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POUR LA PROTECTION DES PLANTES

EUROPEAN AND  
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PLANT PROTECTION  
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# EPPPO Reporting Service

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**2017/112 PQR - the EPPO database on quarantine pests: a new update is available!**

PQR - the EPPO database on quarantine pests (geographical distributions, host plants, regulatory status, pathways, and pictures) was updated on 2017-06-08. This new update can be downloaded by clicking on the following link (if you have already installed PQR on your computer, it will simply replace the earlier version): <http://newpqr.eppo.int/download.php>

Much data has been added since the previous update (2016-05-25), the list below is not exhaustive but provides some examples of newly added items:

- **World distributions:** e.g. *Aleurolobus marlatti*, *Euwallacea fornicatus sensu lato*, *Fusarium euwallaceae*, *Gymnandrosoma aurantianum*, *Igutettix oculatus*, *Neodiprion abietis*, *Penthimiola bella*, *Rose rosette virus*, *Xylosandrus compactus*, *Zaprionus indianus*, *Zaprionus tuberculatus*.
- **Pest and plant pictures:** e.g. *Anthonomus eugenii*, *Aporia crataegi*, *Cameraria ohridella*, *Castor fiber*, *Citrus exocortis viroid*, *Coccinella septempunctata*, *Cyperus rotundus*, *Daucus carota* subsp. *sativus*, *Halyomorpha halys*, *Helicoverpa* sp., *Hemileia vastatrix*, *Leptinotarsa decemlineata*, *Liriomyza sativae*, *Lycorma delicatula*, *Pistia stratiotes*, *Potato virus Y* and *PVY<sup>NTN</sup>*, *Prosopis juliflora*, *Quercusia quercus*, *Salvinia molesta*, *Setosphaeria turcica*, *Solanum tuberosum*, *Synanthedon vespiformis*, *Taxodium distichum*, *Ternstroemia gymnanthera*, *Ustilago maydis*, *Vanessa atalanta*, *Viteus vitifoliae*, *Xanthomonas axonopodis* pv. *allii*, *Xanthomonas perforans*, *Xylosandrus compactus*.

The EPPO Secretariat takes this opportunity to thank all photographers who have kindly provided their photos. More would be most welcome and can easily be uploaded via the EPPO Global Database!

- All recent data from the EPPO Reporting Service (April 2016 to May 2017) and updated pest statuses sent by several NPPOs of EPPO member countries.

PQR and EPPO Global Database (GD) share the same data on geographical distributions, host plants, regulatory status, pathways, and pictures (data is entered only once by the EPPO Secretariat). The main differences are that PQR and GD use different technologies to access and display the information, and that GD contains more pest-specific documents (e.g. EPPO Standards, Datasheets, PRAs). PQR is a software which has to be installed on PCs, and as a consequence, it can only be updated at regular intervals when new versions are prepared and released by the EPPO Secretariat. EPPO Global Database is a web-based database which is updated in real-time but an Internet connexion is always needed.

Source: EPPO Secretariat (2017-06).

More explanations about PQR can also be found on the EPPO website:  
<http://www.eppo.int/DATABASES/pqr/pqr.htm>

Practical guide to upload photos via the EPPO Global Database.  
[https://gd.eppo.int/media/files/photos\\_user-guide.pdf](https://gd.eppo.int/media/files/photos_user-guide.pdf)

Additional key words: database, EPPO

**2017/113    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**

*Cowpea mild mottle virus* (*Carlavirus*, CPMMV - EU Annexes) has recently been reported from Australia. The virus has been detected in Queensland in 2 locations (Fassifern and Lockyer Valley, Queensland) on common bean (*Phaseolus vulgaris* cv. Wyatt), soybean (*Glycine max*) and chia (*Salvia hispanica*). In Fassifern, the disease incidence in common bean crops was high (50 to 90% symptomatic plants).

The pest status of *Cowpea mild mottle virus* (*Carlavirus*) in Australia is officially declared as: **Present: only in some areas** (IPPC, 2017).

*Meloidogyne enterolobii* (EPPO A2 List) is reported for the first time from Nigeria. During a nematode survey, tubers of *Dioscorea rotundata* (yam) showing galls were collected from markets and farmer's fields from November 2012 to February 2013. Laboratory analysis (isozyme patterns, PCR, pathogenicity tests) confirmed the identity of the nematode in samples collected from the Nigerian states of Anambra, Niger and Abuja (Federal Capital Territory). This is also the first time that *M. enterolobii* is found causing galls on *D. rotundata* (Kolombia *et al.*, 2016).

The situation of *Meloidogyne enterolobii* in Nigeria can be described as follows: **Present: only in some areas**.

- **Detailed records**

In Australia, *Liriomyza sativae* (Diptera: Agromyzidae - EPPO A2 List) has been found on Cape York Peninsula in Queensland. Eradication is not considered feasible but measures are being taken to prevent any further spread (IPPC, 2017).

The pest status of *Liriomyza sativae* in Australia is officially declared as: **Present: subject to official control** (IPPC, 2017).

In Australia, *Xylosandrus crassiusculus* (Coleoptera: Scolytidae - EPPO Alert List) has been detected 5 times in Queensland. Due to the distance between the detection sites and the broad host range of *X. crassiusculus*, its eradication is not considered to be feasible.

The pest status of *Xylosandrus crassiusculus* in Australia is officially declared as: **Present: only in some areas** (IPPC, 2017).

- **Host plants**

In Pakistan, *Tomato leaf curl New Delhi virus* (*Begomovirus*, EPPO Alert List) has been detected in a soybean (*Glycine max*) field in Faisalabad. Affected plants showed severe leaf curling, vein thickening and leaf yellowing (Jamil *et al.*, 2017).

In the Czech Republic, *Little cherry virus 1* (*Velarivirus*, LChV-1 - EU Annexes) has been found in apricot (*Prunus armeniaca*). During a survey carried out in a germplasm collection located in Lednice in summer 2016, the virus was detected in 5 cultivars. These trees were

not showing any obvious symptoms, such as leaf discoloration or fruit quality reduction. (Šafářová *et al.*, 2017).

- **New pests and taxonomy**

Blueberry fruit drop disease was first detected in blueberry (*Vaccinium* spp.) plants in British Columbia (Canada) in the late 1990s, and in a single field in Northern Washington state (USA) in 2012. On infected plants, young leaves show a transient red coloration of the veins during the blooming period, and flowers display red stripes on their corollas. After bloom, plants appear normal but abort nearly 100% of their fruit, approximately 3 weeks before harvest when the berries are 3-5 mm in diameter. Recent studies have shown that the causal agent of blueberry fruit drop disease is a new virus species, belonging to the Caulimoviridae family and probably representing a new genus, which has been called *Blueberry fruit drop-associated virus*. Studies are being done to determine whether this virus also occurs in native vegetation adjacent to infected blueberry fields. In addition, efforts are being made in collaboration with growers to eradicate this virus (Diaz-Lara and Martin, 2016).

A new species of *Liberibacter*, tentatively called '*Candidatus Liberibacter brunswickensis*' has been identified in *Acizzia solanicola* (Hemiptera: Psyllidae - Australian eggplant psyllid). This is the first time that a *Liberibacter* species is found in Australia, as well as in the psyllid genus *Acizzia*. For the moment, '*Ca. L. brunswickensis*' has not been associated with any plant disease. *A. solanicola* is a psyllid species, first described in 2010, native to Australia which has also been found in New Zealand. It is noted that it has broadened its host range from *Solanum pterophilum* (its native host) to other introduced solanaceous plants, such as *Solanum melongena* (aubergine), *Brugmansia* sp., *Physalis peruviana*, and *S. mauritianum*. Further studies about the biology, host range and distribution of '*Ca. L. brunswickensis*' will be carried out (Morris *et al.*, 2017).

- Sources:
- Diaz-Lara A, Martin RR (2016) Blueberry fruit drop-associated virus: a new member of the family Caulimoviridae isolated from blueberry exhibiting fruit-drop symptoms. *Plant Disease* **100**(11), 2211-2214.  
<http://onlinelibrary.wiley.com/doi/10.1111/1751-7915.12707/epdf>
  - IPPC website. Official Pest Reports - Australia (2017-04-24) Detection of *Liriomyza sativae* in Far North Queensland.  
<https://www.ippc.int/en/countries/australia/pestreports/2017/04/detection-of-liriomyza-sativae-in-far-north-queensland/>
  - IPPC website. Official Pest Reports - Australia (2017-04-24) Detection of *Xylosandrus crassiusculus* (Granulate ambrosia beetle) in Queensland.  
<https://www.ippc.int/en/countries/australia/pestreports/2017/04/detection-of-xylosandrus-crassiusculus-granulate-ambrosia-beetle-in-queensland/>
  - IPPC website. Official Pest Reports - Australia (AUS-83/1 of 2017-05-17) Detection of *Cowpea mild mottle virus* (*Carlavirus*) in Queensland.  
<https://www.ippc.int/en/countries/australia/pestreports/2017/05/detection-of-cowpea-mild-mottle-virus-carlavirus-in-queensland/>
  - Jamil N, Rehman A, Hamza M, Hafeez A, Ismail H, Zubair M, Mansoor S, Amin I (2017) First report of *Tomato leaf curl New Delhi virus*, a bipartite begomovirus, infecting soybean (*Glycine max*). *Plant Disease* **101**(5), p 845.
  - Kolombia YA, Lava Kumar P, Claudius-Cole AO, Karssen G, Viaene N, Coyne D, Bert W (2016) First report of *Meloidogyne enterolobii* causing tuber galling damage on white yam (*Dioscorea rotundata*) in Nigeria. *Plant Disease* **100**(10), 2171-2174.
  - Morris J, Shiller J, Mann R, Smith G, Yen A, Rodoni B (2017) Novel '*Candidatus Liberibacter*' species identified in the Australian eggplant psyllid, *Acizzia solanicola*. *Microbial Biotechnology*. doi:10.1111/1751-7915.12707

Šafářová D, Faure C, Candresse T, Navrátil M, Nečas T, Marais A (2017) First report of *Little cherry virus 1* infecting apricot in the Czech Republic. *Plant Disease* 101(5), p 845.

