



ORGANISATION EUROPEENNE
ET MEDITERRANEENNE
POUR LA PROTECTION DES PLANTES

EUROPEAN AND MEDITERRANEAN
PLANT PROTECTION
ORGANIZATION

EPPO Reporting Service

No. 11 PARIS, 2012-11-01

CONTENTS

Pests & Diseases

- [2012/232](#) - First report of *Tuta absoluta* in a tomato crop in Guernsey
- [2012/233](#) - *Aceria kuko* found again in Germany
- [2012/234](#) - Update on the situation of *Thaumastocoris peregrinus* in Lazio region (IT)
- [2012/235](#) - Updated situation of *Meloidogyne chitwoodi* and *Meloidogyne fallax* in France
- [2012/236](#) - Eradication of citrus huanglongbing in Argentina
- [2012/237](#) - First report of *Chalara fraxinea* in Guernsey
- [2012/238](#) - *Puccinia horiana* found in Lithuania
- [2012/239](#) - *Mycosphaerella pini* detected again in Lithuania
- [2012/240](#) - *Mycosphaerella dearnessii* detected again in Lithuania
- [2012/241](#) - *Mycosphaerella dearnessii* found on *Pinus nigra* var. *nigra* in Austria
- [2012/242](#) - Outbreak of *Pepino mosaic virus* in Ticino (CH)
- [2012/243](#) - New findings of *Plum pox virus* in Lithuania
- [2012/244](#) - *Plum pox virus* found for the first time in the regions of Nord-Pas de Calais and Corse (FR)
- [2012/245](#) - EPPO report on notifications of non-compliance
- [2012/246](#) - New section on 'validation data' added to the EPPO database on diagnostic expertise
- [2012/247](#) - 3rd European Bois Noir Workshop (Barcelona, ES, 2013-03-20/21)

Invasive Plants

- [2012/248](#) - The alien and invasive flora of Greece
- [2012/249](#) - First report of *Thladiantha dubia* in Croatia
- [2012/250](#) - *Eichhornia crassipes* and *Pistia stratiotes* in Campania and Sardinia (Italy)
- [2012/251](#) - Environmental factors promoting the spread of *Pennisetum setaceum*
- [2012/252](#) - A review of research on biological invasions
- [2012/253](#) - Conclusions from the Seminar on International Trade and Invasive Alien Species of the Standards and Trade Development Facility
- [2012/254](#) - Freshwater invasive species conference (Galway, IE, 2013-04-8/11)
- [2012/255](#) - 4th EWRS International Symposium on Weeds & Invasive Plants 'Intractable Weeds and Plant invaders' (Montpellier, FR, 2014-05-18/23)

2012/232 First report of *Tuta absoluta* in a tomato crop in Guernsey

In Guernsey, *Tuta absoluta* (Lepidoptera: Gelechiidae - EPPO A2 list) was first found at a packing unit in June 2010 (EPPO RS 2010/138), but until recently no further specimens were found on the island. In October 2012, 2 adult males of *T. absoluta* were caught in a pheromone trap placed in one commercial glasshouse of tomatoes (*Solanum lycopersicum*). This finding was made during a routine survey. No symptoms or damage were seen in the infested tomato crop. Investigations are being made to trace back the possible origin of this introduction. Phytosanitary measures were taken to eradicate *T. absoluta* and included: intensive trapping plus chemical treatments; disposal of the crop, growing medium and floor covering after the final harvest.

The pest status of *Tuta absoluta* in Guernsey is officially declared as: **Present, detected in one commercial glasshouse, under eradication.**

Source: NPPO of Guernsey (2012-11).

Additional key words: detailed record

Computer codes: GNORAB, GG

2012/233 *Aceria kuko* found again in Germany

In Germany, the presence of *Aceria kuko* (Acari: Eriophyidae) was noticed for the first time in 2011 in Baden-Württemberg (EPPO RS 2011/218). This gall mite originating from South-East Asia was found on 'Goji berry' plants (*Lycium* spp.) grown in an orchard for fruit production. Eradication measures were taken by the NPPO in Baden-Württemberg. After this initial finding, a survey (including official inspections of nurseries) was conducted in most German länder in 2012. As a result, *A. kuko* was found in Berlin, Bayern, Nordrhein-Westfalen, Rheinland-Pfalz, Sachsen, and Schleswig-Holstein. The mite was identified on the basis of its morphological characteristics. In all cases, official control measures were taken and included: destruction of infested plants (in Bayern, Schleswig-Holstein, Rheinland-Pfalz), acaricide treatments, quarantine, official inspections in nurseries. The origin of these infestations is unknown but it is suspected that *A. kuko* has been introduced with infested plant material.

Berlin: *A. kuko* was found in 7 locations. There is no commercial production of *Lycium* plants in Berlin and most findings were made in private gardens. In one site, the infested plants had been delivered by a trader from Niedersachsen.

Bayern: in 2012-05-09, symptoms caused by *A. kuko* were observed on *Lycium barbarum* plants in 1 nursery. Approximately 600 plants showed leaf galls. During summer, *A. kuko* was also found in 4 other nurseries and 1 private garden.

Nordrhein-Westfalen: 10 *Lycium* plants showing symptoms of *A. kuko* were found in a garden centre. These plants originated from Niedersachsen.

Niedersachsen: meticulous tracing-back studies were carried out in Niedersachsen but no infested plants could be found in 2012. However in one nursery, the staff had seen symptoms in 2011. The nurseries concerned are now officially and regularly inspected.

Rheinland-Pfalz: in September 2012, *A. kuko* was found in 2 nurseries where the plants had also been delivered from Niedersachsen.

Sachsen: in 2012-06-26, symptoms caused by *A. kuko* were found on *Lycium* plants in 1 nursery. Approximately 110 plants showed leaf deformations, light-coloured patches and galls on the leaves.

Schleswig-Holstein: in 2012-07-25, symptoms caused by *A. kuko* were observed on *Lycium* plants in 1 nursery. Approximately 5% of a lot of 1275 potted plants, as well as some mother plants, were infested.

The pest status of *Aceria kuko* in Germany is officially declared as: **Transient in some areas (Berlin, Baden-Württemberg, Bayern, Nordrhein-Westfalen, Rheinland-Pfalz, Sachsen, Schleswig-Holstein), under eradication.**

Source: NPP0 of Germany (2012-12).

Additional key words: detailed record

Computer codes: ACEISP, DE

2012/234 Update on the situation of *Thaumastocoris peregrinus* in Lazio region (IT)

As reported in EPPO RS 2012/147, *Thaumastocoris peregrinus* (Hemiptera: Thaumastocoridae - EPPO Alert List) was first found in 2011 in Lazio region, Italy. During monitoring activities concerning another eucalyptus pest (*Glycaspis brimblecombei*), the presence of *T. peregrinus* was first noticed in August 2011 in Rome and its surroundings on several eucalyptus species (*Eucalyptus camaldulensis*, *E. gomphocephala*, *E. bridgesiana*, and the hybrids *E. camaldulensis* x *E. bicostata*, *E. camaldulensis* x *E. grandis*). It is estimated that in Lazio region, 8 ha of eucalyptus plantation and the urban park 'Santa Maria di Galeria' are infested. The origin of this introduction is unknown. No specific measures have been taken in Lazio region, as no effective control measures are currently available against this pest.

