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2013/075 Appointment of a new Director-General of EPPO

EPPO is beginning the recruitment procedure for a new Director-General due to be appointed in January 2014. The procedure and terms of appointment of the EPPO Director-General can be obtained from the EPPO website:

<http://www.eppo.int/News&Events/appointment.htm>

Candidates should submit their applications to the Secretariat not later than **2013-06-13**. Any application received after this deadline will not be considered.

Source: EPPO Secretariat, 2013-05.

2013/076 *Anoplophora glabripennis* eradicated from Canada

On 2013-04-05, the NPPO of Canada officially declared the successful eradication of *Anoplophora glabripennis* (Coleoptera: Cerambycidae - EPPO A1 List) in the cities of Toronto and Vaughan, and as a consequence from its whole territory. This declaration is based on 5 years (2007-2012) of negative survey results within the regulated area. The NPPO will continue to conduct general surveys across Canada to ensure early detection in the event the pest is introduced again.

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

Source: NAPPO Phytosanitary Pest Alert System. Official Pest Reports. Canada (2013-04-08) Asian Long-horned Beetle (*Anoplophora glabripennis*) - Eradication from the cities of Toronto and Vaughan, Ontario.
<http://www.pestalert.org/oprDetail.cfm?oprid=544>

Additional key words: absence, eradication

Computer codes: ANOLGL, CA

2013/077 *Anoplophora glabripennis* eradicated from New Jersey (US)

In the USA, *Anoplophora glabripennis* (Coleoptera: Cerambycidae - EPPO A1 List) was first discovered in New York (Brooklyn) in August 1996. Since then, the pest has been found in Illinois (Chicago), New Jersey (Hudson, Middlesex, Union counties), Massachusetts (Worcester, Suffolk counties), and Ohio (Clermont county). In 2008, *A. glabripennis* was declared eradicated in Chicago (Illinois) and the county of Hudson in New Jersey.

On 2013-03-14, USDA-APHIS officially announced the eradication of *A. glabripennis* from the Middlesex and Union counties, and as a consequence from the whole territory of New Jersey. This declaration is based on 3 years of negative survey results within the regulated areas. It is noted that eradication efforts involved the removal of 21 981 trees in Union, Middlesex and Hudson counties, and that nearly a third of those trees have been replaced by non-host species.

Source: NAPPO Phytosanitary Pest Alert System. Official Pest Reports. USA (2013-03-14)
Asian Longhorned Beetle (*Anoplophora glabripennis*) eradicated from New Jersey.
<http://www.pestalert.org/oprDetail.cfm?oprID=543>

USDA-APHIS News Release (2013-03-04) New Jersey declares itself free from
devastating tree-killing pest. http://asianlonghornedbeetle.com/wp-content/uploads/2013/03/ALBNJ_NewsRelease_Final.pdf

Additional key words: absence, eradication

Computer codes: ANOLGL, US

2013/078 First report of *Tuta absoluta* in the United Arab Emirates

The presence of *Tuta absoluta* (EPPO A2 List - Lepidoptera: Gelechiidae) has recently been detected in the United Arab Emirates. The identity of the pest was confirmed by the British Natural History Museum. In July 2012, larvae of *T. absoluta* were found attacking leaves and fruit of tomato and aubergine (*Solanum lycopersicum*, *S. melongena*) grown in greenhouses. This is the first time that *T. absoluta* is reported from the United Arab Emirates.

The situation of *Tuta absoluta* in the United Arab Emirates can be described as follows: **Present, first found in 2012 in glasshouse tomato and aubergine crops.**

Source: Personal communication with Dr Sami Abdulrahman Elawad, Abu Dhabi Food Control Authority, United Arab Emirates (2013-04).

Additional key words: new record

Computer codes: GNORAB, AE

2013/079 First report of *Tuta absoluta* in Yemen

In January 2013, *Tuta absoluta* (Lepidoptera: Gelechiidae - EPPO A2 List) was found infesting tomato (*Solanum lycopersicum*) plants in Yemen, in the governorates of Sana'a, Hudeidah, Lahj, Abyan, and Al-Baydah. In February 2013, official surveys detected the pest on 304 tomato farms located in 88 districts of 12 governorates. These surveys also showed that 70% of the inspected tomato crops were infested by *T. absoluta*. It is estimated that in the absence of an effective control program, potential damage to tomato production could exceed 300 million USD. A control program is being developed and will include pheromone trapping (more than 15 000 pheromone traps will be distributed), a media campaign, and training of extension agents and growers on how to manage the pest. This is the first report of *T. absoluta* in Yemen.

The situation of *Tuta absoluta* in Yemen can be described as follows: **Present, first found in 2013 in 12 governorates, under official control.**

Source: INTERNET (via PestLens)
Embassy of the United States in Sana'a, Yemen. US Government helps to combat tomato pest (2013-03-17). <http://yemen.usembassy.gov/hctp.html>

Additional key words: new record

Computer codes: GNORAB, YM

2013/080 First report of *Globodera pallida* in Denmark

In Denmark, official inspections, soil sampling and testing for the presence of potato cyst nematodes (*Globodera rostochiensis* and *G. pallida*, both EPPO A2 List) have been regularly carried out by the NPPO. These official surveys are conducted in all fields proposed for seed potato production and in a selected range of ware potato fields. In addition, outdoor plant nurseries are officially tested for the presence of potato cyst nematodes before they enter production. For the last 25 years prior to 2012, *G. pallida* had never been found in Denmark. However in 2012, *G. pallida* was detected for the first time in 4 ware potato fields (belonging to 2 growers) in the South-western part of Denmark. These 2 outbreaks are currently under eradication.

The pest status of *Globodera pallida* in Denmark is officially declared as: **Present, under eradication.**

Source: IPPC website. Official Pest Reports - Denmark. Two minor outbreaks of *Globodera pallida* are under eradication in Denmark (2013-03-12).
<https://www.ippc.int/index.php>

Additional key words: new record

Computer codes: HETDPA, DK

2013/081 First report of *Helicoverpa armigera* in Brazil

The presence of *Helicoverpa armigera* (Lepidoptera: Noctuidae - EPPO A2 List) has recently been confirmed in Brazil by Embrapa (Empresa Brasileira de Pesquisa Agropecuária). *H. armigera* was identified from specimens collected in light traps between December 2012 and January 2013 using morphological and molecular analysis. Damage has been observed in cotton (*Gossypium hirsutum*) and soybean (*Glycine max*) crops in the state of Bahia (North-eastern Brazil). In Brazil, *H. armigera* is listed as an A1 quarantine pest, and as an emergency measure the Brazilian Ministry of Agriculture has authorized the use of insecticides (chlorantraniliprole, chlorfenapyr, indoxacarb, emamectin benzoate) and of biocontrol agents (baculoviruses and *Bacillus thuringiensis*) to control *H. armigera* in infested fields. This is the first report of *H. armigera* in Brazil. The origin and date of this introduction is unknown (*H. armigera* may have been confused for some time with *H. zea*). Surveys are being conducted to determine the distribution of *H. armigera* in Brazil. The situation of *Helicoverpa armigera* in Brazil can be described as follows: **Present, first found in 2013 in the state of Bahia, under official control.**

Source: INTERNET
Ministério da Agricultura. Liberados agrotóxicos para combater lagarta Helicoverpa.
<http://www.agricultura.gov.br/vegetal/noticias/2013/04/liberados-agrotoxicos-para-combater-lagarta-helicoverpa>

Sugayama R (2013) The cotton bollworm situation in Bahia, Brazil. *Agropec News: A Newsletter on Plant Protection* (via PestLens). <http://zc1.campaign-view.com/ua/SharedView?od=11287eca3e75d0&cno=11a2b0b1e3530df&cd=15bda137606a35c&m=2>.

Additional key words: new record

Computer codes: HELIAR, BR

2013/082 Eradication of *Clavibacter michiganensis* subsp. *sepedonicus* from Denmark

Based on the results of official inspections and surveys that have been carried during the last 8 years in seed and ware potato production, the Danish NPPO declared in August 2012 that *Clavibacter michiganensis* subsp. *sepedonicus* (EPPO A2 List) has been eradicated from its territory.

