromatica*	Vegetables (leaves)	Laos	Netherlands	1
Sternochetus	*Mangifera indica*	Fruits	Uganda	Italy	1
Thaumatotibia leucotreta	*Capsicum*	Vegetables	Uganda	United Kingdom	3
	Capsicum annuum	Vegetables	Nigeria	United Kingdom	1
	Capsicum annuum	Vegetables	Rwanda	United Kingdom	1
	Capsicum frutescens	Vegetables	Cameroon	Belgium	1
	Capsicum frutescens	Vegetables	Côte d'Ivoire	Belgium	1
Thripidae	*Momordica balsamina, Momordica charantia*	Vegetables	Dominican Rep.	United Kingdom	2
	Momordica charantia	Vegetables	Dominican Rep.	United Kingdom	2
	Momordica charantia	Vegetables	Pakistan	United Kingdom	2
	Solanum melongena	Vegetables	Dominican Rep.	United Kingdom	1
	Solanum melongena	Vegetables	India	United Kingdom	1
Thrips palmi	*Dendrobium*	Cut flowers	Malaysia	Netherlands	1
	Momordica charantia	Vegetables	Dominican Rep.	Switzerland	1
	Momordica charantia	Vegetables	Sri Lanka	France	2
	Solanum melongena	Vegetables	Malaysia	United Kingdom	1
	Solanum melongena	Vegetables	Suriname	Netherlands	1
Thysanoptera	*Dianthus caryophyllus*	Cut flowers	Colombia	Spain	1
	Momordica charantia	Vegetables	Dominican Rep.	France	1
	Rosa, Alstroemeria, Dianthus caryophyllus	Cut flowers	Colombia	Spain	1
Tortricidae, Tephritidae	*Capsicum*	Vegetables	Egypt	Ireland	1
Xanthomonas arboricola pv. *pruni*	*Prunus laurocerasus*	Plants for planting	Netherlands	United Kingdom	1
Xanthomonas citri subsp. *citri*	*Citrus latifolia*	Fruits	Vietnam	United Kingdom	1
	Citrus maxima	Fruits	China	United Kingdom	3

- **Fruit flies**

Pest	Consignment	Country of origin	Destination	nb
Anastrepha	*Mangifera indica*	Peru	Netherlands	1
Bactrocera	*Averrhoa*	Malaysia	Netherlands	1
	Capsicum annuum	Cambodia	United Kingdom	2
	Capsicum frutescens	Vietnam	Switzerland	1
	Mangifera indica	Thailand	United Kingdom	1
	Citrus maxima	China	Netherlands	2
Bactrocera latifrons	*Capsicum frutescens*	Laos	Sweden	1
Ceratitis	*Citrus sinensis*	Zambia	Netherlands	1
	Prunus persica	Zimbabwe	United Kingdom	1
	Prunus persica	Zimbabwe	Netherlands	1

Pest	Consignment	Country of origin	Destination	nb
Ceratitis capitata	*Mangifera indica*	Brazil	France	1
Non-European *Tephritidae*	*Annona muricata*	Uganda	Belgium	1
	Annona squamosa	India	United Kingdom	1
	Capsicum	Thailand	United Kingdom	1
	Capsicum annuum	Cambodia	United Kingdom	1
	Citrus hystrix	Malaysia	France	1
	Citrus maxima	China	Netherlands	1
	Cucurbita	Kenya	Netherlands	1
	Ficus carica	Israel	Spain	1
	Mangifera indica	Brazil	France	1
	Mangifera indica	Burundi	Belgium	1
	Mangifera indica	Dominican Rep.	United Kingdom	1
	Mangifera indica	Sri Lanka	United Kingdom	1
	Momordica	Uganda	United Kingdom	2
	Momordica charantia	Pakistan	United Kingdom	1
	Momordica charantia	Uganda	United Kingdom	2
	Psidium guajava	Malaysia	United Kingdom	1
	Trichosanthes cucumerina	Sri Lanka	United Kingdom	1
	Ziziphus	India	United Kingdom	1
	Ziziphus mauritiana	India	United Kingdom	1
Zeugodacus	*Trichosanthes*	India	United Kingdom	1
Zeugodacus cucurbitae	*Luffa acutangula*	Uganda	Sweden	1
	Momordica charantia	Laos	Sweden	1
	Momordica charantia	Uganda	Sweden	1

- **Wood**

Pest	Consignment	Type of commodity	Country of origin	Destination	nb
Aphelenchoides	Unspecified	Wood packaging material (pallet)	Belarus	Lithuania	3
Belionota aenea, Heterobostrychus, Xylothrips flavipes, Xylothrips religiosus	Unspecified	Wood packaging material (pallet)	China	Germany	1
Bursaphelenchus mucronatus	Unspecified	Wood packaging material	Belarus	Lithuania	1
	Unspecified	Wood packaging material (pallet)	Belarus	Lithuania	4
	Unspecified	Wood packaging material (pallet)	Ukraine	Latvia	1
Bursaphelenchus xylophilus	Unspecified	Wood packaging material (pallet)	China	Estonia	1
Cerambycidae	Unspecified	Wood packaging material (crate)	China	Switzerland	1
Insecta	Unspecified	Wood packaging material	China	Italy	1
Lyctus africanus	Unspecified	Wood packaging material (crate)	India	Germany	1
Rhabditis	Unspecified	Wood packaging material	Belarus	Lithuania	1

Pest	Consignment	Type of commodity	Country of origin	Destination	nb
Sinoxylon	Unspecified	Wood packaging material (crate)	India	Germany	1
	Unspecified	Wood packaging material (pallet)	Indonesia	Germany	1
	Unspecified	Wood packaging material (pallet)	Malaysia	Germany	2
	Unspecified	Wood packaging material (pallet)	Pakistan	Germany	1
Siricidae	Unspecified	Wood packaging material (pallet)	Turkey	Latvia	1

Source: EPPO Secretariat (2018-03).