The pest status of *Thaumastocoris peregrinus* in Italy is officially declared as: **Present, restricted area near Rome.**

Source: NPP0 of Italy (2012-10).

Additional key words: detailed record

Computer codes: THMCPE, IT

2012/235 Updated situation of *Meloidogyne chitwoodi* and *Meloidogyne fallax* in France

The NPP0 of France recently sent to the EPPO Secretariat several updates about the situation of *Meloidogyne chitwoodi* and *Meloidogyne fallax* (both EPPO A2 List) on its territory. In 2012, new outbreaks have been found in France as a result of the national surveillance programme on potato root-knot nematodes. Although the origin of these outbreaks could not be determined, it is suspected that they are linked to imports of infested plants for planting. Phytosanitary measures were taken to prevent any further spread of these root-knot nematodes and included: delimitation of infested areas, prohibition to move plant material and soil from infested areas, access to infested areas restricted to authorized persons, disinfection of all machinery which may have been in contact with infested material.

- ***Meloidogyne chitwoodi***

In 2008, *M. chitwoodi* was found for the first time in Picardie region on black salsify (*Scorzonera hispanica*) and ware potatoes (*Solanum tuberosum*), together with *M. fallax*. In 2009, an outbreak of *M. chitwoodi* (together with *M. fallax*) was detected in Bretagne in greenhouse crops (tomato, lettuce, etc.). In 2010, an outbreak of *M. chitwoodi* (alone) was found in Aquitaine in outdoor vegetable crops. In September 2012, the nematode was found in Ile-de-France in a 400 m² glasshouse of tomatoes (*Solanum lycopersicum*). *M. chitwoodi* was detected in a soil sample, but tomato plants were not showing any root galls. Finally in October 2012, it was also found in Basse-Normandie. It was detected in a soil sample which had been collected from a field of red beet (*Beta vulgaris* var. *esculenta* cv. 'Braco'). No root galls were observed in red beet plants.

The pest status of *Meloidogyne chitwoodi* in France is officially declared as: **Present, restricted distribution.**

- ***Meloidogyne fallax***

As explained above, *M. fallax* was first detected together with *M. chitwoodi* in Picardie in 2008, and then in Bretagne in 2009. In October 2012, *M. fallax* was found in region Nord-Pas de Calais. It was detected in a soil sample associated with a crop of dandelion (*Taraxacum officinale*).

The pest status of *Meloidogyne fallax* in France is officially declared as: **Present, restricted distribution.**

Source: NPP0 of France (2012-10, 2012-11).

Additional key words: detailed record

Computer codes: MELGCH, MELGFA, FR

2012/236 Eradication of citrus huanglongbing in Argentina

In June 2012, citrus huanglongbing (associated with '*Candidatus Liberibacter asiaticus*' - EPPO A1 List) was detected for the first time in Argentina (EPPO RS 2012/183). The NPP0 of Argentina (SENASA) recently provided the EPPO Secretariat with more details about this finding and its eradication.

Within the framework of the 'National HLB Prevention Program' carried out by the Ministry of Agriculture, Livestock and Fisheries of Argentina, inspectors from SENASA detected and destroyed a tangerine plant (*Citrus reticulata*) which was infected by citrus huanglongbing. This plant was found in a private residence in the locality of Puerto Deseado (General Belgrano department - Misiones province), a few kilometres away from the border with Brazil. The area where the finding was made is composed of small family homes and gardens, most of which grow *Ilex paraguariensis* (yerba mate). In addition, it is surrounded by protected natural parks and is not an area of commercial citrus production.

As part of a contingency plan, eradication measures were immediately taken and included: 1) destruction of the infected tree; 2) intensification of monitoring activities within a radius of 10 km around the finding site on all potential host plants of the disease and its vector (*Diaphorina citri*), including those occurring in urban or semi-urban areas. As a result of these monitoring activities, 260 samples were collected and tested by real-time PCR and/or nested PCR. 15 plants were found to be infected and destroyed. By now, all potential hosts located around affected plants have been surveyed covering a total surface of 50,000 ha. Monitoring activities were also extended to other parts of Argentina covering more than 52,000 sites with potential host plants. It is underlined that all citrus fruit-

producing provinces were part of the monitoring programme. Tests were performed on 13,160 samples collected from host plant material and *D. citri*; all gave negative results. Therefore, the NPPO of Argentina concluded that its territory should now be considered as free from citrus huanglongbing.

Additional information can be viewed on the SENASA website (in Spanish):
http://www.senasa.gov.ar/Archivos/File/File3511-Informe_HLB_2012.pdf
<http://www.senasa.gov.ar/Archivos/File/File3229-contingencia2012.pdf>
http://www.senasa.gov.ar/Archivos/File/File6221-Informe_hlb.pdf

Source: NPPO of Argentina (2012-11).

Additional key words: absence, eradication

Computer codes: LIBEAS, AR

2012/237 First report of *Chalara fraxinea* in Guernsey

The NPPO of Guernsey recently informed the EPPO Secretariat of the first detection of *Chalara fraxinea* (teleomorph *Hymenoscyphus pseudoalbidus* - EPPO Alert List) on its territory. In October 2012, ash dieback was observed on an outdoor plantation of young ash trees (*Fraxinus excelsior*). The disease was detected during a survey of recent ash plantations and the identity of the fungus was confirmed by real-time PCR. Infected trees had been imported from a nursery in the United Kingdom which was subsequently found to have the disease. In the affected plantation, one standard tree was showing cankers on the stem and dieback was observed in 9 (out of 80) two year-old trees.

The pest status of *Chalara fraxinea* in Guernsey is officially declared as: **Transient, actionable and under eradication.**

Source: NPPO of Guernsey (2012-11).

Additional key words: new record

Computer codes: CHAAFR, GG

2012/238 *Puccinia horiana* found in Lithuania

In 2012-10-05, *Puccinia horiana* (EPPO A2 List) was detected in 2 glasshouses on the same farm in the district of Birzai, Lithuania. The fungus was found on 170 flowering chrysanthemum plants. It is recalled that the first outbreak of *Puccinia horiana* in Lithuania was detected in 1999 (EPPO RS 2000/060). Other outbreaks were then detected and always submitted to eradication measures. In the 2 affected glasshouses official control measures were taken to eradicate the disease. All infected and potentially infected chrysanthemum plants were uprooted and destroyed by burial. Strict phytosanitary inspections will be carried out in the infected glasshouses for at least 1 vegetative period following plant destruction.

The pest status of *Puccinia horiana* in Lithuania is officially declared as: **Present, eradicated, under official control.**

Source: NPPO of Lithuania (2012-11).

Additional key words: detailed record

Computer codes: PUCCHN, LT

2012/239 *Mycosphaerella pini* detected again in Lithuania

In Lithuania, the presence of *Mycosphaerella pini* (anamorph *Dothistroma septosporum* - EU Annexes) was first confirmed in 2008 in different parts of the country (EPPO RS 2011/084). The NPPO of Lithuania recently reported new findings of *M. pini* on its territory. During the annual visual inspections, 37 symptomatic samples were collected from pine trees (*Pinus sylvestris*, *P. mugo*, *P. nigra*, *P. sibirica*, *P. cembra*) and the presence of *M. pini* was confirmed in 22 of them (in July and October 2012) by morphological and PCR-based methods. Infected samples had been collected from 4 forest nurseries (14 positive samples), 3 forest seed orchards (3 positive samples), and 1 private park (5 positive samples). All infected sites were located in the Kaunas region. Phytosanitary measures were taken. The movement of plants from the outbreak areas is prohibited and additional measures are currently under development. Further investigations to determine the distribution of *M. pini* in Lithuania will be carried out. The pest status of *Mycosphaerella pini* in Lithuania is officially declared as: **Present, subject to official control.**

Source: NPPO of Lithuania (2012-11).

