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2019/176 New additions to the EPPO A1 and A2 Lists

In September 2019, the EPPO Council approved the addition of the following pests to the EPPO A1 and A2 Lists of pests recommended for regulation as quarantine pests.

Pests absent from the EPPO region (A1)
No additions in 2019.

Pests present in the EPPO region (A2)
- *Agrilus bilineatus* (Coleoptera: Buprestidae)
- *Agrilus fleischeri* (Coleoptera: Buprestidae)
- *Ambrosia trifida* (Asteraceae)

Due to taxonomic revisions, the following changes have been made to the lists:
- *Bactrocera invadens, B. papayae, B. philippinensis* are now considered to be synonyms of ***Bactrocera dorsalis***, therefore only *B. dorsalis* appears separately in the EPPO A1 List.
- *Ceratocystis fagacearum* is now called ***Bretziella fagacearum*** (EPPO A1 List)
- *Verticillium albo-atrum* hop infecting strains have been replaced by ***Verticillium nonalfalfae*** hop infecting strains (EPPO A2 List)

For each individual pest, PRA documents and datasheets have been prepared (or are under development) and will be available in due course in the EPPO Global Database (https://gd.eppo.int) and in the EPPO Bulletin (datasheets only). In addition, posters to raise public awareness have been specifically prepared for most of these pests and can be downloaded from the EPPO website:
https://www.eppo.int/RESOURCES/eppo_publications/pest_specific_posters

Source: EPPO Secretariat (2019-09).

Pictures: *Agrilus bilineatus*. https://gd.eppo.int/taxon/AGRLBL/photos
Agrilus fleischeri. https://gd.eppo.int/taxon/AGRLFL/photos
Ambrosia trifida. https://gd.eppo.int/taxon/AMBTR/photos

Additional key words: EPPO lists

Computer codes: AGRLBL, AGRLFL, AMBTR, CERAFA, DACUDO, VERTNO

2019/177 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**

Corythauma ayyari (Hemiptera: Tingidae - jasmine lace bug) was first found in Syria in 2017. The pest was observed causing defoliation on *Jasminum grandiflorum* and *J. sambac* in public and private gardens in Latakia city, as well as in its surroundings (Zeity & Ali, 2019). **Present, first found in 2017 in the area of Latakia.**

In Rwanda, during a survey conducted in August 2017 to characterise the plant-parasitic nematodes associated with potato (*Solanum tuberosum*), *Globodera rostochiensis* (EPPO A2 List) was found in 3 districts: Rubavu (Western Province), Musanze and Burera (both in Northern Province). As this study was only based on 10 samples, further surveys are needed to investigate the distribution of *G. rostochiensis* in Rwanda (Niragire *et al.*, 2019). The situation of *Globodera rostochiensis* in Rwanda can be described as follows: **Present, first found in 2017 in Western and Northern Provinces**.

In Michigan (US), symptoms of chestnut brown rot were observed on nuts of *Castanea mollissima* and *C. sativa x C. crenata* in autumn 2016. Laboratory studies (molecular tests, inoculation tests) confirmed the presence of *Gnomoniopsis smithogilvyi*. This is the first time that this fungus is reported from Michigan (Sakalidis *et al.*, 2019). **Present, first found in 2016 in Michigan**. According to the information available at the EPPO Secretariat, this is also a first record for the Americas.

Hercinothrips dimidiatus (Thysanoptera: Thripidae) was first found in Corse (France) in September 2018. The pest was observed in Ajaccio on *Aloe* spp. plants in public parks and gardens (Internet, 2018). **Present, first found in 2018 in Ajaccio.**

In Jordan, the red palm mite, *Raoiella indica* (Acari: Tenuipalpidae – formerly EPPO Alert List), was first observed in 2017 on date palm (*Phoenix dactylifera*) growing at the University of Jordan Station, Jordan Valley (Kholoud *et al.*, 2019). **Present, first found in 2017 in Jordan Valley.**

In Algeria, *Phenacoccus madeirensis* (Hemiptera: Pseudococcidae - bougainvillea mealybug) was first detected in summer 2018 in private gardens in Salamandre (north-western Algeria), feeding on ornamental plants: *Hibiscus rosa-sinensis*, *Hibiscus syriacus*, *Cestrum nocturnum*, and *Aloysia citriodora* (Guenaoui *et al.*, 2019). **Present, first found in 2018 in north-western Algeria.**

In Belgium, *Thrips setosus* (Thysanoptera: Thripidae – formerly EPPO Alert List) was first found in 2018 during a research project financed by the Belgian NPPO. During a survey carried out in 23 locations, *T. setosus* was found near Ghent in one glasshouse on *Hydrangea* cuttings. The identity of the pest was confirmed by molecular methods (Goedefroit *et al.*, 2019; NPPO of Belgium, 2019-09). **Present, first found in 2018 in one glasshouse.**

- **Detailed records**

In the USA, *Dickeya dianthicola* (EPPO A2 List) causing blackleg on potato (*Solanum tuberosum*) is reported for the time from Texas. This outbreak is associated with an infected seed potato lot originating from Wisconsin where the bacterium was detected during surveys conducted in 2015 and 2016 (Nasaruddin *et al.*, 2019).

Meloidogyne graminicola (EPPO Alert List) occurs in Sichuan, China. In June 2018, stunned and yellowish plants were observed in rice fields in Guanghan City. Galls and hooked tips were found in the roots of affected seedlings and plants. Laboratory studies (morphological and molecular methods) confirmed the identity of the nematode (Xie *et al.*, 2019).

In Brazil, the red palm mite, *Raoiella indica* (Acari: Tenuipalpidae – formerly EPPO Alert List), was first reported in 2009 in the State of Roraima. Despite quarantine measures, it further spread to Amazonas in 2011. In 2016 it was first detected in Northeast region, first in Ceará state and a few months later in 12 other states: 7 in Northeastern Brazil (Alagoas, Bahia, Paraíba, Pernambuco, Piauí, Rio Grande do Norte and Sergipe), 2 in Midwestern Brazil (Distrito Federal and Goiás), 2 in South-Eastern Brazil (Minas Gerais, São Paulo), and 1 in Southern Brazil (Paraná). *R. indica* is considered to be a threat for banana and coconut production (Melo *et al.*, 2018)

Rhagoletis completa (Diptera: Tephritidae – EU Annexes) was first found in Corse (France) in August 2018 near Ajaccio (Internet).

- **New pests and taxonomy**

During studies on the genetic variability of *Xyleborus glabratus* (Coleoptera: Curculionidae: Scolytinae – EPPO Alert List) populations native to Southeast Asia, two populations were found to present significant differences from the other population. As individuals from these two populations presented consistent morphological differences, it was concluded that they corresponded to two new species: *Xyleborus insidiosus* n.sp. and *Xyleborus mysticulus* n.sp. A new description of *X. glabratus* was also provided. Considering that the biology and host range of these two new species are unknown, it is concluded that their introduction to other regions of the world should be prevented (Cognato *et al.*, 2019).

Taxonomic studies have concluded that *Aeolesthes sarta* (Coleoptera: Cerambycidae – EPPO A2 List) should be transferred to the genus *Trirachys*, and thus called *Trirachys sartus* (Vitali *et al.*, 2017).

Sources:

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Additional key words: absence, detailed record, diagnostics, new pest, new record, taxonomy

Computer codes: AELSSA, COTMAY, ERWICD, GNMPCA, HERCDI, HETDRO, MELGGC, PHENMD, RAOIIN, RHAGCO, THRISE, XYLBGR, XYLBIS, XYLBMY, BE, BR, CN, DZ, FR, JO, RW, SY, US