INTERNET
EUROPHYT. Annual and monthly reports of interceptions of harmful organisms in imported plants and other objects.
http://ec.europa.eu/food/plant/plant_health_biosecurity/europhyt/interceptions/index_en.htm

2018/051 *Agrilus fleischeri*: addition to the EPPO Alert List

Why: *Agrilus fleischeri* (Coleoptera: Buprestidae) is an Asian wood borer of poplars (*Populus* spp.). In parts of China (e.g. Liaoning province), *A. fleischeri* has become a destructive pest causing tree mortality in poplar plantations, in particular on *Populus nigra* var. *italica* (Lombardy poplar). Considering the importance of poplar in the EPPO region, and the fact that its wood is commonly used to make pallets, the NPPO of the United Kingdom suggested the addition of *A. fleischeri* to the EPPO Alert List.

Where: *A. fleischeri* originates from East Asia.
EPPO region: Kazakhstan, Russia (Eastern Siberia, Far East).
Asia: China (Beijing, Hebei, Heilongjiang, Liaoning, Shaanxi, Sichuan, Tianjin), Japan (Hokkaido, Honshu), Kazakhstan, Korea (Dem. People's Republic of), Korea (Republic of), Mongolia, Russia (Eastern Siberia, Far East).

On which plants: *Populus* species, including *Populus davidiana* (Korean aspen), *P. laurifolia* (laurel-leaf poplar), *Populus nigra* var. *italica* (Lombardy poplar) and *P. sieboldi* (Japanese aspen). In the literature, *Salix* spp. (willows) are recorded as hosts but no data on damage could be found in the literature. Records of A. *fleischeri* on *Quercus* spp. are considered erroneous. In China, the two most common poplar species used in plantations are *P. davidiana* (native to China) and *P. nigra* var. *italica* (non-native to China). A field study conducted in Liaoning province has shown that the non-native *P. nigra* var. *italica* was more vulnerable to *A. fleischeri* than the native *P. davidiana*.

Damage: Larvae develop under the cambium within the phloem of infested trees. Feeding activity disrupts the transportation of water and nutrients in the tree. When high populations are present, larval galleries can girdle the trunk and kill the tree within 2 to 3 years. Emerging adults leave a distinct D-shaped exit hole in the trunk (2 to 4 mm in length and 1.3 to 2.8 mm in width). In addition to tree debilitation or mortality, infestations can significantly reduce the ornamental value of poplar trees.
Studies on the life history of *A. fleischeri* have been conducted in Liaoning (Saima village near Fengcheng city) from April 2013 to September 2015 on plots of *P. nigra* var. *italica* and *P. davidiana*. Results showed that this wood boring beetle was univoltine on *P. nigra* var. *italica* and overwintered as mature larvae. On *P. davidiana*, *A. fleischeri* was semivoltine and overwintered as 2nd or 3rd instar larvae. The adult beetles emerged from late May to mid-August with a peak in early June. Adults (about 10.3-11.4 mm long) are dark brown to black, glabrous beetles with two white spots on each elytrum. Eggs (approximately 1 mm long) are oval and irregular in shape, and milky white. Larvae are milky white to light yellow, with dark brown mouthparts and urogomphi. Pupae are approximately 11 mm long. Pupation takes place inside the tree, in pupal chambers that are situated 4 to 14 mm from the surface of the sapwood. Pictures can be viewed on the Internet
https://www.flickr.com/photos/87155171@N08/35662783144
https://www.zin.ru/Animalia/Coleoptera/rus/agrflems.htm
https://ars.els-cdn.com/content/image/1-s2.0-S1226861516302679-fx1_lrg.jpg

Dissemination: There is little information about the natural spread of the pest, but adults can fly. Over long distances, trade of infested plants, wood and wood products can disseminate *A. fleischeri.* During informal discussions, the NPPO of the United Kingdom has been informed that Canadian authorities have intercepted *A. fleischeri* (adult beetles) on two occasions: in 1992 in wood packaging material and in 2015 in dunnage originating from China; demonstrating that these types of commodities can transport the pest between continents.

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

Possible risks: Poplars are widely present in the EPPO region, in forests and plantations, as well as in parks and gardens. Wood from poplar is used for many different purposes including lumber, wood panels, wood packaging material, bioenergy, and paper. In terms of surfaces of poplar plantations, China is the leading country (7.6 million ha), followed by France (236,000 ha), Turkey (125,000 ha), Spain (105,000 ha), and Italy (101,430 ha). In Northeastern China, *A. fleischeri* has been reported as a newly emerging pest causing severe damage and tree mortality in poplar plantations, especially on *P. nigra* var. *italica* which is also widely present in the EPPO region. Recent experience with another *Agrilus* species attacking ash trees (*A. planipennis*) has shown that control against this type of wood-boring insect when introduced into new areas (i.e. North America, European Russia) was difficult. In China, natural enemies of *A. fleischeri* have been recorded such as: *Oobius* sp. (Hymenoptera: Encyrtidae), *Euderus* sp. (Hymenoptera: Eulophidae), *Paramblynotus* sp. (Hymenoptera: Liopteridae), *Polystenus rugosus* and *Spathius* sp. (both Hymenoptera: Braconidae). The high parasitism rates observed in the field suggested that these parasitoids could efficiently limit populations of *A. fleischeri*, but this remains to be verified. The fact that poplar is commonly used for making pallets that are moved in trade adds to the risk of introducing this pest into the EPPO region. Despite the requirements made in ISPM 15, numerous cases of non-compliant wood packaging material from Asia have been recorded in the EPPO region. Although, data is generally lacking on its biology, host range, and economic impact, the emergence of *A. fleischeri* in parts of China as a serious pest of *P. nigra* var. *italica*, suggests that it could present a risk for the EPPO region.

