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2021/027 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**

Two invasive eucalyptus psyllids, *Blastopsylla occidentalis* (Hemiptera: Aphalaridae) and *Glycaspis brimblecombei* (Hemiptera: Aphalaridae - formerly EPPO Alert List) are reported for the first time in Malta (Mifsud, 2020). **Present.**

In Argentina, ‘*Ca. Phytoplasma pruni*’ (EPPO A1 List) and ‘*Ca. Phytoplasma meliae*’ were detected in symptomatic plum (*Prunus domestica*) and peach (*Prunus persicae*) trees during surveys carried out in 2019-2020 in fruit production plots in Jujuy province (Northwest region). **Present.**

In Belarus, *Cydalima perspectalis* (Lepidoptera: Crambidae - formerly EPPO Alert List) was first observed in July 2019 in Brest. The pest was found on *Buxus sempervirens* in a recreation park and in the botanical garden of the Ecology Center (Sinchuk *et al.*, 2020). **Present, few occurrences.**

In China, *Elsinoë australis* (EU Annexes) was detected for the first time in 2016-2017 causing leaf anthracnose on poplar trees (*Populus tomentosa* and *P. deltoides*) in South-eastern China (Anhui and Jiangsu). This is the first report in China, and the first report on poplar. Pathogenicity tests found that isolates from two poplar species caused red spot symptoms on leaves from different poplar species and also led to scab formation on the fruit of one hybrid citrus but not on fruit of orange, lemon, or grapefruit. The authors considered that this is a new pathotype (Zhao *et al.*, 2020). **Present: only in some areas.**

In Saudi Arabia, *Phenacoccus solenopsis* (Hemiptera: Pseudococcidae) was first found in October 2019 in the city of At-Taif (south-western part of the country). The pest was observed in a garden on *Hibiscus rosa-sinensis* (Katbeh Bader and Al-Jboory, 2020).

Squash leaf curl virus (SLCV, Begomovirus - EPPO A2 List) was detected for the first time in 2016 on squash plants in Oman (Shahid *et al.*, 2020). **Present.**

In Malta, *Thaumastocoris peregrinus* (Hemiptera: Thaumastocoridae - formerly EPPO Alert List) was first found in December 2020 in several on *Eucalyptus* spp. (Mifsud and Carapezza, 2020). **Present.**

Thrips parvispinus (Thysanoptera: Thripidae - formerly EPPO Alert List) is reported for the first time from continental USA. In July 2020, *T. parvispinus* was found in Orange county, Florida on greenhouse plants of *Hoya* and *Anthurium*. Prior to this record in Florida, it was known to occur only in Hawaii (Soto-Adames, 2020). **Present: only in some areas.**

- **Detailed records**

In Indonesia, the potato cyst nematode *Globodera rostochiensis* (EPPO A2 List) was detected for the first time in Sulawesi. Its presence is also confirmed in North Sumatra, Central Java and East Java (Handayani *et al.*, 2020).

Scaphoideus titanus (Hemiptera: Cicadellidae - vector of flavescence dorée) was first found in July 2010 on the island of Madeira (Portugal). Surveys conducted from 2010 to 2017 have shown that *S. titanus* is common in the main wine-producing areas in the north of Madeira. During these surveys, flavescence dorée has not been detected on Madeira island (Aguin-Pombo *et al.*, 2020).

- **New pests and taxonomy**

A new species of root-knot nematode, named *Meloidogyne vitis* sp. nov. (Nematoda: Meloidogynidae), was described from China (Yunnan province). The nematode infested grapevine plants (*Vitis vinifera*) and infestation resulted in plant dwarfing, leaf yellowing and shedding, reduced fruit production, declining and low growth (Yang *et al.*, 2021).

Neopestalotiopsis rosae has been recently observed causing root rot, crown rot and leaf spot on strawberry (*Fragaria ananassa*) in Mexico (Rebollar-Alviter *et al.*, 2020), in Florida (USA) (Baggio *et al.*, 2021) and in Taiwan (Wu *et al.*, 2020). These are all first records of this pathogen in strawberry production. The disease is associated with transplants.

In Germany, a new *Emaravirus* tentatively called ‘common oak ringspot-associated emaravirus’ (CORaV) has been detected by high-throughput sequencing in diseased oak trees (*Quercus robur*). Affected trees showed leaf symptoms such as mottle, chlorotic spots and ringspots. CORaV was also detected in leaf samples collected from various locations in Germany, Sweden, and Norway. It is noted that further studies are needed to understand the biology and epidemiology of CORaV (Rehanek *et al.*, 2021).

A new *Emaravirus* tentatively called ‘aspen mosaic-associated virus’ (AsMaV) has been identified in aspen trees (*Populus tremula*) in Scandinavia. Affected trees showed leaf symptoms such as mottle, yellow blotching, variegation and chlorosis along the veins. AsMaV has been found in leaf samples collected from Finland, Norway and Sweden. Experiments have shown that AsMaV is graft-transmissible (von Barga *et al.*, 2020).

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

Computer codes: 1NPESG, ASMAV0, BLSPOC, CORAV0, DPHNPE, ELSIAU, GLYSBR, HETDRO, MELGVI, PHENSO, PHYPPN, SCAPLI, SLCV00, THMCPE, THRIPV, AR, BY, CN, ID, MT, PT, SA, US

2021/028 New and revised dynamic EPPO datasheets are available in the EPPO Global Database

The EPPO Secretariat is in the process of revising the EPPO datasheets on pests recommended for regulation and creating new datasheets. This project is also supported by an EU grant agreement. This revision provides the opportunity to create dynamic datasheets in the EPPO Global Database in which the sections on pest identity, host range and geographical distribution are automatically generated by the database. It is planned that these dynamic datasheets will progressively replace the PDF documents that are currently stored in the database. Since the previous report (EPPO RS 2021/005), the following new and revised EPPO datasheets have been published in the EPPO Global Database:

- *Conotrachelus nenuphar*. <https://gd.eppo.int/taxon/CONHNE/datasheet>
- *Dryocosmus kuriphilus*. <https://gd.eppo.int/taxon/DRYCKU/datasheet>
- *Fusarium circinatum*. <https://gd.eppo.int/taxon/GIBBCI/datasheet>
- *Listronotus bonariensis*. <https://gd.eppo.int/taxon/HYROBO/datasheet>
- *Megaplatypus mutatus*: <https://gd.eppo.int/taxon/PLTPMU/datasheet>
- *Tecia solanivora*. <https://gd.eppo.int/taxon/TECASO/datasheet>

Source: EPPO Secretariat (2021-02).

Additional key words: publication

Computer codes: CONHNE, DRYCKU, GIBBCI, HYROBO, PLTPMU, TECASO

2021/029 Improvements on lists of host plants in EPPO Global Database

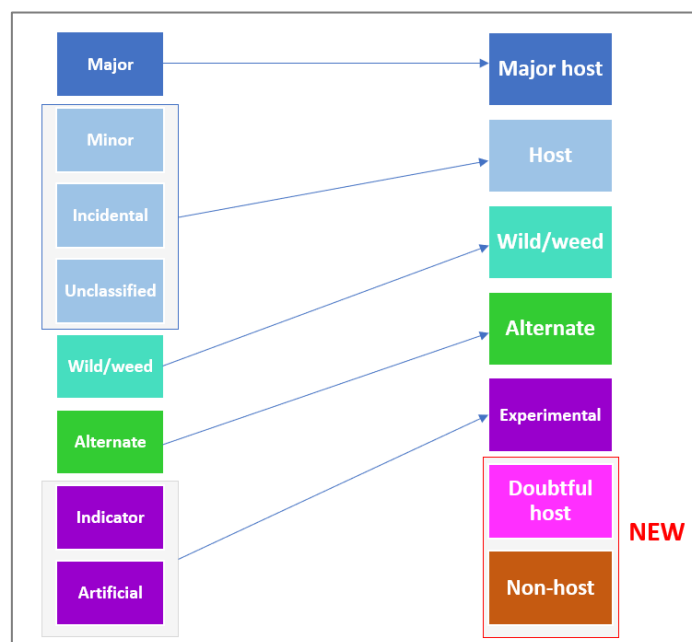
The EPPO Global Database (GD) is a freely accessible web-based database which is maintained by the EPPO Secretariat. The main objective of the database is to provide National Plant Protection Organizations of EPPO member countries with a rapid and easy access to all pest-specific information that has been produced or collected by EPPO. Major improvements to lists of host plants were initiated in 2019 with the preparation of more exhaustive host lists and addition of bibliographic sources to individual host plant records, and continued in 2020 with the simplification of host plant categories.

- Bibliographic sources

Since September 2019, references to scientific papers or other sources are given for host plant records, with the possibility to add notes to these references, such as ‘Confirmed host’, ‘Preferred host’ or any other useful comment (see for example <https://gd.eppo.int/taxon/MELGMY/hosts>). Concerning the past contents of GD, gaps are being filled gradually, and the EPPO Secretariat is making use of synergies between the datasheet revision project and the addition of new host plant data. About a third of the 15 000 records have been documented so far.

- Host categories:

Biological associations between a pest and a plant are complex, and there is no simple definition of what a host plant is. However fixed categories are necessary to be able to structure the information and retrieve it in a consistent way in the database. Since the early versions of the database (PQR in the 1980s), pest/host plant associations have been described by using eight categories. However, discussions in different EPPO Panels showed that some categories were not always understood. Since December 2020, categories have been simplified as follows:



- **Major host** (to replace 'Major'): a host plant which is important for the pest, or on that plant the pest is considered to be important. This category is assigned by the EPPO Secretariat, resulting from a qualitative judgement, and using available information (e.g. the plant is frequently considered in the literature as an important host, significant damage is observed). The fact that the host status has been demonstrated (full cycle, Koch's postulate completed) or that the plant is a preferred host (choice studies) will be indicated together with the bibliographic references whenever data is available.
- **Host** (to replace Minor - Incidental - Unclassified, as these categories were difficult to understand or to manage over time): the plant is listed as a host in the literature. The fact that it is a confirmed host, or a preferred host will be indicated together with the bibliographic references whenever data is available. Similarly, if the plant is only used by certain pest stages (adult/larval feeding) or has been shown to be a poor host (e.g. as used in nematology) this could also be indicated if known.
- **Alternate** (no change): for organisms which need distinct hosts to complete their life cycle (e.g. some aphids, some rusts).
- **Wild/weed** (no change): self-explanatory.
- **Experimental** (to replace Artificial and Indicator): only in inoculation studies or under laboratory conditions, no records of infestation in the field or the environment.
- **Doubtful host** (new): the information provided is weak or subject to controversy.
- **Non-host** (new): the plant has clearly been shown NOT to be a host. The main objective of this category is to be able to correct past errors, close controversy (similarly to the category 'Absent, invalid record' for geographical records in GD), or to be able to clearly state that a plant is not a host (sometimes important for trade).