Additional key words: detailed record

Computer codes: SCIRPI, LT

2012/240 *Mycosphaerella dearnessii* detected again in Lithuania

In Lithuania, *Mycosphaerella dearnessii* (anamorph *Lecanosticta acicola* - EPPO A2 List) was first found in 2010 in the Curonian Lagoon near the Baltic Sea in the Klaipeda region (Western Lithuania - EPPO RS 2010/214). During the annual survey carried out by the NPPO, the presence of *M. dearnessii* was confirmed by morphological and PCR-based methods in 3 symptomatic samples. These samples had been collected from pine trees (*Pinus sylvestris* and *P. mugo*) in a forest near the village of Juodkrantė (again in the Curonian Lagoon, Klaipeda region). Phytosanitary measures were taken. The movement of plants from the outbreak areas is prohibited and additional measures are currently under development. Further investigations to determine the distribution of *M. dearnessii* in Lithuania will be carried out. The pest status of *Mycosphaerella dearnessii* in Lithuania is officially declared as: **Present, subject to official control.**

Source: NPPO of Lithuania (2012-11).

Additional key words: detailed record

Computer codes: SCIRAC, LT

2012/241 *Mycosphaerella dearnessii* found on *Pinus nigra* var. *nigra* in Austria

In Austria, the presence of *Mycosphaerella dearnessii* (anamorph *Lecanosticta acicola* - EPPO A2 List) was detected for the first time in 1996 (EPPO RS 99/135) on *Pinus mugo* subsp. *mugo* in 1 locality in Niederösterreich. Between 2009 and 2011, the disease was found in new localities in the länder of Niederösterreich, Oberösterreich, Steiermark, Vorarlberg, Tyrol and Salzburg on several hosts (*Pinus mugo* subsp. *mugo*, *Pinus mugo* subsp. *uncinata*, and *Pinus sylvestris*). As in other European countries, *M. dearnessii* has been mostly observed on ornamental pines and only occasionally in forest stands. In July 2011, *M. dearnessii* was detected on ornamental pines in the city of Gmunden

(Oberösterreich) along the north-eastern coast of Lake Traun. The disease was initially found on 2 *P. mugo* subsp. *mugo*, and then on 2 *Pinus nigra* var. *nigra* (10 to 15-years old) growing in a private garden. As previous reports of *M. dearnessii* on *P. nigra* in Europe were considered doubtful, the authors noted that this is the first documented record of *M. dearnessii* on *Pinus nigra* in Europe. This finding might be explained by the combination of a heavy inoculum on nearby *P. mugo* subsp. *mugo* and climatic conditions which were conducive for fungal infections. It is also noted that the possible occurrence of *M. dearnessii* on *Pinus nigra* should be taken into account during survey and diagnostic activities.

Source: Hinsteiner M, Cech TL, Hamschlager E, Stauffer C, Kirisits T (2012) First report of *Mycosphaerella dearnessii* on *Pinus nigra* var. *nigra* in Austria. *Forest Pathology* 42, 437-440.

Additional key words: host plant

Computer codes: SCIRAC, AT

2012/242 Outbreak of Pepino mosaic virus in Ticino (CH)

In Switzerland, *Pepino mosaic virus* (*Potexvirus*, PepMV - EPPO A2 List) was first found in the canton of Fribourg in 2004. A few other cases were subsequently reported in the cantons of Ticino and Zürich, but submitted to eradication measures. From March to May 2012, the presence of PepMV was detected in 3 tomato (*Solanum lycopersicum*) production facilities located in the canton of Ticino. Considering the economic losses caused by PepMV in commercial production facilities, the Cantonal plant health service recommended the destruction of tomato crops and disinfection of the facilities. It is suspected that PepMV has been introduced via infected plant material. All planting material originated from the Netherlands.

For each of the three facilities, the following additional details were given.

- **Facility A:** 0.9 ha of tomato production, PepMV was identified for the first time in March 2012. Significant yield reduction was observed on cvs. Growdena and Sunstream (both grafted on Maxifort). Total loss (yield loss + plant destruction) was estimated at 80 000 CHF (66 400 EUR).
- **Facility B:** 2.7 ha of tomato production, PepMV was identified for the first time in May 2012. Significant yield reduction was observed, especially on cv. Komeett (almost total yield loss) and to a lesser extent on cvs. Monalisa, Robinio, and Tastery (all grafted on Maxifort). Total loss was estimated at 297 000 CHF (250 000 EUR).
- **Facility C:** 14.5 ha of tomato production. PepMV was identified for the second time on this site in May 2012, affecting all tomato cultivars. In 2005/2006, a first outbreak had been notified but successfully eradicated and no symptoms were detected until 2012. Total loss was estimated at 232 000 CHF (193 000 EUR).

The pest status of *Pepino mosaic virus* in Switzerland is officially declared as: **Present, under eradication, first finding in Switzerland 2004.**

Source: NPPO of Switzerland (2012-10).

Additional key words: detailed record

Computer codes: PEPMV0, CH

2012/243 New findings of Plum pox virus in Lithuania

The NPPO of Lithuania recently reported new findings of *Plum pox virus* (*Potyvirus*, PPV - EPPO A2 List) on its territory. As a result of an official annual survey, PPV was detected in 2 fruit tree nurseries and 1 orchard in the Kaunas region in June 2012. During this 2012 survey, a total of 30 orchards (approximately 27 ha) and 80 nurseries (approximately 14 ha) were inspected and 16 samples were tested. The presence of PPV was confirmed in 6 symptomatic samples by ELISA. Official control measures were taken to eradicate the disease. All infected and possibly infected trees were uprooted and burnt. Buffer zones of 250 m radius around each outbreak site were delimited. Official control measures will be applied in the outbreak and buffer zones for the next 3 vegetative periods.

The pest status of *Plum pox virus* in Lithuania is officially declared as: **Present, at low prevalence.**

Source: NPPO of Lithuania (2012-11).

Additional key words: detailed record

Computer codes: PPV000, LT

2012/244 Plum pox virus found for the first time in the regions of Nord-Pas de Calais and Corse (FR)

The NPPO of France recently informed the EPPO Secretariat of the first reports of *Plum pox virus* (*Potyvirus*, PPV - EPPO A2 List) in two new regions: Nord-Pas de Calais (Northern France) and Corse. In both cases, phytosanitary measures have been taken in accordance with the EU Directive 2000/29/EC (and French legislation) and include: destruction of the infected lot, suspension of the issuance of plant passports for all plots located within a radius of 200 m of the infected plot, tracing-back and tracing-forward studies to identify potentially infected plants, intensification of surveillance activities in the vicinity of the nursery (within a radius of 2.5 km).