Sources

INTERNET
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- International Poplar Commission. http://www.fao.org/forestry/ipc/en/
- UK Risk Register details for *Agrilus fleischeri*. https://secure.fera.defra.gov.uk/phiw/riskRegister/viewPestRisks.cfm?cslref=27776

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NPPO of the United Kingdom (2017-10).

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Zang K, Wang XY, Yang ZQ, Wei K, Duan JJ (2017) Biology and natural enemies of *Agrilus fleischeri* (Coleoptera: Buprestidae), a newly emerging destructive buprestid pest in Northeast China. *Journal of Asia-Pacific Entomology* **20**, 47-52.

EPPO RS 2018/051
Panel review date -
Entry date 2018-03

Additional key words: Alert List
Computer codes: AGRLFL

2018/052 *Agrilus planipennis* found in Manitoba (CA)

In December 2017, the Canadian Food Inspection Agency confirmed the presence of *Agrilus planipennis* (Coleoptera: Buprestidae – EPPO A2 List) in the city of Winnipeg in Manitoba. This is the first time that *A. planipennis* is reported from Manitoba. The finding was made outside the regulated area which includes several municipalities in Canada, mainly in Southwestern Quebec and Southern Ontario. Phytosanitary measures have immediately been taken to prevent any further spread of the pest. Movements of firewood of all species, as well as of ash trees, ash nursery stock or ash wood (including wood chips, wood packaging or dunnage) out of the regulated area are subject to restrictions.
The situation of *Agrilus planipennis* in Canada can be described as follows: **Present, only in some areas of Ontario, Quebec and Manitoba, under official control.**

Source: INTERNET
- Government of Manitoba. Emerald ash borer in Manitoba. https://www.gov.mb.ca/sd/forestry/health/eab.html
- Canadian Food Inspection Agency
  News release (2017-12-07) Emerald ash borer confirmed in Winnipeg. https://www.canada.ca/en/food-inspection-agency/news/2017/12/emerald_ash_borerconfirmedinwinnipeg.html
  News release (2018-01-24) Emerald ash borer regulated areas expanded. https://www.canada.ca/en/food-inspection-agency/news/2018/01/emerald_ash_borerregulatedareasexpanded.html

Pictures: *Agrilus planipennis*. https://gd.eppo.int/taxon/AGRLPL/photos

Additional key words: detailed record **Computer codes:** AGRLPL, CA

2018/053 *Lycorma delicatula* found in New York and Virginia states (US)

In the USA, *Lycorma delicatula* (Hemiptera: Fulgoridae - EPPO A1 List) was first found in Pennsylvania in 2014. This finding was made on the premises of a company importing stones in Berks county. Since then and despite an eradication campaign, *L. delicatula* has continued to spread to 13 counties in Pennsylvania (EPPO RS 2017/211). In November 2017, *L. delicatula* was observed for the first time in Delaware (RS 2017/211). In the same month, a single dead specimen of the pest was found in New York state. In early January 2018, inspectors detected *L. delicatula* near Winchester in Virginia. Egg masses and dead adults were found on *Ailanthus altissima* trees growing in the yard of a company selling stones in Frederick county. Surveys are being conducted in Virginia in the surroundings of the infested site to determine the extent of the infestation.
The situation of *Lycorma delicatula* in the USA can be described as follows: **Present, only in some areas (13 counties in Pennsylvania and 1 county in Virginia; 1 specimen in Delaware, 1 dead specimen in New York), under eradication.**

Source: INTERNET
- New York State. Agriculture and Markets (2017-11-29) NYS Department of Agriculture and Markets confirms finding of spotted lanternfly invasive insect. https://www.agriculture.ny.gov/AD/release.asp?ReleaseID=3637
- Pennsylvania Department of Agriculture. Spotted Lanternfly. Quarantine. http://www.agriculture.pa.gov/Plants_Land_Water/PlantIndustry/Entomology/spotted_lanternfly/quarantine/Pages/default.aspx

- Virginia Department of Agriculture and Consumer Services (2018-02-08). New invasive pest detected in Virginia. http://www.vdacs.virginia.gov/press-releases-180208-spottedlanternfly.shtml

Pictures: *Lycorma delicatula*. https://gd.eppo.int/taxon/LYCMDE/photos

Additional key words: detailed record, incursion **Computer codes:** LYCMDE, US

2018/054 Update on the situation of *Tecia solanivora* in Spain

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). It was then found in Asturias in several municipalities (Castropol, Cudillero, Navia, San Tirso de Abres, Taramundi, Valdés, Vegadeo) (EPPO RS 2017/080). In 2017, more findings were made in potato fields and warehouses in Asturias in the municipalities of Coaña, Gijón, Muros de Nalón, Pravia, and Valdés. In Galicia, *T. solanivora* was also caught in October 2017 in traps located in potato fields in the municipality of Cariño (province of La Coruña). An eradication programme against *T. solanivora* is being implemented in mainland Spain. The pest status of *Tecia solanivora* in Spain is officially declared as: **Present, only in some parts of the Member State concerned, under eradication.**

Source: NPPO of Spain (2017-12).