Important note about the classification of host plants in GD: Categories are assigned by the EPPO Secretariat on the basis of available data at the time of entry. They correspond to a qualitative evaluation of the importance of the host plant for the pest concerned and remain indicative only.

Source: EPPO (2021) EPPO Global Database (available online). <https://gd.eppo.int>
 How to use the EPPO Global Database? General contents and search tips (2020)
 EPPO, Paris, 20 pp. Available at https://gd.eppo.int/media/files/general_user-guide.pdf
 EPPO Secretariat (2021-02).

Additional key words: database, host plants

2021/030 Recommendations from Euphresco projects

The following research project has recently been carried out in the framework of Euphresco (network for phytosanitary research coordination and funding - hosted by EPPO). A report presenting the main objectives and results of this project, as well as recommendations made can be viewed on the Internet.

The application of Next-Generation Sequencing technology for the detection and diagnosis of non-culturable organisms: viruses and viroids (NGSdetect)

High-throughput sequencing (HTS) technologies are increasingly being used in a regulatory context. The project aimed to optimise the application of HTS in diagnostics, and focussed

on sample preparation, library preparation, the comparison of different sequencing platforms and bioinformatic analysis. The project brought together many partners with different types of experience, from partners with little or no experience with HTS to experts. HTS is a powerful technology that enables the simultaneous detection of plant viruses and viroids without *a priori* knowledge of what may be present. In comparison to other technologies, HTS is still relatively expensive and it should be reserved for critical samples. The outcome of HTS analyses depends on good sample preparation. Various methods exist to enrich viral sequences and, depending on the scope of the analyses, different enrichment methods may be chosen. However, as the sample preparation is crucial for good sequencing results, the best method needs to be empirically validated in each laboratory and adjusted to the particular matrix under analysis. The use of *Phaseolus vulgaris* endovirus -1 (PvEV-1) is an excellent control for the extraction phase, and can allow users to verify whether a sufficient sequencing depth has been achieved, thus avoiding false negative results. Another major obstacle in implementing HTS lays in the bioinformatics analyses of HTS data. There is currently no solution that will fit all purposes and therefore, significant bioinformatics expertise is required to correctly interpret HTS data. One potential solution was the use of Virtool that was developed at the Canadian Food Inspection Agency.

Duration of the project: 2016-07-02 to 2019-01-31.

Authors: Ziebell, Heiko; De Jonghe, Kris; Rott, Mike; Nicolaisen, Mogens; Gentit, Pascal; Renvoise, Jean-Philippe; Candresse, Thierry; Fox, Adrian; Varveri, Christina; Melika, George; Krizbai, Laszlo; Angelini, Elisa; Ferretti, Luca; Westenberg, Marcel; Roenhorst, Annelien; Shneyder, Yury; Kornev, Konstantin; Olmos, Antonio; Kreuze, Jan; Ravnkar, Maja; Mehle, Natasa; Maree, Hans J.

Link: <https://zenodo.org/record/4467914#.YBK5eOhKiUL>

Source: Euphresco (2021-02). <https://www.euphresco.net/projects/>

Additional key words: research, diagnostics

2021/031 EPPO report on notifications of non-compliance

The EPPO Secretariat has gathered below the notifications of non-compliance for 2020 received since the previous report (EPPO RS 2020/068). Notifications have been sent via TRACES for the EU countries and Switzerland, and directly by Bosnia and Herzegovina. 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	Exporting country	Reporting country	nb
<i>Acanthoscelides obtectus</i>, Cleridae	<i>Cyperus esculentus</i> , <i>Dioscorea</i> , <i>Manihot esculenta</i> , <i>Phaseolus vulgaris</i>	Vegetables	Cameroon	Ireland	1
<i>Aonidiella citrina</i>	<i>Citrus tangerina</i>	Fruit	Tunisia	Italy	1

Pest	Consignment	Type of commodity	Exporting country	Reporting country	nb
Bemisia	<i>Ocimum basilicum</i>	Vegetables (leaves)	Israel	Netherlands	1
Bemisia tabaci	<i>Alternanthera, Echinodorus, Gymnocoronis, Hemigraphis, Hygrophila, Lobelia cardinalis, Nomaphila, Rotala</i>	Cuttings	Côte d'Ivoire	France	1
	<i>Amaranthus</i>	Vegetables (leaves)	Sri Lanka	France	1
	<i>Anubias</i>	Plants for planting (aquatic)	Sri Lanka	Belgium	1
	<i>Apium graveolens, Ocimum basilicum</i>	Vegetables (leaves)	Laos	Germany	1
	<i>Artemisia dracunculus</i>	Vegetables (leaves)	Israel	Netherlands	1
	<i>Asclepias</i>	Cut flowers	Israel	Belgium	1
	<i>Capsicum annuum</i>	Vegetables	Turkey	United Kingdom	1
	<i>Capsicum frutescens</i>	Vegetables	South Africa	Netherlands	2
	<i>Cestrum latifolium</i>	Vegetables (leaves)	Suriname	Netherlands	4
	<i>Chlorophytum</i>	Plants	Uganda	Netherlands	1
	<i>Colocasia</i>	Vegetables	Kenya	Belgium	1
	<i>Colocasia</i>	Plants for planting	USA	United Kingdom	1
	<i>Corchorus</i>	Vegetables (leaves)	Egypt	Germany	1
	<i>Corchorus</i>	Vegetables (leaves)	Sierra Leone	Belgium	1
	<i>Corchorus olitorius</i>	Vegetables (leaves)	United Kingdom	United Kingdom	1
	<i>Corchorus olitorius</i>	Vegetables (leaves)	Egypt	United Kingdom	3
	Deciduous trees	Plants	Israel	Netherlands	1
	<i>Echinodorus</i>	Cuttings	Singapore	Denmark	1
	<i>Echinodorus</i>	Plants for planting (aquatic)	Sri Lanka	Belgium	1
	<i>Echinodorus</i>	Cuttings	Sri Lanka	Germany	1
	<i>Eryngium</i>	Vegetables (leaves)	Thailand	Netherlands	1
	<i>Eryngium foetidum</i>	Vegetables (leaves)	Malaysia	Netherlands	1
	<i>Eryngium foetidum</i>	Vegetables (leaves)	Thailand	Germany	1
	<i>Fragaria</i>	Fruit	Egypt	Netherlands	1
	<i>Gerbera jamesonii</i>	Plants for planting	Israel	Netherlands	1
	<i>Hibiscus</i>	Vegetables (leaves)	Congo, Dem. Rep.	Belgium	1
	<i>Hibiscus</i>	Vegetables (leaves)	Togo	Belgium	5
	<i>Hibiscus</i>	Vegetables (leaves)	Togo	Switzerland	1
	<i>Hibiscus, Ipomoea</i>	Vegetables (leaves)	Togo	Belgium	1
	<i>Hibiscus, Ipomoea, Solanum macrocarpon</i>	Vegetables	Togo	Belgium	2
	<i>Hibiscus, Solanum</i>	Vegetables	Togo	Belgium	2
	<i>Hibiscus, Solanum macrocarpon</i>	Vegetables	Togo	Belgium	1
	<i>Hypericum</i>	Cut flowers	Ethiopia	Belgium	2
	<i>Hypericum</i>	Cut flowers	Zimbabwe	Netherlands	1
	<i>Ipomoea</i>	Vegetables (leaves)	Congo, Dem. Rep.	Belgium	1
	<i>Ipomoea</i>	Vegetables (leaves)	Sierra Leone	Belgium	2
	<i>Ipomoea</i>	Vegetables (leaves)	Togo	Belgium	2
	<i>Lisianthus</i>	Cut flowers	Israel	Belgium	1
	<i>Manihot</i>	Vegetables (leaves)	Togo	France	2
	<i>Manihot esculenta</i>	Vegetables	Sri Lanka	Switzerland	1
	<i>Manihot esculenta</i>	Vegetables	Thailand	Switzerland	1
	<i>Manihot esculenta</i>	Vegetables	Uganda	Sweden	1
	<i>Mentha</i>	Vegetables (leaves)	Israel	Netherlands	1
	<i>Mentha, Ocimum basilicum, Ocimum tenuiflorum</i>	Vegetables (leaves)	Vietnam	Germany	1
	<i>Murraya koenigii</i>	Vegetables (leaves)	India	Germany	1
	<i>Nomaphila</i>	Plants for planting	Malaysia	Netherlands	1