- **Nord-Pas de Calais**

During official phytosanitary inspections carried out in a nursery, the presence of PPV was confirmed in 8 plum trees (*Prunus domestica* cv. 'Prunes des Roy') by serological and molecular tests. These affected plum trees showed leaf symptoms (yellow ringspots and discoloration) and were grown on the same commercial nursery plot as plants ready to be sold. As similar symptoms were observed in 3 other production plots of this nursery, samples will be collected and tested. If appropriate, phytosanitary measures will be extended to these 3 other potentially infected plots.

- **Corse**

During official phytosanitary inspections, symptoms of PPV were first observed in June 2012 in a plum (*Prunus domestica*) orchard. The presence of the virus was confirmed in July and a survey showed that 384 plum trees were infected.

The pest status of *Plum pox virus* in France is officially declared as: **Present, restricted distribution.**

Source: NPPO of France (2012-09, 2012-10).

Additional key words: detailed record

Computer codes: PPV000, FR

2012/245 EPPO report on notifications of non-compliance

The EPPO Secretariat has gathered below the notifications of non-compliance for 2012 received since the previous report (EPPO RS 2012/194). Notifications have been sent directly to EPPO by Azerbaijan and 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, Aphididae, Fungi	<i>Hoya</i>	Cuttings	Thailand	Germany	1
<i>Bemisia tabaci</i>	<i>Ammannia senegalensis</i>	Plants for planting	Thailand	United Kingdom	1
	<i>Asteriscus</i>	Cuttings	Israel	Germany	1
	<i>Bacopa</i>	Aquarium plants	Sri Lanka	United Kingdom	1
	<i>Caladium</i>	Plants for planting	Singapore	United Kingdom	1
	<i>Cardamine lyrata</i>	Plants for planting	Singapore	United Kingdom	1
	<i>Corchorus acutangulus</i>	Vegetables (leaves)	Lebanon	United Kingdom	1
	<i>Corchorus olitorius</i>	Vegetables (leaves)	Jordan	France	1
	<i>Corchorus olitorius</i>	Vegetables (leaves)	Jordan	United Kingdom	1
	<i>Corchorus olitorius,</i>	Vegetables	Ghana	United Kingdom	1
	<i>Ipomoea batatas</i>				
	<i>Eryngium foetidum</i>	Vegetables (leaves)	Malaysia	Switzerland	3
	<i>Euphorbia pulcherrima</i>	Cuttings	Guatemala	Denmark	1
	<i>Gypsophila, Solidago</i>	Cut flowers	Israel	Netherlands	1
	<i>Hibiscus</i>	Vegetables (leaves)	Togo	France	1
	<i>Hygrophila</i>	Aquarium plants	Singapore	United Kingdom	2
	<i>Hygrophila</i>	Aquarium plants	Thailand	United Kingdom	1
	<i>Hygrophila corymbosa</i>	Aquarium plants	Indonesia	United Kingdom	1
	<i>Ipomoea</i>	Vegetables	Ghana	United Kingdom	1
	<i>Limnophila aromatica</i>	Vegetables	Vietnam	France	1
	<i>Lippia</i>	Cuttings	Israel	United Kingdom	1
	<i>Lisianthus</i>	Cut flowers	Israel	United Kingdom	1
	<i>Manihot</i>	Vegetables	Cameroon	France	1
	<i>Manihot esculenta</i>	Vegetables	Congo, Dem. Rep.	France	2
	<i>Murraya koenigii</i>	Vegetables (leaves)	India	Ireland	7
	<i>Nomaphila</i>	Plants for planting	Thailand	United Kingdom	1
	<i>Ocimum</i>	Vegetables (leaves)	Guatemala	United Kingdom	1
	<i>Ocimum basilicum</i>	Vegetables (leaves)	Cambodia	United Kingdom	2
	<i>Ocimum basilicum</i>	Vegetables (leaves)	Ghana	United Kingdom	1
	<i>Ocimum basilicum</i>	Vegetables (leaves)	India	United Kingdom	1
	<i>Ocimum basilicum</i>	Vegetables (leaves)	Israel	Germany	4
	<i>Ocimum basilicum</i>	Vegetables (leaves)	Israel	Ireland	1
	<i>Ocimum basilicum</i>	Vegetables (leaves)	Israel	Switzerland	3
	<i>Ocimum basilicum</i>	Vegetables (leaves)	Israel	United Kingdom	2
	<i>Ocimum basilicum</i>	Vegetables (leaves)	Kenya	United Kingdom	1
	<i>Ocimum basilicum</i>	Vegetables (leaves)	Malaysia	United Kingdom	1
	<i>Ocimum sanctum</i>	Vegetables (leaves)	Cambodia	France	1
	<i>Pelargonium</i>	Plants for planting	Israel	Bulgaria	1
	<i>Solidago</i>	Cut flowers	Israel	Netherlands	2
	<i>Solidago</i>	Cut flowers	Israel	United Kingdom	1
	Unspecified	Aquarium plants	Singapore	United Kingdom	1

Pest	Consignment	Type of commodity	Country of origin	Destination	nb
Bemisia tabaci, Liriomyza	<i>Ocimum</i>	Vegetables (leaves)	Spain (Canary isl.)	United Kingdom	1
	<i>Ocimum basilicum</i>	Vegetables (leaves)	Israel	Ireland	2
Bemisia tabaci, Thripidae	<i>Ocimum basilicum</i>	Vegetables (leaves)	Cambodia	United Kingdom	1
Clavibacter michiganensis subsp. michiganensis	<i>Solanum lycopersicum</i>	Seeds	Thailand*	France	2
Colletotrichum	<i>Psidium guajava</i>	Fruits	Brazil	Spain	1
Diptera	<i>Momordica</i>	Vegetables	India	United Kingdom	2
	<i>Momordica cochinchinensis</i>	Vegetables	India	United Kingdom	1
	<i>Psidium</i>	Fruits	Bangladesh	Italy	1
	<i>Solanum melongena</i>	Vegetables	India	Italy	1
Dryocosmus kuriphilus (suspected)	<i>Castanea sativa</i>	Plants for planting	Italy	Czech Republic	1
Elsinoe	<i>Citrus paradisi</i>	Fruits	China	France	1
Elsinoe fawcettii	<i>Citrus aurantifolia</i>	Fruits	Brazil	Spain	2
Fungi	<i>Citrus limon</i>	Fruits	Chile	Spain	1
Guignardia citricarpa	<i>Citrus</i>	Fruits	Bangladesh*	United Kingdom	3
	<i>Citrus limon</i>	Fruits	South Africa	Belgium	2
	<i>Citrus maxima</i>	Fruits	China	Netherlands	1
	<i>Citrus sinensis</i>	Fruits	Argentina	Netherlands	1
	<i>Citrus sinensis</i>	Fruits	Argentina	Spain	1
	<i>Citrus sinensis</i>	Fruits	Brazil	Netherlands	5
	<i>Citrus sinensis</i>	Fruits	Ghana*	United Kingdom	2
	<i>Citrus sinensis</i>	Fruits	Mozambique	Netherlands	2
	<i>Citrus sinensis</i>	Fruits	South Africa	Netherlands	15
	<i>Citrus sinensis</i>	Fruits	South Africa	United Kingdom	1
	<i>Citrus sinensis</i>	Fruits	Swaziland*	Netherlands	3
Helicoverpa armigera	<i>Capsicum frutescens</i>	Vegetables	India	Ireland	1
	<i>Pisum sativum</i>	Vegetables	Kenya	Ireland	1
Heliothis	<i>Amaranthus</i>	Plant product	Nigeria	Germany	1
Hirschmanniella	<i>Vallisneria spiralis</i>	Plants for planting	Malaysia	Germany	1
Insecta	<i>Lolium perenne</i>	Seeds	USA	Spain	3
Lepidoptera	<i>Abelmoschus esculentus, Trichosanthes</i>	Vegetables	India	Italy	1
	<i>Fabaceae</i>	Vegetables	Sri Lanka	Italy	1
	<i>Solanaceae</i>	Vegetables	Bangladesh	Italy	1
	<i>Solanaceae</i>	Vegetables	Sri Lanka	Italy	1
	<i>Solanum</i>	Vegetables	Sri Lanka	Italy	2
	<i>Solanum melongena</i>	Vegetables	Sri Lanka	Italy	1
	<i>Tillandsia</i>	Plants for planting	Guatemala	Italy	1
	<i>Solanum melongena</i>	Vegetables	Bangladesh	Sweden	4
Leucinodes orbonalis	<i>Solanum melongena</i>	Vegetables	Cameroon	Belgium	6
	<i>Solanum melongena</i>	Vegetables	India	Sweden	4