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

**Computer codes:** ACIZSO, BFDAV0, CPMMV0, LCHV10, LIBENE, LIRISA, MELGMY, TOLCND, XYLBRC, AU, CA, CZ, NG, PK, US

## 2017/114 EPPO report on notifications of non-compliance

The EPPO Secretariat has gathered below the notifications of non-compliance for 2017 received since the previous report (EPPO RS 2017/054). 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
Agromyzidae	<i>Verbena</i> hybrids	Cuttings	Brazil	Spain	1
<i>Aleurocanthus spiniferus</i>	<i>Camellia japonica</i>	Plants for planting	China	Netherlands	1
Aleyrodidae	<i>Sutera</i>	Cuttings	Uganda	Spain	1
<i>Andean potato latent virus, Arracacha virus B, Potato virus A, Potato virus V, Potato virus X, Potato virus Y, Potato yellowing virus</i>	<i>Solanum tuberosum</i>	Ware potatoes	Peru	Italy	1
<i>Anthonomus eugenii</i>	<i>Capsicum</i>	Vegetables	Mexico	United Kingdom	1
	<i>Capsicum annuum</i>	Vegetables	Mexico	Netherlands	1
	<i>Capsicum annuum</i>	Vegetables	Mexico	United Kingdom	1
	<i>Solanum melongena</i>	Vegetables	Dominican Rep.	Netherlands	2
<i>Atherigona orientalis, Helicoverpa armigera</i>	<i>Capsicum annuum</i>	Vegetables	Mauritius	France	1
<i>Bactericera cockerelli</i>	<i>Solanum</i>	Vegetables	Mexico	United Kingdom	1
<i>Bemisia</i>	<i>Capsicum annuum</i>	Vegetables	Egypt	United Kingdom	1
	<i>Solanum melongena</i>	Vegetables	Mexico	United Kingdom	1
	<i>Solanum melongena</i> var. <i>serpentinum</i>	Vegetables	Mexico	United Kingdom	1
	<i>Monarda</i>	Cuttings	Costa Rica	United Kingdom	1
<i>Bemisia afer</i>	<i>Manihot esculenta</i>	Vegetables (leaves)	Congo, Dem. Rep. of	France	1
<i>Bemisia tabaci</i>	<i>Ajuga reptans</i>	Cuttings	Kenya	Netherlands	2
	<i>Amaranthus</i>	Vegetables (leaves)	Nigeria	United Kingdom	1

Pest	Consignment	Type of commodity	Country of origin	Destination	nb
<i>B. tabaci</i> (cont.)	<i>Amaranthus, Telfairia, Vernonia amygdalina</i>	Vegetables (leaves)	Nigeria	United Kingdom	1
	<i>Apium graveolens</i>	Vegetables	Thailand	Sweden	1
	<i>Capsicum</i>	Vegetables	Egypt	United Kingdom	3
	<i>Capsicum annuum</i>	Vegetables	Turkey	United Kingdom	1
	<i>Capsicum frutescens</i>	Vegetables	Turkey	United Kingdom	3
	<i>Cardamine</i>	Cuttings	Malaysia	United Kingdom	1
	<i>Cestrum</i>	Vegetables	Suriname	Netherlands	5
	<i>Chlorophytum</i>	Cuttings	Sri Lanka	Netherlands	1
	<i>Corchorus</i>	Vegetables	Malaysia	United Kingdom	1
	<i>Corchorus</i>	Vegetables	Nigeria	United Kingdom	8
	<i>Corchorus olitorius</i>	Vegetables	India	United Kingdom	1
	<i>Corchorus olitorius</i>	Vegetables	Jordan	Sweden	1
	<i>Corchorus olitorius</i>	Vegetables	Jordan	United Kingdom	1
	<i>Corchorus olitorius</i>	Vegetables	Malaysia	United Kingdom	3
	<i>Corchorus olitorius</i>	Vegetables	Nigeria	United Kingdom	5
	<i>Corchorus olitorius</i>	Vegetables	Vietnam	United Kingdom	1
	<i>Corchorus olitorius</i>	Vegetables (leaves)	Togo	Belgium	1
	<i>Corchorus olitorius, Hibiscus</i>	Vegetables	Nigeria	United Kingdom	1
	<i>Corchorus olitorius, Vernonia amygdalina</i>	Vegetables (leaves)	Nigeria	United Kingdom	1
	<i>Corchorus, Ocimum, Telfairia occidentalis</i>	Vegetables (leaves)	Nigeria	United Kingdom	1
	<i>Corchorus, Solanum, Telfairia occidentalis</i>	Vegetables (leaves)	Nigeria	United Kingdom	1
	<i>Corchorus, Telfairia</i>	Vegetables (leaves)	Nigeria	United Kingdom	1
	<i>Corchorus, Telfairia occidentalis</i>	Vegetables (leaves)	Nigeria	United Kingdom	1
	<i>Crossandra infundibuliformis</i>	Plants for planting	Netherlands	United Kingdom	2
	<i>Echinacea</i>	Cuttings	India	Netherlands	1
	<i>Echinodorus</i>	Plants for planting	Malaysia	United Kingdom	1
	<i>Eryngium</i>	Vegetables (leaves)	Cambodia	United Kingdom	1
	<i>Eryngium</i>	Vegetables (leaves)	Laos	France	1
	<i>Eryngium foetidum</i>	Vegetables (leaves)	Laos	France	1
	<i>Euphorbia millii</i>	Cuttings	Sri Lanka	Denmark	1
	<i>Euphorbia pulcherrima</i>	Plants for planting	Greece	Bulgaria	1
	<i>Euphorbia pulcherrima</i>	Plants for planting	Netherlands	United Kingdom	1
	<i>Eustoma</i>	Cut flowers	Israel	Netherlands	1
	<i>Eustoma, Trachelium</i>	Cut flowers	Israel	Netherlands	1
	<i>Heliopsis</i>	Cuttings	Costa Rica	United Kingdom	1
	<i>Hibiscus</i>	Plants for planting	Netherlands	United Kingdom	4
	<i>Hibiscus</i>	Vegetables	Nigeria	United Kingdom	2
	<i>Hibiscus rosa-sinensis</i>	Plants for planting	Netherlands	United Kingdom	2
	<i>Hibiscus sabdariffa</i>	Vegetables	Nigeria	United Kingdom	3
	<i>Houttuynia cordata</i>	Cuttings	Malaysia	United Kingdom	1
	<i>Hygrophila corymbosa</i>	Plants for planting	Malaysia	United Kingdom	1
	<i>Hyptis, Polygonum</i>	Vegetables (leaves)	Laos	Germany	1
	<i>Ipomoea aquatica</i>	Vegetables	Thailand	United Kingdom	1
	<i>Lantana camara</i>	Cuttings	Kenya	Germany	1
	<i>Lavandula angustifolia</i>	Cuttings	Tanzania	Netherlands	1
	<i>Limnophila aromatica</i>	Vegetables (leaves)	Thailand	Switzerland	1
	<i>Lisianthus alatus</i>	Cut flowers	Netherlands	United Kingdom	1
	<i>Mandevilla</i>	Plants for planting	Netherlands	United Kingdom	2
	<i>Mandevilla</i>	Cuttings	Israel	Netherlands	1
	<i>Mandevilla splendens</i>	Plants for planting	Italy	United Kingdom	3

Pest	Consignment	Type of commodity	Country of origin	Destination	nb
<i>B. tabaci</i> (cont.)	<i>Mandevilla splendens</i>	Plants for planting	Netherlands	United Kingdom	3
	<i>Manihot</i>	Vegetables	Indonesia	Netherlands	1
	<i>Manihot esculenta</i>	Fruits	Cameroon	Belgium	1
	<i>Manihot esculenta</i>	Fruits	Sierra Leone	United Kingdom	1
	<i>Manihot esculenta, Corchorus olitorius, Ipomoea batatas, Ocimum gratissimum</i>	Vegetables	Nigeria	United Kingdom	1
	<i>Mentha</i>	Vegetables (leaves)	Israel	Netherlands	1
	<i>Mentha</i>	Vegetables (leaves)	Laos	Netherlands	2
	<i>Mentha arvensis</i>	Vegetables (leaves)	Vietnam	Switzerland	4
	<i>Momordica</i>	Vegetables	Mexico	United Kingdom	1
	<i>Monarda</i>	Cuttings	Costa Rica	United Kingdom	2
	<i>Morinda citrifolia</i>	Fruits	Thailand	Ireland	1
	<i>Nerium oleander</i>	Plants for planting	Italy	United Kingdom	1
	<i>Nerium oleander</i>	Plants for planting	Netherlands	United Kingdom	1
	<i>Nerium oleander</i>	Plants for planting	Spain	United Kingdom	6
	<i>Ocimum</i>	Vegetables (leaves)	Israel	United Kingdom	1
	<i>Ocimum</i>	Vegetables (leaves)	Nigeria	United Kingdom	2
	<i>Ocimum</i>	Vegetables (leaves)	Spain (Canary Isl.)	United Kingdom	1
	<i>Ocimum</i>	Vegetables (leaves)	Thailand	United Kingdom	1
	<i>Ocimum basilicum</i>	Vegetables (leaves)	Israel	United Kingdom	2
	<i>Ocimum basilicum</i>	Vegetables (leaves)	Mexico	United Kingdom	1
	<i>Ocimum basilicum</i>	Vegetables (leaves)	Spain (Canary Isl.)	United Kingdom	2
	<i>Ocimum basilicum</i>	Vegetables (leaves)	Thailand	Austria	1
	<i>Ocimum gratissimum</i>	Vegetables (leaves)	Nigeria	United Kingdom	3
	<i>Ocimum gratissimum, Corchorus, Solanum</i>	Vegetables (leaves)	Nigeria	United Kingdom	2
	<i>Ocimum tenuiflorum</i>	Vegetables (leaves)	Laos	Sweden	1
	<i>Ocimum tenuiflorum</i>	Vegetables (leaves)	Malaysia	Netherlands	6
	<i>Ocimum tenuiflorum</i>	Vegetables (leaves)	Vietnam	Switzerland	1
	<i>Origanum vulgare</i>	Vegetables (leaves)	Israel	Netherlands	3
	<i>Oxypetalum</i>	Cut flowers	Israel	Netherlands	2
	<i>Pachystachys</i>	Cuttings	Brazil	Netherlands	1
	<i>Pandanus</i>	Vegetables (leaves)	Thailand	Belgium	1
	<i>Persicaria odorata</i>	Vegetables (leaves)	China (Hong Kong)	Netherlands	1
	<i>Persicaria odorata</i>	Vegetables (leaves)	Laos	Netherlands	2
	<i>Piper sarmentosum</i>	Vegetables	Malaysia	Netherlands	2
	<i>Polygonum</i>	Vegetables (leaves)	Laos	United Kingdom	1
	<i>Rumex acetosa</i>	Vegetables (leaves)	Nigeria	United Kingdom	1
	<i>Rumex rugosus</i>	Vegetables (leaves)	Nigeria	United Kingdom	2
	<i>Rumex, Solanum macrocarpon, Vernonia amygdalina</i>	Vegetables (leaves)	Nigeria	United Kingdom	1
	<i>Salvia</i>	Cuttings	Costa Rica	Denmark	1
	<i>Salvia</i>	Vegetables (leaves)	Israel	Belgium	1
	<i>Salvia</i>	Vegetables (leaves)	Morocco	Switzerland	1
	<i>Salvia officinalis</i>	Vegetables (leaves)	Israel	Netherlands	1
	<i>Scutellaria</i>	Plants for planting	Netherlands	United Kingdom	3
<i>Solanum</i>	Vegetables	Togo	Belgium	2	
<i>Solanum macrocarpon</i>	Vegetables	Nigeria	United Kingdom	10	
<i>Solanum melongena</i>	Vegetables	Mexico	United Kingdom	2	
<i>Solanum, Vernonia amygdalina</i>	Plants for planting	Nigeria	United Kingdom	1	
<i>Solidago</i>	Cut flowers	Kenya	Netherlands	1	
<i>Telfairia</i>	Vegetables	Nigeria	United Kingdom	3	
<i>Telfairia occidentalis</i>	Vegetables	Nigeria	United Kingdom	12	