Pest	Consignment	Type of commodity	Exporting country	Reporting country	nb	
Bemisia tabaci (cont.)	<i>Ocimum</i>	Vegetables (leaves)	Cameroon	Belgium	1	
	<i>Ocimum</i>	Vegetables (leaves)	Cameroon	France	7	
	<i>Ocimum</i>	Vegetables (leaves)	Malaysia	Netherlands	1	
	<i>Ocimum</i>	Vegetables (leaves)	Thailand	Germany	3	
	<i>Ocimum</i>	Vegetables (leaves)	Togo	France	3	
	<i>Ocimum basilicum</i>	Vegetables (leaves)	Israel	Belgium	1	
	<i>Ocimum basilicum</i>	Vegetables (leaves)	Israel	Netherlands	2	
	<i>Ocimum basilicum</i>	Vegetables (leaves)	Malaysia	Netherlands	1	
	<i>Ocimum basilicum</i>	Vegetables (leaves)	Togo	Belgium	2	
	<i>Ocimum gratissimum</i>	Vegetables (leaves)	Togo	Belgium	1	
	<i>Ocimum tenuiflorum</i>	Vegetables (leaves)	Laos	France	2	
	<i>Ocimum tenuiflorum</i>	Vegetables (leaves)	Thailand	Germany	1	
	<i>Ocimum tenuiflorum</i>	Vegetables (leaves)	Thailand	Switzerland	1	
	<i>Oxypetalum</i>	Cut flowers	Israel	Netherlands	2	
	<i>Perilla frutescens</i>	Vegetables (leaves)	Japan	Netherlands	1	
	<i>Piper</i>	Vegetables (leaves)	Thailand	Germany	1	
	<i>Polygonum</i>	Vegetables (leaves)	Laos	Netherlands	1	
	<i>Polygonum</i>	Vegetables (leaves)	Malaysia	Netherlands	1	
	<i>Salvia</i>	Vegetables (leaves)	Israel	Netherlands	1	
	<i>Salvia</i>	Cuttings	Israel	United Kingdom	1	
	<i>Salvia officinalis</i>	Vegetables (leaves)	Israel	Netherlands	1	
	<i>Solanum macrocarpon</i>	Vegetables	Togo	Belgium	1	
	<i>Solidago</i>	Cut flowers	Israel	Belgium	2	
	<i>Solidago</i>	Cut flowers	Israel	Netherlands	3	
	<i>Solidago</i>	Cut flowers	Turkey	Netherlands	1	
	<i>Telfairia</i>	Vegetables (leaves)	Nigeria	Belgium	1	
	<i>Trachelium</i>	Cut flowers	Israel	Belgium	2	
	<i>Unspecified</i>	Vegetables (leaves)	Sri Lanka	France	1	
	<i>Vernonia amygdalina</i>	Vegetables (leaves)	Nigeria	Belgium	1	
	Bemisia tabaci, Dialeuropora decempuncta	<i>Piper</i>	Vegetables (leaves)	Thailand	Germany	1
	Bephratelloides	<i>Annona muricata</i>	Fruit	Mexico	Luxembourg	1
	Cerambycidae, Tortricidae	<i>Lansium</i>	Fruit	Vietnam	Ireland	1
Choristoneura dinota	<i>Monarda</i>	Cuttings	Kenya	Germany	2	
Clavibacter michiganensis subsp. michiganensis	<i>Solanum lycopersicum</i>	Seeds	India	France	1	
Coleoptera	<i>Allium cepa</i>	Vegetables	India	Ireland	2	
	<i>Prunus dulcis</i>	Fruit	Tunisia	Italy	1	
Corcyra cephalonica	<i>Cassia fistula</i>	Stored products	Indonesia	Germany	1	
Cryptophlebia ombrodelta	<i>Vigna unguiculata</i>	Vegetables	Vietnam	Ireland	1	
Curculio elephas, Tortricidae	<i>Syzygium cumini</i>	Stored products	Pakistan	Ireland	1	
Curculionidae	<i>Tamarindus indica</i>	Fruit	Malawi	Germany	1	
Dialeuropora decempuncta	<i>Piper</i>	Vegetables (leaves)	Laos	Germany	1	

Pest	Consignment	Type of commodity	Exporting country	Reporting country	nb
<i>Diaphania</i>	<i>Sechium</i>	Vegetables	Costa Rica	Portugal	1
<i>Dysmicoccus brevipes</i>	<i>Mangifera indica</i>	Fruit	France	Spain	1
<i>Elsinoë</i>	<i>Citrus latifolia</i>	Fruit	Brazil	Netherlands	1
	<i>Citrus latifolia</i>	Fruit	Indonesia	Netherlands	1
<i>Elsinoë australis</i>	<i>Citrus limon</i>	Fruit	Argentina	Spain	4
<i>Elsinoë australis, Elsinoë fawcettii</i>	<i>Citrus limon</i>	Fruit	Argentina	Spain	1
<i>Elsinoë australis, Phyllosticta citricarpa</i>	<i>Citrus limon</i>	Fruit	Argentina	Spain	2
<i>Elsinoë citricola</i>	<i>Citrus limon</i>	Fruit	Argentina	Spain	1
	<i>Citrus limon</i>	Fruit	Colombia	Spain	1
<i>Elsinoë citricola, Phyllosticta citricarpa</i>	<i>Citrus limon</i>	Fruit	Argentina	Spain	1
<i>Elsinoë fawcettii</i>	<i>Citrus</i>	Fruit	Bangladesh	United Kingdom	1
	<i>Citrus limon</i>	Fruit	Argentina	Spain	2
<i>Elsinoë fawcettii, Phyllosticta citricarpa, Xanthomonas citri pv. citri</i>	<i>Citrus limon</i>	Fruit	Argentina	Spain	1
<i>Frankliniella occidentalis, Thrips flavus</i>	<i>Dianthus</i>	Cut flowers	Israel	Germany	1
Fungi	<i>Punica granatum</i>	Fruit	Tunisia	Italy	1
	<i>Zingiber officinale</i>	Stored products	Vietnam	Italy	1
<i>Fusarium oxysporum</i>	<i>Zingiber officinale</i>	Stored products	Côte d'Ivoire	France	1
Gastropoda	<i>Myriophyllum</i>	Plants for planting (aquatic)	Singapore	Belgium	1
Gelechiidae	<i>Solanum melongena</i>	Vegetables	Morocco	France	1
<i>Helicoverpa</i>	<i>Zea mays</i> subsp. <i>saccharata</i>	Vegetables	Peru	France	2
<i>Helicoverpa armigera</i>	<i>Capsicum annum</i>	Vegetables	Morocco	France	2
	<i>Phaseolus vulgaris</i>	Vegetables	Morocco	France	2
	<i>Solanum aethiopicum</i>	Vegetables	Senegal	France	1
<i>Helicoverpa armigera, Tephritidae</i>	<i>Capsicum frutescens</i>	Vegetables	Uganda	Ireland	1
<i>Helicoverpa zea</i>	<i>Rosa</i>	Cut flowers	Ecuador	Netherlands	1
	<i>Zea mays</i>	Vegetables	Peru	Italy	1
	<i>Zea mays</i> subsp. <i>saccharata</i>	Vegetables	Peru	France	1
	<i>Zea mays</i> subsp. <i>saccharata</i>	Vegetables	Peru	Netherlands	1

Pest	Consignment	Type of commodity	Exporting country	Reporting country	nb
Hemiptera	<i>Nymphaea</i>	Plants for planting (aquatic)	Guinea	Hungary	1
	<i>Unspecified</i>	Plants for planting (aquatic)	Guinea	Hungary	1
Hirschmanniella caudacrena	<i>Hygrophila</i>	Plants for planting (aquatic)	Singapore	Germany	1
	<i>Hygrophila, Vallisneria</i>	Plants for planting (aquatic)	Singapore	Luxembourg	1
	<i>Vallisneria</i>	Plants for planting (aquatic)	Malaysia	Germany	1
	<i>Vallisneria</i>	Cuttings	Singapore	Belgium	1
	<i>Vallisneria</i>	Plants for planting (aquatic)	Singapore	Belgium	5
Insecta	<i>Cynara scolymus</i>	Vegetables	Tunisia	Italy	1
	<i>Festuca</i>	Seeds	New Zealand	France	1
	<i>Ocimum</i>	Vegetables (leaves)	Cameroon	France	2
	<i>Phalaenopsis</i>	Cut flowers	Taiwan	France	1
Leucinodes	<i>Solanum aethiopicum</i>	Vegetables	Ghana	Belgium	1
	<i>Solanum aethiopicum</i>	Vegetables	Kenya	Belgium	1
	<i>Solanum aethiopicum</i>	Vegetables	Sierra Leone	Belgium	1
	<i>Solanum aethiopicum</i>	Vegetables	Uganda	Belgium	7
	<i>Solanum melongena</i>	Vegetables	India	France	1
Leucinodes orbonalis	<i>Capsicum annum</i>	Vegetables	Japan	France	1
	<i>Solanum</i>	Vegetables	Sri Lanka	Italy	1
	<i>Solanum</i>	Vegetables	Thailand	Belgium	1
	<i>Solanum aethiopicum</i>	Vegetables	Togo	France	1
	<i>Solanum aethiopicum</i>	Vegetables	Uganda	Belgium	3
	<i>Solanum melongena</i>	Vegetables	Cambodia	France	2
	<i>Solanum melongena</i>	Vegetables	Laos	France	1
	<i>Solanum melongena</i>	Vegetables	Sri Lanka	Italy	3
	<i>Solanum melongena, Solanum torvum</i>	Vegetables	Cambodia	France	1
	<i>Solanum torvum</i>	Vegetables	Cambodia	France	1
	<i>Solanum torvum</i>	Vegetables	Laos	France	1
	<i>Solanum torvum</i>	Vegetables	Sri Lanka	France	6
	<i>Solanum torvum</i>	Vegetables	Thailand	France	2
	Leucinodes orbonalis, Tephritidae	<i>Solanum melongena</i>	Vegetables	Cambodia	France
Liberibacter solanacearum	<i>Petroselinum crispum</i>	Seeds	Turkey*	Italy	1
Liriomyza	<i>Chrysanthemum</i>	Cut flowers	Colombia	United Kingdom	2
	<i>Lactuca sativa</i>	Vegetables (leaves)	Egypt	Italy	1
	<i>Ocimum basilicum</i>	Vegetables (leaves)	Morocco	Spain	1
Liriomyza huidobrensis	<i>Chrysanthemum</i>	Cut flowers	Kenya	Netherlands	1
	<i>Gypsophila</i>	Cut flowers	Ecuador	Netherlands	1
Liriomyza sativae	<i>Glebionis coronaria</i>	Vegetables (leaves)	Japan	Netherlands	1
	<i>Lactuca sativa</i>	Vegetables (leaves)	Egypt	Italy	1
	<i>Ocimum basilicum</i>	Vegetables (leaves)	Belgium*	Netherlands	1
	<i>Ocimum basilicum</i>	Vegetables (leaves)	Israel	Belgium	1