Pest	Consignment	Type of commodity	Country of origin	Destination	nb
L. orbonalis (cont.)	<i>Solanum melongena</i>	Vegetables	Malaysia	Belgium	8
	<i>Solanum melongena</i>	Vegetables	Thailand	Belgium	1
	<i>Solanum melongena</i>	Vegetables	Uganda	Belgium	1
Liriomyza	<i>Apium graveolens</i>	Vegetables	Vietnam	Denmark	1
	<i>Coriandrum sativum</i>	Vegetables (leaves)	Cambodia	United Kingdom	1
	<i>Coriandrum sativum</i>	Vegetables (leaves)	Israel	United Kingdom	1
	<i>Coriandrum sativum</i>	Vegetables (leaves)	Vietnam	United Kingdom	2
	<i>Eryngium</i>	Vegetables	Kenya	United Kingdom	1
	<i>Lisianthus</i>	Cut flowers	Kenya	United Kingdom	1
	<i>Ocimum basilicum</i>	Vegetables (leaves)	India	United Kingdom	1
	<i>Ocimum basilicum</i>	Vegetables (leaves)	Israel	France	1
	<i>Ocimum basilicum</i>	Vegetables (leaves)	Israel	United Kingdom	1
	<i>Ocimum basilicum</i>	Vegetables (leaves)	Turkey	Germany	1
	<i>Solidago</i>	Cut flowers	Zimbabwe	United Kingdom	1
Liriomyza huidobrensis	<i>Apium graveolens</i>	Vegetables	Cambodia*	Sweden	3
	<i>Aster</i>	Cut flowers	Ecuador	Netherlands	1
	<i>Brachycome</i>	Cuttings	Tanzania*	Netherlands	1
	<i>Chrysanthemum</i>	Cut flowers	Ecuador	Spain	4
	<i>Chrysanthemum</i>	Cut flowers	Ecuador	United Kingdom	1
	<i>Eryngium</i>	Cut flowers	Kenya	Netherlands	3
	<i>Gypsophila</i>	Cut flowers	Ecuador	Netherlands	2
	<i>Gypsophila</i>	Cut flowers	Kenya	Netherlands	1
		<i>Ocimum basilicum</i>	Vegetables (leaves)	Kenya	United Kingdom
Liriomyza sativae	<i>Ocimum basilicum</i>	Vegetables (leaves)	Cambodia*	France	1
	<i>Ocimum basilicum</i>	Vegetables (leaves)	Israel	Latvia	1
Liriomyza trifolii	<i>Apium graveolens</i>	Vegetables	Brazil	Netherlands	1
	<i>Gypsophila</i>	Cut flowers	Israel	Netherlands	2
	<i>Solidago</i>	Cut flowers	Zambia	Netherlands	1
	<i>Solidago</i>	Cut flowers	Zimbabwe	Netherlands	1
Meloidogyne	<i>Chlorophytum</i>	Aquarium plants	Singapore	United Kingdom	1
Opogona sacchari	<i>Chrysalidocarpus</i>	Plants for planting	(Netherlands)	Austria	1
	<i>Dracaena fragrans</i>	Plants for planting	Netherlands	Cyprus	1
	<i>Dracaena reflexa</i>	Plants for planting	(Netherlands)	Austria	1
Phytophthora ramorum	<i>Rhododendron catawbiense</i>	Plants for planting	Netherlands	Finland	1
Potato spindle tuber viroid	<i>Solanum lycopersicum</i>	Seeds	China	Austria	1
Rhizoeus hibisci	<i>Zelkova</i>	Plants for planting	China	Netherlands	1
Spodoptera	Unspecified	Cuttings	Spain (Canary isl.)	Netherlands	1
Spodoptera frugiperda	<i>Tillandsia</i>	Cuttings	Guatemala	Netherlands	1
Spodoptera littoralis	<i>Rosa</i>	Cut flowers	Uganda	Netherlands	5
	<i>Rosa</i>	Cut flowers	Zimbabwe	Netherlands	1
	<i>Solidago</i>	Cut flowers	Zimbabwe	Netherlands	1
Spodoptera litura	<i>Ocimum basilicum</i>	Vegetables (leaves)	Cambodia	Sweden	2
	<i>Ocimum gratissimum</i>	Vegetables (leaves)	Cambodia	Sweden	2
	<i>Rosa</i>	Cut flowers	India	Netherlands	1