The pest status of *Clavibacter michiganensis* subsp. *sepedonicus* in Denmark is officially declared as: **Absent, pest eradicated.**

Source: IPPC website. Official Pest Reports - Denmark. *Clavibacter michiganensis* ssp. *sepedonicus* eradicated in Denmark (2012-08-27). <https://www.ippc.int/index.php>

Additional key words: eradication

Computer codes: CORBSE, DK

2013/083 First report of *Pantoea stewartii* in Argentina

During the 2010/2011 and 2011/2012 growing seasons, symptoms of bacterial leaf blight were observed in maize (*Zea mays*) crops in the province of Córdoba, Argentina. In this province, the disease incidence reached around 54%. Leaf samples were collected from 10 symptomatic maize plants, grown in 15 fields covering a representative geographical area. Molecular (PCR) and pathogenicity tests confirmed the presence of *Pantoea stewartii* (EPPO A2 List) in diseased maize plants. This is the first time that *P. stewartii* is reported from Argentina.

The situation of *Pantoea stewartii* in Argentina can be described as follows: **Present, first detected during the 2010/2011 and 2011/2012 maize growing seasons in the province of Córdoba.**

Source: Albarracín Orio AG, Brücher E, Plazas MC, Sayago P, Guerra F, de Rossi R, Ducasse DA, Guerra GD (2013) First report of Stewart's wilt of maize in Argentina caused by *Pantoea stewartii*. *Plant Disease* 96(12), 1819-1820.

Additional key words: new record

Computer codes: ERWIST, AR

2013/084 First report of '*Candidatus Phytoplasma mali*' in Canada

Apple proliferation (associated with '*Candidatus Phytoplasma mali*' - EPPO A2 List) has recently been discovered in an apple orchard (*Malus domestica* cv. 'Pacific Gala') near Kentville in Nova Scotia, Canada. This is the first time that apple proliferation is found in Canada and North America. The affected orchard has been placed under quarantine. The trees originated in the USA and were shipped to Canada in 2008. Both in the USA and Canada '*Ca. Phytoplasma mali*' is considered to be a quarantine pest. Therefore, USDA has been informed and an investigation is ongoing to determine the source of this infestation.

The situation of '*Candidatus Phytoplasma mali*' in Canada can be described as follows: **Present, first detected in 2013 in 1 orchard in Nova Scotia, under official control.**

Source: USDA-APHIS (2013-04-02) Stakeholder Announcement: Apple proliferation phytoplasma detected in Nova Scotia.
http://www.aphis.usda.gov/newsroom/2013/04/pdf/sa_nova_scotia_app.pdf

Additional key words: new record

Computer codes: PHYPMA, US

2013/085 'Candidatus Phytoplasma solani' formally proposed as a new phytoplasma species

Phytoplasma strains associated with stolbur disease in wild and cultivated plants (in particular with potato and tomato - EPPO A2 List), with bois noir disease in grapevine (*Vitis vinifera*) and with maize redness (EPPO Alert List) have been informally proposed to represent a separate species, 'Candidatus Phytoplasma solani', but no formal description of this taxon had been published, so far. A recent publication from Quaglino *et al.* (2013) now provides a formal description for this new taxon in the International Journal of Systematic and Evolutionary Microbiology.

Source: Quaglino F, Zhao Y, Casati P, Bulgari D, Bianco PA, Wei W, Davis RE (2013) 'Candidatus Phytoplasma solani', a novel taxon associated with stolbur and bois noir related diseases of plants. *International Journal of Systematic and Evolutionary Microbiology* (abst.).
<http://ijs.sgmjournals.org/content/early/2013/01/17/ijs.0.044750-0.abstract>.

Additional key words: taxonomy

Computer codes: PHYP10, PHYPSO

2013/086 First report of *Tomato spotted wilt virus* in Bosnia and Herzegovina

Tomato spotted wilt virus (*Tospovirus*, TSWV - EPPO A2 List) is reported for the first time from Bosnia and Herzegovina. In June and July 2012, virus symptoms were observed in glasshouse gloxinia plants (*Sinningia speciosa*) at Lijevče polje, near Banja Luka. Infected plants showed chlorotic ring spots, chlorotic and necrotic patterns, leaf necrosis and deformation. In this glasshouse, 400 plants were inspected and it was estimated that the disease incidence reached approximately 30%. Symptomatic leaf samples were collected and tested (DAS-ELISA, RT-PCR, sequencing). TSWV was detected in 27 out of the 30 tested gloxinia samples. It was concluded that more studies are needed to determine the distribution and incidence of TSWV in susceptible host plants in the country. The situation of *Tomato spotted wilt virus* in Bosnia and Herzegovina can be described as follows: Present, first found in glasshouse *Sinningia speciosa* near Banja Luka in 2012.

Source: Trkulja V, Mihić Salapura J, Curković B, Santoković I, Bulajić A, Vučurović A, Krstić B (2013) First report of *Tomato spotted wilt virus* on gloxinia in Bosnia and Herzegovina. *Plant Disease* 97(3), p 429.

Additional key words: new record

Computer codes: TSWV00, BA

2013/087 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 on the EPPO Alert List. The situation of the pest concerned is indicated in bold, using the terms of ISPM no. 8.

- **New records**

In Panama, coffee rust (*Hemileia vastatrix*) was detected for the first time in August 2012 in the Chiriqui province and then spread to all coffee-production areas of Panama. It is estimated that 46% of the crops are affected. Phytosanitary measures are being taken to prevent any further spread of the disease (MIDA, 2013).

Cherry necrotic rusty mottle virus (formerly EPPO A2 List) is reported for the first time from China. The virus was found during a survey conducted from 2010 to 2012 on samples collected from 206 stone fruit trees in 6 provinces (unspecified). The virus was detected in 1 *Prunus avium* (sweet cherry), 1 *P. armeniaca* (apricot), 1 *P. persica* (peach), 1 *P. domestica* (plum) and 2 *P. cerasi* (sour cherry) (Zhou *et al.*, 2013). **Present, no details.**

Iris yellow spot virus (*Tospovirus*, IYSV - formerly EPPO Alert List) occurs in Bosnia and Herzegovina. It was detected for the first time in July 2012 in 1 onion seed crop (*Allium cepa*) at Gornji Karajzovci in the region of Banja Luka (Trkulja *et al.*, 2013).

Phoma exigua var. *foveata* (formerly EPPO A2 List) is reported for the first time from Chile. The fungus was found during a survey in the municipalities of Aysén, Coyhaique and Río Ibáñez (Aysén region) on potatoes grown in family gardens for home consumption. Eradication measures have been taken (PotatoPro, 2013).

- **Detailed records**

Acidovorax citrulli (EPPO Alert List) occurs in Anhui province, China. In July 2012, it was observed on watermelon (*Citrullus lanatus*) seedlings grafted on pumpkin (*Cucurbita pepo*) rootstocks (Tian *et al.*, 2013).

The dwarf mistletoe, *Arceuthobium abietinum* f.sp. *concoloris* (EPPO A1 List) has been found on *Abies durangensis* in the state of Durango, Mexico (Quiñonez Barraza *et al.*, 2013).

In 2012, *Drosophila suzukii* (Diptera: Drosophilidae - EPPO A2 List) was observed for the first time in País Vasco, Spain. The pest was observed near Gipuzkoa, in 2 Txakoli vineyards (Anonymous, 2013).

In the Czech Republic, *Globodera pallida* (EPPO A2 List) was recorded once in 1998 (EPPO RS 2011/140) in a private plot. In July 2011, this nematode was detected for the second time in soil samples collected from a potato field near Teplá, Karlovy Vary region (Douda *et al.*, 2012).

Monilinia fructicola (EPPO A2 List) occurs in Maryland, USA. The fungus was detected in July 2010 on sweet cherry trees (*Prunus avium*) in 1 commercial orchard (Chen *et al.*, 2013).

In Western Siberia (Russia), *Polygraphus proximus* (Coleoptera: Scolytidae - EPPO Alert List) and its associated fungus *Ophiostoma aoshimae* were found in Altay (Baranchikov *et al.*, 2012).

In spring 2012, a severe disease was observed on a limited number of tomato plants (*Solanum lycopersicum*) in a research glasshouse in western North Carolina (US). The presence of *Potato spindle tuber viroid* (*Pospiviroid*, PSTVd - EPPO A2 List) was confirmed in symptomatic tomato plants. This is the second time that a natural PSTVd infection is reported from the USA on tomatoes. The first one was detected in 2010 in California (see EPPO RS 2011/154) but has been successfully eradicated (Ling *et al.*, 2013).