Pest	Consignment	Type of commodity	Country of origin	Destination	nb
<i>B. tabaci</i> (cont.)	<i>Telfairia occidentalis</i> , unspecified plant species	Vegetables	Nigeria	United Kingdom	1
	<i>Telfairia occidentalis</i> , <i>Vernonia amygdalina</i>	Vegetables	Nigeria	United Kingdom	2
	<i>Telfairia</i> , <i>Vernonia amygdalina</i>	Vegetables	Nigeria	United Kingdom	1
	<i>Verbena bonariensis</i>	Cuttings	Brazil	Spain	1
	<i>Vernonia amygdalina</i>	Vegetables (leaves)	Nigeria	United Kingdom	3
	<i>Vernonia amygdalina</i> , <i>Amaranthus</i> , <i>Corchorus olitorius</i> , <i>Solanum macrocarpon</i>	Vegetables (leaves)	Nigeria	United Kingdom	1
	<i>Bemisia tabaci</i> , <i>Spodoptera litura</i>	<i>Ocimum</i>	Vegetables (leaves)	Laos	Germany
<i>Clavibacter michiganensis</i> subsp. <i>michiganensis</i>	<i>Solanum lycopersicum</i>	Seeds	China	Italy	1
	<i>Solanum lycopersicum</i>	Seeds	Taiwan*	France	1
<i>Clavibacter michiganensis</i> subsp. <i>sepedonicus</i>	<i>Solanum tuberosum</i>	Ware potatoes	Turkey	Bulgaria	1
	<i>Solanum tuberosum</i> subsp. <i>andigenum</i>	Ware potatoes	Poland	United Kingdom	1
<i>Ditylenchus dipsaci</i>	<i>Allium cepa</i>	Seeds	Australia	Netherlands	1
<i>Ephestia kuehniella</i>	<i>Cyperus esculentus</i>	Vegetables	Burkina Faso	Spain	1
Fungi	<i>Citrus latifolia</i>	Fruits	Vietnam	Spain	1
<i>Fusarium circinatum</i>	<i>Pinus taeda</i>	Seeds	USA	France	1
<i>Globodera pallida</i>	<i>Solanum tuberosum</i>	Ware potatoes	Cyprus	Germany	1
	Unspecified	Soil and growing medium	Algeria	Spain	1
<i>Globodera rostochiensis</i>	<i>Solanum tuberosum</i>	Ware potatoes	Cyprus	Germany	1
	<i>Solanum tuberosum</i>	Ware potatoes	Egypt	Croatia	1
<i>Helicoverpa</i>	<i>Capsicum</i>	Vegetables	Mauritius	France	1
<i>Helicoverpa zea</i>	<i>Solanum melongena</i>	Vegetables	Mexico	Netherlands	1
Hemiptera	<i>Origanum vulgare</i>	Vegetables (leaves)	Israel	Ireland	1
<i>Leptoglossus clypealis</i> , Heteroptera	<i>Yucca rostrata</i>	Plants for planting	Mexico	Italy	1
<i>Leucinodes orbonalis</i>	<i>Solanum melongena</i>	Vegetables	Sri Lanka	Switzerland	1
<i>Liriomyza</i>	<i>Apium graveolens</i>	Vegetables	Algeria	France	1
	<i>Aster</i> , <i>Bupleurum</i> , <i>Gypsophila</i>	Cut flowers	Ecuador	Ireland	1
	<i>Bupleurum</i>	Cut flowers	Ecuador	Ireland	1
	<i>Bupleurum</i>	Cut flowers	Ecuador	United Kingdom	1
	<i>Bupleurum</i> , <i>Moluccella</i> <i>Chrysanthemum</i>	Cut flowers	Ecuador	Ireland	1
		Cut flowers	Ecuador	United Kingdom	1



Pest	Consignment	Type of commodity	Country of origin	Destination	nb
<i>Liriomyza</i> (cont.)	<i>Corchorus</i>	Vegetables	Malaysia	United Kingdom	1
	<i>Coriandrum</i>	Vegetables (leaves)	Egypt	United Kingdom	2
	<i>Moluccella</i>	Cut flowers	Ecuador	Ireland	1
	<i>Ocimum</i>	Vegetables (leaves)	Kenya	United Kingdom	1
	<i>Ocimum basilicum</i>	Vegetables (leaves)	Mexico	United Kingdom	1
	<i>Sauropus androgynus</i>	Vegetables (leaves)	Vietnam	United Kingdom	1
	<i>Solidago</i>	Cut flowers	Zimbabwe	United Kingdom	1
<i>Liriomyza huidobrensis</i>	<i>Dianthus</i>	Cut flowers	Colombia	United Kingdom	1
	<i>Dianthus barbatus</i>	Cut flowers	Colombia	Netherlands	1
	<i>Dianthus barbatus</i>	Cut flowers	Colombia	Netherlands	1
	<i>Dianthus, Eryngium</i>	Cut flowers	Ecuador	Switzerland	1
	<i>Eryngium</i>	Cut flowers	Ecuador	Netherlands	1
	<i>Gypsophila</i>	Cut flowers	Ecuador	Italy	2
	<i>Gypsophila</i>	Cut flowers	Ecuador	Netherlands	6
<i>Liriomyza sativae</i>	<i>Amaranthus viridis</i>	Vegetables (leaves)	Sri Lanka	United Kingdom	1
	<i>Coriandrum sativum</i> , <i>Ocimum tenuiflorum</i>	Vegetables (leaves)	Laos*	Sweden	1
	<i>Ocimum americanum</i>	Vegetables (leaves)	Laos*	Denmark	1
	<i>Ocimum basilicum</i>	Vegetables (leaves)	Cambodia*	France	1
	<i>Ocimum basilicum</i>	Vegetables (leaves)	Israel	France	1
	<i>Ocimum basilicum</i>	Vegetables (leaves)	Israel	Netherlands	1
	<i>Ocimum basilicum</i>	Vegetables (leaves)	Jordan	United Kingdom	1
	<i>Ocimum basilicum</i>	Vegetables (leaves)	Kenya	Netherlands	2
	<i>Ocimum basilicum</i>	Vegetables (leaves)	Malaysia	Netherlands	2
	<i>Ocimum basilicum</i>	Vegetables (leaves)	Malaysia	Sweden	1
	<i>Trigonella</i>	Vegetables (leaves)	Pakistan*	Sweden	1
	<i>Liriomyza trifolii</i>	<i>Apium graveolens</i>	Vegetables	Laos*	Sweden
<i>Gypsophila</i>		Cut flowers	Israel	Belgium	4
<i>Gypsophila</i>		Cut flowers	Israel	Germany	2
<i>Gypsophila</i>		Cut flowers	Israel	Netherlands	2
<i>Gypsophila</i>		Cut flowers	Zimbabwe	Netherlands	1
<i>Gypsophila paniculata</i>		Cut flowers	Israel	Netherlands	1
<i>Ocimum</i>		Vegetables (leaves)	Israel	United Kingdom	1
<i>Solidago</i>		Cut flowers	Israel	Netherlands	1
<i>Solidago</i>		Cut flowers	Zimbabwe	United Kingdom	2
<i>Pantoea stewartii</i>	<i>Zea mays</i>	Seeds	Mexico	France	2
	<i>Zea mays</i>	Seeds	Mexico	Germany	1
<i>Phyllosticta citricarpa</i>	<i>Citrus maxima</i>	Fruits	China	Italy	1
<i>Phytophthora ramorum</i>	<i>Rhododendron</i>	Plants for planting	Netherlands	Estonia	1
	<i>Rhododendron Repens</i> hybrids	Plants for planting	Germany	United Kingdom	1
'Ca. Phytoplasma pyri'	<i>Pyrus pyrifolia</i>	Plants for planting	Netherlands	Austria	1
<i>Plodia interpunctella</i>	<i>Cyperus esculentus</i>	Vegetables	Burkina Faso	Spain	1
<i>Pomacea canaliculata</i>	<i>Limnophila aromatica</i>	Vegetables (leaves)	Thailand	Switzerland	1
<i>Potato spindle tuber viroid</i>	<i>Capsicum</i>	Seeds	China	United Kingdom	1
	<i>Capsicum</i>	Seeds	USA*	United Kingdom	1
	<i>Capsicum frutescens</i>	Seeds	China	United Kingdom	1