2019/178 EPPO report on notifications of non-compliance

The EPPO Secretariat has gathered below the notifications of non-compliance for 2019 received since the previous report (EPPO RS 2019/095). 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
Acaridae	*Zingiber officinale*	Vegetables	China	Spain	2
Acaridae, Sciaridae, Staphylinidae	*Zingiber officinale*	Vegetables	China	Spain	1
Bemisia tabaci	*Abelmoschus esculentus*	Vegetables	Jordan	Netherlands	1
	Abelmoschus esculentus	Vegetables	Nigeria	United Kingdom	1
	Ajuga	Cuttings	Israel	Netherlands	1
	Ajuga reptans	Cut flowers	Kenya	Germany	1
	Amaranthus	Cut flowers	Israel	Netherlands	1
	Asclepias tuberosa	Cut flowers	Israel	Netherlands	1
	Capsicum	Vegetables	Egypt	United Kingdom	2
	Capsicum annuum	Vegetables	Morocco	France	2
	Capsicum annuum	Vegetables	Morocco	United Kingdom	1
	Capsicum annuum	Vegetables	Pakistan	United Kingdom	1
	Capsicum annuum	Vegetables	Turkey	United Kingdom	4
	Colocasia	Vegetables	Ghana	United Kingdom	1
	Colocasia esculenta	Vegetables	Bangladesh	United Kingdom	1
	Corchorus olitorius	Vegetables (leaves)	Jordan	United Kingdom	3
	Corchorus olitorius	Vegetables (leaves)	Nigeria	United Kingdom	1
	Corchorus olitorius, Hibiscus sabdariffa	Vegetables (leaves)	Nigeria	United Kingdom	1
	Corchorus olitorius, Ipomoea batatas	Vegetables (leaves)	Vietnam	United Kingdom	1
	Corchorus olitorius, Telfairia occidentalis	Vegetables (leaves)	Nigeria	United Kingdom	2
	Euphorbia trigona	Plants for planting	Guatemala	Netherlands	1
	Gypsophila	Cut flowers	Israel	Netherlands	1
	Hibiscus	Plants for planting	Belgium	United Kingdom	1
	Hibiscus	Plants for planting	Netherlands	United Kingdom	6
	Hibiscus rosa-sinensis	Plants for planting	Netherlands	United Kingdom	1
	Hibiscus sabdariffa	Vegetables (leaves)	Nigeria	United Kingdom	1
	Hibiscus sabdariffa	Vegetables (leaves)	Togo	Belgium	2
	Hibiscus sabdariffa, Solanum	Vegetables (leaves)	Nigeria	United Kingdom	1
	Hygrophila angustifolia	Plants for planting (aquatic plants)	Singapore	United Kingdom	1
	Ipomoea batatas	Vegetables (leaves)	Netherlands Antilles	Netherlands	1
	Ipomoea batatas	Vegetables (leaves)	Togo	Belgium	1
	Ipomoea batatas, Ocimum gratissimum	Vegetables	Ghana	United Kingdom	1
	Lisianthus	Cut flowers	Israel	Netherlands	1
	Lisianthus	Cut flowers	Japan	France	1
	Mandevilla	Cuttings	Netherlands	United Kingdom	1
	Mandevilla	Plants for planting	Italy	United Kingdom	1
	Mandevilla	Plants for planting	Netherlands	United Kingdom	4
	Mandevilla splendens	Plants for planting	Netherlands	United Kingdom	2
	Mandevilla splendens	Plants for planting	Spain	United Kingdom	1
	Manihot esculenta	Vegetables	Indonesia	Netherlands	1
	Manihot esculenta	Vegetables	Sierra Leone	Belgium	1
	Mentha, Polygonum	Vegetables (leaves)	Laos	France	1
	Nerium oleander	Plants for planting	Spain	United Kingdom	4
	Ocimum	Vegetables (leaves)	Kenya	United Kingdom	2
	Ocimum basilicum	Vegetables (leaves)	Israel	France	1

Pest	Consignment	Type of commodity	Country of origin	Destination	nb
***Bemisia tabaci* (cont.)**	*Ocimum basilicum*	Vegetables (leaves)	Israel	Netherlands	1
	Ocimum basilicum	Vegetables (leaves)	Kenya	United Kingdom	1
	Ocimum basilicum	Vegetables (leaves)	Thailand	United Kingdom	1
	Ocimum gratissimum	Vegetables (leaves)	Ghana	United Kingdom	1
	Ocimum gratissimum, Vernonia amygdalina	Vegetables (leaves)	Nigeria	United Kingdom	1
	Ocimum tenuiflorum	Vegetables (leaves)	India	United Kingdom	1
	Perilla	Vegetables (leaves)	Cambodia	Czech Republic	1
	Piper sarmentosum	Vegetables (leaves)	Thailand	Sweden	1
	Rumex acetosa, Solanum melongena	Vegetables (leaves)	Nigeria	United Kingdom	1
	Salvia	Vegetables (leaves)	Israel	Netherlands	1
	Solanum	Vegetables	Togo	Belgium	1
	Solanum macrocarpon	Vegetables	Suriname	Netherlands	4
	Solanum melongena	Vegetables	Nigeria	United Kingdom	1
	Spinacia oleracea	Vegetables (leaves)	Togo	Belgium	1
	Telfairia occidentalis	Vegetables (leaves)	Nigeria	United Kingdom	5
	Trachelium	Cut flowers	Israel	Germany	1
	Unspecified	Vegetables	Nigeria	United Kingdom	1
	Vernonia	Vegetables (leaves)	Ghana	United Kingdom	1
Bruchidae	*Ocimum, Phaseolus, Ziziphus mauritiana*	Seeds and fruits	Bangladesh	Italy	1
Carrot red leaf virus	*Daucus carota*	Seeds	India	Italy	1
Chilli veinal mottle virus	*Capsicum*	Vegetables	China	United Kingdom	1
Clavibacter michiganensis* subsp. *sepedonicus	*Solanum tuberosum*	Ware potatoes	Turkey	Bulgaria	1
Coleoptera	Unspecified	Plants for planting	India	France	1
Diptera	*Capsicum annuum*	Unspecified plant product	Tunisia	Italy	1
	Unspecified	Plants for planting	India	France	1
Diptera, Fungi	*Capsicum annuum, Prunus dulcis*	Unspecified plant product	Tunisia	Italy	1
Fungi	*Capsicum annuum*	Unspecified plant product	Tunisia	Germany	1
	Capsicum annuum, Prunus dulcis	Unspecified plant product	Tunisia	Italy	1
Fungi, Thrips	*Vernonia amygdalina*	Unspecified	Nigeria	Italy	1
Helicoverpa zea	*Capsicum chinense*	Vegetables	Mexico	Netherlands	1
Hirschmanniella caudacrena	*Aponogeton natans*	Plants for planting (aquatic plants)	Singapore	United Kingdom	1
	Vallisneria spiralis	Plants for planting (aquatic plants)	Singapore	United Kingdom	1
Insecta	*Ocimum basilicum*	Plants for planting	Tunisia	Italy	1
Lepidoptera	*Brassica*	Vegetables	Vietnam	Ireland	1

Pest	Consignment	Type of commodity	Country of origin	Destination	nb
Leucinodes	*Mangifera indica, Solanum aethiopicum*	Fruits and vegetables	Ghana	Italy	1
	Solanum	Vegetables	Vietnam	Ireland	1
	Solanum aethiopicum	Vegetables	Cameroon	Belgium	6
	Solanum aethiopicum	Vegetables	Uganda	France	1
	Solanum melongena	Vegetables	Cambodia	France	2
Liberibacter solanacearum	*Daucus carota*	Seeds	Argentina	Italy	1
Limacoccus brasiliensis, Oedionychus rugiceps, Stenoma	*Syagrus romanzoffiana, Trachycarpus fortunei*	Plants for planting	Brazil	Spain	1
Liriomyza	*Chrysanthemum*	Cut flowers	Colombia	United Kingdom	2
	Chrysanthemum, Celosia argentea, Rumex acetosa	Cut flowers	Colombia	United Kingdom	1
	Dendranthema	Cut flowers	Colombia	United Kingdom	2
	Dendranthema	Cut flowers	Ecuador	United Kingdom	1
	Ocimum	Vegetables (leaves)	Ethiopia	United Kingdom	1
	Ocimum	Vegetables (leaves)	Tunisia	France	1
Liriomyza huidobrensis	*Gypsophila*	Cut flowers	Ecuador	Italy	1
	Gypsophila	Cut flowers	Ecuador	Netherlands	1
Liriomyza sativae	*Ocimum basilicum*	Vegetables (leaves)	Kenya	France	1
	Ocimum basilicum	Vegetables (leaves)	Morocco*	France	2
	Ocimum basilicum, Syzygium samarangense	Vegetables (leaves)	Thailand	Czech Republic	1
Liriomyza trifolii	*Chrysanthemum*	Cut flowers	Colombia	United Kingdom	1
	Gypsophila	Cut flowers	Israel	Belgium	2
	Gypsophila	Cut flowers	Israel	Germany	1
	Gypsophila	Cut flowers	Israel	Netherlands	2
Nematoda	*Abelmoschus esculentus, Capsicum annuum, Solanum melongena, Telfairia occidentalis*	Seeds	Nigeria	Italy	1
	Allium cepa	Unspecified	Tunisia	Italy	1
	Allium sativum	Unspecified plant product	Tunisia	Italy	1
Pepino mosaic virus, Potato spindle tuber viroid	*Solanum lycopersicum*	Seeds	Dominican Rep.	Italy	1
Phyllachora maydis	*Zea mays*	Vegetables	USA	United Kingdom	1
Phyllosticta citricarpa	*Citrus limon*	Fruits	South Africa	Italy	2
Phytophthora ramorum	*Rhododendron*	Plants for planting	Belgium	United Kingdom	1
	Rhododendron Repens hybrids	Cuttings	Netherlands	United Kingdom	1
Potato spindle tuber viroid	*Capsicum annuum*	Seeds	China	Romania	1
	Lycium barbarum	Seeds	China	Italy	1
	Solanum lycopersicum	Seeds	China	Romania	1