- New host plants

In Bulgaria, unusual symptoms were noticed at the end of August 2009 during a routine field survey on 2 year-old canes of *Rubus fruticosus* cv. 'Evergreen Thornless' near Plovdiv. Affected plants showed severe stunting, a bushy appearance, upward leaf curling. In addition, their leaves remained green until the end of the season. Molecular tests (PCR, RFLP, sequencing) confirmed the presence of '*Candidatus* Phytoplasma solani' (EPPO A2 List) in diseased blackberry plants (Bobev *et al.*, 2013).

In 2008 and 2009, unusual symptoms were observed on *Rubus fruticosus* cv. 'Chester' in the provinces of Isparta and Konya, Turkey. Affected plants showed shoot blight and cankers with brown discoloration of necrotic tissues on mature branches. It is estimated that the disease incidence was around 2%. Bacteria were consistently isolated from diseased plant tissues and were identified as *Erwinia amylovora* (EPPO A2 List) on the basis of biochemical, physiological, molecular and pathogenicity tests (Bastas *et al.*, 2012).

- Source:
- Anonymous (2013) Incidencia de plagas y enfermedades en las Comunidades Autonomas en 2012. *Phytoma-España* no.248, 57-59.
 - Baranchikov Y, Pashenova N, Petko V (2012) United they stand: invasive association of four-eyed fir bark beetle and ophiostomal fungus destroy fir taiga forest in Siberia. Abstract of a paper presented at the 3rd meeting of IUFRO Working Unit 7.03.12 'Alien invasive species and international trade' (Tokyo, JP, 2012-06-10/16)
http://hyoka.nenv.k.u-tokyo.ac.jp/alien2012/alien_abst/o04.pdf (abst.)
http://hyoka.nenv.k.u-tokyo.ac.jp/alien2012/alien_report/O04_Baranchikov.pdf (presentation)
 - Bastas KK, Sahin F (2012) First report of fire blight disease on blackberry in Turkey. *Plant Disease* 96(12), p 1818.
 - Bobev SG, de Jonghe K, Maes M (2013) First report of *Candidatus* Phytoplasma solani on blackberry (*Rubus fruticosus*) in Bulgaria. *Plant Disease* 97(2), p 282.
 - Chen F, Liu X, Schnabel G (2013) First report of brown rot caused by *Monilinia fructicola* in sweet cherry in Maryland. *Plant Disease* 97(1), p 145.
 - Douda O, Zouhar M, Urban J (2012) Identification and characterization of pale potato cyst nematode (*Globodera pallida*) in Teplá, the Czech Republic. *Plant Disease* 96(9), p 1386.
- INTERNET
- Ministerio de Desarrollo Agropecuario (2013-04-09) MIDA declara emergencia por plagas que afectan al café. http://168.77.213.112/noticias_id_1877.html (via PestLens).
 - PotatoPro. Services for the Potato Industry. News of 2013-04-03. El Servicio Agrícola y Ganadero de Chile detecta presencia de plaga cuarentenaria de la papa. <http://www.potatopro.com/Lists/News/dispForm.aspx?ID=7985>
 - Ling KS, Li R, Panthee DR, Gardner RG (2013) First report of *Potato spindle tuber*

- viroid* naturally infecting greenhouse tomatoes in North Carolina. *Plant Disease* 97(1), p 148.
- Quiñonez Barraza S, Mathiasen R, Gonzalez-Elizondo S (2013) First report of white fir dwarf mistletoe (*Arceuthobium abietinum* f. sp. *concoloris*) on Durango fir (*Abies durangensis*) from Durango, Mexico. *Plant Disease* 97(3), 431-432.
- Tian YL, Zhao YQ, Hu BS, Liu FQ (2013) First report of seedling blight of watermelon caused by *Acidovorax citrulli* transmitted from rootstock of pumpkin in China. *Plant Disease* 97(3), p 420.
- Trkulja V, Mihić Salapura J, Kovačić D, Sanković I, Bulajić A, Vučurović A, Krstić B (2013) First report of *Iris yellow spot virus* infecting onion in Bosnia and Herzegovina. *Plant Disease* 97(3), p 430.
- Zhou JF, Wang GP, Qu LN, Deng CL, Wang Y, Wang LP, Hong N (2013) First report of *Cherry necrotic rusty mottle virus* on stone fruit trees in China. *Plant Disease* 97(2), 290-291.

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

Computer codes: AREAB, CRNRMV, DROSSU, ERWIAM, HEMIVA, HETDPA, IYSV00, PHOMEF, POLGPR, PSDMAC, PSTVDO, BA, BG, CL, CN, CN, CZ, ES, MX, PA, RU, TR

2013/088 EPPO report on notifications of non-compliance

The EPPO Secretariat has gathered below the notifications of non-compliance for 2013 received since the previous report (EPPO RS 2013/065). Notifications have been sent directly to EPPO or 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
Acari	<i>Sanvitalia</i>	Cuttings	Brazil	Italy	1
Agromyzidae	<i>Ocimum</i>	Vegetables (leaves)	Vietnam	Switzerland	1
<i>Bemisia</i>	<i>Hemigraphis</i>	Plants for planting	Sri Lanka	United Kingdom	1
<i>Bemisia tabaci</i>	<i>Corchorus olitorius, Salvia</i>	Vegetables (leaves)	Ghana	United Kingdom	1
	<i>Euphorbia milii, Ficus</i>	Cuttings	Sri Lanka	Denmark	1
	<i>Eustoma</i>	Cut flowers	Tanzania	United Kingdom	2
	<i>Eustoma grandiflorum</i>	Cut flowers	Tanzania	United Kingdom	1
	<i>Hibiscus</i>	Cuttings	Israel	Netherlands	1
	<i>Hygrophila</i>	Plants for planting	Sri Lanka	United Kingdom	1
	<i>Hygrophila corymbosa</i>	Plants for planting	Indonesia	United Kingdom	1
	<i>Hygrophila, Limnophila</i>	Aquarium plants	Indonesia	United Kingdom	1
	<i>Ipomoea</i>	Vegetables	Ghana	United Kingdom	1
	<i>Lisianthus</i>	Cut flowers	Israel	Netherlands	1
	<i>Lisianthus</i>	Cut flowers	Tanzania	United Kingdom	1
	<i>Mandevilla</i>	Plants for planting	Italy	Finland	1
	<i>Mandevilla</i>	Plants for planting	Netherlands	Finland	1
	<i>Ocimum</i>	Vegetables (leaves)	Cambodia	Netherlands	1
<i>Ocimum basilicum</i>	Vegetables (leaves)	Colombia	United Kingdom	2	

Pest	Consignment	Type of commodity	Country of origin	Destination	nb
<i>B. tabaci</i> (cont.)	<i>Ocimum basilicum</i>	Vegetables (leaves)	Ethiopia	Switzerland	1
	<i>Ocimum basilicum</i>	Vegetables (leaves)	Jordan	Netherlands	1
	<i>Ocimum basilicum</i>	Vegetables (leaves)	Malaysia	United Kingdom	1
	<i>Ocimum tenuiflorum</i>	Vegetables (leaves)	Malaysia	Belgium	1
<i>Bemisia tabaci</i> , <i>Spodoptera litura</i>	<i>Apium graveolens</i> , <i>Brassica oleracea</i>	Vegetables	Malaysia	Netherlands	1
<i>Citrus exocortis viroid</i> , <i>Tomato apical stunt viroid</i>	<i>Solanum jasminoides</i> , <i>Solanum rantonnetii</i>	Plants for planting	Germany	Czech Republic	1
<i>Clavibacter michiganensis</i> subsp. <i>michiganensis</i>	<i>Solanum lycopersicum</i>	Seeds	China	Germany	1
<i>Clavibacter michiganensis</i> subsp. <i>sepedonicus</i>	<i>Solanum tuberosum</i>	Ware potatoes	Poland	Hungary	2
Coccidae, Lepidoptera	<i>Dillenia indica</i>	Fruit	Bangladesh	Italy	1
<i>Coccotrypes cyperi</i>	<i>Ficus microcarpa</i>	Plants for planting	China	Cyprus	1
Coleoptera	<i>Pisum sativum</i>	Stored products	Colombia	Spain	1
<i>Diaphania</i> , <i>Thrips</i>	<i>Momordica charantia</i>	Vegetables	Dominican Rep.	Germany	1
Diptera	<i>Calibrachoa</i> , <i>Petunia</i>	Cuttings	Spain (Canary Isl.)	Italy	1
	<i>Momordica charantia</i>	Vegetables	Kenya	United Kingdom	1
	<i>Momordica charantia</i>	Vegetables	Sri Lanka	Italy	1
	<i>Momordica charantia</i>	Vegetables	Sri Lanka	United Kingdom	1
<i>Frankliniella occidentalis</i>	<i>Pelargonium</i>	Cuttings	Tunisia	France	1
<i>Helicoverpa</i>	<i>Chrysalidocarpus</i>	Plants for planting	Honduras	Spain	1
	<i>Pisum sativum</i>	Vegetables	Egypt	Ireland	3
<i>Helicoverpa armigera</i>	<i>Basella</i>	Vegetables	Bangladesh	Sweden	1
	<i>Ocimum basilicum</i>	Vegetables (leaves)	Cambodia	Sweden	1
	<i>Pisum sativum</i>	Vegetables	Egypt	Ireland	2
<i>Helicoverpa armigera</i> , <i>Leucinodes orbonalis</i>	<i>Solanum melongena</i>	Vegetables	India	Sweden	1
<i>Helicoverpa</i> , <i>Leucinodes orbonalis</i>	<i>Solanum melongena</i>	Vegetables	Cambodia	Sweden	1
Lepidoptera	<i>Solanum</i>	Vegetables	Sri Lanka	Italy	2
<i>Lettuce mosaic virus</i>	<i>Lactuca sativa</i>	Seeds	China	Italy	1
<i>Leucinodes orbonalis</i>	<i>Solanum melongena</i>	Vegetables	India	Germany	1
	<i>Solanum melongena</i>	Vegetables	Malaysia	Belgium	3
	<i>Solanum melongena</i>	Vegetables	Malaysia	Germany	3
	<i>Solanum melongena</i>	Vegetables	Pakistan	Sweden	1
<i>Liriomyza</i>	<i>Amaranthus</i>	Vegetables (leaves)	Bangladesh	United Kingdom	1
	<i>Amaranthus</i>	Vegetables (leaves)	India	United Kingdom	1
	<i>Amaranthus</i>	Vegetables (leaves)	Pakistan	United Kingdom	1