Pest	Consignment	Type of commodity	Country of origin	Destination	nb
<i>Thaumatotibia leucotreta</i>	<i>Citrus paradisi</i>	Fruits	South Africa	Germany	1
	<i>Citrus sinensis</i>	Fruits	South Africa	Lithuania	1
	<i>Citrus sinensis</i>	Fruits	South Africa	Spain	1
Thripidae	<i>Dendrobium</i>	Cut flowers	Thailand	United Kingdom	1
	<i>Luffa</i>	Vegetables	Ghana	United Kingdom	1
	<i>Luffa acutangula</i>	Vegetables	Ghana	United Kingdom	12
	<i>Luffa acutangula</i>	Vegetables	India	United Kingdom	3
	<i>Momordica</i>	Vegetables	Dominican Rep.	United Kingdom	4
	<i>Momordica</i>	Vegetables	India	United Kingdom	5
	<i>Momordica</i>	Vegetables	Pakistan	United Kingdom	1
	<i>Momordica charantia</i>	Vegetables	India	United Kingdom	6
	<i>Momordica charantia</i>	Vegetables	Pakistan	United Kingdom	1
	<i>Solanum melongena</i>	Vegetables	Cambodia	United Kingdom	1
	<i>Solanum melongena</i>	Vegetables	Dominican Rep.	United Kingdom	4
	<i>Solanum melongena</i>	Vegetables	Ghana	United Kingdom	1
	<i>Solanum melongena</i>	Vegetables	India	United Kingdom	3
	<i>Solanum melongena</i>	Vegetables	Malaysia	United Kingdom	2
<i>Solanum melongena</i>	Vegetables	Pakistan	United Kingdom	1	
Thrips	<i>Ficus benjamina</i>	Plants for planting	Costa Rica	Spain	1
	<i>Momordica charantia</i>	Vegetables	Pakistan	Germany	1
	<i>Solanum melongena</i>	Vegetables	Dominican Rep.	United Kingdom	1
<i>Thrips palmi</i>	<i>Dendrobium</i>	Cut flowers	Malaysia	Netherlands	1
	<i>Dendrobium</i>	Cut flowers	Thailand	Belgium	1
	<i>Momordica</i>	Vegetables	Dominican Rep.	Belgium	1
	<i>Momordica</i>	Vegetables	Dominican Rep.	United Kingdom	1
	<i>Momordica</i>	Vegetables	Sri Lanka	United Kingdom	1
	<i>Momordica charantia</i>	Vegetables	Dominican Rep.	Belgium	2
	<i>Momordica charantia</i>	Vegetables	Malaysia	Belgium	1
	<i>Momordica charantia</i>	Vegetables	Sri Lanka	France	1
	<i>Momordica charantia</i>	Vegetables	Suriname	Netherlands	1
	<i>Momordica cochinchinensis</i>	Vegetables	Bangladesh	United Kingdom	1
	<i>Momordica, Solanum melongena</i>	Vegetables	Dominican Rep.	Netherlands	1
	<i>Solanum melongena</i>	Vegetables	Dominican Rep.	Belgium	2
	<i>Solanum melongena</i>	Vegetables	Ghana*	United Kingdom	1
	<i>Solanum melongena</i>	Vegetables	India	Netherlands	1
	<i>Solanum melongena</i>	Vegetables	India	United Kingdom	1
	<i>Solanum melongena</i>	Vegetables	Suriname	Netherlands	1
Thysanoptera	<i>Momordica</i>	Vegetables	Malaysia	Switzerland	1
	<i>Solanum melongena</i>	Vegetables	Dominican Rep.	Switzerland	1
	<i>Solanum melongena</i>	Vegetables	India	Switzerland	1
	<i>Solanum melongena</i>	Vegetables	Mauritius	France	1
<i>Xanthomonas axonopodis</i> pv. <i>citri</i>	<i>Citrus</i>	Fruits	Bangladesh	United Kingdom	1
	<i>Citrus</i>	Fruits	Pakistan	Germany	1
	<i>Citrus latifolia</i>	Fruits	Bangladesh	United Kingdom	13
	<i>Citrus latifolia, Citrus limon</i>	Fruits	Bangladesh	United Kingdom	1
	<i>Citrus maxima</i>	Fruits	China	United Kingdom	1
	<i>Citrus sinensis</i>	Fruits	Argentina	Spain	1

• Fruit flies

Pest	Consignment	Country of origin	Destination	nb
Anastrepha	<i>Psidium guajava</i>	Suriname	Netherlands	1
Bactrocera	<i>Citrus maxima</i>	China	Netherlands	5
	<i>Mangifera indica</i>	Senegal	France	2
	<i>Mangifera indica</i>	Suriname	Netherlands	1
	<i>Psidium guajava</i>	Thailand	Netherlands	2
	<i>Trichosanthes cucumerina</i>	India	United Kingdom	1
Bactrocera correcta	<i>Psidium guajava</i>	Thailand	Sweden	1
Bactrocera cucurbitae	<i>Momordica</i>	Bangladesh	United Kingdom	1
	<i>Momordica</i>	Pakistan	Netherlands	1
	<i>Momordica charantia</i>	Bangladesh	Sweden	2
Bactrocera tryoni	<i>Prunus persica</i> var. <i>nucipersica</i>	Australia	Switzerland	1
Bactrocera zonata	<i>Benincasa hispida</i>	India	France	1
Dacus bivittatus	<i>Mangifera indica</i>	Ghana	France	1
Dacus ciliatus	<i>Benincasa hispida</i>	Pakistan	France	1
	<i>Momordica charantia</i>	Kenya	United Kingdom	1
Tephritidae (non-European)	<i>Annona</i>	Egypt	United Kingdom	5
	<i>Annona</i>	India	United Kingdom	7
	<i>Annona</i>	Thailand	United Kingdom	1
	<i>Annona cherimola</i>	India	United Kingdom	1
	<i>Annona squamosa</i>	Thailand	United Kingdom	1
	<i>Capsicum frutescens</i>	Cambodia	France	2
	<i>Citrullus fistulosus</i>	Ghana	United Kingdom	1
	<i>Citrus maxima</i>	China	Netherlands	1
	<i>Flacourtia</i>	Bangladesh	United Kingdom	1
	<i>Fortunella</i>	South Africa	France	1
	<i>Lagenaria siceraria</i>	Ghana	United Kingdom	1
	<i>Lagenaria siceraria</i>	India	Germany	1
	<i>Luffa acutangula</i>	Ghana	United Kingdom	3
	<i>Luffa acutangula</i>	India	United Kingdom	1
	<i>Mangifera</i>	Dominican Rep.	United Kingdom	3
	<i>Mangifera</i>	India	United Kingdom	1
	<i>Mangifera</i>	Pakistan	United Kingdom	9
	<i>Mangifera</i>	Sri Lanka	United Kingdom	3
	<i>Mangifera indica</i>	Dominican Rep.	Belgium	1
	<i>Mangifera indica</i>	Pakistan	Belgium	2
	<i>Mangifera indica</i>	Pakistan	United Kingdom	2
	<i>Mangifera indica</i>	Sri Lanka	United Kingdom	2
	<i>Mangifera indica</i>	Thailand	France	1
	<i>Manilkara zapota</i>	India	United Kingdom	2
	<i>Momordica</i>	Bangladesh	United Kingdom	4
	<i>Momordica</i>	India	United Kingdom	13
	<i>Momordica</i>	Kenya	United Kingdom	2
	<i>Momordica</i>	Pakistan	United Kingdom	1
	<i>Momordica</i>	Sri Lanka	United Kingdom	2
	<i>Momordica charantia</i>	India	United Kingdom	7
	<i>Momordica charantia</i>	Kenya	United Kingdom	6

Pest	Consignment	Country of origin	Destination	nb
Tephritidae (non-European)	<i>Momordica charantia</i>	Malaysia	Belgium	2
	<i>Momordica charantia</i>	Pakistan	United Kingdom	1
	<i>Momordica charantia</i>	Sri Lanka	United Kingdom	1
	<i>Momordica cochinchinensis</i>	India	United Kingdom	1
	<i>Passiflora edulis</i>	Uganda	Belgium	1
	<i>Psidium</i>	India	United Kingdom	1
	<i>Psidium</i>	Sri Lanka	United Kingdom	2
	<i>Psidium guajava</i>	Dominican Rep.	Germany	1
	<i>Psidium guajava</i>	Pakistan	United Kingdom	1
	<i>Psidium guajava</i>	Sri Lanka	United Kingdom	2
	<i>Psidium guajava</i>	Thailand	France	1
	<i>Psidium guajava</i>	Thailand	Switzerland	1
	<i>Psidium guajava</i>	Thailand	United Kingdom	2
	<i>Solanum melongena</i>	Sri Lanka	Switzerland	1
	<i>Trichosanthes</i>	Bangladesh	United Kingdom	2
	<i>Trichosanthes</i>	Sri Lanka	United Kingdom	2
	<i>Trichosanthes</i>	Sri Lanka	United Kingdom	3
	<i>Trichosanthes cucumerina</i>	Bangladesh	United Kingdom	1
	<i>Trichosanthes cucumerina</i>	India	United Kingdom	1
	<i>Trichosanthes cucumerina</i>	Sri Lanka	United Kingdom	5
	<i>Vaccinium</i>	Argentina	United Kingdom	2
	<i>Ziziphus jujuba</i>	Thailand	United Kingdom	1