Pest	Consignment	Type of commodity	Country of origin	Destination	nb
Potato virus Y	*Capsicum*	Vegetables	Senegal	United Kingdom	1
	Capsicum annuum	Vegetables	Senegal	United Kingdom	2
	Capsicum frutescens	Vegetables	Senegal	United Kingdom	1
Radopholus similis	*Acorus gramineus*	Plants for planting (aquatic plants)	Malaysia	United Kingdom	3
	Acorus gramineus	Plants for planting (aquatic plants)	Thailand	United Kingdom	1
Ralstonia solanacearum	*Solanum tuberosum*	Ware potatoes	Egypt	Italy	1
Spodoptera eridania	*Solanum macrocarpon*	Vegetables	Suriname	Netherlands	2
Spodoptera frugiperda	*Asparagus officinalis*	Vegetables	Peru	Netherlands	5
	Capsicum chinense	Vegetables	Suriname	Netherlands	1
	Eryngium	Cut flowers	Ecuador	Netherlands	1
	Eryngium	Cut flowers	Zimbabwe	Netherlands	1
	Solanum macrocarpon	Vegetables	Suriname	Netherlands	2
	Solanum melongena	Vegetables	Suriname	Netherlands	3
	Zea	Vegetables	Senegal	United Kingdom	1
	Zea mays	Vegetables	Senegal	Netherlands	1
	Zea mays	Vegetables	Senegal	United Kingdom	4
Spodoptera littoralis	*Capsicum frutescens*	Vegetables	Uganda	Belgium	1
	Ocimum basilicum	Vegetables (leaves)	Kenya	Netherlands	2
Stenoma catenifer	*Persea americana*	Vegetables	Ecuador	Spain	4
Sternochetus mangiferae*, Bactrocera dorsalis	*Mangifera indica*	Fruits	Burkina Faso*	Italy	1
Thaumatotibia	*Capsicum*	Vegetables	Kenya	United Kingdom	1
Thaumatotibia leucotreta	*Annona muricata*	Fruits	Ghana	Netherlands	1
	Annona muricata	Fruits	Uganda	Belgium	1
	Capsicum	Vegetables	Kenya	United Kingdom	2
	Capsicum	Vegetables	Rwanda	France	1
	Capsicum	Vegetables	Uganda	United Kingdom	4
	Capsicum	Vegetables	Zimbabwe	Netherlands	1
	Capsicum annuum	Vegetables	Rwanda	France	1
	Capsicum chinense	Vegetables	Rwanda	United Kingdom	2
	Capsicum chinense	Vegetables	Uganda	Netherlands	1
	Citrus paradisi	Fruits	Swaziland	Netherlands	2
	Citrus sinensis	Fruits	South Africa	Netherlands	3
	Fortunella japonica	Fruits	South Africa	United Kingdom	1
	Rosa	Cut flowers	Kenya	Netherlands	8
	Rosa	Cut flowers	Kenya	Sweden	2
	Rosa	Cut flowers	Kenya	United Kingdom	1
	Rosa	Cut flowers	Tanzania	Netherlands	2
	Rosa	Cut flowers	Uganda	Netherlands	5
Thaumetopoea processionea	*Quercus cerris*	Plants for planting	Netherlands	United Kingdom	3
	Quercus frainetto	Plants for planting	Netherlands	United Kingdom	1
	Quercus palustris	Plants for planting	Germany	United Kingdom	1
	Quercus palustris	Plants for planting	Netherlands	United Kingdom	2
	Quercus robur	Plants for planting	Netherlands	United Kingdom	21
	Quercus rubra	Plants for planting	Netherlands	United Kingdom	1

Pest	Consignment	Type of commodity	Country of origin	Destination	nb
Thripidae	*Capsicum*	Vegetables	Ghana	United Kingdom	1
	Corchorus	Vegetables (leaves)	Nigeria	United Kingdom	1
	Ipomoea aquatica	Vegetables (leaves)	Thailand	United Kingdom	1
	Luffa acutangula	Vegetables	Ghana	United Kingdom	2
	Luffa acutangula	Vegetables	Pakistan	United Kingdom	2
	Momordica	Vegetables	Bangladesh	United Kingdom	1
	Momordica	Vegetables	Dominican Rep.	United Kingdom	1
	Momordica	Vegetables	Japan	United Kingdom	1
	Momordica charantia	Vegetables	Dominican Rep.	United Kingdom	1
	Momordica charantia	Vegetables	Mexico	United Kingdom	1
	Momordica charantia, Solanum melongena	Vegetables	Malaysia	Ireland	1
	Piper betle	Vegetables (leaves)	Bangladesh	Italy	1
	Solanum melongena	Vegetables	Dominican Rep.	United Kingdom	1
	Telfairia occidentalis	Vegetables (leaves)	Nigeria	United Kingdom	11
Thrips	*Solanum aethiopicum*	Vegetables	Togo	France	1
Thrips palmi	*Acalypha indica*	Vegetables	Bangladesh	United Kingdom	1
	Amaranthus viridis	Vegetables (leaves)	Nigeria	United Kingdom	1
	Dendrobium	Cut flowers	Malaysia	Italy	4
	Dendrobium	Cut flowers	Malaysia	Switzerland	1
	Luffa	Vegetables	Pakistan	Sweden	1
	Luffa acutangula	Vegetables	Dominican Rep.	United Kingdom	1
	Luffa acutangula	Vegetables	Pakistan	United Kingdom	1
	Momordica	Vegetables	Bangladesh	France	1
	Momordica	Vegetables	Mexico	Netherlands	1
	Momordica, Solanum melongena	Vegetables	Mexico	United Kingdom	1
	Solanum aethiopicum	Vegetables	Burkina Faso*	France	1
	Solanum macrocarpon	Vegetables	Suriname	Netherlands	2
	Solanum melongena	Vegetables	Dominican Rep.	Switzerland	3
	Solanum melongena	Vegetables	Mexico	Netherlands	2
	Solanum melongena	Vegetables	Suriname	Netherlands	2
Thysanoptera	*Capsicum*	Vegetables	Ghana	United Kingdom	1
	Momordica	Vegetables	Bangladesh	France	1
Tuta absoluta	*Solanum lycopersicum*	Vegetables	Tunisia	France	4
	Solanum lycopersicum	Vegetables	Tunisia	Netherlands	1
Udinia	*Mangifera indica*	Fruits	Côte d'Ivoire	Italy	1
Xanthomonas arboricola* pv. *pruni	*Prunus laurocerasus*	Plants for planting	Netherlands	United Kingdom	1
Xanthomonas citri* pv. *citri	*Citrus hystrix*	Fruits	Indonesia	Netherlands	1
	Citrus limon	Fruits	Indonesia	Netherlands	1
	Citrus limon	Fruits	Uruguay	Italy	1
Xanthomonas phaseoli* pv. *phaseoli	*Phaseolus vulgaris*	Seeds	China	Romania	1

- **Fruit flies**

Pest	Consignment	Country of origin	Destination	nb
Anastrepha	*Mangifera*	Dominican Rep.	United Kingdom	1
	Mangifera indica	Dominican Rep.	France	1
	Mangifera indica	Dominican Rep.	United Kingdom	1
Anastrepha obliqua	*Psidium guajava*	Dominican Rep.	Switzerland	1
Bactrocera	*Annona muricata*	Benin	Switzerland	1
	Averrhoa carambola	Malaysia	Netherlands	2
	Capsicum	Thailand	Switzerland	1
	Capsicum	Vietnam	Switzerland	1
	Capsicum annuum	Malaysia	Netherlands	1
	Capsicum frutescens	Vietnam	Netherlands	1
	Capsicum frutescens	Vietnam	Switzerland	1
	Citrus maxima	Indonesia	United Kingdom	1
	Mangifera	Gambia	United Kingdom	3
	Mangifera indica	Bangladesh	United Kingdom	4
	Mangifera indica	Cameroon	Switzerland	1
	Mangifera indica	Côte d'Ivoire	Netherlands	1
	Mangifera indica	Gambia	United Kingdom	3
	Mangifera indica	India	Switzerland	1
	Mangifera indica	Mali	Netherlands	2
	Mangifera indica	Senegal	France	1
	Mangifera indica	Thailand	Netherlands	1
	Syzygium	Sri Lanka	Switzerland	1
	Trichosanthes	Sri Lanka	Switzerland	4
Bactrocera dorsalis	*Mangifera indica*	Uganda	Sweden	1
Ceratitis capitata	*Mangifera indica*	Côte d'Ivoire	Netherlands	1
Ceratitis cosyra	*Mangifera indica*	Côte d'Ivoire	France	1
Dacus	*Momordica charantia*	Uganda	Sweden	1
Dacus ciliatus	*Coccinia grandis*	India	Sweden	1
	Momordica charantia	Uganda	Sweden	3
Dacus frontalis	*Cucurbita maxima*	Senegal	Spain	2
Tephritidae (non-European)	*Annona muricata*	Cameroon	France	1
	Annona muricata	Uganda	Belgium	1
	Annona muricata	Vietnam	France	1
	Capsicum annuum	Rwanda	Belgium	1
	Capsicum frutescens	Cambodia	France	3
	Capsicum frutescens	Laos	France	1
	Capsicum frutescens	Vietnam	Netherlands	1
	Mangifera indica	Burkina Faso	France	6
	Mangifera indica	Burkina Faso	Germany	1
	Mangifera indica	Burkina Faso	Netherlands	1
	Mangifera indica	Colombia	France	1
	Mangifera indica	Côte d'Ivoire	France	3
	Mangifera indica	Côte d'Ivoire	Netherlands	1
	Mangifera indica	Dominican Rep.	France	2
	Mangifera indica	Dominican Rep.	United Kingdom	1
	Mangifera indica	Guinea	France	1