Pest	Consignment	Type of commodity	Country of origin	Destination	nb
<i>Potato spindle tuber viroid</i>	<i>Solanum lycopersicum</i>	Seeds	China	Italy	1
<i>Potato virus Y</i>	<i>Solanum tuberosum</i>	Ware potatoes	Russia	Netherlands	1
Pseudococcidae	<i>Hylocereus undatus</i>	Vegetables	Vietnam	Spain	1
<i>Radopholus similis</i>	<i>Anubias</i>	Aquatic plants	Malaysia	Germany	1
<i>Ralstonia solanacearum</i>	<i>Rosa</i>	Cut flowers	Netherlands	Poland	1
<i>Ripersiella hibisci</i>	<i>Syzygium buxifolium</i>	Plants for planting	China*	Netherlands	1
<i>Scyphophorus acupunctatus</i>	<i>Beaucarnea</i>	Plants for planting	Guatemala	Italy	1
<i>Spodoptera</i>	<i>Dendranthema</i>	Cut flowers	Colombia	United Kingdom	1
<i>Spodoptera eridania</i>	<i>Phaseolus, Solanum macrocarpon</i>	Vegetables	Suriname	Netherlands	1
	<i>Solanum macrocarpon</i>	Vegetables	Suriname	Netherlands	4
<i>Spodoptera frugiperda</i>	<i>Capsicum</i>	Vegetables	Suriname	Netherlands	1
	<i>Capsicum chinense</i>	Vegetables	Mexico	Netherlands	1
	<i>Capsicum frutescens</i>	Vegetables	Suriname	Netherlands	1
	<i>Capsicum frutescens</i>	Vegetables	Suriname	Netherlands	1
	<i>Solanum macrocarpon</i>	Vegetables	Suriname	Netherlands	1
	<i>Solanum melongena</i>	Vegetables	Suriname	Netherlands	1
<i>Spodoptera littoralis</i>	<i>Chrysanthemum</i>	Plants for planting	Uganda	Netherlands	1
	<i>Eryngium</i>	Cut flowers	Zimbabwe	Netherlands	2
	<i>Lactuca sativa</i>	Vegetables	Egypt	Netherlands	5
	<i>Lactuca sativa var. crispata</i>	Vegetables	Egypt	Netherlands	1
	<i>Ocimum basilicum</i>	Vegetables (leaves)	Kenya	Netherlands	1
	<i>Rosa</i>	Cut flowers	Kenya	Netherlands	1
	<i>Rosa</i>	Cut flowers	Rwanda	Netherlands	3
	<i>Rosa</i>	Cut flowers	Tanzania	Netherlands	1
	<i>Rosa</i>	Cut flowers	Zimbabwe	Netherlands	2
<i>Telfairia occidentalis</i>	Vegetables	Nigeria	United Kingdom	1	
<i>Spodoptera litura</i>	<i>Amaranthus tricolor</i>	Vegetables (leaves)	Bangladesh	United Kingdom	1
	<i>Brassica</i>	Vegetables	Thailand	Netherlands	1
	<i>Mentha aquatica</i>	Vegetables (leaves)	Vietnam	Switzerland	1
	<i>Ocimum basilicum</i>	Vegetables (leaves)	India	Netherlands	1
	<i>Perilla frutescens</i>	Vegetables (leaves)	Laos	Netherlands	1
	<i>Rosa</i>	Cut flowers	India	United Kingdom	1
<i>Sternochetus</i>	<i>Mangifera indica</i>	Fruits	Sri Lanka	Italy	1
	<i>Mangifera indica</i>	Fruits	Uganda	Italy	1
<i>Synchytrium endobioticum</i>	<i>Solanum tuberosum</i>	Ware potatoes	Peru	Italy	1
Tetranychidae	<i>Asteriscus, Brachyscome, Begonia semperflorens hybrids, Euryops, Fuchsia, Lavandula angustifolia, Pelargonium fragrans, Pelargonium, Portulaca umbraticola, Sutura cordata</i>	Cuttings	Tanzania	Spain	1

Pest	Consignment	Type of commodity	Country of origin	Destination	nb	
<i>Thaumatotibia leucotreta</i>	<i>Annona</i>	Fruits	Ghana	United Kingdom	1	
	<i>Capsicum</i>	Vegetables	Kenya	Netherlands	1	
	<i>Capsicum</i>	Vegetables	Kenya	United Kingdom	3	
	<i>Capsicum</i>	Vegetables	Mozambique	United Kingdom	1	
	<i>Capsicum</i>	Vegetables	Uganda	United Kingdom	3	
	<i>Capsicum</i>	Vegetables	Uganda	United Kingdom	1	
	<i>Capsicum</i>	Vegetables	Zimbabwe	United Kingdom	3	
	<i>Capsicum</i>	Vegetables	Kenya	United Kingdom	6	
	<i>Capsicum</i>	Vegetables	Mozambique	United Kingdom	5	
	<i>Capsicum</i>	Vegetables	South Africa	Netherlands	1	
	<i>Capsicum</i>	Vegetables	Togo	Belgium	1	
	<i>Capsicum</i>	Vegetables	Uganda	United Kingdom	5	
	<i>Capsicum</i>	Vegetables	Uganda	United Kingdom	2	
	<i>Capsicum</i>	Vegetables	Zambia	United Kingdom	1	
	<i>Capsicum</i>	Vegetables	Zimbabwe	Netherlands	1	
	<i>Capsicum</i>	Vegetables	Zimbabwe	United Kingdom	1	
	<i>Capsicum annum</i>	Vegetables	Kenya	United Kingdom	1	
	<i>Capsicum annum</i>	Vegetables	Nigeria	United Kingdom	1	
	<i>Capsicum annum</i>	Vegetables	Uganda	Belgium	1	
	<i>Capsicum annum</i>	Vegetables	Uganda	Netherlands	2	
	<i>Capsicum annum</i>	Vegetables	Uganda	United Kingdom	6	
	<i>Capsicum annum</i>	Vegetables	Zambia	United Kingdom	2	
	<i>Capsicum annum</i>	Vegetables	Zimbabwe	United Kingdom	3	
	<i>Capsicum chinense</i>	Vegetables	Uganda	United Kingdom	3	
	<i>Capsicum chinense</i>	Vegetables	Uganda	United Kingdom	2	
	<i>Capsicum frutescens</i>	Vegetables	Kenya	United Kingdom	1	
	<i>Capsicum frutescens</i>	Vegetables	South Africa	Netherlands	1	
	<i>Capsicum frutescens</i>	Vegetables	Uganda	Netherlands	3	
	<i>Citrus reticulata</i>	Fruits	Israel	France	1	
	<i>Citrus tangerina</i>	Fruits	Israel	Finland	1	
	Unspecified	Fruits	Israel	France	1	
	Thripidae	<i>Abelmoschus esculentus</i> ,	Vegetables	Pakistan	Spain	1
		<i>Capsicum annum</i> ,				
		<i>Lagenaria siceraria</i>				
<i>Amaranthus viridis</i>		Vegetables (leaves)	India	United Kingdom	1	
<i>Momordica</i>		Vegetables	Dominican Rep.	United Kingdom	3	
<i>Momordica</i>		Vegetables	Pakistan	United Kingdom	1	
<i>Momordica</i>		Vegetables	Thailand	United Kingdom	1	
<i>Momordica balsamina</i>		Vegetables	Dominican Rep.	United Kingdom	1	
<i>Momordica charantia</i>		Vegetables	Dominican Rep.	United Kingdom	5	
<i>Momordica charantia</i>		Vegetables	Pakistan	United Kingdom	3	
<i>Momordica charantia</i> ,		Vegetables	Dominican Rep.	United Kingdom	2	
<i>Solanum melongena</i> var.						
<i>serpentinum</i>						
<i>Solanum melongena</i>		Vegetables	Bangladesh	United Kingdom	3	
<i>Solanum melongena</i>	Vegetables	Dominican Rep.	United Kingdom	2		
<i>Solanum melongena</i>	Vegetables	Nigeria	United Kingdom	1		
<i>Sutera</i>	Cuttings	Uganda	Spain	1		
Thrips	<i>Solanum melongena</i>	Vegetables	Mauritius	France	1	
	<i>Solanum melongena</i> var.	Vegetables	Dominican Rep.	United Kingdom	1	
<i>serpentinum</i>						
<i>Thrips palmi</i>	<i>Brassica rapa</i>	Vegetables	China (Hong Kong)	Netherlands	1	
	<i>Capsicum</i>	Vegetables	Cuba	Netherlands	1	
	<i>Dendrobium</i>	Cut flowers	Malaysia	Italy	2	

Pest	Consignment	Type of commodity	Country of origin	Destination	nb
<i>T. palmi</i> (cont.)	<i>Dendrobium</i>	Cut flowers	Thailand	Belgium	1
	<i>Dendrobium</i>	Cut flowers	Thailand	Italy	2
	<i>Dendrobium</i>	Cut flowers	Thailand	Netherlands	1
	<i>Mokara</i>	Cut flowers	Malaysia	Italy	2
	<i>Momordica</i>	Vegetables	Dominican Rep.	France	1
	<i>Momordica charantia</i>	Vegetables	Cambodia	France	1
	<i>Momordica charantia</i>	Vegetables	Dominican Rep.	United Kingdom	1
	<i>Momordica charantia</i>	Vegetables	Sri Lanka	France	1
	<i>Momordica charantia</i>	Vegetables	Thailand	France	1
	<i>Momordica charantia</i>	Vegetables	Vietnam	Switzerland	2
	<i>Ocimum tenuiflorum</i>	Vegetables (leaves)	Vietnam	Switzerland	1
	<i>Rosa</i>	Cut flowers	India	Netherlands	1
	<i>Solanum melongena</i>	Vegetables	Dominican Rep.	France	1
	<i>Solanum melongena</i>	Vegetables	Dominican Rep.	United Kingdom	1
<i>Solanum melongena</i>	Vegetables	Suriname	Netherlands	1	
Thysanoptera	<i>Momordica charantia</i>	Vegetables	Cambodia	France	1
	<i>Momordica charantia</i>	Vegetables	Dominican Rep.	France	1
	<i>Solanum melongena</i>	Vegetables	Dominican Rep.	France	1
Tortricidae	<i>Capsicum annuum</i>	Vegetables	Kenya	United Kingdom	1
<i>Xanthomonas</i>	<i>Citrus maxima</i>	Fruits	China	Germany	1
<i>Xanthomonas citri</i> subsp. <i>citri</i>	<i>Citroncirus</i>	Fruits	Pakistan	United Kingdom	1
	<i>Citrus hystrix</i>	Fruits	Vietnam	Switzerland	1
	<i>Citrus limon</i>	Fruits	Bolivia	Italy	4
<i>Xanthomonas euvesicatoria</i>	<i>Capsicum annuum</i>	Seeds	China	Czech Republic	1
	<i>Capsicum annuum</i>	Seeds	China	Italy	1
<i>Xylella fastidiosa</i>	<i>Juglans</i>	Plants for planting	USA	Spain	1