INTERNET
Boletín Oficial del Principado de Asturias (2017-11-20) no 268, 5 pp.
https://www.asturias.es/bopa/2017/11/20/2017-12837.pdf

Ministerio de Agricultura y Pesca, Alimentación y Medio Ambiente. Areas demarcadas de *Tecia solanivora* en España (June 2017)
http://www.mapama.gob.es/es/agricultura/temas/sanidad-vegetal/zonasdemarcadasteciaespana-14junio2017_tcm7-460374.pdf

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

Additional key words: detailed record **Computer codes:** TECASO, ES

2018/055 *Opogona sacchari* found in Bremen and Brandenburg, Germany

The NPPO of Germany recently informed the EPPO Secretariat that *Opogona sacchari* (Lepidoptera: Tineidae - EPPO A2 list) has been found in glasshouses in Bremen and Brandenburg. In both cases, phytosanitary measures were taken to eradicate the pest.

Bremen

In November 2011, *O. sacchari* was found on 3 banana (*Musa* sp.) plants in a greenhouse in the municipality of Bremen. The presence of the pest had been notified by the operator of the greenhouse to the NPPO which then carried out surveys (visual inspections and traps). The identity of the pest was confirmed (morphological methods) in December 2017.

Brandenburg
During official surveys, *O. sacchari* was caught in pheromone traps in a garden centre in Brandenburg. The glasshouse contained ornamental plants (*Bromelia, Dracaena, Dieffenbachia, Ficus, Philodendron, Saintpaulia,* and *Sansevieria*), but no symptoms could be found on the plants. Over a period of 4 weeks, 80 specimens were caught. The identity of the pest was confirmed in October 2017. It is presumed that *O. sacchari* was introduced with infested ornamental plants purchased from another company. Surveys are being conducted in the garden centre concerned and in other related garden centres.

The pest status of *Opogona sacchari* in Germany is officially declared as: **Transient, in some areas, actionable, under eradication.**

Source: NPPO of Germany (2017-10, 2018-01).

Pictures: *Opogona sacchari*. https://gd.eppo.int/taxon/OPOGSC/photos

Additional key words: detailed record **Computer codes:** OPOGSC, DE

2018/056 *Opogona sacchari* found in the United Kingdom

In the United Kingdom, *Opogona sacchari* (Lepidoptera: Tineidae - EPPO A2 list) was detected in a large public glasshouse in the South East of England in July 2017. Concerns about the possible presence of the pest had been raised by the professional operator of the glasshouse. A first inspection took place in April 2017, but no sign of the pest was seen. A subsequent inspection was carried out in July 2017 when larvae had been spotted and collected by the professional operator. Larvae were sent to Fera and the identity of the pest was confirmed at the end of July (morphological methods). Infestations by *O. sacchari* were found in *Musa acuminata* and flowers of *Costus spiralis*. During further surveys, larvae were caught in traps but no signs of infestation were observed. All infested plants have been removed and destroyed, and chemical and biological control methods are being used in attempt to eradicate the pest. Monitoring activities (including pheromone traps) are ongoing.
The pest status of *Opogona sacchari* in the United Kingdom is officially declared as: **Present, under eradication.**

Source: NPPO of the United Kingdom (2017-10).

Pictures: *Opogona sacchari*. https://gd.eppo.int/taxon/OPOGSC/photos

Additional key words: detailed record **Computer codes:** OPOGSC, GB

2018/057 First report of *Viteus vitifoliae* in the Netherlands

In July 2017, *Viteus vitifoliae* (Hemiptera: Phylloxeridae – EPPO A2 List) was detected for the first time in the Netherlands on *Vitis* plants for planting in the municipality of Kapelle (province of Zeeland). The pest was found during tracing-back investigations in response to a notification of non-compliance received from the United Kingdom. Initially, these *Vitis* plants were part of a lot which had been imported into the Netherlands from another EU Member State 3 years before. At the Dutch production site, part of the lot had already been

sold but 2500 plants were still present. The majority of the *Vitis* plants inspected showed root galls, but no symptoms or specimens were observed on the leaves. The plants had been continuously growing in containers which stood on a tray protected by an 'anti-root' membrane. This membrane was checked and found to be intact, and no penetration of roots into the soil was observed. As only wingless specimens were found, natural dispersal of the pest into the surroundings is not expected. No other lots of *Vitis* spp. were present at the company. Official phytosanitary measures have been taken to eradicate *V. vitifoliae*. All plants of the lot (2500 plants) will be destroyed, and re-use of the land for planting or placing *Vitis* plants in containers will only be permitted 14 days after removal of the infested plants. Tracing forward studies are on-going to identify other growers and retailers who might have received *Vitis* plants belonging to the infested lot and all identified plants will be destroyed. The pest status of *Viteus vitifoliae* in the Netherlands is officially declared as: **Transient, actionable, under eradication.**

Source: NPPO of the Netherlands (2017-11).