Pest	Consignment	Country of origin	Destination	nb
Tephritidae (non-European)	*Mangifera indica*	Mali	Belgium	1
	Mangifera indica	Mali	France	8
	Mangifera indica	Mali	Netherlands	4
	Mangifera indica	Mexico	France	1
	Mangifera indica	Pakistan	France	2
	Mangifera indica	Senegal	France	2
	Mangifera indica	Thailand	France	2
	Mangifera indica	Togo	Belgium	1
	Momordica charantia	Sri Lanka	France	1
	Psidium guajava	Sri Lanka	France	1
	Psidium guajava	Vietnam	France	1
	Pyrus pyraster	Morocco	France	1
	Syzygium	Suriname	Netherlands	1
	Syzygium samarangense	Sri Lanka	United Kingdom	1

- **Wood**

Pest	Consignment	Type of commodity	Country of origin	Destination	nb
Aphelenchoides, Rhabditida	Unspecified	Wood packaging material	China	Portugal	1
Apriona	Unspecified	Wood packaging material (crate)	China	Netherlands	1
Arhopalus rusticus	Unspecified	Wood packaging material (pallet)	Turkey	Germany	2
Bostrichidae	Unspecified	Wood packaging material	India	Germany	2
	Unspecified	Wood packaging material	Malaysia	Ireland	1
	Unspecified	Wood packaging material (crate)	India	Germany	1
Bursaphelenchus mucronatus	Unspecified	Wood packaging material (crate)	Russia	Latvia	1
	Unspecified	Wood packaging material (pallet)	Belarus	Denmark	1
	Unspecified	Wood packaging material (pallet)	Belarus	Germany	1
	Unspecified	Wood packaging material (pallet)	Russia	Germany	1
	Unspecified	Wood packaging material (pallet)	Ukraine	Lithuania	1
Bursaphelenchus mucronatus, Rhabditis	Unspecified	Wood packaging material (pallet)	Belarus	Germany	1
	Unspecified	Wood packaging material (pallet)	Belarus	Netherlands	1
Cerambycidae	Unspecified	Wood packaging material (crate)	Vietnam	Belgium	1
Insecta	Unspecified	Wood packaging material	India	Switzerland	1
	Unspecified	Wood packaging material (pallet)	China	Switzerland	1
Lyctus	Unspecified	Wood packaging material	China	Germany	1
Lyctus suturalis	Unspecified	Dunnage	China	Latvia	9
Lyctus suturalis, Trichoferus	Unspecified	Dunnage	China	Latvia	1
Monochamus	Picea abies	Wood and bark	Ukraine	Spain	7
Monochamus galloprovincialis	Unspecified	Wood packaging material (pallet)	Belarus	Netherlands	1

Pest	Consignment	Type of commodity	Country of origin	Destination	nb
Monochamus sartor	Unspecified	Wood packaging material (pallet)	China	Germany	1
Prionus coriarius	Unspecified	Wood packaging material (pallet)	Belarus	Germany	1
Rhabditis, Tylenchus	Unspecified	Wood packaging material (pallet)	Belarus	Germany	1
Sinoxylon	Unspecified	Wood packaging material	China	Germany	1
	Unspecified	Wood packaging material	Indonesia	Germany	1
	Unspecified	Wood packaging material	Malaysia	Germany	1
	Unspecified	Wood packaging material (pallet)	India	Germany	5
Sinoxylon anale	Unspecified	Wood packaging material	Vietnam	Germany	1
	Unspecified	Wood packaging material (pallet)	India	Slovenia	1
Stromatium longicorne	Unspecified	Wood packaging material	China	Germany	1

- **Bonsais**

Pest	Consignments	Country of origin	Destination	nb
Ditylenchus dipsaci, Xiphinema	*Acer*	Japan	United Kingdom	1
Muscidae	*Ficus thonningii*	China	Italy	1

Source: EPPO Secretariat (2019-09).

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

2019/179 First report of *Spodoptera frugiperda* in Gabon

In Gabon, *Spodoptera frugiperda* (Lepidoptera: Noctuidae – EPPO A1 List) was first observed in 2017 in the provinces of Estuaire and Haut-Ogooué. Following these first observations, official surveys were carried out in the 9 provinces of Gabon mainly in maize (*Zea mays*) crops, but also in rice (*Oryza sativa*), sugarcane (*Saccharum officinale*) and vegetable crops, to determine the extent of the outbreak. Survey results confirmed the presence of *S. frugiperda* in the 9 provinces of Gabon (in order of decreasing incidence: Woleu-Ntem, Ogooué Ivindo, Estuaire, Moyen Ogooué, Ngounié, Haut Ogooué, Nyanga, Ogooué Maritime, Ogooué Lolo). The pest was mainly found in maize crops, but it was also observed in sugarcane in the province of Nyanga. A national action plan has been elaborated to manage *S. frugiperda* in Gabon.
The pest status of *Spodoptera frugiperda* in Gabon is officially declared as: **Present: in all parts of the area.**

Source: IPPC website. Official Pest Reports – Gabon (GAB-03/2 of 2019-08-28) Signalement de la chenille légionnaire d'automne (CLA) au Gabon. https://www.ippc.int/en/countries/gabon/pestreports/2019/08/signalement-de-la-chenille-legionnaire-dautomne-cla-au-gabon/

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

Additional key words: new record **Computer codes:** LAPHFR, GA

2019/180 First report of *Spodoptera frugiperda* in Nepal

Following the detection of *Spodoptera frugiperda* (Lepidoptera: Noctuidae – EPPO A1 List) in India, the NPPO of Nepal initiated specific surveys on its territory. In January 2019, the first suspicious insect specimens were collected but at that time, they were identified as *Spodoptera litura*. More samples were collected in maize (*Zea mays*) fields in the districts of Chitwan, Kavrepalanchowk, Nawalpur and Sindhupalchowk, and in August 2019, the identity of *S. frugiperda* was confirmed by morphological and molecular methods.
The pest status of *Spodoptera frugiperda* in Nepal is officially declared as: **Present: only in some areas.**

Source: IPPC website. Official Pest Reports – Nepal (NPL-04/3 of 2019-08-13) *Spodoptera frugiperda* (Fall Armyworm). https://www.ippc.int/en/countries/nepal/pestreports/2019/08/spodoptera-frugiperda-fall-armyworm/

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

Additional key words: new record **Computer codes:** LAPHFR, NP

2019/181 *Tetranychus mexicanus*: addition to the EPPO Alert List

Why: In October 2018, *Tetranychus mexicanus* (Acari: Tetranychidae) was found for the first time in the Netherlands in a greenhouse on pot plants of *Beaucarnea recurvata* (RS 2018/223). Considering that this spider mite is polyphagous and could be a risk for glasshouse crops in the EPPO region as well as outdoor crops in the Southern EPPO region, the Panel on Phytosanitary Measures suggested that *T. mexicanus* should be added to the EPPO Alert List.

Where: *T. mexicanus* has a neotropical distribution. It is reported from the Americas. A record in China in 1994 has not been confirmed.
EPPO Region: Netherlands (transient, under eradication).
North America: USA (Florida, Texas), Mexico.
Central America and the Caribbean: Costa Rica, Cuba, El Salvador, Guadeloupe, Honduras, Martinique, Nicaragua.
South America: Argentina, Brazil (Acre, Bahia, Ceara, Mato Grosso, Minas Gerais, Pernambuco, Rio Grande do Sul, Sao Paulo, Sergipe), Colombia, Paraguay, Peru, Uruguay, Venezuela.

On which plants: About 100 species, belonging to 44 plant families, have been recorded as hosts (Migeon & Dorkeld 2018). The finding on *Beaucarnea recurvata* in the Netherlands adds a new plant family (Asparagaceae). The host range includes important crops in the EPPO region such as *Citrus* spp., *Malus domestica, Vitis vinifera,* as well as many plants used as ornamentals.

Damage: Damage is similar to other spider mites. Feeding punctures lead to whitening or yellowing of leaves, followed by desiccation, and eventually defoliation. Mites and their webbing can be seen on the underside of the leaf. Females are carmine in colour and bigger than males. The life cycle at 27°C is about 10-12 days. In its current area of distribution, *T. mexicanus* has been recorded as causing economic damage on soursop *(Annona muricata),* passion fruit *(Passiflora edulis),* cocoa *(Theobroma cacao)*. In southern Brazil, the following symptoms were observed on Citrus: chlorotic spots on the leaves, shoots' death, as well as leaf and fruit fall. Bleaching of leaves of ornamental plants may affect their commercial value.

Dissemination: Over short distances, *Tetranychus* mites are mainly transported with their webs by wind. Trade of host plants can ensure long distance dissemination.

Pathways: plants for planting, cut foliage? fruits with green parts?