• Fruit flies

Pest	Consignment	Country of origin	Destination	nb
<i>Anastrepha</i>	<i>Mangifera indica</i>	Peru	France	1
	<i>Mangifera indica</i>	Peru	Germany	1
	<i>Mangifera indica</i>	Peru	Netherlands	1
<i>Anastrepha fraterculus</i>	<i>Mangifera</i>	Brazil	Portugal	1
	<i>Mangifera indica</i>	Brazil	Portugal	2
<i>Bactrocera</i>	<i>Averrhoa</i>	Malaysia	Netherlands	1
	<i>Capsicum frutescens</i>	Uganda	Germany	1
	<i>Citrus maxima</i>	China	Netherlands	1
	<i>Psidium guajava</i>	Suriname	Netherlands	1
	<i>Capsicum</i>	Suriname	Netherlands	1
	<i>Capsicum annuum</i>	Malaysia	Netherlands	1
	<i>Capsicum frutescens</i>	Laos	Germany	1
	<i>Capsicum frutescens</i>	Laos	Netherlands	1
	<i>Mangifera indica</i>	Côte d'Ivoire	Netherlands	1
	<i>Mangifera indica</i>	Sri Lanka	Switzerland	1
	<i>Syzygium jambos</i>	India	United Kingdom	1

Pest	Consignment	Country of origin	Destination	nb
<i>Bactrocera</i> (cont.)	<i>Trichosanthes cucumerina</i>	Sri Lanka	United Kingdom	1
	<i>Trichosanthes cucumerina</i>	Sri Lanka	United Kingdom	1
<i>Bactrocera dorsalis</i>	<i>Annona</i>	Vietnam	Germany	1
	<i>Mangifera indica</i>	Burkina Faso	France	2
	<i>Mangifera indica</i>	Mali	France	1
	<i>Mangifera indica</i>	Mali	Switzerland	1
	<i>Manilkara zapota</i>	Pakistan	United Kingdom	1
	<i>Psidium guajava</i>	Malaysia	Germany	1
	<i>Psidium guajava</i>	Vietnam	France	1
	<i>Ziziphus</i>	India	France	1
<i>Bactrocera invadens</i>	<i>Mangifera indica</i>	Côte d'Ivoire	Netherlands	1
<i>Bactrocera latifrons</i>	<i>Capsicum frutescens</i>	Laos	France	1
	<i>Capsicum frutescens</i>	Laos	Germany	1
<i>Bactrocera zonata</i>	<i>Psidium guajava</i>	India	France	1
<i>Ceratitis</i>	<i>Capsicum</i>	Kenya	France	1
	<i>Mangifera indica</i>	Côte d'Ivoire	Netherlands	1
<i>Ceratitis capitata</i>	<i>Capsicum</i>	Senegal	France	1
	<i>Capsicum frutescens</i>	Cameroon	Switzerland	2
	<i>Capsicum frutescens</i>	Congo	France	1
	<i>Mangifera indica</i>	Burkina Faso	France	2
	<i>Psidium guajava</i>	Egypt	United Kingdom	1
<i>Ceratitis cosyra</i>	<i>Mangifera indica</i>	Burkina Faso	France	2
	<i>Mangifera indica</i>	Côte d'Ivoire	Netherlands	1
	<i>Mangifera indica</i>	Malawi	United Kingdom	1
	<i>Mangifera indica</i>	Mali	France	4
<i>Dacus</i>	<i>Cucumis sativus</i>	Jordan	Sweden	1
<i>Dacus bivittatus</i>	<i>Luffa acutangula</i>	Kenya	United Kingdom	1
<i>Dacus ciliatus</i>	<i>Momordica charantia</i>	Uganda	Sweden	1
Tephritidae (non-European)	<i>Averrhoa carambola</i>	Malaysia	Netherlands	1
	<i>Baccaurea ramiflora</i>	Thailand	Ireland	1
	<i>Capsicum</i>	Senegal	United Kingdom	1
	<i>Capsicum</i>	Cambodia	United Kingdom	3
	<i>Capsicum annum,</i>	Uganda	Spain	2
	<i>Capsicum frutescens</i>			
	<i>Capsicum chinense</i>	Uganda	Belgium	1
	<i>Capsicum frutescens</i>	Bangladesh	Italy	1
	<i>Capsicum frutescens</i>	Cameroon	Belgium	1
	<i>Capsicum frutescens</i>	Congo, Dem. Rep. of	Sweden	1
	<i>Capsicum frutescens</i>	Laos	Netherlands	1
	<i>Chrysophyllum cainito</i>	Vietnam	United Kingdom	1
	<i>Citrus maxima</i>	China	Germany	1
	<i>Citrus sinensis</i>	Egypt	Spain	2
	<i>Feijoa sellowiana</i>	Colombia	Netherlands	1
	<i>Luffa acutangula</i>	Kenya	United Kingdom	1
	<i>Mangifera</i>	Côte d'Ivoire	Germany	1
	<i>Mangifera</i>	Côte d'Ivoire	Netherlands	1

Pest	Consignment	Country of origin	Destination	nb
Tephritidae (non-European)	<i>Mangifera</i>	Guinea	Netherlands	1
	<i>Mangifera indica</i>	Burkina Faso	France	2
	<i>Mangifera indica</i>	Burkina Faso	Germany	1
	<i>Mangifera indica</i>	Burkina Faso	Netherlands	2
	<i>Mangifera indica</i>	Cameroon	Belgium	1
	<i>Mangifera indica</i>	Cameroon	France	9
	<i>Mangifera indica</i>	Cameroon	Italy	1
	<i>Mangifera indica</i>	Côte d'Ivoire	Belgium	1
	<i>Mangifera indica</i>	Côte d'Ivoire	France	7
	<i>Mangifera indica</i>	Côte d'Ivoire	Netherlands	1
	<i>Mangifera indica</i>	Guinea	Belgium	2
	<i>Mangifera indica</i>	Guinea	United Kingdom	1
	<i>Mangifera indica</i>	Mali	France	4
	<i>Mangifera indica</i>	Peru	France	1
	<i>Mangifera indica</i>	Peru	Germany	2
	<i>Mangifera indica</i>	Peru	Netherlands	2
	<i>Mangifera indica</i>	Uganda	United Kingdom	2
	<i>Manilkara zapota</i>	Pakistan	United Kingdom	2
	<i>Momordica charantia</i>	Uganda	United Kingdom	2
	<i>Psidium</i>	Zimbabwe	United Kingdom	1
	<i>Psidium guajava</i>	Dominican Rep.	United Kingdom	1
	<i>Psidium guajava</i>	India	France	1
	<i>Psidium guajava</i>	Malaysia	United Kingdom	1
	<i>Trichosanthes</i>	India	United Kingdom	1
	<i>Trichosanthes</i>	Mauritius	France	1
	<i>Trichosanthes cucumerina</i>	Bangladesh	United Kingdom	1
	<i>Trichosanthes cucumerina</i>	Sri Lanka	United Kingdom	1
	<i>Trichosanthes cucumerina</i> var. <i>anguina</i>	Sri Lanka	United Kingdom	1
	<i>Ziziphus jujuba</i> var. <i>spinosa</i>	Thailand	United Kingdom	1
	<i>Ziziphus mauritiana</i>	Pakistan	Spain	1

- Wood

Pest	Consignment	Type of commodity	Country of origin	Destination	nb
<i>Alphitobius leavigatus</i> , <i>Stenolophus mixtus</i>	Unspecified	Wood packing material (pallet)	Israel	Bulgaria	1
<i>Anoplophora glabripennis</i>	Unspecified	Dunnage	China	United Kingdom	1
	Unspecified	Wood packing material (pallet)	China	Austria	4
<i>Aphelenchoides</i> , <i>Bursaphelenchus</i> <i>mucronatus</i>	Unspecified	Wood packing material (pallet)	Belarus	Germany	1
<i>Aphelenchoides</i> , <i>Bursaphelenchus</i> <i>mucronatus</i> , <i>Rhabditis</i>	Unspecified	Wood packing material (crate)	Russia	Belgium	1
<i>Aphelenchoides</i> , Rhabditidae	Unspecified	Wood packing material	China	Portugal	1

Pest	Consignment	Type of commodity	Country of origin	Destination	nb
<i>Aphelenchoides, Rhabditis</i>	Unspecified	Wood packing material	Belarus	Lithuania	1
Aphelenchoididae, Rhabditidae, Cerambycidae	Unspecified	Wood packing material	Ukraine	Slovakia	1
<i>Apriona germari</i>	Unspecified	Dunnage	China	Estonia	1
Bethylidae	Unspecified	Wood packing material (pallet)	China	Lithuania	1
<i>Blepephaeus succinator</i>	Unspecified	Wood packing material	China	Finland	1
Bostrichidae	Unspecified	Wood packing material	China	Germany	1
	Unspecified	Wood packing material (pallet)	(China)	Germany	1
	Unspecified	Wood packing material (pallet)	Vietnam	Switzerland	1
<i>Buprestidae, Cerambycidae, Curculionidae, Isoptera</i>	<i>Eperua</i>	Wood and bark	Suriname	Italy	1
<i>Bursaphelenchus mucronatus</i>	Unspecified	Dunnage	China	Poland	1
	Unspecified	Wood packing material (pallet)	Belarus	Germany	1
	Unspecified	Wood packing material (pallet)	Israel	France	2
	Unspecified	Wood packing material (pallet)	Ukraine	Latvia	1
<i>Bursaphelenchus mucronatus, Rhabditis</i>	Unspecified	Dunnage and wooden crate	Belarus	Lithuania	1
	Unspecified	Wood packing material (pallet)	Russia	Poland	1
<i>Bursaphelenchus mucronatus, Seinura</i>	Unspecified	Wood packing material (crate)	Belarus	Netherlands	1
	Unspecified	Wood packing material (pallet)	Belarus	Netherlands	1
<i>Bursaphelenchus mucronatus, Tylenchus</i>	Unspecified	Wood packing material (pallet)	Belarus	Germany	1
<i>Bursaphelenchus xylophilus</i>	Unspecified	Dunnage	USA	Czech Republic	1
	Unspecified	Wood packing material	USA	Finland	1
	Unspecified	Wood packing material (pallet)	Taiwan	Bulgaria	1
Cerambycidae	Unspecified	Wood packing material	Turkey	United Kingdom	1
	Unspecified	Wood packing material (pallet)	China	Austria	1
Cerambycidae, <i>Xyleborus</i>	Unspecified	Wood packing material (pallet)	China	Austria	1
Diptera	<i>Quercus alba</i>	Wood and bark	USA	Spain	1
Grub holes	Unspecified	Dunnage	Canada	France	1
	Unspecified	Wood packing material	China	France	1
	Unspecified	Wood packing material	Ukraine	Slovakia	3
	Unspecified	Wood packing material (pallet)	Indonesia	Bulgaria	1
<i>Heterobostrychus aequalis</i>	Unspecified	Wood packing material (pallet)	China	Germany	1
Insecta	Unspecified	Dunnage	China	France	1