Pictures: *Viteus vitifoliae*. https://gd.eppo.int/taxon/VITEVI/photos

Additional key words: new record **Computer codes:** VITEVI, NL

2018/058 *Meloidogyne luci* found again in Slovenia

In Slovenia, *Meloidogyne luci* (EPPO Alert List) was first found in 2003 on tomato (*Solanum lycopersicum*) roots in a glasshouse situated in the village of Dornberk. At that time, this tropical nematode species was identified as *M. ethiopica* but subsequent studies confirmed that the species found in Dornberk was in fact *M. luci*. In the infested glasshouse, all plants were destroyed, and as no further root-knot nematode infestations were found, the outbreak was considered to be eradicated (EPPO RS 2011/004, 2016/212 and 2017/216). However, during a field survey on root-knot nematodes conducted in 2015, *M. luci* was found again on tomato roots in a glasshouse located in the village of Šmartno near Ljubljana. Infested tomato plants showed symptoms of decline and leaf chlorosis, and large galls were present on the roots. Nematode infestation was relatively high as more than 80% of the plants were severely infested. The village of Šmartno is situated approximately 100 km away from the infested site of 2003. Strict phytosanitary measures were imposed in the infested glasshouse to eradicate *M. luci* and included the destruction of all infested plants and the use of soil disinfection. However, as the eradication programme implemented since 2015 has not been successful to-date, only resistant tomato cultivars, non-host or poor-host crops have been allowed to be grown in the infested glasshouse. The success of this crop rotation in eliminating *M. luci* will be assessed in the future.
The situation of *Meloidogyne luci* in Slovenia can be described as follows: **Present, few occurrences (1 tomato glasshouse), under eradication.**

Source: Gerič Stare B, Strajnar P, Širca S, Susič N, Urek G (2018) Record of a new location for tropical root knot nematode *Meloidogyne luci* in Slovenia. *Bulletin OEPP/EPPO Bulletin* **48**(early view). DOI: 10.1111/epp.12443

Pictures: *Meloidogyne luci*. https://gd.eppo.int/taxon/MELGLC/photos

Additional key words: detailed record **Computer codes:** MELGLC, SI

2018/059 First report of *Pantoea stewartii* in Ukraine

The NPPO of Ukraine recently informed the EPPO Secretariat about the presence of *Pantoea stewartii* (EPPO A2 List) on its territory. The bacterium was detected for the first time on maize (*Zea mays*) in 2014 in the Poltava region, on an area of approximately 100 ha. The total infected area is currently estimated at 3483 ha. The disease has been found in the following areas: Zhytomyr (1022 ha), Ivano-Frankivsk (1084 ha), Lviv (128 ha), Poltava (50 ha), Rivne (546 ha), Ternopil (533 ha), and Chernihiv (120 ha).
The pest status of *Pantoea stewartii* in Ukraine is officially declared as: **Transient: actionable, under eradication.**

Source: NPPO of Ukraine (2018-02).

Pictures: *Pantoea stewartii*. https://gd.eppo.int/taxon/ERWIST/photos

Additional key words: new record **Computer codes:** ERWIST, UA

2018/060 First report of *Fusarium euwallaceae* and its vector *Euwallacea fornicatus sensu lato* causing tree dieback in South Africa

Since the mid-2000s, an ambrosia beetle belonging to the species complex *Euwallacea fornicatus* (Coleoptera: Curculionidae – EPPO A2 List) and one of its obligate symbiotic fungi (*Fusarium euwallaceae* – EPPO A2 List) have been reported to cause dieback and mortality on avocado (*Persea americana*) and numerous other trees and shrubs in the USA and Israel. During routine surveys conducted in 2016 in botanical gardens of South Africa in the framework of the International Plant Sentinel Network (IPSN), the presence of an ambrosia beetle and its associated fungal symbiont were detected in *Platanus x acerifolia* (London plane) trees showing dieback symptoms in the KwaZulu-Natal National Botanical Garden in Pietermaritzburg. On infested tree trunks, the removal of the bark and cambium exposed insect galleries with lesions from which wood material was sampled. In addition, infested branches were also collected and dissected. Insect specimens and fungal isolates were collected and studied (morphological, molecular and pathogenicity tests). Results confirmed the presence of both *E. fornicatus sensu lato* and of *F. euwallaceae* in diseased plane trees. This is the first time that *E. fornicatus sensu lato* and its fungal symbiont, *F. euwallaceae* are reported to cause Fusarium dieback on trees in South Africa. The authors also stressed that this is also the first time that a damaging invasive forest pest has been detected through a sentinel tree research project, highlighting the value of such type of initiative. As both *E. fornicatus sensu lato* and *F. euwallaceae* represent a significant threat to many tree species in South Africa, it is noted that regulations should be envisaged to prevent their spread, as well as further surveys to determine their geographical distribution.

Source: Paap T, de Beer ZW, Migliorini D, Nel WJ, Wingfield MJ (2018) The polyphagous shot hole borer (PSHB) and its fungal symbiont *Fusarium euwallaceae*: a new invasion in South Africa. *Australasian Plant Pathology.* https://doi.org/10.1007/s13313-018-0545-0

Additional key words: new record, detailed record **Computer codes:** FUSAEW, XYLBO, ZA

2018/061 *Synchytrium endobioticum* found in Sweden

In 2017, the NPPO of Sweden has reported several outbreaks of *Synchytrium endobioticum* (EPPO A2 List) on its territory. In all cases, phytosanitary measures have been taken to eradicate the disease, and further laboratory studies will be conducted to identify the race(s) found.