Possible risks: Although *T. mexicanus* mainly has a neotropical distribution, it could potentially establish in the Southern part of the EPPO region, as well as become a glasshouse pest in the entire EPPO region. Establishment in the EPPO region may affect export to certain regions in the world as it is a quarantine pest in several countries (e.g. Taiwan and Japan).

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INTERNET
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EPPO RS 2019/181

Panel review date – Entry date 2019-09

Additional key words: Alert List **Computer codes:** TETRME

2019/182 First report of *Scirtothrips dorsalis* in the Netherlands

The NPPO of the Netherlands recently informed the EPPO Secretariat of the detection of *Scirtothrips dorsalis* (Thysanoptera: Thripidae – EPPO A2 List) on its territory. In August 2019, during a post-import inspection, 92 plants for planting of *Podocarpus* were found to be infested by the thrips in a nursery in protected conditions. By beating plants, 11 females, 5 males and 6 second stage larvae were collected but no damage were observed on the plants. The plants had been imported from China in March 2019. Eradication measures are being applied.
The pest status of *Scirtothrips dorsalis* in the Netherlands is officially declared as: **Present, under eradication.**

Source: NPPO of the Netherlands (2019-08).

INTERNET
NVWA (2019) Pest report August 2019 - Finding of *Scirtothirps dorsalis* on ornamental plants for planting of *Podocarpus* (closed conditions, professional grower). https://english.nvwa.nl/binaries/nvwa-en/documents/plant/plant-health/pest-reporting/documents/august-2019---finding-of-scirtothirps-dorsalis-on-ornamental-plants-for-planting-of-podocarpus/20190829_pest_report_scirtothrips_dorsalis_podocarpus.pdf

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

2019/183 *Scirtothrips dorsalis* in Spain

Scirtothrips dorsalis (Thysanoptera: Thripidae – EPPO A2 List) was found in Spain on citrus in 2017 in Comunidad Valenciana (EPPO RS 2017/129). The NPPO of Spain recently informed the EPPO Secretariat of the detection of *S. dorsalis* in Andalucía. In June 2019, the pest was identified a plantation of mango trees (*Mangifera indica*) in a greenhouse in the municipality of Motril (province of Granada). Trace-back studies showed that the plant material originated from a nursery in the same municipality which grows mango and citrus plants. *S. dorsalis* was identified on Citrus plants. Further trace-back studies showed that the plants from the nursery came from two other nurseries in the provinces of Málaga and Sevilla but the pest was not found there. Eradication measures are being applied.

The pest status of *Scirtothrips dorsalis* in Spain is officially declared as: **Present, under eradication, only in some parts of the Member State concerned.**

Source: NPPO of Spain (2019-08).

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

2019/184 Update on the distribution of *Gymnandrosoma aurantianum*

While preparing the Pest Risk Analysis on *Gymnandrosoma aurantianum* (Lepidoptera: Tortricidae, EPPO Alert List), the EPPO Secretariat found additional records for the presence of this insect in Central and South America.

- Specimens of this species have been recorded from Bolivia, El Salvador, French Guiana, Guatemala, Honduras, Mexico, Panama, Suriname, Uruguay.
- In Brazil, it is reported in 16 federative units (out of 27): Alagoas, Amazonas, Bahia, Distrito Federal, Espírito Santo, Golás, Maranhao, Mato Grosso, Minas Gerais, Pará, Paraná, Rio de Janeiro, Rondônia, Santa Catarina, São Paulo, Rio Grande do Sul.

The pest distribution has been updated in Global Database: https://gd.eppo.int/taxon/ECDYAU/distribution

Source:

Adamski D, Brown JW (2001) Systematic revision of the Ecdytolopha group of genera (Lepidoptera: Tortricidae: Grapholitini) in the New World. *Entomologica Scandinavica Supplement* **58**, 86 pp.

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Additional key words: detailed record, new record **Computer codes:** ECDYAU, BR, MX, BO, GF, GT, HN, PA, SR, UY, SV

2019/185 An inventory of alien Chrysomelidae in European Russia

An inventory of alien Chrysomelidae which appeared in European Russia during the 20th and 21st century has recently been published. The following 9 alien species were recorded:

- Two species native to the Mediterranean region: *Chrysolina americana* (pest of *Rosmarinus* and *Lavandula*), and *Leptomona erythrocephala* (feeding on *Lotus corniculatus*).

- Two species native to Asia: *Luperomorpha xanthodera* (polyphagous pest of ornamentals) and *Medythia nigrobilineata* (pest of soybean).
- Four species native to the Americas: *Diabrotica virgifera* (intercepted in 2011 at the border of Russia but not established), *Epitrix hirtipennis* (pest of tobacco), *Leptinotarsa decemlineata* (pest of potato), *Zygogramma suturalis* (introduced for the biocontrol of *Ambrosia artemisiifolia*).
- One species native to Afghanistan and Tajikistan: *Phyllotreta reitteri* (feeding on *Lepidium latifolium*).

For the following pests, the EPPO Secretariat has extracted below details about their situation in European Russia.

Chrysolina americana: in 2013, 13 specimens were found in Crimea on *Rosmarinus officinalis*. Until recently, the pest was thought to occur only in this area but another paper (Kravetz and Sergienko, 2018) reports the finding of 4 specimens in Sochi (Krasnodar region) on *R. officinalis*. However, it is considered that the establishment of this species in European Russia needs to be confirmed.

Diabrotica virgifera (EPPO A2 List): this pest was caught in 2011 in a pheromone trap in the Rostov region (Southern European Russia), near an international highway. As no further findings were made, it is considered that the pest did not establish in Russia.

Epitrix hirtipennis: this pest was first recorded in 2011 in a tobacco (*Nicotiana tabacum*) plantation in Krasnodar city (Southern European Russia). In 2013, 2016 and 2018, the pest was found on the Black Sea coast (5 specimens in Tuapse and Sochi). It is supposed that the pest was introduced as larvae occurring in the soil attached to imported plants for planting.

Leptinotarsa decemlineata (EPPO A2 List): in 1958, the Colorado beetle reached the Western border of USSR. The pest is currently common across European Russia, even in the North (Leningrad region and Republic of Komi). Its range has expanded to most parts of Siberia and its Northern front passes through Karelia, Arkhangelsk region, Republic of Komi, Tumen region, Tomsk region and Krasnoyarsk territory. Since 2000, the pest also occurs in an isolated part of the Far East (Primorksy territory).

Luperomorpha xanthodera: this pest was first recorded in European Russia during the period 2016-2018, in Sochi (Krasnodar, Southern European Russia). As numerous specimens were observed from 2016 to 2018 in different localities, *L. xanthodera* is considered to be established in this area. Beetles were commonly observed on rose flowers and on ruderal vegetation from May to June. It is supposed that *L. xanthodera* was unintentionally introduced as larvae on roots of imported seedlings or as adults transported as cargo stowaways in airplanes. It is noted that Sochi is close to an international airport, and that a massive amount of planting material was imported during the landscaping of the city while preparing for the Olympic games in 2014.

Medythia nigrobilineata: in 2016, this pest was found for the first time in the Southern part of European Russia. A single female specimen was collected with a sweep net on wasteland with grasses in Sochi (Imereti resort). *M. nigrobilineata* is native to Northern China, Japan, Nepal, Pakistan, South Korea, Eastern Siberia and the Russian Far East. Adult beetles feed on soybean (*Glycine max*) leaves and can damage immature pods. They can also feed on rice (*Oryza* spp.) and sugarcane (*Saccharum officinalis*) leaves. Larvae feed on soybean roots. As the specimen was caught near the international airport of Sochi, it is suspected that it was unintentionally introduced from Asia via the airport. It is not known if *M. nigrobilineata* has

established but it is considered that it could represent a serious threat to the Kranosdar region which is a soybean-production area.

Source: Bieńkowski AO, Orlova-Bienkowskaja MJ (2018) Alien leaf beetles (Coleoptera, Chrysomelidae) of European Russia and some general tendencies of leaf beetle invasions. *PLoS ONE* **13**(9), e0203561. https://doi.org/10.1371/journal.pone.0203561

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Pictures: *Chrysolina americana*. https://gd.eppo.int/taxon/CRYSAM/photos
Diabrotica virgifera virgifera. https://gd.eppo.int/taxon/DIABVI/photos
Epitrix hirtipennis. https://gd.eppo.int/taxon/EPIXPA/photos
Leptinotarsa decemlineata. https://gd.eppo.int/taxon/LPTNDE/photos

Additional key words: new record, detailed record **Computer codes:** CRYSAM, DIABVI, EPIXPA, LPTNDE, LUPMXA, MEDYNI, RU

2019/186 Survey on *Globodera pallida* and *G. rostochiensis* in Algeria

In Algeria, potato cyst nematodes (*Globodera pallida* and *G. rostochiensis*, both EPPO A2 List) are known to be present in the regions of Algiers and Aïn Defla (EPPO RS 2017/100). Soil samples from potato (*Solanum tuberosum*) fields taken between 2013 and 2016 showed that potato cyst nematodes also occur in the southern regions. *Globodera pallida* occurred predominantly in the northern region (Algiers, Blida, Tipaza and Boumerdès), whereas *G. rostochiensis* occurred predominantly in the southern regions (El Oued and Bechar). No mixed populations were observed during this study.