Pest	Consignment	Type of commodity	Exporting country	Reporting country	nb
<i>Liriomyza sativae</i> (cont.)	<i>Ocimum basilicum</i>	Vegetables (leaves)	Israel	Netherlands	2
<i>Listronotus bonariensis</i>	<i>Lolium perenne</i>	Seeds	New Zealand	United Kingdom	1
<i>Metamasius hemipterus</i>, Tephritidae	<i>Prunus persica</i>	Fruit	Brazil	Luxembourg	1
Nematoda	<i>Vallisneria</i>	Plants for planting (aquatic)	Singapore	Belgium	1
<i>Neoleucinodes elegantalis</i>	<i>Capsicum</i>	Vegetables	Suriname	Netherlands	1
	<i>Solanum betaceum</i>	Vegetables	Colombia	Belgium	1
	<i>Solanum betaceum</i>	Vegetables	Colombia	Netherlands	1
	<i>Solanum melongena</i>	Vegetables	Suriname	Netherlands	10
Orthoptera	<i>Rosa</i>	Cut flowers	Colombia	Spain	1
<i>Parlatoria ziziphi</i>	<i>Citrus limon</i>	Fruit	Tunisia	Italy	5
	<i>Citrus tangerina</i>	Fruit	Tunisia	Italy	1
<i>Phyllosticta citricarpa</i>	<i>Citrus</i>	Fruit	Bangladesh	Germany	1
	<i>Citrus limon</i>	Fruit	Argentina	France	9
	<i>Citrus limon</i>	Fruit	Argentina	Italy	8
	<i>Citrus limon</i>	Fruit	Argentina	Netherlands	5
	<i>Citrus limon</i>	Fruit	Argentina	Portugal	7
	<i>Citrus limon</i>	Fruit	Argentina	Spain	44
	<i>Citrus limon</i>	Fruit	South Africa	Italy	1
	<i>Citrus reticulata</i>	Fruit	South Africa	France	1
	<i>Citrus sinensis</i>	Fruit	Argentina	Netherlands	2
	<i>Citrus sinensis</i>	Fruit	Argentina	Spain	5
	<i>Citrus sinensis</i>	Fruit	Brazil	Italy	8
	<i>Citrus sinensis</i>	Fruit	South Africa	Italy	3
	<i>Citrus sinensis</i>	Fruit	South Africa	Netherlands	1
	<i>Citrus sinensis</i>	Fruit	South Africa	Spain	1
	<i>Citrus sinensis</i>	Fruit	Uruguay	Netherlands	4
	<i>Citrus sinensis</i>	Fruit	Uruguay	Spain	1
<i>Phyllosticta citricarpa</i>, <i>Phyllosticta</i> <i>paracitricarpa</i>	<i>Citrus limon</i>	Fruit	China	Spain	1
<i>Phytophthora ramorum</i>	<i>Rhododendron</i>	Plants for planting	Netherlands	Finland	8
<i>Phytoplasma pyri</i>	<i>Pyrus communis</i>	Plants for plantings	Belgium	Bosnia and Herzegovina	1
<i>Planococcus</i>	<i>Punica granatum</i>	Fruit	Tunisia	Italy	1
<i>Potato virus Y</i>	<i>Capsicum</i>	Vegetables	Uganda	United Kingdom	1
<i>Protopulvinaria pyriformis</i>	<i>Laurus nobilis</i>	Vegetables (leaves)	Tunisia	Italy	2
<i>Ralstonia solanacearum</i>	<i>Solanum tuberosum</i>	Ware potatoes	Greece	Poland	1
<i>Resseliella citrifrugis</i>	<i>Citrus maxima</i>	Fruit	China	Netherlands	6
<i>Scirtothrips dorsalis</i>	<i>Apium graveolens</i>	Vegetables	Suriname	Netherlands	1

Pest	Consignment	Type of commodity	Exporting country	Reporting country	nb	
Scirtothrips dorsalis (cont.)	<i>Asparagus</i>	Cut flowers	Thailand	Netherlands	1	
	<i>Asparagus officinalis</i>	Vegetables	Thailand	Netherlands	2	
Sitotroga cerealella	<i>Zea</i>	Seeds	Turkey	France	1	
Spodoptera eridania	<i>Xanthosoma sagittifolium</i>	Vegetables	Suriname	Netherlands	1	
Spodoptera frugiperda	<i>Apium graveolens</i>	Vegetables	Suriname	Netherlands	1	
	<i>Asparagus officinalis</i>	Vegetables	Peru	Netherlands	1	
	<i>Capsicum</i>	Vegetables	Suriname	Netherlands	3	
	<i>Capsicum</i>	Vegetables	Uganda	Netherlands	2	
	<i>Capsicum annum</i>	Vegetables	Gambia	Belgium	1	
	<i>Capsicum annum</i>	Vegetables	Rwanda	Belgium	1	
	<i>Capsicum annum</i>	Vegetables	Suriname	Netherlands	1	
	<i>Capsicum chinense</i>	Vegetables	Suriname	Netherlands	2	
	<i>Eryngium</i>	Cut flowers	Ethiopia	Netherlands	1	
	<i>Gypsophila</i>	Cut flowers	Ecuador	Netherlands	1	
	<i>Kalanchoe</i>	Plants	Tanzania	Netherlands	1	
	<i>Rosa</i>	Cut flowers	Kenya	Netherlands	1	
	<i>Xanthosoma</i>	Vegetables	Suriname	Netherlands	4	
<i>Xanthosoma sagittifolium</i>	Vegetables	Suriname	Netherlands	1		
Spodoptera litura	<i>Apium graveolens</i>	Vegetables	Thailand	Netherlands	1	
	<i>Ficus microcarpa</i>	Plants for planting	China	Netherlands	1	
	<i>Kalanchoe</i>	Plants	Indonesia	Netherlands	1	
	<i>Oncidium</i>	Cut flowers	Taiwan	Netherlands	1	
Sweet potato chlorotic stunt virus	<i>Ipomoea batatas</i>	Vegetables	Egypt	Portugal	1	
Thaumatotibia leucotreta	<i>Annona muricata</i>	Fruit	Côte d'Ivoire	Belgium	1	
	<i>Capsicum</i>	Vegetables	Kenya	Belgium	1	
	<i>Capsicum</i>	Vegetables	Kenya	United Kingdom	2	
	<i>Capsicum</i>	Vegetables	Rwanda	Belgium	2	
	<i>Capsicum</i>	Vegetables	Rwanda	Netherlands	1	
	<i>Capsicum annum</i>	Vegetables	Kenya	United Kingdom	1	
	<i>Capsicum annum</i>	Vegetables	Rwanda	Belgium	2	
	<i>Capsicum annum</i>	Vegetables	Tanzania	Germany	1	
	<i>Capsicum annum</i>	Vegetables	Tanzania	Netherlands	1	
	<i>Capsicum annum</i>	Vegetables	Uganda	Belgium	1	
	<i>Capsicum chinense</i>	Vegetables	Burkina Faso	Belgium	1	
	<i>Capsicum chinense</i>	Vegetables	Rwanda	United Kingdom	2	
	<i>Capsicum chinense</i>	Vegetables	Uganda	Belgium	1	
	<i>Capsicum frutescens</i>	Vegetables	Ghana	United Kingdom	1	
	<i>Citrus paradisi</i>	Fruit	South Africa	Netherlands	2	
	<i>Citrus sinensis</i>	Fruit	South Africa	France	1	
	<i>Citrus sinensis</i>	Fruit	South Africa	Netherlands	11	
	Thaumatotibia leucotreta	<i>Citrus sinensis</i>	Fruit	Zimbabwe	Netherlands	1
		<i>Rosa</i>	Cut flowers	Ethiopia	Belgium	1
		<i>Rosa</i>	Cut flowers	Kenya	Netherlands	9
<i>Rosa</i>		Cut flowers	Rwanda	Netherlands	2	
<i>Rosa</i>		Cut flowers	Tanzania	Netherlands	1	
<i>Rosa</i>		Cut flowers	Uganda	Netherlands	13	
<i>Solanum melongena</i>		Vegetables	Kenya	United Kingdom	1	
Thaumetopoea processionea		<i>Quercus petraea</i>	Plants for planting	Belgium	Ireland	1