County of Blekinge
In September 2017 during harvest of potatoes (*Solanum tuberosum* cv. Quadrigo) grown for starch production, symptoms of potato wart disease were noticed by a farmer who then contacted the Swedish Board of Agriculture. The infected field (5.5 ha) is located in the municipality of Sölvesborg. It is noted that this field is situated in the vicinity of an area where *S. endobioticum* race 18 had been recorded before but no longer detected since 2008. In the same county, infected tubers were also discovered by a farmer in September 2017 when delivering potatoes (cv. Kuras) to the starch industry. The infected field (1 ha) is located in the municipality of Karlshamn.

County of Skåne
In October 2017, potato wart disease was initially noticed on potato tubers at the time of harvest by a farmer who then contacted the Swedish Board of Agriculture. The infested field (5 ha) is located in the municipality of Kristianstad.

County of Värmlands
In October 2017, during the harvest of ware potatoes (cv. King Edward), a farmer discovered infected tubers and contacted the Swedish Board of Agriculture. The infected field is located in the municipality of Säffle**.**

The pest status of *Synchytrium endobioticum* in Sweden is officially declared as: **Present, only in some parts of the Member State concerned.**

Source: NPPO of Sweden (2017-09, 2017-11).

Pictures: *Synchytrium endobioticum*. https://gd.eppo.int/taxon/SYNCEN/photos

Additional key words: detailed record **Computer codes:** SYNCEN, SE

2018/062 *Synchytrium endobioticum* found in Germany

In 2017, the NPPO of Germany has reported several outbreaks of *Synchytrium endobioticum* (EPPO A2 List) on its territory. In all cases, official phytosanitary measures have been taken to eradicate the disease.

Baden-Württemberg
In May 2017, *S. endobioticum* was found on a single seed potato tuber harvested in 2016. A demarcated area was established, consisting of the plot where the seed potato had been grown in 2016 and the directly adjacent plots (5.2 ha located in the municipality of Dettingen an der Iller). Within the demarcated area, it is prohibited to grow potatoes or other plants for planting. The source of this outbreak is unknown, but it is supposed that some winter sporangia may have been transferred by birds or wild boars from a nearby field found to be infested by *S. endobioticum* in 2011.

Bayern

- In February 2017, a grower notified the German NPPO of the presence of potato wart disease in his potato harvest of 2016. By planting a selection of differential potato cultivars on the field concerned (2 ha) by the official authorities, the presence of *S. endobioticum* race 18 was confirmed.
- In August 2017, *S. endobioticum* was found in 3 lots of seed potatoes grown on two nearby fields (15 ha). Infestation was detected during sampling for potato bacteria for seed potato certification. In October 2017, 1 lot of seed potatoes of the same grower was also found to be infested (4 ha) during sampling before harvest. Finally, 1 additional infested lot of seed potatoes was found in November 2017, again on the same farm. The infestation (6 ha) was found during tracing back studies. The source of this outbreak is unknown. It is presumed that the fields might have been already infested prior to planting and carry-over at this farm might be the reason for the infestation in several fields.
- In October 2017, *S. endobioticum* was found in a lot of seed potatoes. The infestation was detected during sampling for potato bacteria in the context of potato certification. It is estimated that a plot of 1 ha is infected. The source of this outbreak is unknown.
- In October 2017, during tracing forward investigations related to the outbreak in seed potatoes in Baden-Württemberg (above, 2 symptomatic tubers were found during harvesting.

The pest status of *Synchytrium endobioticum* in Germany is officially declared as: **Present few occurrences, at low prevalence.**

Source: NPPO of Germany (2018-01, 2017-08).

Pictures: *Synchytrium endobioticum*. https://gd.eppo.int/taxon/SYNCEN/photos

Additional key words: detailed record **Computer codes:** SYNCEN, DE

2018/063 Invasive alien plants in Russia

Data on the distribution and abundance of invasive alien plant species in Russia is primarily published in grey literature in the Russian language. To compile an inventory of invasive alien plants for the Russian territory, local experts and regional contributors provided lists of invasive plants for 45 regions of Russia which accounts for 83% of the territory of Russia. The invasive flora for the 45 Russian regions included 354 species. In the European part of Russia, there are 277 invasive alien plants in total, in Siberia 70 and in the Russian Far East there are 79 invasive alien plants. The most widespread species included *Acer negundo* and *Echinocystis lobata* (recorded in 34 regions): see table 1 for a list of the most represented species. The majority of species (228) had a limited distribution, occurring in only one region. The 354 species belong to 65 families and 221 genera. The greatest number of invasive plants belong to the family Asteraceae (62 species), Poaceae (40) and Rosaceae (35). Most of the invasive plants originate from other parts of Asia and Europe. Regression tree analysis showed that climatic factors (average annual temperature and precipitation during the dry season), human population, and in particular urban population were highly important factors for shaping the richness of invasive flora in a region.

Table 1. The invasive alien plants most represented in the flora of Russia.