Source: Mezerket A, Hammache M, Cantalapiedra-Navarrete C, Castillo P, Palomares-Rius JE (2018) Prevalence, identification, and molecular variability of potato cyst nematodes in Algeria. *Journal of Agricultural Science and Technology* **20**, 1293-1305.

Pictures: *Globodera pallida*. https://gd.eppo.int/taxon/HETDPA/photos
Globodera rostochiensis https://gd.eppo.int/taxon/HETDRO/photos

Additional key words: detailed record **Computer codes:** HETDRO, HETDPA, DZ

2019/187 *Xylella fastidiosa* detected in two olive trees in France

In France, *Xylella fastidiosa* (EPPO A2 List) was first reported in 2015 (EPPO RS 2015/144). It currently occurs in Corse, as well as in 19 municipalities of Alpes-Maritimes and Var (Provence-Alpes-Côte d'Azur region). In September 2019, the French Ministry of Agriculture reported the detection of the bacterium in 2 symptomatic olive (*Olea europaea*) trees grown for ornamental purposes in Antibes and Menton (both in Alpes-Maritime department). It is noted that the municipalities of Antibes and Menton were already located in the delimited area for *X. fastidiosa*, but that it is the first time that the bacterium is detected in olive trees in France. Since 2015, 5100 olive samples have been collected from Provence-Alpes-Côte d'Azur region and tested, but until this finding all results were negative. It is also noted that *X. fastidiosa* subsp. *pauca* was identified in the olive tree from Menton. Both infected olive trees will be destroyed, and surveillance will be intensified within a radius of 5 km of the finding sites.

Source: INTERNET
Ministère de l'Agriculture et de l'Alimentation. Alim'Agri (2019-09-06) La contamination par *Xylella fastidiosa* de 2 oliviers confirmée en PACA. https://agriculture.gouv.fr/la-contamination-par-xylella-fastidiosa-de-2-oliviers-confirmee-en-paca

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

Additional key words: detailed record **Computer codes:** XYLEFA, XYLEFP, FR

2019/188 *Ceratocystis platani* is spreading to Northern France

In France, *Ceratocystis platani* (EPPO A2 List) was first recorded in the 1940s and scattered outbreaks are reported from the South of France (EPPO RS 2008/029, 2008/184). The NPPO of France recently informed the EPPO Secretariat of two findings in the Northern part of France.

Following a report by the municipality of Nantes (Pays-de-la-Loire region) on symptomatic plane trees (*Platanus x acerifolia*), an official inspection was carried out in May and June 2019 and two samples tested positive for *C. platani*. The two plane trees were located in a market place, as part of an alignment of 18 plane trees. In accordance with the Ministerial Decree of 22 December 2015 as regards of measures to prevent the spread and introduction of *C. platani*, a demarcated area has been established. It includes an infected zone of a width of 35 metres and a buffer zone that encompasses the entire municipality of Nantes. All 18 plane trees in the market place have been uprooted.

In the municipality of Antony (Ile-de-France region), 8 plane trees tested positive for *C. platani* in August 2019. These trees were planted along a road. A demarcated area has been established. It includes an infected zone of a width of 35 metres and a buffer zone that encompasses the entire municipality of Antony. The 128 plane trees in the infected zone will be uprooted.

In both cases, plantation of plane trees in the infected zones is forbidden. Official annual surveillance on plane trees in the buffer zones will be carried out.

Source: NPPO of France (2019-07, 2019-08).

INTERNET
Le chancre coloré, champignon tueur de platanes, a été détecté à Antony https://www.ville-antony.fr/actualites/chancre-colore

Pictures: *Ceratocystis platani*. https://gd.eppo.int/taxon/CERAFP/photos

Additional key words: detailed record **Computer codes:** CERAFP, FR

2019/189 Detection of *Geosmithia morbida* in several insect species

Thousand cankers disease (EPPO A2 List) of *Juglans* spp. is caused by the fungus *Geosmithia morbida* and its known insect vector is *Pityophthorus juglandis* (Coleoptera: Curculionidae: Scolytinae - walnut twig beetle). The disease was initially described in the USA in 2009 and reported for the first time in the EPPO region, in Italy, in 2013 (EPPO RS 2014/001). In the USA, several surveys have been carried out since 2010 to monitor the distribution of *G. morbida, P. juglandis* and to study the possible presence of *G. morbida* in other insect species. During recent studies, *G. morbida* was isolated from *Xylosandrus crassiusculus* and *Xyleborinus saxesenii* collected in Ohio, as well as from *Stenomimus pallidus* collected in Indiana. Initially, it was thought that thousand cankers disease was caused by the unique association of *G. morbida* and *P. juglandis*. However, the above detections of *G. morbida* in other insect species led to the hypothesis that the association *G. morbida*/*P. juglandis* was not unique and that *G. morbida* was more widespread in the USA than initially thought.
From 2015 to 2017, another study was carried out in Illinois, Indiana, Minnesota and North Carolina (Eastern USA) on ambrosia beetles, bark beetles and other weevils to detect the possible presence of *G. morbida*. Traps of different types were placed in the 4 above states (e.g. near sawmills, in areas where *J. nigra* trees are abundant) and the captured beetles were tested for the presence of *G. morbida*. Fungal colonies were obtained by spreading macerated insect suspensions on artificial growing media, and suspect *G. morbida* colonies were subsequently tested by several PCR methods. As a result, *G. morbida* was detected in 18 coleopteran insect species* belonging to different subfamilies (Bostrichinae, Cerambycinae, Cossoninae, Dryophthorinae, Molytinae, Scolytinae) indicating that the fungus can be carried out by a broad range of insect species. In addition, *G. morbida* was detected in several insect species collected in Illinois and Minnesota, where thousand cankers disease has not been observed. During this study, *X. crassiusculus* was the most commonly found species on *J. nigra* trees (or their vicinity). However, it is stressed that for the moment, only *P. juglandis* is known to transmit the fungus to healthy *J. nigra* trees. The potential role of these insects in disease transmission remains to be further studied.

* List of insect species in which *G. morbida* was detected: in alphabetical order and in brackets (total number of tested insects / number of *G. morbida*-positive) : *Ambrosiodmus obliquus* (5/1), *Ambrosiophilus atratus* (17/4), *Cnestus mutilatus* (23/11), *Conotrachelus retentus* (5/3), *Dryophthorus americanus* (1/1), *Himatium errans* (27/4), *Monarthrum fasciatum* (7/3), *Monarthrum mali* (33/9), *Neoclytus acuminatus* (20/4), *Pityophthorus juglandis* (3/1), *Pseudopityophthorus minutissimus* (30/18), *Stenomimus pallidus* (20/8), *Stenoscelis brevis* (1/1), *Xyleborinus saxesenii* (198/77), *Xyleborus californicus* (5/1), *Xylobiops basilaris* (32/18), *Xylosandrus crassiusculus* (735/250), *Xylosandrus germanus* (34/12).

Source: Moore M, Juzwik J, Miller F, Roberts L, Ginzel MD (2019) Detection of *Geosmithia morbida* on numerous insect species in four Eastern States. *Plant Health Progress*, 1-7. DOI: https://doi.org/10.1094/PHP-02-19-0016-RS

Pictures: *Geosmithia morbida*. https://gd.eppo.int/taxon/GEOHMO/photos
Pityophthorus juglandis. https://gd.eppo.int/taxon/PITOJU/photos

Additional key words: detailed record, epidemiology

Computer codes: GEOHMO, AMBDOB, XYLBAT, XYLSMU, CONHRE, DRPHAM, HIMTER, MNTHFA, MNTHMA, NEOYAC, PITOJU, PSDPMI, STNOPA, STEWBR, XYLBSA, XYLBCA, XYLPBA, XYLBCR, XYLBGE, US

2019/190 New *Phytophthora* species

Within the genus *Phytophthora*, new species have recently been described (see also EPPO RS 2009/007, 2009/159, 2009/197, 2015/169). Outbreaks of invasive species such as *P. alni*, *P. ramorum* and *P. kernoviae* in forests and woodlands of Europe and North America have triggered surveys in different types of environments. In addition, the development of new molecular tools together with the use of adequate isolation techniques and observation of morphological characteristics has facilitated the identification of new *Phytophthora* species. The list below has been compiled by the EPPO Secretariat from recent publications but is not an exhaustive list.

Phytophthora acaciae

In Brazil, *Phytophthora acaciae* sp. nov. was found to be associated with gummosis in plantations of *Acacia mearnsii*. The disease has been observed in the subtropical humid areas of Southern Brazil (Rio Grande do Sul). A pathogenicity trial confirmed that this new *Phytophthora* species causes necrotic lesions on the plant stem, with either the presence or absence of gum. It is noted that other *Phytophthora* species (*P. boehmeriae, P. frigida, P. nicotianae*) have also been associated with gummosis of *A. mearnsii* in Brazil (Alves *et al.*, 2019).