Pest	Consignment	Type of commodity	Exporting country	Reporting country	nb	
Thripidae	<i>Lithodora</i>	Cuttings	Israel	France	1	
	<i>Luffa acutangula</i>	Vegetables	Ghana	United Kingdom	1	
Thrips	<i>Dianthus, Rosa</i>	Cut flowers	Netherlands	France	1	
Thrips palmi	<i>Dendrobium</i>	Cut flowers	Malaysia	Netherlands	10	
	<i>Dendrobium</i>	Cut flowers	Singapore	Netherlands	2	
	<i>Dendrobium</i>	Cut flowers	Thailand	Netherlands	1	
	<i>Momordica</i>	Vegetables	Bangladesh	Austria	1	
	<i>Perilla frutescens</i>	Vegetables (leaves)	Japan	Netherlands	1	
	<i>Solanum melongena</i>	Vegetables	Mexico	Netherlands	1	
Tomato aspermy virus	<i>Callistephus chinensis</i>	Seeds	Netherlands	Italy	1	
Tomato brown rugose fruit virus	<i>Capsicum annuum</i>	Seeds	China	Hungary	2	
	<i>Capsicum annuum</i>	Seeds	Germany	Austria	1	
	<i>Capsicum annuum</i>	Seeds	India*	Italy	1	
	<i>Capsicum annuum</i>	Seeds	Israel	France	1	
	<i>Capsicum annuum</i>	Seeds	Israel	Greece	1	
	<i>Capsicum annuum</i>	Seeds	Israel	Netherlands	7	
	<i>Capsicum annuum</i>	Seeds	Peru	Netherlands	2	
	<i>Capsicum annuum</i>	Seeds	Thailand*	Spain	1	
	<i>Capsicum annuum</i>	Seeds	USA	United Kingdom	1	
	<i>Capsicum chinense</i>	Seeds	Israel	United Kingdom	1	
	<i>Solanum lycopersicum</i>	Seeds	China	Cyprus	1	
	<i>Solanum lycopersicum</i>	Seeds	China	Netherlands	1	
	<i>Solanum lycopersicum</i>	Seeds	China	Poland	1	
	<i>Solanum lycopersicum</i>	Seeds	China	Slovenia	2	
	<i>Solanum lycopersicum</i>	Seeds	Ethiopia*	Netherlands	1	
	<i>Solanum lycopersicum</i>	Seeds	Guatemala*	Netherlands	1	
	<i>Solanum lycopersicum</i>	Seeds	India*	Netherlands	1	
	<i>Solanum lycopersicum</i>	Seeds	Israel	Greece	4	
	<i>Solanum lycopersicum</i>	Seeds	Israel	Hungary	1	
	<i>Solanum lycopersicum</i>	Seeds	Israel	Netherlands	14	
	<i>Solanum lycopersicum</i>	Seeds	Israel	Poland	1	
	<i>Solanum lycopersicum</i>	Seeds	Israel	Spain	1	
	<i>Solanum lycopersicum</i>	Seeds	Israel	United Kingdom	1	
	<i>Solanum lycopersicum</i>	Seeds	Japan*	Netherlands	1	
	<i>Solanum lycopersicum</i>	Seeds	Netherlands	Poland	1	
	<i>Solanum lycopersicum</i>	Seeds	Peru*	Netherlands	12	
	<i>Solanum lycopersicum</i>	Seeds	Turkey	Italy	1	
	<i>Solanum lycopersicum</i>	Seeds	Turkey	Netherlands	1	
	<i>Solanum lycopersicum</i>	Seeds	USA	Portugal	1	
	Xanthomonas	<i>Citrus aurantiifolia</i>	Fruit	Indonesia	Netherlands	2
		<i>Citrus hystrix</i>	Fruit	Indonesia	Netherlands	1
	Xanthomonas axonopodis pv. dieffenbachiae	<i>Citrus latifolia</i>	Fruit	United Kingdom	Netherlands	1
Xanthomonas citri pv. citri	<i>Citrus latifolia</i>	Fruit	Brazil	Netherlands	2	
	<i>Citrus limon</i>	Fruit	Argentina	Germany	1	
	<i>Citrus limon</i>	Fruit	Argentina	Italy	3	
	<i>Citrus limon</i>	Fruit	Argentina	Spain	5	
	<i>Citrus limon</i>	Fruit	Uruguay	Spain	3	
	<i>Citrus sinensis</i>	Fruit	Uruguay	Italy	3	

• Fruit flies

Pest	Consignment	Exporting country	Reporting country	nb
Anastrepha	<i>Prunus persica</i>	Brazil	Luxembourg	2
	<i>Psidium guajava</i>	Brazil	France	1
	<i>Psidium guajava</i>	Dominican Republic	France	1
Bactrocera	<i>Annona muricata</i>	Sri Lanka	Switzerland	2
	<i>Capsicum annuum</i>	Laos	Netherlands	1
	<i>Capsicum frutescens</i>	Indonesia	Netherlands	2
	<i>Capsicum frutescens</i>	Thailand	Switzerland	1
	<i>Capsicum frutescens</i>	Vietnam	Switzerland	1
	<i>Citrus maxima</i>	China	Netherlands	4
	<i>Hylocereus</i>	Indonesia	Netherlands	1
	<i>Hylocereus undatus</i>	Thailand	Switzerland	1
	<i>Mangifera</i>	Ghana	United Kingdom	1
	<i>Mangifera</i>	India	United Kingdom	1
	<i>Mangifera indica</i>	Ghana	Netherlands	1
	<i>Mangifera indica</i>	India	Switzerland	1
	<i>Mangifera indica</i>	India	United Kingdom	1
	<i>Mangifera indica</i>	Pakistan	United Kingdom	1
	<i>Mangifera indica</i>	Senegal	Netherlands	4
	<i>Mangifera indica</i>	Sri Lanka	Switzerland	1
	<i>Psidium guajava</i>	India	Switzerland	2
	<i>Psidium guajava</i>	Sri Lanka	France	1
<i>Solanum torvum</i>	Thailand	Netherlands	1	
Bactrocera dorsalis	<i>Annona muricata</i>	Sri Lanka	Sweden	1
	<i>Psidium guajava</i>	Bangladesh	Sweden	1
Dacus ciliatus	<i>Coccinia grandis</i>	Uganda	Sweden	5
Tephritidae (non-European)	<i>Annona muricata</i>	Sri Lanka	France	1
	<i>Annona muricata</i>	Vietnam	France	1
	<i>Capsicum</i>	Laos	France	1
	<i>Capsicum</i>	Rwanda	Belgium	1
	<i>Coccinia grandis</i>	India	France	1
	<i>Cucurbita</i>	South Africa	Netherlands	1
	<i>Ficus carica</i>	Tunisia	Italy	2
	<i>Ficus carica, Opuntia ficus-indica</i>	Tunisia	Italy	1
	<i>Luffa acutangula</i>	Kenya	United Kingdom	1
	<i>Mangifera</i>	India	United Kingdom	1
	<i>Mangifera indica</i>	Brazil	Luxembourg	1
	<i>Mangifera indica</i>	Brazil	Spain	1
	<i>Mangifera indica</i>	Burkina Faso	Belgium	8
	<i>Mangifera indica</i>	Cameroon	Belgium	1
	<i>Mangifera indica</i>	Côte d'Ivoire	Belgium	3
	<i>Mangifera indica</i>	Côte d'Ivoire	France	1
	<i>Mangifera indica</i>	Dominican Republic	France	2
	<i>Mangifera indica</i>	Egypt	France	1
	<i>Mangifera indica</i>	Gambia	Belgium	1
	<i>Mangifera indica</i>	Ghana	Belgium	1
	<i>Mangifera indica</i>	India	France	1
	<i>Mangifera indica</i>	India	United Kingdom	1
	<i>Mangifera indica</i>	Mali	Belgium	1
	<i>Mangifera indica</i>	Mexico	Luxembourg	1
	<i>Mangifera indica</i>	Pakistan	Belgium	1

Pest	Consignment	Exporting country	Reporting country	nb
Tephritidae (non-European)	<i>Mangifera indica</i>	Pakistan	France	1
	<i>Mangifera indica</i>	Senegal	Belgium	3
	<i>Mangifera indica</i>	Senegal	France	1
	<i>Mangifera indica</i>	Senegal	Netherlands	2
	<i>Mangifera indica</i>	Sudan	Belgium	1
	<i>Momordica</i>	Bangladesh	United Kingdom	1
	<i>Opuntia ficus-indica</i>	Tunisia	Italy	1
	<i>Prunus</i>	Georgia	Poland	1
	<i>Prunus persica</i>	Tunisia	Italy	1
	<i>Psidium guajava</i>	Bangladesh	France	1
	<i>Psidium guajava</i>	Egypt	France	1
	<i>Psidium guajava</i>	Sri Lanka	France	1
	<i>Trichosanthes</i>	India	France	1
	Zeugodacus cucurbitae	<i>Coccinia grandis</i>	India	Sweden
<i>Cucumis sativus</i>		India	Ireland	1
<i>Luffa</i>		Sri Lanka	Sweden	1
<i>Luffa</i>		Uganda	Sweden	1
<i>Luffa acutangula</i>		Uganda	Sweden	2
Zeugodacus cucurbitae, Atherigona soccata	<i>Benincasa hispida, Cucumis sativus, Ipomoea batatas</i>	India	Ireland	1

• Wood

Pest	Consignment	Type of commodity	Exporting country	Reporting country	nb
Aphelenchoides	Unspecified	Wood	Belarus	Lithuania	1
	Unspecified	Wood packaging material	China	Poland	2
Bostrichidae	Unspecified	Wood packaging material	China	Finland	1
	Unspecified	Wood packaging material	India	Germany	4
	Unspecified	Wood packaging material	Thailand	Germany	1
Bostrichidae, Trichoferus campestris	Unspecified	Wood packaging material	China	Austria	1
Bruchidae	Unspecified	Wood packaging material	Thailand	Germany	1
Bursaphelenchus	Unspecified	Wood packaging material	China	Slovenia	1
	Unspecified	Dunnage	Portugal	Poland	1
Bursaphelenchus mucronatus	Conifer	Wood packaging material	Belarus	Latvia	3
	Conifer	Wood packaging material	Ukraine	Latvia	1
	Unspecified	Wood packaging material	Belarus	Latvia	2
	Unspecified	Wood	Belarus	Lithuania	1
	Unspecified	Wood packaging material	Belarus	Lithuania	1
	Unspecified	Wood packaging material	Russia	Finland	2
	Unspecified	Wood packaging material	Russia	Latvia	2
	Unspecified	Wood packaging material	Russia	Lithuania	2
Bursaphelenchus mucronatus, Nematoda	Unspecified	Wood packaging material	Belarus	Lithuania	1
Bursaphelenchus xylophilus	<i>Pinus</i>	Dunnage	Portugal	Spain	1
	Unspecified	Wood packaging material	Portugal	Netherlands	1

Pest	Consignment	Type of commodity	Exporting country	Reporting country	nb
<i>B. xylophilus</i> (cont.)	Unspecified	Wood packaging material	Portugal	United Kingdom	1
Cerambycidae	Unspecified	Wood packaging material	China	Austria	2
	Unspecified	Wood packaging material	Serbia	Hungary	1
Coleoptera	<i>Juglans nigra</i>	Wood	USA	Italy	5
	Unspecified	Wood packaging material	China	Belgium	1
<i>Euzophera semifuneralis</i>	<i>Liriodendron tulipifera</i> , <i>Tilia</i>	Wood	USA	Italy	1
<i>Halyomorpha halys</i>	<i>Thuja plicata</i>	Wood	Canada	France	1
Insecta	<i>Juglans</i>	Wood	USA	Italy	1
	<i>Juglans nigra</i>	Wood	USA	Italy	1
	<i>Milicia excelsa</i>	Wood	Cameroon	Italy	1
	<i>Quercus alba</i>	Wood	USA	France	8
	Unspecified	Wood packaging material	India	Belgium	1
Nematoda	Conifer	Wood packaging material	Belarus	Latvia	1
	Unspecified	Wood	Belarus	Lithuania	1
	Unspecified	Wood packaging material	Belarus	Lithuania	1
	Unspecified	Wood packaging material	Russia	Latvia	1
<i>Sinoxylon</i>	Unspecified	Wood packaging material	Hong Kong	Germany	1
	Unspecified	Wood packaging material	India	Germany	8
	Unspecified	Wood	Indonesia	Germany	1
	Unspecified	Wood packaging material	Malaysia	Germany	1
	Unspecified	Wood packaging material	Vietnam	Germany	1
<i>Sinoxylon anale</i>	Unspecified	Wood packaging material	Indonesia	Germany	1
Siricidae	Unspecified	Wood packaging material	China	Czech Republic	1
<i>Trichoferus campestris</i>	Unspecified	Wood packaging material	China	Austria	12
<i>Xyleborinus</i>	Unspecified	Wood packaging material	China	Austria	1

• **Bonsais**

Pest	Consignments	Exporting country	Reporting country	nb
<i>Anoplophora chinensis</i>	<i>Acer palmatum</i>	Japan	Austria	1
	<i>Acer palmatum</i>	Japan	Germany	1
<i>Gymnosporangium asiaticum</i>	<i>Juniperus procumbens</i>	Japan	Czech Republic	1
<i>Ripersiella hibisci</i>	<i>Serissa foetida</i>	China	Netherlands	1

Source: EPPO Secretariat (2021-02).