Pest	Consignment	Type of commodity	Country of origin	Destination	nb	
<i>Liriomyza</i> (cont.)	<i>Apium graveolens</i>	Vegetables	Cambodia	Denmark	1	
	<i>Basella</i>	Vegetables	Pakistan	United Kingdom	1	
	<i>Basella alba</i>	Vegetables	India	United Kingdom	1	
	<i>Chrysanthemum</i>	Cut flowers	Colombia	United Kingdom	1	
	<i>Chrysanthemum</i>	Cut flowers	Ecuador	United Kingdom	1	
	<i>Chrysanthemum</i>	Cut flowers	Spain (Canary Isl.)	United Kingdom	1	
	<i>Coriandrum sativum</i>	Vegetables (leaves)	Cambodia	United Kingdom	1	
	<i>Coriandrum sativum</i>	Vegetables (leaves)	Vietnam	United Kingdom	1	
	<i>Gypsophila</i>	Cut flowers	Israel	Netherlands	1	
	<i>Gypsophila</i>	Cut flowers	Israel	United Kingdom	2	
	<i>Gypsophila</i>	Seeds	India	United Kingdom	1	
	<i>Ocimum</i>	Vegetables (leaves)	Ethiopia	United Kingdom	1	
	<i>Ocimum basilicum</i>	Vegetables (leaves)	Cambodia	Czech Republic	2	
	<i>Ocimum basilicum</i>	Vegetables (leaves)	Cambodia	Sweden	1	
	<i>Ocimum basilicum</i>	Vegetables (leaves)	Cambodia	United Kingdom	2	
	<i>Ocimum basilicum</i>	Vegetables (leaves)	Israel	United Kingdom	1	
	<i>Ocimum basilicum</i>	Vegetables (leaves)	Kenya	United Kingdom	4	
	<i>Ocimum basilicum</i>	Vegetables (leaves)	Laos	United Kingdom	1	
	<i>Solidago</i>	Cut flowers	Zimbabwe	United Kingdom	5	
	<i>Spinacia oleracea</i>	Vegetables (leaves)	Bangladesh	United Kingdom	1	
	<i>Trigonella foenum-graecum</i>	Vegetables (leaves)	India	United Kingdom	1	
	<i>Liriomyza huidobrensis</i>	<i>Apium graveolens</i>	Vegetables	Cambodia*	Czech Republic	1
		<i>Apium graveolens</i>	Vegetables	Cambodia*	Sweden	1
<i>Apium graveolens</i>		Vegetables	Vietnam	Switzerland	1	
<i>Aster</i>		Cut flowers	Ecuador	Netherlands	2	
<i>Aster, Solidago</i>		Cut flowers	Ecuador	Netherlands	1	
<i>Chrysanthemum</i>		Cut flowers	Ecuador	United Kingdom	1	
<i>Eryngium</i>		Cut flowers	Kenya	Netherlands	1	
<i>Gypsophila</i>		Cut flowers	Ecuador	Italy	2	
<i>Gypsophila</i>		Cut flowers	Ecuador	Netherlands	6	
<i>Gypsophila</i>		Cuttings	Indonesia	Netherlands	1	
<i>Gypsophila</i>		Cuttings	Kenya	Netherlands	1	
<i>Gypsophila paniculata</i>		Cut flowers	Kenya	Netherlands	1	
<i>Solidago</i>		Cut flowers	Israel	Latvia	1	
<i>Solidago</i>		Cut flowers	Kenya	Netherlands	1	
<i>Liriomyza sativae</i>	<i>Apium graveolens</i>	Vegetables	Cambodia*	Sweden	1	
	<i>Cestrum</i>	Vegetables	Surinam*	Netherlands	1	
	<i>Coriandrum sativum</i>	Vegetables (leaves)	Pakistan*	Sweden	1	
	<i>Ocimum americanum</i>	Vegetables (leaves)	Malaysia	Switzerland	1	
	<i>Ocimum basilicum</i>	Vegetables (leaves)	Cambodia*	Netherlands	1	
	<i>Ocimum basilicum</i>	Vegetables (leaves)	Cambodia*	Sweden	2	
	<i>Ocimum basilicum</i>	Vegetables (leaves)	Ethiopia*	Belgium	2	
	<i>Ocimum basilicum</i>	Vegetables (leaves)	Ethiopia*	Netherlands	1	
	<i>Ocimum basilicum</i>	Vegetables (leaves)	Ethiopia*	United Kingdom	1	
	<i>Ocimum basilicum</i>	Vegetables (leaves)	Laos	Sweden	1	
	<i>Ocimum basilicum</i>	Vegetables (leaves)	Malaysia	Netherlands	2	
	<i>Solidago</i>	Cut flowers	Israel	Latvia	1	
	<i>Trigonella foenum-graecum</i>	Vegetables (leaves)	Pakistan*	Sweden	1	
<i>Liriomyza sativae, Liriomyza trifolii</i>	<i>Ocimum basilicum</i>	Vegetables (leaves)	Cambodia	Sweden	1	