Pest	Consignment	Type of commodity	Country of origin	Destination	nb
Insecta (cont.)	Unspecified	Wood packing material	China	France	1
	Unspecified	Wood packing material (pallet)	China	Switzerland	2
	Unspecified	Wood packing material (pallet)	Singapore	Switzerland	1
<i>Monochamus alternatus</i>	Unspecified	Wood packing material	China	Estonia	1
<i>Pentatomidae</i>	Unspecified	Wood packing material (pallet)	China	Austria	1
Rhabditida	Unspecified	Wood packing material	China	Portugal	1
<i>Rhabditis</i>	Unspecified	Wood packing material	Belarus	Austria	1
	Unspecified	Wood packing material	China	Portugal	1
	Unspecified	Wood packing material (pallet)	Belarus	Germany	1
<i>Rhabditis, Seinura</i>	Unspecified	Wood packing material (pallet)	Ukraine	Estonia	1
<i>Rhabditis, Sirex noctilio</i>	Unspecified	Wood packing material (pallet)	Belarus	Germany	1
<i>Saperda tridentata</i>	<i>Ulmus rubra</i>	Wood and bark	USA	Italy	2
<i>Sinoxylon</i>	Unspecified	Wood packing material	India	Germany	1
	Unspecified	Wood packing material	Indonesia	Belgium	1
	Unspecified	Wood packing material (crate)	China	Germany	1
	Unspecified	Wood packing material (pallet)	Indonesia	Germany	1
<i>Sinoxylon anale</i>	Unspecified	Wood packing material (pallet)	India	Germany	1
<i>Sinoxylon ceratoniae</i>	Unspecified	Wood packing material (pallet)	China	Germany	1
<i>Tetropium</i>	Unspecified	Wood packing material	China	Germany	1
<i>Xyleborinus</i>	Pinales	Dunnage	China	France	2
	Unspecified	Wood packing material (pallet)	China	Austria	4
<i>Xyleborinus artestriatus</i>	Unspecified	Wood packing material (pallet)	China	Austria	3
<i>Xyleborinus saxeseni</i>	Unspecified	Wood packing material (pallet)	China	Austria	1
<i>Xyleborus</i>	Unspecified	Wood packing material (pallet)	China	Austria	1
	Unspecified	Wood packing material (pallet)	China	Austria	10
<i>Xyleborus, Xylosandrus</i>	Unspecified	Wood packing material (pallet)	China	Austria	1
<i>Xylosandrus</i>	Unspecified	Wood packing material (pallet)	China	Austria	1
<i>Xylotrechus</i>	Unspecified	Wood packing material	China	Germany	1



- Bonsais

Pest	Consignment	Country of origin	Destination	nb
<i>Aleurocanthus spiniferus</i>	<i>Camellia sasanqua</i>	Japan	Italy	1
<i>Pratylenchus</i>	<i>Acer, Carpinus coreana; Ligustrum obtusifolium, Rosa multiflora, Weigelia, Wisteria floribunda</i>	Korea, Rep. of	Switzerland	1

Source: EPPO Secretariat (2017-06).

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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](http://ec.europa.eu/food/plant/plant_health_biosecurity/europhyt/interceptions/index_en.htm)

**2017/115 First report of *Rhagoletis cingulata* in Italy**

In Italy, during a monitoring survey targeting *Rhagoletis pomonella*, another fruit fly *Rhagoletis cingulata* (Diptera: Tephritidae - EPP0 A2 List) was found in May 2016 in Lombardia region. A single specimen was caught in a trap which was placed in an apple (*Malus domestica*) orchard in the municipality of San Martino di Bianzone (province of Sondrio). The identity of the pest was confirmed by morphological and molecular methods. No damage was observed in nearby plants.

The pest status of *Rhagoletis cingulata* in Italy is officially declared as: **Present, a single specimen has been caught in a trap.**

Source: NPPO of Italy (2017-06).

Pictures: *Rhagoletis cingulata*. <https://gd.eppo.int/taxon/RHAGCI/photos>

Additional key words: new record

Computer codes: RHAGCI, IT

**2017/116 *Spodoptera frugiperda* continues to spread in Africa**

In early 2016, outbreaks of *Spodoptera frugiperda* (Lepidoptera: Noctuidae - EPP0 A1 List) were reported for the first time in Africa where high armyworm populations damaging maize (*Zea mays*) crops have been noticed (EPP0 RS 2016/188, 2017/035). Since these initial reports, other African countries have reported confirmed or suspected outbreaks of *S. frugiperda*, thus showing that the pest is rapidly spreading. This phytosanitary crisis has prompted coordinated actions by FAO aiming to contain the pest.

- As of May 2017, the presence of *S. frugiperda* has been officially confirmed in the following African countries (recent records are indicated in bold): Benin, **Botswana**, **Burundi**, **Cameroon**, Congo (Democratic Republic of), **Ethiopia**, Ghana, **Kenya**, Malawi, Mozambique, Namibia, Nigeria, **Rwanda**, Sao Tomé e Príncipe, South Africa, Swaziland, **Tanzania**, Togo, **Uganda**, Zambia, Zimbabwe.
- In addition, *S. frugiperda* has been detected in **Burkina Faso**, **Equatorial Guinea**, **Niger**, and **Sierra Leone**, but its presence remains to be officially confirmed in these countries.

Source: FAO (2017-05-15) Briefing note on fall armyworm (FAW) in Africa. <http://www.fao.org/3/a-bs183e.pdf>

IPPC website. Official Pest Reports - Cameroon (CMR-04/6 of 2017-06-02) First report of the fall army worm *Spodoptera frugiperda* in Cameroon. <https://www.ippc.int/en/countries/cameroon/pestreports/2017/06/first-report-of-the-fall-army-worm-spodoptera-frugiperda-in-cameroon/>

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

Additional key words: new record

Computer codes: LAPHFR, BF, BI, BW, CM, ET, GO, KE, NE, RW, SL, TZ, UG

**2017/117 First report of '*Candidatus Liberibacter asiaticus*' in Panama**

In February 2016, '*Candidatus Liberibacter asiaticus*' (associated with huanglongbing - EPPO A1 List) was detected for the first time in Panama. The disease was found on citrus the areas of Guabito and Las Tablas (district of Changuinoa, province of Bocas del Toro). The Ministry of Agriculture has declared a state of phytosanitary emergency and a national contingency plan has been elaborated to contain the disease and its vector, *Diaphorina citri* (Hemiptera: Liviidae - EPPO A1 List). In July 2016, 101 citrus plants at the sites where the disease was found were destroyed (burnt). In addition to plant destruction and surveys, the development of a national certification scheme for the production of healthy planting material of citrus has been undertaken.

The situation of '*Candidatus Liberibacter asiaticus*' in Panama can be described as follows: **Present, only in some areas (province of Bocas del Toro), under official control.**

**Source:** INTERNET  
 Gobierno de la República de Panamá  
 - Noticias (2017-06-05) Más de B/. 1 millón invertirán Panamá y Taiwán en proyecto para control de la enfermedad de los cítricos HLB. [http://mida.gob.pa/noticias\\_id\\_4875.html](http://mida.gob.pa/noticias_id_4875.html)  
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 - Noticias (2016-08-16) MIDA y Embajada de China (Taiwan) coordinan proyectos técnicos. [http://www.mida.gob.pa/noticias\\_id\\_3977.html](http://www.mida.gob.pa/noticias_id_3977.html)  
 - Noticias (2016-07-25) Decomisan plantones de cítricos en puesto de control de cuarentena en Hornitos. [http://mida.gob.pa/noticias\\_id\\_3898.html](http://mida.gob.pa/noticias_id_3898.html)  
 - Noticias (2016-06-01) MIDA impulsa plan de emergencia para control de enfermedad en los cítricos. [http://www.mida.gob.pa/noticias\\_id\\_3739.html](http://www.mida.gob.pa/noticias_id_3739.html)  
 República de Panamá. Ministerio de Desarrollo Agropecuario. Resolución no. OAL-039-ADM-2016 of 2016-02-03. Gaceta Oficial Digital, jueves 17 de marzo de 2016 no. 27991. <http://extwprlegs1.fao.org/docs/pdf/pan163996.pdf>

**Pictures:** '*Candidatus Liberibacter asiaticus*'. <https://gd.eppo.int/taxon/LIBEAS>

**Additional key words:** new record

**Computer codes:** LIBEAS, DIAACI, PA

**2017/118 First report of '*Candidatus Liberibacter asiaticus*' in Trinidad and Tobago**

In May 2017, the presence of '*Candidatus Liberibacter asiaticus*' (associated with huanglongbing - EPPO A1 List) was confirmed in leaf samples which had been collected from a lime (*Citrus* sp.) tree located in Curepe (county Saint George West) in the Northern part of the island of Trinidad (Trinidad and Tobago). These samples were tested at the University of Florida (USA). The NPPO of Trinidad and Tobago has initiated the following actions: delimiting survey, public awareness campaign and development of an integrated pest management programme against huanglongbing.

The pest status of '*Candidatus Liberibacter asiaticus*' in Trinidad and Tobago is officially declared as: **Present: subject to official control.**

**Source:** IPPC website. Official Pest Reports - Trinidad and Tobago (TTO-10/1 of 2017-06-18) Detection of huanglongbing or citrus greening ('*Candidatus Liberibacter asiaticus*') in Trinidad. <https://www.ippc.int/en/countries/trinidad-and-tobago/pestreports/2017/06/detection-of-huanglongbing-or-citrus-greening-candidatus-liberibacter-asiaticus-in-trinidad/>

**Pictures:** '*Candidatus Liberibacter asiaticus*'. <https://gd.eppo.int/taxon/LIBEAS/photos>

Additional key words: new record

Computer codes: LIBEAS, TT

**2017/119 'Candidatus Liberibacter asiaticus' detected in Alabama (US)**

In June 2017, the presence of '*Candidatus Liberibacter asiaticus*' (associated with huanglongbing - EPPO A1 List) is reported for the first time from Alabama (US). The bacterium was detected in citrus leaf samples and psyllid vectors (*Diaphorina citri*, Hemiptera: Liviidae - EPPO A1 List) which had been collected from a residential property on Dauphin Island in Mobile county. A delimiting survey will be initiated shortly, as well as an information campaign for nurserymen, plant dealers, and citrus hobbyists. If the delimiting survey concludes that the disease is limited to only a few trees, an eradication programme will be implemented.