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

2021/032 Eradication of *Anoplophora glabripennis* in Finland

In February 2021, the NPPO of Finland informed the EPPO Secretariat that *Anoplophora glabripennis* (Coleoptera: Cerambycidae - EPPO A1 List) has been eradicated from its territory. It can be recalled that *A. glabripennis* had been found in the municipality of Vantaa (near Helsinki) in 2015 and eradication measures were immediately implemented (EPPO RS 2015/184). Official surveys carried out for the last 5 years have not detected signs of the pest.

The pest status of *Anoplophora glabripennis* in Finland is officially declared as: **Absent, pest eradicated.**

Source: NPPO of Finland (2021-02).

Pictures: *Anoplophora glabripennis*. <https://gd.eppo.int/taxon/ANOLGL/photos>

Additional key words: absence, eradication

Computer codes: ANOLGE, FI

2021/033 First report of *Euwallacea fornicatus* in Germany

The NPPO of Germany recently informed the Secretariat of the recent finding of *Euwallacea fornicatus* (Coleoptera: Scolytinae, EPPO A2 List) on its territory. The pest was found in January 2021 in two shrubs of *Mangifera indica* and *Tectona grandis* in a tropical greenhouse in Thüringen. The infested plants have been removed and incinerated. Those plants had been delivered in May 2020 from another Member State. However, as numerous plants were moved around within the tropical greenhouse, the source of the infestation cannot be clearly identified. Further monitoring by alcohol-traps in the greenhouse is planned and a demarcated area has been established. Movement of plants out of the greenhouse is prohibited.

The pest status of *Euwallacea fornicatus* in Germany is officially declared as: **Transient, actionable, under eradication.**

Source: NPPO of Germany (2021-02).

Additional key words: new record

Computer codes: XYLBFO, DE

2021/034 First report and eradication of *Neoleucinodes elegantalis* in Switzerland

In Switzerland, a single adult of *Neoleucinodes elegantalis* (Lepidoptera: Crambidae - EPPO A1 List) was found in a private household. No infested plant material was found. It is likely that the individual of *N. elegantalis* arrived with packaged fruits of either *Solanum lycopersicum* or *Solanum melongena* bought at local supermarkets. The introduction of the insect did not lead to its establishment. It may be recalled that in the EPPO region, *N. elegantalis* is regularly intercepted in imported consignments (see EPPO RS 2021/031).

The pest status of *Neoleucinodes elegantalis* in Switzerland is officially declared as: **Absent, pest eradicated.**

Source: NPPO of Switzerland (2021-02).

Pictures: *Neoleucinodes elegantalis*. <https://gd.eppo.int/taxon/NEOLEL/photos>

Additional key words: absence, eradication

Computer codes: NEOLEL, CH

2021/035 Update on the situation of *Aromia bungii* in Italy

In Italy, *Aromia bungii* (Coleoptera: Cerambycidae - EPPO A1 List) was first found in Campania region (province of Napoli) in 2012 (EPPO RS 2012/204, RS 2017/168) and in 2018, on the island of Procida (province of Napoli). It was also detected in 2013 in Lombardia region (RS 2013/187, RS 2019/159) and in 2020 in Lazio region (RS 2020/191).

- **Campania**

Official measures are taken in line with the decision (EU) 2018/1503, with the aim of containing the pest. A demarcated area with a 4-km buffer zone has been established. The demarcated area is located in the following municipalities: Arzano, Bacoli, Casoria, Marano di Napoli, Marigliano, Monte di Procida, Napoli, Pozzuoli, Quarto, San Giorgio a Cremano, San Sebastiano al Vesuvio, Somma Vesuviana, Procida, Brusciano. A map of the demarcated area is available in the regional decree n° 134 of 18/11/2019.

In 2020, 231 infested *Prunus* plants were found within the infested zone (38 sites) in orchards and private or public gardens (138 *Prunus armeniaca*, 12 *P. avium*, 3 *P. cerasifera* var. *pissardii*, 1 *P. cerasus*, 30 *P. domestica*, 43 *P. domestica* subsp. *insititia*, 4 *Prunus* sp. All infested plants will be cut down before the next flying season of the pest. Official measures including monitoring continue.

- **Lazio**

An intensive survey was carried out in 2020 after the first finding in Civitavecchia. No further infested plants were found. Official measures are applied and aim at eradicating the pest.

- **Lombardia**

The infested area is located in the municipality of Bareggio, Sedriano and Vittuone. A demarcated area with a 4-km buffer zone has been established. Official measures are taken in line with the decision (EU) 2018/1503, with the aim of containing the pest. A map of the demarcated area is available in the regional decree n° 7119 of 21/03/2019.

The pest status of *Aromia bungii* in Italy is officially declared as: **Present, only in some parts of the Member State concerned, under eradication or under containment, in case eradication is impossible.**

Source: NPPO of Italy (2021-02).

Giunta regionale della Campania (2019) Piano d'azione regionale per la lotta al cerambicide *Aromia bungii* - approvazione del vii aggiornamento. Available at <http://www.agricoltura.regione.campania.it/difesa/aromia.html>

Regione Lombardia (2019) Definizione dell'area delimitata per la presenza di *Aromia bungii* (Faldermann) in Lombardia e applicazione delle misure fitosanitarie di contenimento. Bollettino Ufficiale) D.d.u.o. 21 maggio 2019 - n. 7119. Available at <https://www.regione.lombardia.it/wps/portal/istituzionale/HP/DettaglioRedazione/servizi-e-informazioni/Imprese/Imprese-agricole/servizio-fitosanitario-regionale/organismi-nocivi/aromia-bungii/aromia-bungii>

Pictures: *Aromia bungii*. <https://gd.eppo.int/taxon/AROMBU/photos>

Additional key words: detailed record

Computer codes: AROMBU, IT

2021/036 Update on the situation of *Saperda candida* in Germany

In Germany, the round-headed apple-tree borer *Saperda candida* (Coleoptera: Cerambycidae - EPPO A1 list) was first detected on the Island of Fehmarn (Island in the Baltic Sea, part of Schleswig-Holstein) in 2008 (EPPO RS 2008/139). All infested and suspicious plants were destroyed. A safety zone with a radius of 2 km was established where intensive surveys are carried out several times every year since 2008. In 2009, 3 dead beetles and 1 living beetle were found in the infested area. In 2010, a *Sorbus* tree with bore holes was found next to a road as well as dead beetles. In 2011, further suspicious plants were found: a *Crataegus* hedge in a private garden and 3 probably infested *Crataegus*. In the following years, the number of infested trees decreased continuously and in 2014 no infested trees were found. In 2015, 2 suspicious *Crataegus* plants were found in a hedge in a private garden close to a camp site and 2 infested plants with larvae were detected. In 2020, one larva was found. Official surveillance and eradication measures continue. From 2008 to 2019, host plants have been treated with alpha-cypermethrin as a prophylactic measure. From 2008 to 2020 a total of 126 infested trees have been destroyed. The source of the outbreak is not known.

The pest status of *Saperda candida* in Germany is officially declared as: **Present, only in one location, under eradication.**

Source: NPPO of Germany (2021-02).

Pictures: *Saperda candida*. <https://gd.eppo.int/taxon/SAPECN/photos>

Additional key words: detailed record

Computer codes: SAPECN, DE

2021/037 *Brachyplatys subaeneus*: an Asian Plataspidae spreading in America

Brachyplatys subaeneus (Hemiptera: Plataspidae - black bean bug) originates from Asia where it is considered to be a minor pest, particularly in legume crops (Fabaceae). This insect has a clear preference for Fabaceae, but it has also been reported on other plant families (e.g. Areaceae, Asteraceae, Cannabaceae, Convolvulaceae, Solanaceae, Poaceae - see <https://gd.eppo.int/taxon/BRAPSU/hosts>). *B. subaeneus* is a sap feeder, nymphs and adults tend to aggregate on stems or on petioles under leaves. Pictures can be viewed on the Internet: <http://dx.doi.org/10.3391/bir.2016.5.1.02>

In the 2010s, its presence started to be recorded in several countries in the Americas. It can be recalled that another Asian Plataspidae, *Megacopta cribraria* (formerly EPPO Alert List - see EPPO RS 2014/161) has been introduced in North America (i.e. USA) where it rapidly spread. *B. subaeneus* was first found in Panama in 2012 where it was initially identified as *B. vahlii*, but later studies confirmed its identity as *B. subaeneus*. The insect was first detected on *Cajanus cajan* (Fabaceae, pigeon pea) and *Bactris gasipaes* (Areaceae, peach palm) in a private garden in Vacamonte (Panama Oeste province). Subsequent observations concluded that it is now common and frequently abundant near the Panama Canal. In 2018, *B. subaeneus* was observed in the Dominican Republic on peas (*Pisum* sp.). In April 2019, it was found in Costa Rica (Guanacaste province) on several Fabaceae (*C. cajan*, *Mucuna pruriens*, *Gliricidia sepium*). In March 2019, it was found in Ecuador near Guayaquil, mainly on *C. cajan* crops, but also on *M. pruriens* and *Zea mays*. In Guadeloupe, the first specimens of *B. subaeneus* were reported in July 2020 on *C. cajan* in the municipality of Petit-Bourg. In August 2020, *B. subaeneus* was noticed on sea grape (*Coccoloba uvifera*, Ephedraceae) near Miami Beach, Florida (US) by a member of the public. The identity of the pest was

confirmed in September 2020, and more specimens were detected on *Canavalia rosea* (Fabaceae) which appeared to be the preferred host in the area of Miami Beach.