Species	No. regions	EPPO Listing	Family	Native range	Occurrence in the EPPO region
Acer negundo	34		Sapindaceae	N America	AT, BG, CH, CZ, ES, FR, GB, HU, IT, PL, RU, SE, SK, UA
Acorus calamus	34		Acoraceae	Asia	RU
Amaranthus retroflexus	30		Amaranthaceae	N America	AT, BE, BG, CZ, DK, EE, FI, FR, DE, LV, LT, NL, NO, PL, RU, SE, UA
Amelanchier spicata	30	Invasive Alien Plants	Rosaceae	N America	AT, BE, BG, CZ, DK, EE, FR, DE, LV, LT, NL, NO, PL, RU, SE, UA
Aronia mitschurinii	24		Rosaceae	hybrid	RU
Bidens frondosa	23	Observation List	Asteraceae	N America	AT, BE, CH, CZ, DE, EE, ES, FR, GB, HR, HU, IT, NL, NO, PT, PL, RU, SI, UA
Echinochloa crus-galli	23		Poaceae	Africa, Asia, Europe	Widespread
Echinocystis lobata	21		Cucurbitaceae	N America	BG, CZ, DE, EE, RU, HU, IT, LV, LT, PL, RO, UA
Elaeagnus rhamnoides	21		Elaeagnaceae	Asia	RU
Elodea canadensis	20		Hydrocharitaceae	N America	Widespread
Epilobium ciliatum	19		Onagraceae	Americas, Asia	Widespread
Epilobium pseudorubescens	18		Onagraceae	Asia	BY, RU
Erigeron annuus	18		Asteraceae	N America	BY, CH, CZ, BE, EE, HU, HR, IT, LT, ME, NL, PL, RO, RU, SK, SI, SE, UA

Species	No. regions	EPPO Listing	Family	Native range	Occurrence in the EPPO region
Erigeron canadensis	17		Asteraceae	N America	Widespread
Fraxinus pennsylvanica	17		Oleaceae	N America	ES, RU
Helianthus tuberosus	17	Invasive Alien Plants A2 List	Asteraceae	N America	Widespread
Heracleum sosnowskyi	16		Apiaceae	Asia	AM, AZ, BY, EE, FI, DE, HU, LV, LT, PL, RU, RS, UA
Hordeum jubatum	16		Poaceae	Asia	Widespread
Impatiens glandulifera	14	Invasive Alien Plants	Balsaminaceae	Asia	Widespread
Impatiens parviflora	14		Balsaminaceae	Asia	Widespread
Juncus tenuis	14		Juncaceae	Americas	RU
Lepidium densiflorum	13		Brassicaceae	N America	BY, BE, CH, CZ, DE, EE, FI, GB, HU, IT, LV, LT, MD, NL, NO, PL, RO, RU, SI, SE
Lupinus polyphyllus	13	Observation List	Fabaceae	N America	Widespread
Matricaria discoidea	13		Asteraceae	Asia	Widespread
Oenothera biennis	13		Onagraceae	N America	AT, DE, FR, HU, IT, LV, PL, RU
Oenothera rubricaulis	13		Onagraceae	N America	BY, BE, CZ, EE, ES, FI, HU, LV, LT, RU, SE, UA
Parthenocissus inserta	12		Vitaceae	N America	BE, CZ, ES, FR, GB, FR, DE, GR, HU, IT, LV, NL, PL, PT, RO, RU, SI, UA
Sambucus racemosa	12		Adoxaceae	N America	BE, EE, GB, FI, IE, LV, LT, NO, SE, RU
Saponaria officinalis	12		Caryophyllaceae	Asia	BE, BG, CZ, DK, EE, GB, IE, LV, NO, SE, RU, UA
Solidago canadensis	11	Invasive Alien Plants	Asteraceae	N America	Widespread
Solidago gigantea	11	Invasive Alien Plants	Asteraceae	N America	Widespread
Symphyotrichum salignum	10		Asteraceae	hybrid	Widespread
Ulmus pumila	10		Ulmaceae	Asia	LV, RU
Xanthium albinum	10		Asteraceae	N America	BE, ES, FR, IT, PT, RO, SI

Source: Vinogradova Y, Pergl J, Essl F, Hejda M, van Kleunen, Pyšek P (2018) Invasive alien plants of Russia: insights from regional inventories. *Biological Invasions*, DOI: https://doi.org/10.1007/s10530-018-1686-3

Additional key words: invasive alien plants

Computer codes: ABOMI, ACRNE, ACSCA, AMARE, AMESP, BIDFR, ECHCG, ECNLO, ELDCA, EPICT, EPIPS, ERIAN, ERICA, FRXPE, HELTU, HERSO, HORJU, IPAGL, IPAPA, IUNTE, LEPDE, LUPPO, MATMT, OEOBI, OEORU, PRTIN, SAMRA, SAWOF, SOOCA, SOOGI, ZMYSA, ULMPU, XANRI, RU

2018/064 First report of *Amaranthus viridis* and *Euphorbia serpens* in Bulgaria

Two new alien plant species are reported for Bulgaria: *Amaranthus viridis* and *Euphorbia serpens*. Both species were recorded in Varna city, Black Sea coast.

Amaranthus viridis (Amaranthaceae) is an annual plant species with a pantropical native distribution. The population of *A. viridis* in the city of Varna occurs close to a church and covers a strip of approximately 10 x 1.5 m consisting of 200 – 400 individuals. The population has been observed since 2014 and remains stable. In the EPPO region the species is recorded in Algeria, Greece, Italy and Spain.

Euphorbia serpens (Euphorbiaceae) is an annual plant species native to Central and South America. The species has been widely introduced into tropical regions where it occurs as a weed. In Bulgaria, the species is recorded in the Primorski Park area in Varna, where it occurs within a garden centre colonizing areas around polytunnels and in disused containers. In 2017, the estimated population size was 400 individuals. In the EPPO region the species is recorded in Algeria, Portugal, Spain and Greece.

The Black Sea coast region is regarded as an area vulnerable to intentional and unintentional introductions of alien plants. The region is an important destination for tourists and a port and transport hub. Further new occurrences of invasive alien plants are likely in this region and surveys should be conducted to monitor the coastal flora.

Source: Petrova AS (2018) *Amaranthus viridis* and *Euphorbia serpens*, new alien species records for the flora of Bulgaria. *Comptes rendus de l'Académie bulgare des Sciences*, **71**, 46-52.