**Source:** INTERNET  
Alabama Department of Agriculture & Industries. Press release of 2017-06-20. Citrus greening plant disease detected in Alabama. <http://agi.alabama.gov/s/press-release/citrus-greening-plant-disease-detected-in-alabama>

**Pictures:** '*Candidatus Liberibacter asiaticus*'. <https://gd.eppo.int/taxon/LIBEAS/photos>

Additional key words: detailed record

Computer codes: LIBEAS, US

**2017/120 *Neonectria neomacrospora* an emerging disease of fir trees in Northern Europe: addition to the EPPO Alert List**

**Why:** since 2008, a new and severe canker disease caused by *Neonectria neomacrospora* (anamorph *Cylindrocarpon cylindroides*) has been observed on firs (*Abies* spp.) in Norway. In 2011, the same disease was also found in Denmark causing damage on fir trees. In 2015, the fungus was detected in Southern Sweden. The Panel on Quarantine Pests for Forestry recommended that *N. neomacrospora* is added to the EPPO Alert List.

**Where:** the geographical distribution of *N. neomacrospora* remains to be clarified and it is not entirely clear whether this is a recently emerging fungus in Europe or a re-emerging one. According to the literature, cankers caused by this fungus have probably been observed in North America on *A. balsamea* as early as the 1930s. However, there is very little information about the current situation of this fungus in North America. In Europe, there are some old records of its presence. In Norway, when the herbarium specimen of the fungus recorded in 1951 under the name *Nectria cucurbitula* on *Abies alba*, *A. balsamea*, *A. concolor* and *A. nordmanniana* was re-examined in 1962, it was found to be identical to *Nectria cucurbitula* var. *macrospora* (= *N. neomacrospora*). The anamorph *Cylindrocarpon cylindroides* was first described from grafted *A. concolor* in a German nursery more than 100 years ago, but there is no indication that a canker disease caused by *N. neomacrospora* currently occurs in Germany. In Asia, *N. neomacrospora* was first found in 2014 in the province of Hubei in China.

**EPPO region:** Denmark, Norway, Sweden, United Kingdom (an Internet source mentions recent identifications).

**North America:** Canada (British Columbia), USA (Oregon, Washington).

**Asia:** China (Hubei).

**On which plants:** *N. neomacrospora* has been reported on many *Abies* species, such as: *A. alba* (European silver fir), *A. amabilis* (Pacific silver fir), *A. balsamea* (balsam fir), *A. balsamea* var. *phanerolepis* (Canaan fir), *A. cephalonica* (Greek fir), *A. concolor* (white fir), *A. durangensis*, *A. fargesii* (Farges's fir), *A. fraseri* (Fraser fir), *A. grandis* (grand fir), *A. kawakamii* (Taiwan fir), *A. koreana* (Korean fir), *A. lasiocarpa* (subalpine fir), *A. magnifica* (Californian red fir), *A. nebrodensis* (Sicilian fir), *A. nordmanniana* (Nordmann fir), *A. nordmanniana* subsp. *equitrojani* (Turkish fir), *A. numidica* (Algerian fir), *A. pinsapo* (Spanish fir), *A. procera* (noble fir), *A. sibirica* (Siberian fir), *A. vejarii*. It has also occasionally been found on *Picea abies* (Norway spruce), *Pseudotsuga menziesii* (Douglas fir), and *Tsuga heterophila* (Western hemlock).

**Damage:** symptoms are characterized by dead shoots and branches, cankers, branch dieback and heavy resin flow. Under humid conditions, characteristic red perithecia with ascospores (sexual stage) develop on plant material that has been dead for some time (usually more than 1 year). These red fruiting bodies are usually observed in the lower part of the crown and close to the trunk. Conidia from the asexual state (*C. cylindroides*) can also form on infected bark in humid conditions. In Denmark and Norway, tree mortality has been observed on *Abies* spp. in landscape plantings, Christmas tree production fields, and forest stands. Studies conducted in Denmark from 2011 to 2014 on 3 trial sites planted with different provenances of *A. lasiocarpa* have shown that damage has increased significantly. In surveyed sites, the proportion of damaged trees increased from 40% in 2011 to 80% in 2014, and approximately 60% of the trees were seriously damaged. In these studies, it is noted that damage caused by *N. neomacrospora* was so serious that all *A. lasiocarpa* provenances from Southern USA included in the trial were rated as unsuitable for Christmas tree production in Denmark.

**Dissemination:** ascospores are airborne and can spread over long distances. Conidia from the asexual state (*Cylindrocarpon cylindroides*) can be spread from tree to tree by rain splashes and physical contact between trees. *N. neomacrospora* is considered to be seed borne, and it has been hypothesized that the fungus has been introduced into Europe via infected seeds.

**Pathway:** plants for plantings, seeds, Christmas trees, cut branches? of *Abies* species and other conifer hosts from countries where the fungus occurs.

**Possible risks:** *Abies* species are widely grown in the EPPO region for forestry and ornamental purposes, including the production of Christmas trees (e.g. *A. nordmanniana* and *A. lasiocarpa*). *N. neomacrospora* has recently caused severe outbreaks in Denmark and Norway on *Abies* spp. trees, leading to reduced tree quality and in some cases to tree mortality. *N. neomacrospora* can attack a very large number of *Abies* species and subspecies. In nurseries of Christmas tree plantations, some control measures have been recommended (destruction of diseased plants, chemical treatments) but these cannot be applied in forest stands. Studies have been initiated in Denmark to identify resistant or tolerant *Abies* species and subspecies, but the moment no positive results have been obtained. The epidemic levels which have been observed in Denmark and Norway, as well as the high number of *Abies* species susceptible to this fungus, indicate that attention should be paid to *N. neomacrospora* in the cultivation of *Abies* species.

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EPPO RS 2013/234, 2017/120

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Additional key words: Alert List

Computer codes: NECTMA

### 2017/121 First report of *Synchytrium endobioticum* in Greece

During official surveys conducted in 2011, *Synchytrium endobioticum* (EPPO A2 List) was detected for the first time in Greece. The fungus was found in 2 potato (*Solanum tuberosum*) fields in the municipality of Kato Nevrokopi (Regional unit of Drama). Typical wart symptoms on stolons and tubers were observed. The identification of *S. endobioticum* was based on the EPPO diagnostic protocol PM 7/28. Additional studies were conducted and confirmed the presence of pathotype 18(T1) in both potato fields. Phytosanitary measures were implemented in accordance with the EU Council Directive 69/464/EEC. Potato crops on the 2 infested fields were destroyed. In the buffer zone, only potato cultivars resistant to pathotype 18(T1) will be allowed to be planted.

The situation of *Synchytrium endobioticum* in Greece can be described as follows: **Present, first found in 2011 in 2 potato fields, under official control.**

**Source:** Vloutoglou I, van Leeuwen GCM, Eleftheriadis H, Sarigkoli I, Simoglou KB, Tsirogianis D, Gilpathi D (2015) First report of potato wart disease caused by *Synchytrium endobioticum* (Schilb.) Perc. in Greece: detection, impacts and pathotype identification. Abstract of a paper presented at the 16<sup>th</sup> Hellenic Phytopathological Congress (Thessaloniki, GR, 2012-10-16/18). *Hellenic Plant Protection Journal* (special issue), p 9.

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

Additional key words: new record

Computer codes: SYNCEN, GR

### 2017/122 First report of *Thekopsora minima* in China

In 2015, symptoms of leaf rust were observed in several blueberry (*Vaccinium corymbosum*) fields in 4 localities (Wenjiang, Shuangliu, Dujiangyan, Yaan) in Sichuan province, China. Blueberry leaf rust symptoms were first observed in April, causing extensive defoliation in the following months. Random field surveys were performed in early October to determine the incidence of the disease in Wenjiang by assessing 20 leaves from 100 plants of each cultivar. The disease incidence was estimated to be 87.2, 5.1, 3.5, and 0.0% on cvs Sharpblue, Misty, Bluegold, and O'Neill, respectively. Laboratory analysis (morphology, PCR

and sequencing, pathogenicity test) confirmed the presence of *Thekopsora minima* (EPPO Alert List) in symptomatic leaf samples.

The situation of *Thekopsora minima* in China can be described as follows: **Present, first found in 2015 in several blueberry fields (4 localities) in Sichuan province.**

**Source:** Zheng X, Tang G, Tian Y, Huang X, Chang X, Chen H, Yang H, Zhang Z, Gong G (2017) First report of leaf rust of blueberry caused by *Thekopsora minima* in China. *Plant Disease* 101(5), p 835.

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

**Additional key words:** new record

**Computer codes:** THEKMI, CN

### 2017/123 Grapevine fabavirus a new virus of grapevine

A new virus tentatively named Grapevine fabavirus (*Fabavirus*, GFabV) has recently been reported in California (USA). This virus was detected (NGS) during the testing of 2 selections of Japanese table grapes (*Vitis vinifera* cvs. Black Beet and Nagano Purple) which had been introduced from the Republic of Korea in 2013 in a grapevine collection (Foundation Plant Services, Davis). Studies conducted in California have shown that GFabV could be graft-transmitted to *V. vinifera* cv. Cabernet Franc. In addition, GFabV was then also detected in 2 additional grapevine selections, one from India and the other from the Republic of Korea. In California, field surveys and biological studies will be conducted to determine the prevalence of GFabV, evaluate its potential natural spread, and assess its impact on grapevine. In later studies conducted in China, the presence of GFabV was detected in grapevine material (*Vitis vinifera* cv. Ruby seedless grafted on *Vitis riparia* × *V. labrusca*) showing chlorotic mottling and leaf deformation. It was also concluded that more studies were needed to determine the effects of GFabV on grapevine.

**Source:** Al Rwahnih M, Alabi OJ, Westrick NM, Golino D, Rowhani A (2016) Near-complete genome sequence of grapevine fabavirus, a novel putative member of the genus Fabavirus. *Genome Announcements* 4(4), e00703-16. doi:10.1128/genomeA.00703-16

Fan XD, Zhang ZP, Ren F, Hu GJ, Li ZN, Dong YF (2017) First report of Grapevine fabavirus in grapevines in China. *Plant Disease* 101(5), p 847.