The currently known world distribution of *B. subaeneus* is as follows:

North America: USA (Florida).

Central America and the Caribbean: Costa Rica, Dominican Republic, Ecuador, Guadeloupe, Panama.

Asia: Bangladesh, Cambodia, China (Fujian, Guangdong, Guangxi, Guizhou, Hainan, Hong Kong, Macau, Xizhang, Yunnan), India (Andaman and Nicobar Islands, Andhra Pradesh, Assam, Bihar, Karnataka, Odisha, Uttarakhand, West Bengal), Indonesia (Java, Maluku, Sulawesi, Sumatra), Japan (Ryukyu Archipelago), Malaysia (Sabah, West), Myanmar, Philippines, Singapore, Sri Lanka, Taiwan, Thailand, Vietnam.

It is noted that, as in its native area *B. subaeneus* is restricted to humid tropical and subtropical areas, its expansion to temperate North America seems unlikely. However, it is considered that this insect has the potential to become a widely distributed and significant pest of legume crops in tropical and subtropical parts of Central and South America. Regarding the EPPO region, further studies would be needed to evaluate its potential of establishment, but it seems that *B. subaeneus* is more adapted to humid tropical and subtropical climates than to temperate and Mediterranean climates.

- Source:** Anonymous (2020) Premier signalement d'une punaise invasive en Guadeloupe. Bulletin de Santé du Végétal. Région Guadeloupe. Diversification végétale - Cultures maraîchères no. 6, 3 pp.
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Additional key words: new record

Computer codes: BRAPSU, CR, DO, EC, GP, PA, US

2021/038 Unusual pathways and risks: *Pachodynerus nasidens* and aircrafts

Pachodynerus nasidens (Hymenoptera: Vespidae) is a mud-nesting wasp native to South and Central America and the Caribbean. It has also been recorded from several Pacific islands including Hawaii, Polynesia, Micronesia and Japan. In its native range, *P. nasidens* is known to use man-made cavities (e.g. window crevices, keyholes, electrical sockets) to construct nests. In Australia, *P. nasidens* was first detected in 2010 in Northern Brisbane during a routine quarantine inspection of commodities initially received at the Brisbane Port. In 2012, the insect was also found at Brisbane Airport. As a series of serious safety incidents related to the obstruction of vital airspeed measuring probes (i.e. pitot probes) on aircrafts were reported at the Brisbane Airport, a study was initiated to verify whether these were associated with *P. nasidens*. From February 2016 to April 2019, replica pitot probes and several traps were installed at Brisbane Airport and regularly monitored. Blocked probes were removed and placed in fine mesh bags to observe insect emergence. Results showed that all nests found in blocked probes were made by *P. nasidens*, and that a peak of nesting activities took place during summer months. Within the airport, it was also observed that probes placed closer to natural habitats (e.g. grasses) were more likely to be blocked than those further away. These results show that *P. nasidens* has the potential to pose a significant risk to aviation safety and that aircraft could also contribute to its further spread. *P. nasidens* is not a plant pest, but this particular case illustrates the diversity of pathways for spread and the unexpected risks presented by some invasive species to human activities.

Source: House APN, Ring JG, Shaw PP (2020) Inventive nesting behaviour in the keyhole wasp *Pachodynerus nasidens* Latreille (Hymenoptera: Vespidae) in Australia, and the risk to aviation safety. *PLoS ONE* 15(11), e0242063.
<https://doi.org/10.1371/journal.pone.0242063>

Additional key words: pathway, risk

Computer codes: PACDNA

2021/039 Eradication of *Thekopsora minima* in Belgium

In February 2021, the NPPO of Belgium informed the EPPO Secretariat that the blueberry rust *Thekopsora minima* (EPPO A2 List) has been eradicated from its territory. The disease was first reported in East-Flanders in 2016 in a nursery on *Vaccinium corymbosum* and infested plants were immediately destroyed (EPPO RS 2016/171). Subsequent monitoring did not reveal any further contamination by *Thekopsora minima*.

The pest status of *Thekopsora minima* in Belgium is officially declared as: **Absent, pest eradicated.**

Source: NPPO of Belgium (2021-02).

Pictures: *Thekopsora minima*. <https://gd.eppo.int/taxon/THEKMI/photos>

Additional key words: absence, eradication

Computer codes: THEKMI, BE

2021/040 New finding of Grapevine flavescence dorée phytoplasma in Germany

In Germany, Grapevine flavescence dorée phytoplasma (EPPO A2 List) was first recorded in one grapevine plant (*Vitis vinifera*) in 2014 and declared eradicated in 2017 (EPPO RS 2014/202, 2017/135). The NPPO of Germany recently informed the EPPO Secretariat that the pathogen was found again in the framework of the project 'FlavePrevent' at the end of 2020 in one plant (*Vitis vinifera*) in a vineyard in Rheinland-Pfalz. The identity of the pathogen was confirmed by molecular methods. Due to the advanced age of the vines, it is excluded that the planting material could be the source of the infestation. It is assumed that the source of the infestation is an *Alnus* stand near the vineyard. The vector *Scaphoideus titanus* is not present in Germany but the pathogen may be transmitted from alders to grapevines by cicadas, such as *Allygus mixtus*, *A. modestus* and *Orientalus ishidae*, which live on alders. Official eradication measures will be taken. The whole plot (1 ha, approximately 3000 plants) will be destroyed. Intensive surveys for flavescence dorée and its vectors will be conducted.

The pest status of Grapevine flavescence dorée phytoplasma in Germany is officially declared as: **Present, only at one location, under eradication.**

Source: NPPO of Germany (2021-01).

Pictures: Grapevine flavescence dorée phytoplasma.
<https://gd.eppo.int/taxon/PHYP64/photos>

Additional key words: new record

Computer codes: PHYP64, DE

2021/041 Update on the situation of cucurbit yellow stunting disorder virus in Italy

In Italy, cucurbit yellow stunting disorder virus (CYSDV, *Crinivirus* - EPPO A2 List) was first detected in 2016 in the south of Sardinia (municipalities of Serramanna and Uta) on crops of courgette (*Cucurbita pepo*) and melon (*Cucumis melo*) in open fields (EPPO RS 2017/045). Specific monitoring carried out in the following years confirmed the presence of CYSDV at low prevalence in open field cultivation and wild plants in the area of the first finding. The

virus has never been found in nurseries. No significant damage has been observed or reported by farmers. No official phytosanitary measures are taken.

The pest status of cucurbit yellow stunting disorder virus in Italy is officially declared as: **Present, only in some parts of the Member State concerned.**

Source: NPPO of Italy (2021-01).

Additional key words: detailed record

Computer codes: CYSDV0, IT

2021/042 *Erysiphe corylacearum*, an emerging pathogen of hazelnut in the EPPO region

Native to East Asia, *Erysiphe corylacearum* is a new powdery mildew of hazelnuts (*Corylus* spp.) which was first observed in Turkey in 2013 and has since rapidly extended its distribution range in the Middle East, the Caucasus as well as in Eastern and Central Europe. The species is believed to originate in Asia (China, Japan, Korean Peninsula, Russian Far East) and has been reported as an invasive pathogen in hazelnut orchards (*Corylus avellana*) in Turkey, Iran and Georgia where it causes serious damage to nut production. Symptoms are observed on the upper leaf surface, on shoots and on fruit clusters including husks. The disease was more recently reported from Southern Russia, the Ukraine, Switzerland, Italy and Austria. In the EPPO region it was observed in orchards for nut production, as well as on trees growing in mixed deciduous forests, hedges as well as in city gardens and parks.

E. corylacearum may already be present in other European countries between Ukraine and Italy and seems to be spreading westwards. Recent phylogenetic and taxonomic studies showed that the isolates from North America on *Corylus cornuta*, which were previously assigned to *E. corylacearum* constitute a species of its own, named *Erysiphe cornutae*, sp. nov.

A distribution map is available in the EPPO Global Database: <https://gd.eppo.int/taxon/ERYSCY/distribution>

- Source:
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Additional key words: new record

Computer codes: ERYSCY, AZ, CH, GE, IR, IT, TR, UA

2021/043 *Euphorbia davidii* in the EPP0 region: addition to the EPP0 Alert List**Why**

Euphorbia davidii has been present in the EPP0 region for a number of years where it occurs often in small populations along railway lines. However, *E. davidii* can also invade agricultural habitats and recently the species has been reported in new areas in Central Russia.

Geographical distribution

EPP0 region: Bulgaria, France, Hungary, Italy, Moldova, Russia, Serbia, Ukraine.

North America: Canada, Mexico, United States: Arizona (native), Arkansas, California (native), Colorado, Connecticut, Delaware, District of Columbia, Florida, Illinois, Indiana, Iowa, Kansas, Kentucky, Maryland, Massachusetts, Michigan, Minnesota, Missouri, Nebraska, New Hampshire, New Jersey, New Mexico (native), New York, North Carolina, Ohio, Oklahoma, Pennsylvania, Rhode Island, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, West Virginia, Wisconsin, Wyoming.

Oceania: Australia.

Morphology

Stem: erect or ascending, 20-70 cm, both coarsely and sparsely hirsute and closely strigillose; branches usually straight, occasionally proximal branches arcuate.

Leaves: usually opposite, occasionally alternate at distal nodes; petiole 7-25 mm, strigose; blade usually narrowly to broadly elliptic, occasionally lance-elliptic, 10-100 × 5-35 mm, base cuneate to attenuate, margins coarsely crenate-dentate, strigose, revolute to nearly flat, apex broadly acute to acuminate, or obtuse, abaxial surface strigose with stiff, strongly tapered hairs, adaxial surface sparsely strigose-hirsute; venation pinnate, midvein prominent.