Pest	Consignment	Type of commodity	Country of origin	Destination	nb
<i>Liriomyza trifolii</i>	<i>Apium graveolens</i>	Vegetables	Malaysia*	Netherlands	1
	<i>Dianthus</i>	Cut flowers	Israel	Netherlands	1
	<i>Gypsophila</i>	Cut flowers	Ethiopia	Netherlands	1
	<i>Ocimum</i>	Vegetables (leaves)	Ethiopia	United Kingdom	1
	<i>Ocimum basilicum</i>	Vegetables (leaves)	Cambodia*	Czech Republic	1
	<i>Ocimum basilicum</i>	Vegetables (leaves)	Cambodia*	Sweden	3
	<i>Ocimum basilicum,</i> <i>Ocimum gratissimum</i>	Vegetables (leaves)	Cambodia*	Sweden	1
	<i>Solidago</i>	Cut flowers	Israel	Netherlands	1
	<i>Solidago</i>	Cut flowers	Zambia	Netherlands	2
	<i>Pepino mosaic virus</i>	<i>Solanum lycopersicum</i>	Vegetables	Spain	Ireland
<i>Solanum lycopersicum</i>		Vegetables	Spain	Lithuania	1
<i>Potato spindle tuber viroid</i>	<i>Brugmansia</i>	Plants for planting	Netherlands	Germany	1
	<i>Petunia</i>	Cuttings	Israel*	Germany	2
Pseudococcidae	Ornamentals	Plants for planting	Thailand	Germany	1
<i>Radopholus similis</i>	<i>Anubias barteri</i>	Plants for planting	Malaysia	Netherlands	1
<i>Spodoptera</i>	<i>Rosa</i>	Cut flowers	India	United Kingdom	1
	<i>Rosa</i>	Cut flowers	Uganda	Netherlands	1
<i>Spodoptera frugiperda</i>	<i>Asparagus</i>	Vegetables	Peru	Netherlands	1
<i>Spodoptera littoralis</i>	<i>Aster</i>	Cut flowers	Zimbabwe	Netherlands	1
	<i>Chrysanthemum</i>	Cuttings	Uganda	Netherlands	1
	<i>Eryngium</i>	Cut flowers	Kenya	Netherlands	1
	<i>Rosa</i>	Cut flowers	Kenya	Netherlands	2
	<i>Rosa</i>	Cut flowers	Uganda	Netherlands	4
	<i>Rosa</i>	Cut flowers	Zimbabwe	Netherlands	3
	<i>Solidago</i>	Cut flowers	Zambia	Netherlands	1
<i>Spodoptera litura</i>	<i>Ocimum</i>	Vegetables (leaves)	Cambodia	Sweden	1
	<i>Ocimum basilicum</i>	Vegetables (leaves)	Cambodia	Netherlands	1
	<i>Ocimum basilicum</i>	Vegetables (leaves)	India	France	1
	<i>Rosa</i>	Cut flowers	India	Netherlands	1
<i>Sternochetus mangiferae</i>	<i>Mangifera indica</i>	Fruit	Sri Lanka	Italy	1
Thripidae	<i>Amaranthus</i>	Vegetables (leaves)	India	United Kingdom	1
	<i>Luffa acutangula</i>	Vegetables	Ghana	United Kingdom	10
	<i>Luffa acutangula</i>	Vegetables	India	United Kingdom	1
	<i>Luffa acutangula</i>	Vegetables	Thailand	United Kingdom	1
	<i>Momordica</i>	Vegetables	Dominican Rep.	United Kingdom	10
	<i>Momordica</i>	Vegetables	India	United Kingdom	11
	<i>Momordica</i>	Vegetables	Malaysia	United Kingdom	1
	<i>Momordica</i>	Vegetables	Pakistan	United Kingdom	3
	<i>Momordica</i>	Vegetables	Thailand	United Kingdom	1
	<i>Momordica charantia</i>	Vegetables	India	United Kingdom	1
	<i>Momordica charantia</i>	Vegetables	Malaysia	United Kingdom	1
	<i>Solanum melongena</i>	Vegetables	Bangladesh	United Kingdom	5
	<i>Solanum melongena</i>	Vegetables	Dominican Rep.	United Kingdom	4
	<i>Solanum melongena</i>	Vegetables	Pakistan	United Kingdom	2

Pest	Consignment	Type of commodity	Country of origin	Destination	nb
<i>Thrips palmi</i>	<i>Amaranthus</i>	Vegetables (leaves)	India	United Kingdom	1
	<i>Dendrobium</i>	Cut flowers	Thailand	Germany	1
	<i>Dendrobium</i>	Cut flowers	Thailand	Italy	1
	<i>Luffa</i>	Vegetables	Ghana*	United Kingdom	1
	<i>Luffa acutangula</i>	Vegetables	India	United Kingdom	1
	<i>Momordica</i>	Vegetables	India	United Kingdom	1
	<i>Momordica charantia</i>	Vegetables	Cambodia*	France	3
	<i>Momordica charantia</i>	Vegetables	Dominican Rep.	France	1
	<i>Momordica charantia</i>	Vegetables	Dominican Rep.	Germany	1
	<i>Momordica charantia</i>	Vegetables	Dominican Rep.	Netherlands	1
	<i>Momordica charantia</i>	Vegetables	India	France	1
	<i>Momordica charantia</i>	Vegetables	Malaysia	Belgium	1
	<i>Momordica charantia</i> , <i>Solanum melongena</i>	Vegetables	India	United Kingdom	1
	Orchidaceae	Cut flowers	Thailand	Austria	2
	Orchidaceae	Cut flowers	Thailand	United Kingdom	1
	<i>Rosa</i>	Cut flowers	Thailand	Switzerland	4
	<i>Solanum aethiopicum</i>	Vegetables	Burkina Faso*	France	3
	<i>Solanum melongena</i>	Vegetables	Bangladesh	United Kingdom	1
	<i>Solanum melongena</i>	Vegetables	Cameroon*	Belgium	1
	<i>Solanum melongena</i>	Vegetables	Dominican Rep.	Netherlands	2
	<i>Solanum melongena</i>	Vegetables	India	Switzerland	1
	<i>Solanum melongena</i>	Vegetables	India	United Kingdom	2
	<i>Solanum melongena</i>	Vegetables	Mauritius	France	1
	<i>Solanum melongena</i>	Vegetables	Pakistan	Switzerland	1
	<i>Solanum melongena</i>	Vegetables	Pakistan	United Kingdom	1
	<i>Solanum melongena</i>	Vegetables	Surinam	Netherlands	1
	Thysanoptera	<i>Momordica charantia</i>	Vegetables	Pakistan	Switzerland
Orchidaceae		Cut flowers	Thailand	Switzerland	2
<i>Solanum melongena</i>		Vegetables	India	France	1
<i>Solanum melongena</i>		Vegetables	India	Switzerland	1
<i>Solanum melongena</i>		Vegetables	Malaysia	Switzerland	1
<i>Trialeurodes vaporariorum</i>	<i>Rosa</i>	Cut flowers	South Africa	Ireland	1
<i>Xanthomonas axonopodis</i> pv. <i>vesicatoria</i>	<i>Capsicum annuum</i>	Seeds	Israel	Italy	1
<i>Xiphinema diffusum</i>	<i>Enkianthus</i>	Plants for planting	Japan	Netherlands	1

• Fruit flies

Pest	Consignment	Country of origin	Destination	nb
<i>Anastrepha</i>	<i>Mangifera</i>	Brazil	United Kingdom	1
	<i>Mangifera</i>	Peru	United Kingdom	1
	<i>Mangifera indica</i>	Brazil	United Kingdom	1
	<i>Mangifera indica</i>	Peru	Netherlands	2
	<i>Psidium guajava</i>	Dominican Rep.	Netherlands	1
	<i>Syzygium malaccense</i>	Surinam	Netherlands	1
Bacteria	<i>Mangifera indica</i>	Sri Lanka	Italy	1
<i>Bactrocera</i>	<i>Mangifera</i>	Kenya	United Kingdom	1
	<i>Mangifera indica</i>	Kenya	United Kingdom	1

Pest	Consignment	Country of origin	Destination	nb
Bactrocera (cont.)	<i>Mangifera indica</i>	Sri Lanka	Italy	1
	<i>Momordica charantia</i>	India	United Kingdom	1
	<i>Psidium</i>	Pakistan	United Kingdom	1
	<i>Psidium guajava</i>	Pakistan	United Kingdom	1
	<i>Psidium guajava</i>	Thailand	United Kingdom	2
	<i>Syzygium</i>	Thailand	United Kingdom	1
	<i>Trichosanthes</i>	Sri Lanka	United Kingdom	1
	<i>Trichosanthes cucumerina</i>	India	United Kingdom	2
Bactrocera (suspect B. carambolae)	<i>Averrhoa carambola</i>	Malaysia	Netherlands	1
Bactrocera correcta	<i>Syzygium samarangense</i>	Thailand	Germany	1
Bactrocera cucurbitae	<i>Momordica charantia</i>	Bangladesh	Sweden	1
	<i>Momordica charantia</i>	Pakistan	Netherlands	1
Bactrocera dorsalis	<i>Mangifera indica</i>	Sri Lanka	France	1
	<i>Mangifera indica</i>	Thailand	France	1
	<i>Syzygium samarangense</i>	Thailand	France	1
Bactrocera zonata	<i>Psidium guajava</i>	Pakistan	France	1
Dacus	<i>Cucurbita</i>	South Africa	Netherlands	1
	<i>Momordica</i>	Gambia	United Kingdom	1
	<i>Momordica</i>	Kenya	United Kingdom	3
	<i>Momordica charantia</i>	Kenya	United Kingdom	1
Tephritidae (non-European)	<i>Capsicum frutescens</i>	Malaysia	Netherlands	2
	<i>Luffa acutangula</i>	Ghana	United Kingdom	1
	<i>Mangifera</i>	Brazil	United Kingdom	1
	<i>Mangifera</i>	Dominican Rep.	United Kingdom	2
	<i>Mangifera</i>	Jamaica	United Kingdom	1
	<i>Mangifera</i>	Kenya	United Kingdom	1
	<i>Mangifera indica</i>	Brazil	Spain	1
	<i>Mangifera indica</i>	Cameroon	Belgium	1
	<i>Mangifera indica</i>	Dominican Rep.	France	1
	<i>Mangifera indica</i>	Dominican Rep.	Netherlands	2
	<i>Mangifera indica</i>	Kenya	United Kingdom	2
	<i>Mangifera indica</i>	Peru	Netherlands	2
	<i>Mangifera indica</i>	Sri Lanka	Switzerland	1
	<i>Momordica</i>	Kenya	United Kingdom	3
	<i>Momordica</i>	Sri Lanka	United Kingdom	2
	<i>Momordica charantia</i>	Kenya	United Kingdom	2
	<i>Psidium guajava</i>	Dominican Rep.	France	1
	<i>Psidium guajava</i>	Pakistan	Germany	1
	<i>Psidium guajava</i>	Thailand	United Kingdom	7
	<i>Syzygium</i>	Surinam	Netherlands	1