Phytophthora betacei

In Colombia, *Phytophthora betacei* sp. nov. was found to be associated with *Solanum betaceum* (tree tomato) crops showing leaf symptoms resembling those of potato late blight. No symptoms were observed on fruit, and rarely on stems. In inoculation experiments, the host range of *P. betacei* appeared to be restricted to *S. betaceum*. In the field, affected plants can be completely defoliated within one week, and the disease can lead to total loss of *S. betacerum* crops (Mideros *et al.*, 2018).

Phytophthora cacuminis and *Phytophthora oreophila*

During studies conducted in alpine and sub-alpine regions of Tasmania (Australia) to elucidate the cause of dying vegetation and progressive thinning of the plant canopy, several *Phytophthora* species were isolated including two new species. *Phytophthora cacuminis* sp. nov. was recovered from asymptomatic vegetation (*Eucalyptus coccifera* and Proteaceae species) and *Phytophthora oreophila* sp. nov. was isolated by baiting rhizosphere soil and associated roots collected from a disturbed alpine herbfield (Khaliq *et al.*, 2019).

Phytophthora oleae

In Italy, *Phytophthora oleae* sp. nov. was found to be consistently associated with a rot of mature fruit of two local cultivars of olive (*Olea europaea* cvs. Carolea and Ottobratica) in Calabria. Affected olives showed symptoms of soft rot with a faint white mycelial efflorescence, mainly in the lower part of the tree canopy. Inoculation trials on fruits of three olive cultivars (cvs. Carolea, Ottobratica and Leccino) confirmed the pathogenicity of *P. oleae* (Ruano-Rosa *et al.*, 2018).

Phytophthora urerae

In the central Peruvian Andes, *Phytophthora urerae* sp. nov. was isolated from symptomatic foliage of *Urera laciniata* (Urticaceae), a wild plant growing in hedgerows along roadsides or riverbanks (Grünwald *et al.*, 2019).

Source:

Alves TCA, Tessmann DJ, Ivors KL, Ristaino JB, Santos AF (2019) *Phytophthora acaciae* sp. nov., a new species causing gummosis of black wattle in Brazil. *Mycologia* **111**(3), 445-455. DOI: 10.1080/00275514.2019.1575685 (via PestLens).

Grünwald NJ, Forbes GA, Perez-Barrera W, Stewart JE, Fieland VJ, Larsen MM (2019) *Phytophthora urerae* sp. nov., a new clade 1c relative of the Irish famine pathogen *Phytophthora infestans* from South America. *Plant Pathology* **68**(3), 557-565. DOI: https://doi.org/10.1111/ppa.12968

Khaliq I, St. J. Hardy GE, McDougall KL, Burgess TI (2019) *Phytophthora* species isolated from alpine and sub-alpine regions of Australia, including the description of two new species; *Phytophthora cacuminis* sp. nov and *Phytophthora oreophila* sp. nov. *Fungal Biology* **123**(1), 29-41.

Mideros MF, Turissini DA, Guayazán N, Ibarra-Avila H, Danies G, Cárdenas M, Myers K, Tabima J, Goss EM, Bernal A, Lagos LE, Grajales A, Gonzalez LN, Cooke DEL, Fry WE, Grünwald N, Matute DR, Restrepo S (2018) *Phytophthora betacei*, a new species within *Phytophthora* clade 1c causing late blight on *Solanum betaceum* in Colombia. *Persoonia* **41**, 39-55.

Ruano-Rosa D, Schena L, Agosteo GE, Magnano di San Lio G, Cacciola SO (2018) *Phytophthora oleae* sp. nov. causing fruit rot of olive in southern Italy. *Plant Pathology* **67**(6), 1362-1373.

Additional key words: new pest

Computer codes: PHYTAK, PHYTBE, PHYTKK, PHYTOL, PHYTOR, PHYTUR

2019/191 *Tomato brown rugose fruit virus* eradicated from Piemonte (Italy)

In Italy, *Tomato brown rugose fruit virus* (*Tobamovirus*, ToBRFV - EPPO Alert List) was first observed in 2019 in Sicily (EPPO RS 2019/013 and 2019/144) and in May 2019 in Piemonte (EPPO RS 2019/124) in a greenhouse producing tomato (*Solanum lycopersicum*) fruit. Eradication measures were immediately applied (destruction by incineration of all (39 613) plants in the greenhouse and disinfection of facilities). Official surveys were carried out in the area surrounding the affected greenhouse and no further outbreak was found. This outbreak is therefore considered eradicated.

Source: NPPO of Italy (2019-09).

Pictures: *Tomato brown rugose fruit virus*. https://gd.eppo.int/taxon/TOBRFV/photos

Additional key words: detailed record, eradication

Computer codes: TOBRFV, IT

2019/192 Update of the situation of *Tomato brown rugose fruit virus* in Mexico

In Mexico, *Tomato brown rugose fruit virus* (*Tobamovirus*, ToBRFV - EPPO Alert List) was first observed in 2018 in Michoacán (EPPO RS 2019/014). Further surveys were carried out to assess the presence of the virus in Mexico. As of February 2019, 117 outbreaks were found in 20 States (Aguascalientes, Baja California, Baja California Sur, Chiapas, Chihuahua, Coahuila, Colima, Durango, Guanajuato, Hidalgo, Jalisco, Michoacán, Morelos, Puebla, San Luis Potosi, Sinaloa, Sonora, Tamaulipas, Yucatán, Zacatecas). ToBRFV is causing damage on tomato (*Solanum lycopersicum*) and *Capsicum* sp. crops.
A positive sample for ToBRFV was also detected in aubergine (*Solanum melongena*) in the municipality of Elota (State of Sinaloa) in December 2018. This is the first reported case on *S. melongena*. It may be noted that in another study, inoculation trials did not result in virus transmission to *S. melongena* (cv. Classic, cv. 206 - Luria *et al.*, 2017).
Phytosanitary measures are applied to mitigate the entry and spread of ToBRFV on the Mexican territory. They include phytosanitary requirements for the importation of seeds, seedlings, plants and cuttings of tomato, capsicum and aubergine as well as national regulation for the production of propagative material of tomato, capsicum and aubergine.

Source: SENASICA (2019-08).

Luria N, Smith E, Reingold V, Bekelman I, Lapidot M, Levin I, Elad N, Tam Y, Sela N, Abu-ras A, Ezra N, Haberman A, Yitzhak L, Lachman O & Dombrovsky A (2017) A new Israeli Tobamovirus isolate infects tomato plants harboring Tm-2 2 resistance genes. *PLoS ONE*, 1–19. DOI: https://doi.org/10.1371/journal.pone.0170429
INTERNET
SADER & SENASICA (2019) presentations made at the Seminario sobre Virus del género Tobamovirus con énfasis en el Tomato brown rugose fruit virus (ToBRFV): Medidas fitosanitarias para el manejo del virus rugoso del tomate. Retrieved from http://www.cesaveson.com/files/docs/eventos/Seminario Tomato/MedidasFitosanitarias.pdf
Tomato brown rugose fruit virus (ToBRFV): caso Mexico. Retrieved from http://www.cesaveson.com/files/docs/eventos/Seminario Tomato/AntecedentesTomato.pdf

Pictures: *Tomato brown rugose fruit virus*. https://gd.eppo.int/taxon/TOBRFV/photos

Additional key words: detailed record, new host plant **Computer codes:** TOBRFV, MX

2019/193 First report of *Nassella neesiana* in Croatia

Nassella neesiana (Poaceae: EPPO Observation List), commonly known as Chilean needle grass, is a perennial grass species which was introduced into the EPPO region for ornamental purposes. The species is native to South America and has been introduced into France (including Corse), Italy and Spain. The species is established in Australia, New Zealand and South Africa where in the case of the former it is a regulated plant in a number of states. In Australia, the species can cause significant damage to natural environments and pasture land. In Croatia, *N. neesiana* was first identified during a floral survey in 2018 on the island of Veli Brijun in Istria (North Western Croatia). Veli Brijun is the largest island in the Brijuni island archipelago and it is also part Briguni National Park. Ten individuals were found in one locality in ruderal vegetation within an Aleppo pine forest along the coast line in association with other vegetation such as *Rostraria cristata*, *Lolium perenne*, *Trifolium campestre* and other species. There is no clear evidence as to how the species was introduced on this island though one possibility may be as a garden ornamental species. Additionally, the caryopsis can be spread by wind or water or dispersed on used machinery or as a contaminant of seed or fodder. The authors suggest that further surveys are conducted to assess the extent of *N. neesiana* in Croatia and that a plan is adopted for the eradication of the species.