**Additional key words:** taxonomy

**Computer codes:** GFABV0, CN, US



**2017/124 Invasive plants affect arbuscular mycorrhizal fungi abundance which results in reduced species richness and performance of native plants**

Over 80 % of all terrestrial plants have roots colonised by arbuscular mycorrhizal fungi (AMF) which aid nutrient acquisition and growth, as well as protecting plants against abiotic stresses. Following invasion by invasive plants which are not associated, or weakly associated with AMF, microbiota levels beneath invaded stands can become reduced. Three invasive plants species with varying levels of AMF colonisation were evaluated for their impact on native plants. *Fallopia japonica* (Polygonaceae; EPPO List of Invasive Alien Plants) is a non-mycorrhizal associated species whereas both *Rudbeckia laciniata* (Asteraceae) and *Solidago gigantea* (Asteraceae; EPPO List of Invasive Alien Plants) are known to form AMF associations. In the present study, soil and root samples were collected from beneath stands of each invasive species and adjacent native vegetation in Poland. For each site, AMF colonisation and species richness was determined. In addition, the performance (shoot biomass, chlorophyll fluorescence and element concentration in shoots) of two native AMF dependent species (*Trifolium repens* (Fabaceae) and *Plantago lanceolata* (Plantaginaceae)) grown in soil taken from beneath each invasive species and from beneath native species was assessed. *F. japonica* had the strongest negative effect on AMF abundance and species richness. Even though *R. laciniata* and *S. gigantea* are AMF dependent, a reduced species abundance was observed indicating that these species may associate with a low number of AMF species in the introduced range. *P. lanceolata* showed a reduced shoot and photosynthetic performance on soil taken from beneath *F. japonica* and *S. gigantea*. Generally, *T. repens* did not show any significant difference in performance between invaded and uninvaded soils, indicating the species might also be utilising microbiota not measured during the experiment.

Source: Zubek S, Majewska M, Blaszkowski J, Stefanowicz AM, Nobis M, Kapusta P (2016) Invasive plants affect arbuscular mycorrhizal fungi abundance and species richness as well as the performance of native plants grown in invaded soils. *Biology and Fertility of Soils* 52, 841-852.

Additional key words: invasive alien plants

Computer codes: POLCU, RUDLA, SOOGI, PL

**2017/125 *Baccharis spicata* in the EPPO region: addition to the EPPO Alert List****Why**

*Baccharis spicata* (Asteraceae) is a medium sized shrub native to South America. In 2015 two naturalised populations were recorded for the first time in the vicinity of Porto (Matosinhos and Vila do Conde) in Portugal (EPPO RS 2017/070). Since these observations, four additional populations have been recorded with the most northern and southern populations some 30 km apart. *B. spicata* has a wide climatic tolerance and can colonise a variety of habitats. Coupled with high seed production which are wind-dispersed, *B. spicata* has the potential of becoming an emerging invasive species in the EPPO region.

**Geographical distribution**

EPPO Region: Portugal

South America: Argentina, Brazil, Paraguay, Uruguay.

**Morphology**

*B. spicata* is a dioecious medium sized shrub usually 40-150 cm in height (maximum 300 cm). Stems are unwinged and branch from the base. The lower leaves are opposite with the upper leaves sub-opposite to alternate. The species is capable of reproducing after 12 months.

Inflorescences are terminal and composed of cylindrical spikes. Flower heads are sessile and solitary or grouped in small glomerules. The achenes bear a pappus which aids wind-dispersal.

### Biology and ecology

Both male and female plants are present in Portugal. Seed production and dispersal rates are similar to that of the congener *B. halimifolia* (EPPO A2 List - EU List of Union concern), indicating that *B. spicata* also has the potential for long distance dispersal.

### Habitats

In its native range, *B. spicata* is reported to exhibit a high level of plasticity for suitable habitats. It can grow in steppe and grasslands, disturbed coastal areas, river margins, arable land, abandoned paddies and urban areas. In the EPPO region, in Portugal, the species is found on disturbed habitats colonised by other invasive non-native plant species.

### Pathways for movement

Three *Baccharis* species are grown in European gardens - *B. magellanica*, *B. patagonica* and *B. halimifolia*. However, there is no evidence that *B. spicata* is or has been grown as an ornamental species in the region. The two originally identified populations in Portugal are located in the vicinity of an international airport and seaport, and thus accidental introduction is the most likely pathway of entry for these populations.

### Impacts

In Portugal, *B. spicata* grows on disturbed ground with other highly invasive species such as *Acacia longifolia*, *A. melanoxylon*, *Cortaderia selloana* and *Paspalum dilatatum*. In these habitats, *B. spicata* shows strong competition with other species becoming an abundant species in the community.

### Control

The populations in Portugal represent the first naturalised record of the species outside its native range and thus there is little information on control options for the species. An EPPO National Regulatory Control Standard is available for *B. halimifolia* (PM 9/23 (1) *Baccharis halimifolia*), and some management methodologies detailed may be suitable for *B. spicata*.

Source: EPPO (2016) First report of *Baccharis spicata* in Portugal. EPPO Reporting Service 2017 no. 3. Available at: <https://gd.eppo.int/reporting/article-6038>.  
Verloove F, Dana ED, Alves P (2017) *Baccharis spicata* (Asteraceae), a new potentially invasive species to Europe. *Plant Biosystems*  
<http://dx.doi.org/10.1080/11263504.2017.1303001>

Additional key words: invasive alien plants, alert list

Computer codes: ACALO, ACAME, BACHA, BACPA, BACSP, BACTR, CDTSE, PASDI, PT

**2017/126 Updated checklist of alien flora of Turkey**

An updated checklist on the alien flora of Turkey has been published which details the naturalized and casual alien taxa in Turkey. The list builds on the previous checklist of alien taxa in Turkey from the DAISIE project (Delivering Alien Invasive Species Inventories for Europe, 2008-2008). Additional species were included from various sources including GBIF (Global Biodiversity Information facility), online floras, field surveys and publications. The results show that the alien flora of Turkey comprises 340 taxa, among which there are 321 angiosperms, 17 gymnosperms and two ferns. Of the total number of taxa, 228 (68%) are naturalized and 112 (32%) are casual. There are 275 neophytes (172 naturalized and 103 casual) and 61 archaeophytes (52 naturalized and 9 casual); four species could not be classified with respect to the residence time. In addition, 47 frequently planted taxa with a potential to escape are also listed.

Source: Uludag A, Aksoy N, Yazlık A, Arslan FA, Yazmiş, Üremiş I, Antonella T, Groom Q, Pergl J, Pyšek P, Brundu G (2017) Alien flora of Turkey: checklist, taxonomic composition and ecological attributes. *Neobiota* 35, 61-85.  
<https://neobiota.pensoft.net/article/12460/>

Additional key words: Publication, invasive alien plants

Computer codes: TR

**2017/127 First report of *Wolffia columbiana* in Italy**

*Wolffia columbiana* (Araceae) was discovered in a pond in the Lombardia region of Italy in March 2016. The species was identified to be distinct from the only native species of *Wolffia*, *W. arrhiza*, which occurs throughout Europe. *W. columbiana* is an aquatic floating perennial herb without any roots. The fronds are single or joined, and spherical to widely ellipsoid in shape: 0.77 - 0.9 mm long, 0.67 - 0.73 mm wide. The native range of *Wolffia columbiana* extends through the temperate and tropical regions of North and South America, from Canada southwards to Argentina. Outside the Americas, it is known only from Central and Western Europe, in over 80 localities in Germany and the Netherlands. The waterbody where *W. columbiana* was recorded in Italy consists of a small pond along the bank of the river Po. The likely pathway for the entry of *W. columbiana* into the EPPO region is as a contaminant of aquatic ornamental plants.

Source: Ardenghi NMG, Armstrong WP, Paganelli D (2017) *Wolffia columbiana* (Araceae, Lemnoideae): first record of the smallest alien flowering plant in southern Europe and Italy. *Botany Letters* 164, 121-127.

Additional key words: new record, invasive alien plants,

Computer codes: WOLCO, IT

**2017/128 EU funded LIFE project: Mitigating the threat of invasive alien plants in the EU through pest risk analysis to support the EU Regulation 1143/2014**

The full report (scientific paper) detailing the prioritization of invasive alien plants for pest risk analysis (PRA) within the DG Environment LIFE funded project 'Mitigating the threat of invasive alien plants in the EU through pest risk analysis to support the EU Regulation 1143/2014' is available for download via the project website or via the NeoBiota website. The paper details the prioritization of 37 alien plant species for PRA using a modified version of the EPPO Prioritisation Process designed to be compliant with the EU Regulation 1143/2014. In Stage 1, species were categorised into one of four lists - a Residual List, EU List of Minor Concern, EU Observation List and the EU List of Invasive Alien Plants. Due to medium or high spread potential coupled with high impacts twenty-two species were included in the EU List of Invasive Alien Plants and proceeded to Stage 2, the risk management stage. In stage 2, species which have been present in the EU for several decades without showing invasive tendencies, and those species which are widespread were not considered a priority for a PRA. In addition, species where phytosanitary measures are likely to be ineffective were not considered a priority for a risk analysis. Nineteen species were identified as having a high priority for a PRA (*Acacia dealbata*, *Ambrosia confertiflora*, *Andropogon virginicus*, *Cardiospermum grandiflorum*, *Celastrus orbiculatus*, *Cinnamomum camphora*, *Cortaderia jubata*, *Ehrharta calycina*, *Gymnocoronis spilanthoides*, *Hakea sericea*, *Humulus scandens*, *Hygrophila polysperma*, *Lespedeza cuneata*, *Lygodium japonicum*, *Pennisetum setaceum*, *Prosopis juliflora*, *Sapium sebiferum*, *Pistia stratiotes* and *Salvinia molesta*).

Source: Tanner R, Branquart E, Brundu G, Buholzer S, Chapman D, Ehret P, Fried G, Starfinger U, van Valkenburg J (2017) The prioritisation of a short list of alien plants for risk analysis within the framework of the Regulation (EU) No. 1143/2014. *NeoBiota* 35, 87-118. <https://doi.org/10.3897/neobiota.35.12366>

Life IAP-RISK. [www.iap-risk.eu](http://www.iap-risk.eu)

Additional key words: invasive alien plants, PRA

Computer codes: ACADA, ANOVI, CELOR, CDTJU, CINCA, CRIGR, EHRCA, FRSCO, GYNP, HKASE, HYGPO, HUMJA, LESCU, LYFJA, PIIST, PRCJU, SAQSE, SAVMO, EU