• Wood

Pest	Consignment	Type of commodity	Country of origin	Destination	nb
<i>Anoplophora</i>	Unspecified	Wood packing material	China	Germany	1
<i>Anoplophora glabripennis</i>	Unspecified	Wood packing material (pallet)	China	Switzerland	1
<i>Aphelenchoides parietinus</i> , <i>Aphelenchoides</i> , <i>Nothotylenchoides</i>	Unspecified	Wood packing material (crate)	Belarus	Lithuania	1
Bostrichidae	Unspecified	Wood packing material (pallet)	Indonesia	Germany	1
Cerambycidae	Unspecified	Wood packing material	China	Germany	1
	Unspecified	Wood packing material (crate)	China	Germany	1
Coleoptera	Unspecified	Wood packing material	China	Czech Republic	1
<i>Cordylomera spinicornis</i>	<i>Entandrophragma cylindricum</i>	Wood and bark	Congo	Spain	1
	<i>Entandrophragma cylindricum</i>	Wood and bark	Congo	Spain	1
<i>Heterobostrychus aequalis</i>	Unspecified	Wood packing material (pallet)	Vietnam	Switzerland	1
Insecta	Unspecified	Wood packing material	India	Switzerland	2
	Unspecified	Wood packing material (pallet)	China	Greece	2
	Unspecified	Wood packing material (pallet)	China	Switzerland	3
	Unspecified	Wood packing material (pallet)	Vietnam	Switzerland	1
Lepidoptera	<i>Quercus alba</i>	Wood and bark	USA	Spain	1
<i>Sinoxylon</i>	Unspecified	Wood packing material (pallet)	Singapore	Germany	1
<i>Xyleborus</i>	Unspecified	Wood packing material (pallet)	China	Switzerland	1

• Bonsais

Pest	Consignment	Type of commodity	Country of origin	Destination	nb
Coleoptera	<i>Acer</i> , <i>Chaenomeles</i> , <i>Ulmus</i>	Bonsais	Japan	Czech Republic	1

Source: EPPO Secretariat, 2013-04

2013/089 Invasive alien plants in Finland

On the 15th of March 2012, the Finnish government adopted a Resolution on Finland's National Strategy on Invasive Alien Species, at the proposal of the Ministry of Agriculture and Forestry.

In the framework of this strategy, a list of invasive alien plants and a list of potentially invasive alien plants for Finland have been elaborated. These lists are provided below, with the origin of the species according to USDA/GRIN and their situation in the EPPO region according to the CABI, DAISIE and NOBANIS databases.

The list of invasive alien plants for Finland is composed of the following species:

Species	Origin	Situation in the EPPO region
<i>Amelanchier spicata</i> (Rosaceae, EPPO List of Invasive Alien Plants)	N-Am.	AT, BE, BG, CZ, DK, DE, EE, FI, FR, GB, LV, LT, NL, NO, PL, RU, SE, UA
<i>Aster x salignus</i> (Asteraceae)	Horticulture hybrid	Widespread
<i>Avena fatua</i> (Poaceae)	Af., As., Eur.	Native in part of the EPPO region
<i>Calystegia sepium</i> (Convolvulaceae)	Cosmop.	Native in part of the EPPO region, established in CZ, DK, DE, FI, FR, GB, IE, NO, SE
<i>Elodea canadensis</i> (Hydrocharitaceae)	N-Am.	Widespread
<i>Epilobium ciliatum</i> (Onagraceae)	As. Temp, N-Am, S- Am.	Widespread
<i>Fallopia japonica</i> (Polygonaceae, EPPO List of IAP)	As. Temp.	Widespread
<i>Fallopia sachalinensis</i> (Polygonaceae, EPPO List of IAP)	As. Temp.	Widespread
<i>Fallopia x bohémica</i> (Polygonaceae, EPPO List of IAP)	Hybrid	Widespread
<i>Galium album</i> (Rubiaceae)	Eur.	Native in part of the EPPO region, established in DK, FI, NO, SE
<i>Galium x pomeranicum</i> (Rubiaceae)	Hybrid	Not recorded
<i>Glyceria maxima</i> (Poaceae)	As. Temp, Eur.	Native in part of the EPPO region, established in FI, FO, IE, NO, SE
<i>Heracleum persicum</i> (Apiaceae, EPPO A2 List)	Middle East	DK, EE, FI, NO, SE
<i>Heracleum mantegazzianum</i> (Apiaceae, EPPO List of IAP)	Caucasus	Widespread
<i>Heracleum sosnowskyi</i> (Apiaceae, EPPO A2 List)	Caucasus	Native in AM, GE, RU, TR established in AZ, BY, EE, DE, HU, LV, LT, PL, RU, TR, UA
<i>Impatiens capensis</i> (Balsaminaceae)	N-Am.	DE, DK, FI, FR, GB, NL, PL
<i>Impatiens glandulifera</i> (Balsaminaceae, EPPO List of IAP)	As. Trop.	Widespread
<i>Impatiens parviflora</i> (Balsaminaceae)	As. Temp.	Widespread
<i>Lupinus polyphyllus</i> (Fabaceae, EPPO Observation List of IAP)	N-Am.	Widespread
<i>Petasites hybridus</i> (Asteraceae)	As. Temp., Eur.	Native in part of the EPPO region, established in DK, EE, FI, LV, LT, NO, SE
<i>Rorippa sylvestris</i> (Brassicaceae)	As., Eur.	Native in part of the EPPO region, established in FI, NO, SE
<i>Rosa rugosa</i> (Rosaceae)	As.	Widespread
<i>Sambucus racemosa</i> (Adoxaceae)	As. Temp., Eur., N-Am.	Native in part of the EPPO region, established in DK, EE, FI, GB, LV, LT, NO, RU, SE

Species	Origin	Situation in the EPPO region
<i>Solidago altissima</i> (Asteraceae)	N-Am.	RU
<i>Solidago canadensis</i> (Asteraceae, EPPO List of IAP)	N-Am.	Widespread
<i>Solidago gigantea</i> (Asteraceae, EPPO List of IAP)	N-Am.	Widespread

The list of potentially invasive alien plants for Finland is composed of the following species:

Species	Origin	Situation in the EPPO region
<i>Abies balsamea</i> (Pinaceae)	N-Am.	FI, LV, SE
<i>Abies sibirica</i> (Pinaceae)	As. Temp., Eur.	Native in part of the EPPO region, established in EE, FI, SE
<i>Acer pseudoplatanus</i> (Sapindaceae)	As. Temp., Eur.	Native in part of the EPPO region, widely established in BE, BY, DE, DK, EE, FI, GB, IE, LV, LT, MT, NL, NO, PT, RU, SE, UA
<i>Alopecurus myosuroides</i> (Poaceae)	Af., As. Temp. and Trop., Eur.	Native in part of the EPPO region, established in CZ, DE, DK, EE, GB, SE, SI, SK
<i>Amaranthus retroflexus</i> (Chenopodiaceae)	N-Am.	Widespread
<i>Ambrosia artemisiifolia</i> (Asteraceae, EPPO List of IAP)	N-Am.	Widespread
<i>Anagallis arvensis</i> (Primulaceae)	Af., As. Temp and Trop., Eur.	Native in part of the EPPO region, established in CZ, DK, GB, NO, SE
<i>Bromus sterilis</i> (Poaceae)	Af., As. Temp., Eur.	Native in part of the EPPO region, established in CZ, DE, DK, EE, GB, LT, SE
<i>Ceratophyllum submersum</i> (Ceratophyllaceae)	Af.	FI, SE
<i>Conyza canadensis</i> (Asteraceae)	N-Am.	Widespread
<i>Cornus alba</i> subsp. <i>alba</i> (Cornaceae)	N-Am.	DK, FI
<i>Cornus alba</i> subsp. <i>stolonifera</i> (Cornaceae)	N-Am.	DK, FI
<i>Echinochloa crus-galli</i> (Poaceae)	Cosmop.	Widespread
<i>Elodea nuttallii</i> (Hydrocharitaceae, EPPO List of IAP)	N-Am.	Widespread
<i>Galega orientalis</i> (Fabaceae)	As. Temp.	DK, EE, FI, LV, SE
<i>Leymus innovatus</i> (Poaceae)	N-Am.	SE
<i>Lupinus nootkatensis</i> (Fabaceae)	N-Am.	FI, NO, SE
<i>Lysichiton americanus</i> (Araceae, EPPO Observation list of IAP)	N-Am.	BE, CH, DK, DE, FI, FR, GB, IE, NL, NO, SE
<i>Malus domestica</i> (Rosaceae)	As.	Widespread
<i>Nymphoides peltata</i> (Menyanthaceae)	As. Temp. and Trop., Eur.	Native in part of the EPPO region, established in CH, DK, IE, SE
<i>Papaver rhoeas</i> (Papaveraceae)	Af., As. Temp. and Trop., Eur.	Native in part of the EPPO region, established in CZ, DK, EE, LV, SE
<i>Petasites japonicus</i> subsp. <i>giganteus</i> (Asteraceae)	As. Temp.	?
<i>Poa chaixii</i> (Poaceae)	Asia Temp., Eur.	Native in part of the EPPO region, established in DK, FI, GB, IE, LV, LT, NL, NO, SE

Species	Origin	Situation in the EPPO region
<i>Prunus pensylvanica</i> (Rosaceae)	N-Am.	FI, GB
<i>Thuja plicata</i> (Cupressaceae)	N-Am.	AT, DK, EE, GB, NL, NO, SE
<i>Senecio cannabifolius</i> (Asteraceae)	N-Am.	SE
<i>Setaria pumila</i> (Poaceae)	Cosmop.	BE, CZ, DE, DK, ES, NL, PT (Azores, Madeira)
<i>Setaria viridis</i> (Poaceae)	Af., As temp. and trop., Eur.	Native in part of the EPPO region, established in BY, DK, FI, NO, RU, SK, TN
<i>Sorbaria sorbifolia</i> (Rosaceae)	As. Temp.	BE, CZ, DK, EE, FI, FR, GB, IT, LV, LT, NO, PL, SE
<i>Symphytum officinale</i> (Boraginaceae)	As. Temp., Eur.	Native in part of the EPPO region, established in DK, FI, NO, SE
<i>Symphytum bohemicum</i> (Boraginaceae)	As. Temp., Eur.	Native in part of the EPPO region, established in DK, FI, NO, SE
<i>Symphytum x uplandicum</i> (Boraginaceae)	Horticulture hybrid	CZ, DE, DK, FI, FR, GB, IE, LT, NL, NO, PT (Azores), SE

The EPPO Secretariat notes that some invasive alien plants such as *Ceratophyllum submersum*, *Leymus innovatus*, *Lupinus nootkatensis*, *Prunus pensylvanica* and *Senecio cannabifolius*, which are alien to the EPPO region and still of limited distribution, may represent emerging invasive alien plants for the EPPO region.

Source: CABI - Invasive Species Compendium.
<http://www.cabi.org/isc>

DAISIE - Delivering Alien Invasive Species Inventories for Europe.
<http://www.europe-aliens.org>

Ministry of Agriculture and Forestry, Alien species in Finland.
http://www.mmm.fi/en/index/frontpage/natural_resources/invasive_alien_species.html

Ministry of Agriculture and Forestry (2012) Finland's National Strategy on Invasive Alien Species. 126 pp.
http://www.mmm.fi/attachments/ymparisto/vieraslajiseminaari9.12.2009/6AEAKM_Hw5/Finlands_national_strategy_on_invasive_alien_species.pdf

NOBANIS - European Network on Invasive Alien Species.
<http://www.nobanis.org>

United States Department of Agriculture, Germplasm Resources Information Network (GRIN).
<http://www.ars-grin.gov>

Additional key words: invasive alien plants, lists

Computer codes: ABIBA, ABISB, ACRPP, ALOMY, AMARE, AMBEL, AMESP, ANGAR, ASTSL, AVEFA, BROST, CAGSE, CEYSU, CRWAL, CRWSR, ECHCG, ELDC, ELDNU, EPIAC, ERICA, GAGOR, GALAL, GALPO, GLYMA, HERMZE, HERPE, HERSO, IPACA, IPAGL, IPAPA, LMYIN, LUPPO, LUPNO, LSYAM, MABSD, NYPPE, PAPRH, PEDHY, PEDJG, POACH, POLCU, PRNPE, REYSA, RORSY, ROSRG, SAMRA, SENC, SETPU, SETVI, SOISO, SOOAL, SOOCA, SOOGI, SYMBO, SYMOF, SYMUP, THUPL, FI

2013/090 Update on the world distribution of *Asparagus asparagoides*

Asparagus asparagoides (Asparagaceae) is registered on the EPPO Alert List. Its distribution in the EPPO region has been reviewed and is as follows:

EPPO Region: France (including Corse), Italy (Sicilia), Malta, Morocco, Portugal (Azores, Madeira), Spain (including Islas Canarias), Tunisia.

Note: in France, *A. asparagoides* is present in the Alpes-Maritimes and Var departments. Alziar & Salanon (1996) consider the species as invasive in the Var department in Mont Boron (near Nice) and in the Esterel mountain range although its behavior there seems to be less invasive. In Corse, the species is present in Ajaccio near the Scudo quarries and at the junction of the roads D.111 and D.111b, where about 1400 to 1800 individual plants were observed in 2002. The species is also present in the île Rousse and 2 km South-west of the île Rousse (Paradis & Piazza, 2004).

In Sicilia, Parlatore (1858) indicated that the species was established in bushland near Palermo and at 'Firriatu di Villafranca'. According to Gianiantonio Domina (University of Palermo, pers. comm., 2013), *Asparagus asparagoides* populations in Sicilia are stable. The species is casual in Sardinia.

In Malta, *A. asparagoides* is recorded by Borg (1927) who states that it is established in the surroundings of San Antonio Gardens, Casa Leoni and Buskett. According to Lanfranco (2005) its cultivation has declined considerably but it still grows at the gardens of the Verdala Palace adjacent to Buskett.

In Spain the species has been found in Burjassot, L'Eixereta, near Valencia (GBIF Portal).

In Tunisia, *A. asparagoides* is recorded in Borj Cedria and in Soukra (Le Floc'h *et al.*, 2010).

The species had erroneously been indicated as present in Slovenia (from an incorrect interpretation of Jogan, 2005).

Africa (native): Ethiopia, Kenya, Lesotho, Malawi, Namibia, South Africa, Swaziland, Tanzania, Uganda, Zambia, Zimbabwe.

North America: Mexico, USA (California, Hawaii (East Maui)).

South and Central America: Argentina, Guatemala, Uruguay.

Oceania: Australia (New South Wales, South Australia, Tasmania, Victoria, Western Australia), New Zealand.

Source: Alziar G & Salanon R (1996) Pourquoi certaines plantes deviennent-elles envahissantes ? Quelques exemples pris dans la flore allochtone des Alpes-Maritimes. Collection "Plantes introduites - Plantes envahissantes", Nice 8-11 octobre 1996 (abstract).

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Additional key words: invasive alien plants, distribution

Computer codes: ASPAS

2013/091 Eradication of *Asparagus asparagoides* in Andalusia (ES)

In Andalusia (ES), *Asparagus asparagoides* (Asparagaceae, EPPO Alert List) was the target of an eradication plan by the Consejería de Medio Ambiente in San José, in Chiclana de la Frontera, near Cádiz in 2010. The species was occasionally sold as an ornamental plant, and is suspected to have escaped from a garden. The eradication action was undertaken in La Barrosa periurban park, which is one of the most biodiverse coastal habitats of the Province of Cádiz. Manual removal of the invasive alien plant was undertaken, including the removal of the subterranean parts of the plant, in order to avoid damaging the protected species present in the area.