Flowers: 5-8. Pistillate flowers: ovary glabrous or sparsely strigose. Capsules broadly ovoid, 3-lobed, glabrous.

Seeds black to brown or pale grey, ovoid to triangular-ovoid, angular in cross section, 2.4-2.9 × 2.2-2.9 mm.

Biology and Ecology

Euphorbia davidii is an annual species that spreads locally by seed. In the EPP0 region (Serbia) flowering occurs in August-September and fruiting in September - October.

Habitats

Ruderal habitats including transportation networks (rail lines and roadsides), port areas and industrial areas. Agricultural habitats (soybean and maize) and vineyards.

Pathways for movement

The potential pathways for entry into the EPP0 region are unclear. However, it is suggested in the literature that the species may have entered as a contaminant of seed consignments.

Impacts

Euphorbia davidii can form dense stands in agricultural areas. There are observations from Serbia that the presence of dense patches can have a negative effect on the size of maize plants and can initiate early ripening of sunflower heads.

Control

Chemical control options include foliar spraying which has been assessed but with limited effectiveness.

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Additional key words: invasive alien plant, alert list

Computer codes: EPHDV

2021/044 First report of *Amaranthus palmeri* in Southern Africa

Amaranthus palmeri (Amaranthaceae - EPPO A2 pest) is a dioecious summer annual species native to North America, where it has become a weed in agricultural fields and disturbed habitats. It has a high fecundity and a long-lived seed bank which make management of the species difficult. In the EPPO region, it is established in a few countries and transient in several others. In South Africa, *A. palmeri* was recorded for the first time in 2018 in a farm in the Douglas district, Northern Cape Province. Here it was reported to infest maize, cotton and alfalfa fields. In 2019, *A. palmeri* was recorded growing in abundance along the main road some 7 km from the farm where it had been originally recorded. Additionally, it was collected from the Kruger National Park in disturbed habitats along the Limpopo river. In 2020, *A. palmeri* was also found in the North-West District in Botswana where local people confirmed it had been present in the area for at least ten years.

Source: Sukhorukov AP, Kushunina M, Reinhardt CF, Bezuidenhout H, Vorster BJ (2020) First records of *Amaranthus palmeri*, a new emerging weed in southern Africa with further notes on other poorly known alien amaranths in the continent. *BioInvasions Records* **10**, In Press. https://www.reabic.net/journals/bir/2021/1/BIR_2021_Sukhorukov.pdf

Pictures: *Amaranthus palmeri*. <https://gd.eppo.int/taxon/AMAPA/photos>

Additional key words: new record, invasive alien plants

Computer codes: AMAPA, BW, ZA

2021/045 First report of *Heteranthera reniformis* and *Rotala ramosior* in Bulgaria

Two non-native plant species are reported for the first time in Bulgaria, namely *Heteranthera reniformis* (Pontederiaceae) and *Rotala ramosior* (Lythraceae). Both species were recorded in rice fields in the Thracian Lowland.

Heteranthera reniformis is an annual or facultatively perennial plant, 20-50 cm tall, that grows in shallow, freshwater wetlands. It is native to the Americas and has a limited distribution in the EPPO region (Bulgaria, France, Greece, Italy, North Macedonia, Portugal

and Spain). It is also recorded as naturalised in Queensland, Australia. In some countries it appears to be restricted to rice fields (e.g. Bulgaria, France), where in others it is recorded as invasive in freshwater or along riverbanks (e.g. Portugal and Spain, RS 2006/113). In Italy, it is recorded in rice fields (where it has been shown to reduce yield) and in lentic shallow waters.

Rotala ramosior is an annual species which has a limited distribution in the EPPO region where it is reported from rice fields in Bulgaria, Greece, Italy and North Macedonia. It is native to the Americas and is also found as a non-native in Taiwan and the Philippines.

Source: Ferrero A (1996) Prediction of *Heteranthera reniformis* competition with flooded rice using day-degrees. *Weed Research* **36**, 197-201.
Gussev C, Georgiev V, Tsoneva S, Tzonev R (2020) New floristic and syntaxonomic data from rice fields in Bulgaria. *Botanica Serbica* **44**, 95-100.

Pictures: *Heteranthera reniformis*. <https://gd.eppo.int/taxon/HETRE/photos>

Additional key words: new record

Computer codes: HETRE, ROTRA, BG

2021/046 First report of *Vitex trifolia* in Tunisia

Vitex trifolia (Lamiaceae) is a large coastal shrub or small tree less than 5 m in height. The species has a number of medicinal uses (e.g. treatment of fevers) and it is used as an ornamental species. *V. trifolia* has a wide native range including Australia, east Africa and Asia. The population in Tunisia has been known since 2015 in the Mahdia region (East Central Tunisia) and consists of more than 30 individuals occupying approximately 3 hectares. Here the population grows in a loam-sandy coastal field. It is reported as invasive in Cuba and naturalized in Hawaii.

Source: Khaifa KH, Mokni R (2020) *Vitex trifolia* (Lamiaceae) a naturalised alien new to the non-native flora of Tunisia and North Africa. *Flora Mediterranea* **30**, 327-332.

Additional key words: invasive alien plants

Computer codes: VIXTR, TN

2021/047 Updated list of non-native ornamental plants in Romania

An updated list of non-native ornamental plants which are reported as escaped, naturalised or invasive in Romania has been published. It includes 264 species and subspecies of which 199 are casual, 37 are naturalised, and 28 are invasive (Table 1). The non-native ornamental flora of Romania is dominated by American and Asian taxa. In total, 80 families are represented and the most important are Asteraceae (33 taxa), Fabaceae (18 taxa), Rosaceae (15 taxa), Solanaceae (10 taxa) and Lamiaceae (8 taxa). 43 families are represented by only one taxon. Many taxa (108) occur only in ten or less localities. There are 78 taxa that have been reported in Romania in the last 20 years.

Table 1. Invasive species in Romania that have been introduced as ornamental species.

Species	Family	EPP0 List
<i>Acer negundo</i>	Sapindaceae	
<i>Ailanthus altissima</i>	Simaroubaceae	Invasive Alien Plants
<i>Amaranthus hypochondriacus</i>	Amaranthaceae	
<i>Amorpha fruticosa</i>	Fabaceae	Invasive Alien Plants
<i>Asclepias syriaca</i>	Apocynaceae	
<i>Bassia scoparia</i>	Amaranthaceae	
<i>Echinocystis lobata</i>	Cucurbitaceae	
<i>Elaeagnus angustifolia</i>	Elaeagnaceae	
<i>Fraxinus pennsylvanica</i>	Oleaceae	
<i>Helianthus tuberosus</i>	Asteraceae	Invasive Alien Plants
<i>Humulus scandens</i>	Cannabaceae	A2
<i>Impatiens glandulifera</i>	Balsaminaceae	Invasive Alien Plants
<i>Lycium barbarum</i>	Solanaceae	
<i>Morus alba</i>	Moraceae	
<i>Oenothera biennis</i>	Onagraceae	
<i>Oenothera glazioviana</i>	Onagraceae	
<i>Parthenocissus inserta</i>	Vitaceae	
<i>Prunus serotina</i>	Rosaceae	Invasive Alien Plants
<i>Reynoutria × bohemica</i>	Polygonaceae	Invasive Alien Plants
<i>Reynoutria japonica</i>	Polygonaceae	Invasive Alien Plants
<i>Robinia pseudoacacia</i>	Fabaceae	
<i>Rudbeckia laciniata</i>	Asteraceae	
<i>Sicyos angulatus</i>	Cucurbitaceae	Invasive Alien Plants
<i>Sisyrinchium montanum</i>	Iridaceae	
<i>Solidago canadensis</i>	Asteraceae	Invasive Alien Plants
<i>Solidago gigantea</i>	Asteraceae	Invasive Alien Plants
<i>Symphotrichum lanceolatum</i>	Asteraceae	
<i>Symphotrichum x salignum</i>	Asteraceae	

Source: Urziceanu M, Camen-Comănescu P, Nagodă E, Raicu M, Sirbu M, Anastasiu P (2020) Updated list of non-native ornamental plants in Romania. *Contribuții Botanice LV* 59-82.

Additional key words: invasive alien plants

Computer codes: ACRNE, AILAL, AMAHP, AMHFR, ASCSY, ASTLN, ECNLO, ELGAN, FRXPE, HELTU, HUMJA, IPAGL, KCHSC, LYUHA, MORAL, OEObI, OEOER, POLCU, PRNSO, PRTIN, REYBO, ROBPS, RUDLA, SISMO, SIYAN, SOOCA, SOOGI, ZMYSA, RO

2021/048 ***Pistia stratiotes* in Slovakia**

Pistia stratiotes (Araceae: EPP0 A2 List) is a free-floating perennial freshwater macrophyte native to South America. The species is invasive in many regions of the world including Africa, Asia, Central America and the Caribbean, North America, and Oceania. In the EPP0 region, the species is established in thermally abnormal waters in Slovenia and Germany and it is invasive in the south of France. Established populations occur in Morocco, Italy and Spain. Recently, *P. stratiotes* was identified Serbia (RS 2019/127). In South -West Slovakia, occasional records of *P. stratiotes* have been recorded as early as 2007 (a few individuals found in Podunajská nížina lowland in the Malý Dunaj river) and between 2008-2010 (Čierna voda river). Studies in 2015 and 2018 show that individual plants first appeared in July. Spreading occurred in September and October and although affected by frost, the plants remained at the sites until December. The highest density of plants reached approximately 380 individuals per m² and an average biomass of 7.3 kg m². In 2016 and 2017 the species was absent. At present, *P. stratiotes* can be regarded as transient in Slovakia, but over time, climate change may facilitate spread and establishment.

Source: Ružičková J, Lehotská B, Takáčová A, Semerád M (2019) Morphometry of alien species *Pistia stratiotes* L. in natural conditions of the Slovak Republic. *Biologia* **75**, 1-10.

Pictures: *Pistia stratiotes*: <https://gd.eppo.int/taxon/PIIST/photos>

Additional key words: invasive alien plants

Computer codes: PIIST, SK