Source: Kabaš E, Ljubičič I, Bogdanovic S (2019) First record of *Nassella neesiana* (Trin. & Rupr.) Barkworth (Poaceae) in Croatia. *BioInvasions Records* **8**, (in press)

Additional key words: new record **Computer codes:** STDNE, HR

2019/194 First report of *Hygrophila corymbosa* in Mexico

Hygrophila corymbosa (Acanthaceae) is native to Asia and has been introduced into Taiwan, the United States of America, where in the case of the latter it is recorded as a potential invasive species due to its rapid growth. The species has been recorded in thermal waters in Hungary (EPPO RS 2012/045). The species was identified for the first time in 2017 in the Mexican aquatic flora within the municipality of El Mante in the state of Tamaulipas in North East Mexico. As *H. corymbosa* is a popular ornamental species in tropical aquariums, it is possible that trade for aquaria has been a pathway of introduction into Mexico. Until now, *H. corymbosa* has only been registered in the urban area of the municipality of El Mante, although there is a risk of spread towards more northern sites as the invaded irrigation channels flow into the Guayalejo river. This would make it possible in the future for this weed to invade the extensive wetlands of the Guayalejo-Tamesí river basin where the states of Tamaulipas, Veracruz and San Luis Potosí converge; an important area because of its high richness of aquatic flora. The distribution of *H. corymbosa* in Mexico should be further assessed with the view of eradicating the species.

Source: Mora-Olivo A, Alvarez-Vazquez LA, Requena-Lara GN, Arellano-Méndez LU, Garza-Torres HA (2018) New record of *Hygrophila corymbosa* (Blume) Lindau (Acanthaceae) for Mexico, a highly invasive aquatic weed. *BioInvasions Records* **7**, 375-379.

Additional key words: new record **Computer codes: HYGCR, MX**

2019/195 EPPO-Q-bank Invasive alien plants

The EPPO-Q-bank invasive plants database includes curated molecular sequence data on vascular plants (excluding algae and mosses) with a special focus on aquatic (non-marine) plants. As part of an ongoing project to provide identification tools for invasive alien plant species listed as species of Union concern (EU Regulation 1143/2014), further sequence data were added to the database in September 2019. At present sequence data are available for 12 of the 14 invasive alien plants species listed in 2016 (including data for 30 look-alike species), and 5 of the 7 species listed in 2017 (including data for 20 look-alike species). In total 263 sequences of species of Union concern are listed along with 178 sequences of look-alike species. All sequence data are supported by a herbarium voucher and details on the specimen can be consulted via the EPPO-Q-bank Invasive Plants website with additional information available on http://www.q-bankplants.eu. As there are still some issues to be resolved on correct identity of *Heracleum* species in collections from the Baltic States, sequence data for *H. persicum* and *H. sosnowskyi* (both EPPO A2 List) have not yet been included. Further sequence data for new species listed as species of Union concern will be added in 2020.

Source: EPPO-Q-bank website: https://qbank.eppo.int/

Additional key words: invasive alien plant, database **Computer codes:** HERPE, HERSO

2019/196 *Prunus serotina* in Italy

Prunus serotina (Rosaceae: EPPO List of Invasive Alien Plants) is a tree species native to North America. The species was first introduced into the EPPO region in the 17th century as an ornamental tree species for parks and gardens. Since then, the species has become a problematic species in parts of the EPPO region where it can cause negative environmental impacts. The species can have an impact on ecosystem services and is a strong competitor for water and nutrients. It can have a high economic impact in the areas it invades and can cause significant management issues: the species is both difficult and costly to control. *P. serotina* was first introduced into Italy at the beginning of the 18th century. In 1922, it was introduced for forest provenance trials in the province of Varese and from there it spread to northern parts of the country and became locally invasive. At present, in Italy, *P. serotina* is present in 7 regions and in 3 of these regions the species has negative impacts on plant communities. Under the Regulation (EU) 1143/2014 on the prevention and management of the introduction and spread of invasive alien species, EU Member States may establish national lists of invasive alien species of Member State concern. For these species, management measures can be applied nationally to mitigate their impacts. With the implementation of prevention measures and management plans for existing populations, coupled with awareness raising activities, further spread of the species could be avoided in Italy. Thus, authors recommend that the species is included in the Italian national list of priority invasive alien species and this will facilitate reducing the spread and impact of the species.

Source: Forte TGW, Brundu G, Celesti-Grapow L, Siniscalco, Barni E (2019) *Prunus serotina* in Italy: a challenging candidate for the national list of priority invasive alien species. *Plant Biosystems*, DOI: 10.1080/11263504.2019.1666173

Lazzaro L, Bolpagni R, Barni E, Brundu G, Blasi C, Siniscalco C, Celestri-Grapow L (2019) Towards alien plant prioritization in Italy: methodological issues and first results. *Plant Biosystems*, DOI: 10.1080/11263504.2019.1640310.

Pictures: *Prunus serotina*. https://gd.eppo.int/taxon/PRNSO/photos

Additional key words: invasive alien plant **Computer codes:** PRNSO, IT

2019/197 Biological control of *Egeria densa* in South Africa

Egeria densa (Hydrocharitaceae: EPPO List of Invasive Alien Plants) is a submergent aquatic plant species native to South America. It is reported as invasive in a number of EPPO countries and is a regulated Invasive Alien Plant in Estonia, Jordan and Spain. In South Africa, *E. densa* is widespread in waterways and traditional management methods including physical and mechanical control can be counter productive as these methods can facilitate dispersal through fragmentation. In addition, herbicide use in or around water is undesirable due to negative environmental impacts. The leaf mining fly *Hydrellia egeriae* (Diptera: Ephydridae), has been evaluated as a biological control agent for *E. densa* in South Africa using host specificity testing (i.e. no-choice and paired choice tests). During no-choice tests, *H. egeriae* only mined into closely related species within the Hydrocharitaceae (*Lagarosiphon major*, *L. muscoides*, *L. cordofanus*, *Hydrilla verticillata* and *Vallisneria spiralis*). Larval damage and survival were greater on the target species compared to the non-target species. During choice tests, *H. egeriae* showed a preference for the target species compared to non-target species. One non-target plant species native to South Africa, *Lagarosiphon major* (Hydrocharitaceae), supported larval development to adult during choice tests. Further tests were conducted to evaluate if *H. egeriae* could sustain a population on the native non-target species. Eggs of *H. egeriae* were transferred to shoots of *L. major* and left to feed and develop. However, no viable adults were produced in the first-generation experiment on the non-target. The experiments conclude that the feeding and reproductive risk to *L. major* is ten times lower compared to the target species *E. densa*. Based on the proven safety of *H. egeriae* as a classical biological control agent for *E. densa*, permission has been granted for the release of the biocontrol agent in South Africa.

Source: Smith R, Mangan R, Coetzee J (2019) Risk assessment to interpret the physiological host range of *Hydrellia egeriae*, a biocontrol agent for *Egeria densa*. *BioControl* **64**, 447-456.

Additional key words: invasive alien plant **Computer codes:** ELDDE, HYLLI, LGACO, LGAMU, LGAMA, VAISP, ZA

2019/198 A hybrid of alien *Impatiens* in the natural environment in the EPPO region

In 2011, atypical *Impatiens parviflora* (Balsaminaceae) plants differing in flower colour and morphology were collected in the nature reserve Bolle di Magadino, Ticino canton, Switzerland. Initially, these individuals were thought to be a hybrid of *I. parviflora* and *I. glandulifera* (EPPO List of Invasive alien Plants) as both species were observed to be growing together in the understory of the alluvial forest. However, *I. balfourii* is also present in the national park and thus a study was conducted to evaluate the parents of the hybrid. In 2012, further voucher specimens and seeds were collected at three locations in Bolle de Magadino,

Ziegelbrücke (St. Gallen canton) and in Winterthur (Zurich canton), and in 2014 specimens were collected from five locations in Ticino canton. All voucher specimens were deposited at the National Plant Protection Organization in the Netherlands (Wageningen). Gemination trials were conducted to evaluate the viability of the seeds and to evaluate if the hybrid could produce a self-sustaining population in the absence of the parent species. Molecular analysis was conducted on the hybrid and compared to other *Impatiens* species. The results showed that the individuals were a hybrid between *I. parviflora* and *I. balfourii*. In germination trials, only seed collected from Bolle di Magadino germinated, where 4 weeks of cold stratification and moist storage produced 95 % germination. F2 and F3 generation plants were grown, proving the hybrid is fertile. Sizable populations of the hybrid were observed in 2014 in the Ticino canton in the absence of the parental species. The hybrid *I. parviflora* x *I. balfourii* is an annual herb up to 60 cm tall. The stem is erect or ascending and the leaves are alternate.

Source: Van Valkenburg JLCH, Schoenenberger N, van de Vossenberg BTLH, Man in't Veld WA, Westenberg M, Boer E (2019) A natural hybrid of Impatiens, in the introduced range, demonstrated by sequence analysis of the nuclear ribosomal DNA-gene repeat. *Botany Letters* **166**, 144-152.

Pictures: *Impatiens balfourii*. https://gd.eppo.int/taxon/IPABF/photos
Impatiens glandulifera. https://gd.eppo.int/taxon/IPAGL/photos
Impatiens parviflora. https://gd.eppo.int/taxon/IPAPA/photos

Additional key words: invasive alien plants **Computer codes:** IPABF, IPABP, IPAGL, IPAPA, CH