Source: Europa Press (2010) La Junta de Andalucía erradica una "peligrosa" planta invasora que amenaza a especies del parque de La Barrosa (Cádiz). 5 Febrero de 2010. <http://www.europapress.es/epsocial/politica-social/noticia-junta-andalucia-erradica-peligrosa-planta-invasora-amenaza-especies-parque-barrosa-cadiz-20100205120649.html>

Additional key words: invasive alien plants, eradication

Computer codes: ASPAS, ES

2013/092 *Cardiospermum grandiflorum* in Macaronesia

In Macaronesia, *Cardiospermum grandiflorum* (Sapindaceae, EPPO Alert List) is reported as invasive in Gran Canaria, La Gomera, Tenerife (Islas Canarias, ES), and Madeira (PT). It is also recorded as established in La Palma (Islas Canarias).

In Madeira, it is recorded in vegetated sea cliffs with endemic flora of the Macaronesian coasts (Habitat 1250 according to the EU Habitats Directive categorization), in thermo-Mediterranean and pre-desert scrub (Habitat 5330), in siliceous rocky slopes with chasmophytic vegetation (Habitat 8220) and in Macaronesian laurel forest (Habitat 9360, which is a protected habitat according to the Habitats Directive).

In Islas Canarias, it is recorded in thermo-Mediterranean and pre-desert scrub (Habitat 5330) and siliceous rocky slopes with chasmophytic vegetation (Habitat 8220).

The species occurs in protected areas (Natural Park of Madeira, Site of community interest of Pináculo and Cuenca Benchijigua-GaurimiarIt and the Rural Park of Anaga). It is also recorded on cultivated land and anthropogenous vegetation, and in urban areas in Madeira and Islas Canarias and in abandoned fields and degraded natural habitats in Madeira.

C. grandiflorum is reported to change the structure, abundance and succession in the habitats in which it occurs, to compete with other species, and to facilitate invasions of other invasive alien species. The following endemic species in Islas Canarias are considered to be affected by *C. grandiflorum*: *Aeonium urbicum* (Crassulaceae), *Allagopappus dichotomus* (Asteraceae), *Argyranthemum frutescens* (Asteraceae), *Artemisia thuscula* (Asteraceae), *Ceballosia fruticosa* (Boraginaceae), *Echium leucophaeum* (Boraginaceae), *Euphorbia canariensis* (Euphorbiaceae), *Euphorbia lamarckii* (Euphorbiaceae, listed in Appendix II of the Convention on International Trade in Endangered Species of Wild Fauna and Flora), *Kleinia neriifolia* (Asteraceae), *Lavandula canariensis* (Lamiaceae), *Rubia fruticosa* (Rubiaceae), *Rumex lunaria* (Polygonaceae).

In Madeira, the following endemic species are considered to be affected by *C. grandiflorum*: *Aeonium glandulosum* (Crassulaceae), *Aeonium glutinosum* (Crassulaceae), *Crambe fruticosa* (Brassicaceae), *Erica platycodon* subsp. *madericola* (Ericaceae), *Euphorbia piscatoria* (Euphorbiaceae), *Genista tenera* (Fabaceae), *Helichrysum melaleucum* (Asteraceae), *Matthiola maderensis* (Brassicaceae), *Olea europaea* subsp. *maderensis* (Oleaceae), *Sedum nudum* (Crassulaceae) and *Sinapidendron angustifolium*

(Brassicaceae). In addition, in Madeira, the following species included in the Habitats Directive are also affected by *C. grandiflorum*: *Chamaemeles coriacea* (Rosaceae), *Convolvulus massonii* (Convolvulaceae), *Dracaena draco* (Asparagaceae), *Jasminum azoricum* (Oleaceae), *Echium candicans* (Boraginaceae), *Musschia aurea* (Campanulaceae), *Maytenus umbellata* (Celastraceae) and *Sideroxylon mirmulans* (Sapotaceae).

Source: Council Directive 92/43/EEC on the Conservation of natural habitats and of wild fauna and flora.
http://ec.europa.eu/environment/nature/legislation/habitatsdirective/index_en.htm

EIONET Website, Reference portal for Natura 2000 - Annex 1.
http://bd.eionet.europa.eu/activities/Natura_2000/reference_portal

Silva L, Ojeda Land E & Rodríguez Luengo JL (Eds.) (2008) Invasive Terrestrial Flora & Fauna of Macaronesia. TOP 100 in Azores, Madeira and Canaries. ARENA, Ponta Delgada, 546 pp.

Additional key words: invasive alien plants, record

Computer codes: AEJUR, AEJGL, AEJGT, ARTTH, CEBFR, CHYFR, CONMA, CRIGR, CRMFR, DRNDR, EHICA, EHILE, EIAPM, EPHKN, EPHOS, EPHQI, GENTE, HECME, IASAZ, KZMCO, LAVCA, MSIAU, MTLMA, MYUUM, OLVEM, RBIFR, RUMLU, SDIMI, SEDNU, SENKL, ZIDAN, ZLADI, PT

2013/093 Revision of ISPM 11 on Pest risk analysis for quarantine pests: addition of an Annex on Pest risk analysis for plants as quarantine pests

The protection of plants as pursued through the International Plant Protection Convention (IPPC) includes defining certain plants as pests, and taking phytosanitary measures to prevent their introduction and spread. The IPPC covers pests injurious to cultivated and wild plants, as well as weeds and invasive plants that are injurious to other plants.

As a consequence, a new annex (Annex 4) on *Pest risk analysis for plants as quarantine pests* was adopted by the Eighth Session of the Commission on Phytosanitary Measures in April 2013, to be added to the International Standard on Phytosanitary Measures no. 11 on *Pest risk analysis for quarantine pests*.

Annex 4 provides specific guidance on conducting PRA to determine if a plant is a pest of cultivated or wild plants, whether it should be regulated, and to identify phytosanitary measures that reduce the pest risk to an acceptable level. It focuses primarily on plants proposed for import (plants for planting or other intended uses). It does not cover the unintentional introduction of plants as contaminants in commodities or conveyances. Annex 4 on *Pest risk analysis for plants as quarantine pests* is structured in the following way:

- Stage 1: Initiation - initiation points; pre-selection.
- Stage 2: Pest risk assessment - identity of the plant; presence or absence in the PRA area; intended use; habitats, locations and endangered areas; probability of entry; historical evidence of pest behaviour, probability of establishment; probability of spread; assessment of potential economic consequences.
- Stage 3: Pest risk management.
- Aspects common to all PRA stages: risk communication.

Source: IPPC (2013) Pest risk analysis for quarantine pests. International Standards for Phytosanitary Measures no. 11. 36 pp.
https://www.ippc.int/file_uploaded/1366798700_ISPM_11_2013_En_2013-04-23.pdf

Additional key words: invasive alien plants, ISPM

2013/094 IUCN Conference on invasive alien species in urban areas in Europe in Gland (CH), 2013-09-05

Urban areas are particularly vulnerable to invasive alien species, due to the amount of commodities arriving or passing through these areas for trade and commercial activities.

The IUCN will therefore organize a conference on invasive alien species in urban environments on the 5th of September at the IUCN Global Headquarters in Gland (CH). This event will offer an interactive forum for discussion, knowledge sharing, networking and action. The following themes will be addressed:

- The occurrence of invasive alien species in urban environments, key pathways and impacts;
- European cities as privileged centers for information campaigns and awareness raising initiatives on IAS issues (e.g. impact, costs, management) and for targeting the general public, stakeholders, policy and decision makers;
- Strategies for preventing the release/escape of invasive alien species in urban environments;
- Options for implementing an early warning and rapid response system in Europe;
- Establishment of networks encompassing different taxa and countries to monitor the occurrence and spread of IAS in urban environments;
- Best practices to eradicate/control invasive alien species in European cities;
- The role of an EU policy framework to combat invasive alien species;
- Engagement of civil society in reducing the risk of invasive alien species in the urban environment.

In advance of the conference, IUCN will compile an overview of case studies of approaches to control, manage and eradicate invasive alien species or to prevent their introduction in urban environments in Europe. IUCN is therefore launching a questionnaire to collect case studies, which is available at the link below:

www.fh-erfurt.de/urbio/httpdocs/content/downloads/IUCN_Template_for_case_studies_IAS_in_urban_areas.pdf

Source: IUCN Conference on invasive species in urban areas in Europe in Gland (CH), 2013-09-05.
http://www.tech-brest-iroise.fr/files/258/8_actualites_et_agenda/42_2013/44_actuait%C3%A9s/47_avril/634_IUCN_Conference_invasive_species_in_urban_areas_in_Europe.pdf

Additional key words: invasive alien species, conference

Computer codes: CH