Additional key words: invasive alien plants, new record **Computer codes:** AMAVI, EPHSN, BG

2018/065 Updated distribution of *Solidago x niederederi* in Poland

Solidago x *niederederi* (Asteraceae) is a natural hybrid between the North American native species *S. canadensis* and the European native species *S. virgaurea* which was first described from Austria at the beginning of the 20th century. It is now widespread throughout the EPPO region reported in Austria, Denmark, Germany, Italy, Lithuania, Latvia, Norway, Poland, Russia and Sweden and the United Kingdom (Great Britain). In Poland, the hybrid was first reported in 1971 from a herbarium sheet from the Faculty of Biology University of Warsaw, collected in 1957 from the Podlaskie Province. The current study details that *Solidago* x *niederederi* is now known from 55 localities within 40 cartogram units (10-km squares) within Poland. It is found mainly in abandoned agricultural fields in the North-eastern and Southern parts of the country. Commonly, *Solidago* x *niederederi* occurs together with their parental species, however, there are some localities in Poland where *Solidago* x *niederederi* occurs with neither or just one parent species. Further studies are required to assess the occurrence of the hybrid in Poland and in the rest of its range especially as the species may become more invasive in the future and pose a threat to the native *S. virgaurea* through introgressive hybridization.

Source: Pliszko A, Lazarski G, Kalinowski P, Adamowski W, Rutkowski L, Puchalka R (2018) An updated distribution of *Solidago x niederederi* (Asteraceae) in Poland. *Acta Musei Silesiae Scientiae Naturales* **66**, 253-258.

Additional key words: invasive alien plants, new record **Computer codes:** PL

2018/066 Updated checklist of the vascular flora alien to Italy

An updated inventory of the vascular flora for Italy has been published which details the occurrence of 1 597 species, subspecies and hybrids at a regional level. These entries are distributed within 725 genera and 152 families. Two taxa are lycophytes, 11 ferns, 33 gymnosperms and 1551 angiosperms. In total, 157 taxa are archaeophytes and 1440 are neophytes. At present there are 791 alien taxa currently established in Italy. Of these, 570 are naturalised and 221 are invasive. There are 705 taxa classified as casual aliens.

Source: Galasso G, Conti F, Peruzzi L, Ardenghi NMG, Banfi E, Celesti-Grapow L, Albano A, Alessandrini A, Bacchetta G, Ballelli S, Bandini Mazzanti M, Barberis G, Bernardo L, Blasi C, Bouvet D, Bovio M, Cecchi L, Del Guacchio E, Domina G, Fascetti S, Gallo L, Gubellini L, Guiggi A, Iamonico D, Iberite M, Jiménez-Mejías P, Lattanzi E, Marchetti D, Martinetto E, Masin RR, Medagli P, Passalacqua NG, Peccenini S, Pennesi R, Pierini B, Podda L, Poldini L, Prosser F, Raimondo FM, Roma-Marzio F, Rosati L, Santangelo A, Scoppola A, Scortegagna S, Selvaggi A, Selvi F, Soldano A, Stinca A, Wagensommer RP, Wilhalm T, Bartolucci F (2018) An updated checklist of the vascular flora alien to Italy. *Plant Biosystems*, DOI: https://doi.org/10.1080/11263504.2018.1441197

Additional key words: invasive alien plants **Computer codes:** IT

2018/067 *Rhododendron ponticum* depletes the native seed bank with long-term effects

Rhododendron ponticum (Ericaceae: EPPO Observation List of invasive alien plants) is one of the most damaging invasive plant species which threatens biodiversity in the United Kingdom. With outbreaks of the plant pathogen *Phytophthora ramorum*, increased efforts have been made to manage *R. ponticum*, as it acts as a host plant. However, following the clearing of dense monocultures of the species, it has been observed that native plant species in particular grasses and forbs fail to return even up to 30 years post-removal. The current study aimed to elucidate the impact of *R. ponticum* invasion, and its subsequent removal on the composition of the seed bank from Atlantic oak woodlands on the West coast of Scotland. Greenhouse germination experiments were conducted using soil collected from three site types and ten samples were taken from each site type: (1) uninvaded sites where *R. ponticum* had never been present (uninvaded); (2) sites with dense *R. ponticum* stands still present (invaded); (3) sites cleared between 10-30 years ago (cleared). Invaded sites and cleared sites had significantly lower abundance of grass species and to a lesser extent forb species compared to uninvaded controls. The seed bank community composition differed between the three soil types. Uninvaded sites had a high species richness of native species compared to invaded sites which were dominated by *R. ponticum* seeds and had half the species richness of uninvaded sites. Cleared sites had a significantly lower species richness compared to uninvaded sites and this was due to the cleared sites being dominated by birch (*Betula pendula*) seed. The results show that the soil seed bank in invaded sites and cleared sites is very different to uninvaded sites and this has implications for site restoration. Of particular importance is the lower species richness seen in cleared sites compared to uninvaded sites suggesting that re-seeding may be necessary post-removal.

Source: Maaclean J, Mitchell RJ, Burslem DFRP, Genney D, Hall J, Pakeman RJ (2018) Invasion by *Rhododendron ponticum* depletes the native seed bank with long-term impacts after its removal. *Biological Invasions* **20**, 375-384.

Pictures: *Rhododendron ponticum*. https://gd.eppo.int/taxon/RHOPO/photos

Additional key words: invasive alien plants **Computer codes:** RHOPO, GB