• Wood

Pest	Consignment	Type of commodity	Country of origin	Destination	nb
<i>Anoplophora glabripennis</i>	Unspecified	Wood packing material (pallets)	China	Germany	1
	Unspecified	Dunnage	China	Netherlands	1
	Unspecified	Wood packing material (pallets)	China	Switzerland	1
<i>Apriona germari</i>	Unspecified	Wood packing material (crates)	China	Netherlands	2
<i>Arhopalus rusticus</i>	Unspecified	Dunnage	Belarus	Lithuania	1
Bostrichidae	Unspecified	Wood packing material	China	Germany	1
	Unspecified	Wood packing material (pallets)	Hong Kong	Germany	1
	Unspecified	Wood packing material	India	Germany	1
	Unspecified	Wood packing material (crates)	India	Germany	1
	Unspecified	Wood packing material (pallets)	India	Germany	3
Cerambycidae	Unspecified	Wood packing material (pallets)	China	Netherlands	2
	Unspecified	Wood packing material	Ukraine	Slovakia	4
Cerambycidae larva	Unspecified	Wood packing material (crates)	China	Denmark	1
Cerambycidae, Lepidoptera	Unspecified	Wood packing material (pallets)	China	Germany	1
Coleoptera	<i>Entandrophragma cylindricum</i>	Wood and bark	Central African Rep.	Spain	1
	<i>Entandrophragma cylindricum</i>	Wood and bark	Congo	Spain	2
	Unspecified	Wood packing material (pallets)	India	Slovenia	1

Pest	Consignment	Type of commodity	Country of origin	Destination	nb
Grub holes and sawdust	Unspecified	Wood packing material (pallets)	China	Germany	1
Insecta	Unspecified	Wood packing material (pallets)	China	Switzerland	3
	Unspecified	Wood packing material (pallets)	Indonesia	Switzerland	1
	Unspecified	Wood packing material (pallets)	Turkey	Switzerland	1
Monochamus	Unspecified	Wood packing material (crates)	China	Netherlands	1
Nematoda	Unspecified	Wood packing material (crates)	China	Finland	1
Scolytidae	<i>Entandrophragma cylindricum</i>	Wood and bark	Congo	Spain	2
Sinoxylon	Unspecified	Wood packing material (crates)	(Japan)	Germany	1
	Unspecified	Wood packing material (pallets)	China	Slovenia	1
	Unspecified	Wood packing material	India	Germany	6
	Unspecified	Wood packing material (crates)	India	Germany	7
	Unspecified	Wood packing material (pallets)	India	Germany	12
	Unspecified	Wood packing material (crates)	India	Netherlands	2
	Unspecified	Wood packing material (pallets)	India	Slovenia	1
	Unspecified	Wood packing material (crates)	Pakistan	Germany	2
	Unspecified	Wood packing material (pallets)	Pakistan	Germany	1
	Unspecified	Wood packing material (pallets)	Philippines	Germany	1
	Unspecified	Wood packing material	Sri Lanka	Germany	2
	Unspecified	Wood packing material (crates)	Sri Lanka	Germany	2
	Unspecified	Wood packing material (pallets)	Thailand	Germany	1
	Sinoxylon anale	Unspecified	Wood packing material (pallets)	India	Germany
Unspecified		Wood packing material (pallets)	India	Italy	1
Termitidae	Unspecified	Wood packing material (pallets)	Hong Kong	Germany	1

• **Bonsais**

Pest	Consignment	Country of origin	Destination	nb
Anoplophora chinensis	<i>Acer</i>	China	Belgium	1
Nematoda	<i>Zanthoxylum</i>	China	France	1

Source: EPPO Secretariat, 2012-11.

2012/246 New section on ‘validation data’ added to the EPPO database on diagnostic expertise

A new section “validation data for diagnostic tests” has just been made open access in the EPPO database on diagnostic expertise. This new section includes validation data generated by various official laboratories in the EPPO region for diagnostic tests for regulated pests. The validation data are presented according to a common format and can be submitted by any laboratory registered in the EPPO database on diagnostic expertise. Visit this new section at <http://dc.eppo.int/validationlist.php>

Source: EPPO Secretariat (2012-12).

Additional key words: databases

2012/247 3rd European Bois Noir Workshop (Barcelona, ES, 2013-03-20/21)

In 2013-03-20/21, the 3rd European Bois Noir Workshop will be held in Barcelona, Spain. The Workshop will cover the following topics:

- Epidemiology of the bois noir disease
- Diagnosis and characterization of the stolbur phytoplasma in grapevine and other natural hosts
- Vectors of the stolbur phytoplasma
- Control strategies
- Other related topics

For further information, visit the Workshop website: <http://www.boisnoir2013.eu>

Source: EPPO Secretariat (2012-10).

Additional key words: conference

2012/248 The alien and invasive flora of Greece

The alien flora of Greece includes 343 taxa of which 294 are neophytes (86%). The total number of the alien taxa reported for Greece is relatively low compared to those of other Mediterranean and Southern European countries, namely Italy, Spain and Portugal. The American continent is the origin of the majority of the neophytes (133 taxa representing 46%). The next most frequent areas of origin of neophytes are Asia, Africa and the Mediterranean basin. Most neophytes (75%) have been introduced intentionally for agricultural or ornamental purposes. Artificial habitats, especially cultivations and road networks host the highest numbers of neophytes. The natural habitats that host the highest numbers of neophytes are the coastal zones and inland surface waters.

50 of these naturalized neophytes were considered by the authors to fulfill the criteria to be characterized as invasive. These are listed in the table below with their family, origin and occurrence in the EPPO region:

Species and family	Origin	Occurrence in the EPPO region
<i>Acer negundo</i> (Sapindaceae)	N-Am.	Widespread
<i>Aeonium arboreum</i> (Crassulaceae)	Macaronesian	CY, ES (Incl. Baleares), MT, PT (Madeira where it is indigenous)
<i>Agave americana</i> (Asparagaceae)	N-Am.	Widespread in the Mediterranean
<i>Ailanthus altissima</i> (Simaroubaceae, EPPO List of Invasive Alien Plants)	E Asia	Widespread
<i>Amaranthus albus</i> (Amaranthaceae)	N-Am.	Widespread
<i>Amaranthus blitoides</i> (Amaranthaceae)	N-Am.	Widespread
<i>Amaranthus deflexus</i> (Amaranthaceae)	S-Am.	Widespread
<i>Amaranthus hybridus</i> (Amaranthaceae)	N-Am.	Widespread
<i>Amaranthus quitensis</i> (Amaranthaceae)	S-Am.	PT (Azores), Spain (Baleares)
<i>Amaranthus retroflexus</i> (Amaranthaceae)	N-Am.	Widespread
<i>Amaranthus viridis</i> (Amaranthaceae)	S-Am.	Widespread
<i>Aptenia cordifolia</i> (Aizoaceae)	S-Af.	Widespread in the Mediterranean
<i>Arundo donax</i> (Poaceae)	C Asia	Widespread in the Mediterranean
<i>Aster squamatus</i> (Asteraceae)	Neotrop.	Widespread
<i>Azolla filiculoides</i> (Azollaceae, EPPO Observation List)	Neotrop.	Widespread
<i>Gomphocarpus fruticosus</i> (Apocynaceae)	S-Af.	Widespread in the Mediterranean
<i>Carpobrotus edulis</i> (Aizoaceae, EPPO List of IAP)	S-Af.	Widespread
<i>Cenchrus incertus</i> (Poaceae, EPPO List of IAP)	Neotrop.	Widespread
<i>Chenopodium ambrosioides</i> (Amaranthaceae)	Pantrop.	Widespread
<i>Chenopodium multifidum</i> (Amaranthaceae)	S-Am.	Widespread in the Mediterranean
<i>Conyza bonariensis</i> (Asteraceae)	Neotrop.	Widespread
<i>Conyza canadensis</i> (Asteraceae)	N-Am.	Widespread
<i>Conyza sumatrensis</i> (Asteraceae)	Neotrop.	
<i>Coronopus didymus</i> (Brassicaceae)	S-Am.	Widespread
<i>Cotula coronopifolia</i> (Asteraceae)	S-Af.	Widespread
<i>Cuscuta campestris</i> (Convolvulaceae)	N-Am.	Widespread
<i>Cymbalaria muralis</i> (Plantaginaceae)	S-Eur.	Widespread
<i>Datura stramonium</i> (Solanaceae)	Cosmopolitan	Widespread
<i>Elaeagnus angustifolia</i> (Elaeagnaceae)	Temp Asia	Widespread

Species and family	Origin	Occurrence in the EPPO region
<i>Eleusine indica</i> (Poaceae)	Cosmopolitan	Widespread
<i>Chamaesyce maculata</i> (Euphorbiaceae)	N-Am.	Widespread
<i>Chamaesyce prostrata</i> (Euphorbiaceae)	N-Am.	Widespread
<i>Halophila stipulacea</i> (Hydrocharitaceae)	W Indian Ocean, Red Sea	CY, IT (Sicilia), MT, TN, TR and AL, EG, LB
<i>Heliotropium curassavicum</i> (Boraginaceae)	Neotrop.	ES (incl. Balears, Canarias), FR, IT (incl. Sardinia), PT (incl. Azores), TR
<i>Malephora purpureocrocea</i> (Aizoaceae)	S-Af.	ES (Balears)
<i>Medicago sativa</i> subsp. <i>sativa</i> (Fabaceae)	Paleotemp.	Widespread
<i>Nicotiana glauca</i> (Solanaceae)	S-Am.	Widespread
<i>Opuntia ficus-indica</i> (Cactaceae)	Neotrop.	Widespread in the Mediterranean
<i>Opuntia vulgaris</i> (Cactaceae)	N-Am.	Widespread in the Mediterranean
<i>Oxalis debilis</i> var. <i>corymbosa</i> (Oxalidaceae)	S-Am.	Widespread in the Mediterranean
<i>Paspalum dilatatum</i> (Poaceae)	S-Am.	Widespread in the Mediterranean
<i>Paspalum distichum</i> (Poaceae, EPPO List of Invasive Alien Plants)	Neotrop	Widespread in the Mediterranean
<i>Phytolacca americana</i> (Phytolaccaceae)	N-Am.	Widespread
<i>Ricinus communis</i> (Euphorbiaceae)	Paleotrop	Widespread
<i>Robinia pseudoacacia</i> (Fabaceae)	N-Am.	Widespread
<i>Salix fragilis</i> (Salicaceae)	Eurosiberian	Native in a large part of the EPPO region
<i>Setaria adhaerens</i> (Poaceae)	Sub-cosmop.	CY?
<i>Solanum elaeagnifolium</i> (Solanaceae, EPPO A2 List)	S-Am.	CS, CY, DZ, ES, FR, HR, IT (incl. Sardinia, Sicilia), IL, MA, MK, TN, TR,
<i>Solanum physalifolium</i> (Solanaceae)	S-Am.	BE
<i>Veronica persica</i> (Plantaginaceae)	W Asia	Widespread
<i>Xanthium orientale</i> (Asteraceae)	S Eur.	Widespread
<i>Xanthium spinosum</i> (Asteraceae)	S-Am.	Widespread
<i>Zantedeschia aethiopica</i> (Araceae)	S-Af.	ES (Balears), FR (incl. Corse), GB, IE, IT (incl. Sicilia), PT (Azores, Madeira)

Other alien plants occurring in Greece, although not having been identified in this publication as invasive, are considered invasive by EPPO and could usefully be followed: *Ambrosia artemisiifolia* (Asteraceae, EPPO List of IAP), *Amorpha fruticosa* (Fabaceae, EPPO List of IAP), *Araujia sericifera* (Apocynaceae, EPPO Observation List), *Fallopia baldschuanica* (Polygonaceae, EPPO List of IAP), *Fallopia japonica* (Polygonaceae, EPPO List of IAP), *Fallopia sachalinensis* (Polygonaceae, EPPO List of IAP) and *Helianthus tuberosus* (Asteraceae).

Source: Arianoutsou M, Bazos I, Delipetrou P, Kokkoris Y (2010) The alien flora of Greece: taxonomy, life traits and habitat preferences. *Biological Invasions* DOI 10.1007/s10530-010-9749-0.

Additional key words: invasive alien plants

Computer codes: GR, ABKDO, ACRNE, AEJAR, AGVAM, AILAL, AJASE, AMAAL, AMABL, AMADE, AMAQU, AMARE, AMAVI, AMBEL, AMHFR, APJCO, ASTSQ, BIKBA, CBSED, CBYMU, CCHPA, CHEAM, CHEMF, COPDI, CULCO, CVCCA, DATST, ELEIN, ELGAN, EPHMA, EPHPT, ERIBO, ERICA, GOPFR, HAHST, HELTU, HEOCU,

NIOGL, OPUFI, OPUVU, PASDI, PASDS, PHTAM, POLCU, REYSA,
RIICO, ROBPS, SAXFR, SETAD, SOLAL, SOLPS, VERPE, XANOR,
XANSP, ZNTAE

2012/249 First report of *Thladiantha dubia* in Croatia

Thladiantha dubia (Cucurbitaceae) is a climber vine native to Northern China. This plant has been cultivated in Europe from the second half of the 19th century and it escaped from cultivation to establish populations in Central and South-Eastern Europe. The species is known to be established in Austria, Germany, Hungary, Lithuania, Poland, Romania, Russia, Serbia and Slovakia, and to be casual in Czech Republic, Italy, and Ukraine although its exact status is not always clear. It climbs up shrubs along railways, riverbanks; it also grows in maize fields, on the borders of vineyards and on waste deposits. *T. dubia* is considered invasive in Japan, whereas in Europe, it is not considered to be spreading or invasive, except in Austria where it is recorded as harmful to maize production.

The plant was reported for the first time in Croatia in Zagreb in the Savica area, a complex of small eutrophic lakes. *T. dubia* was found in nitrophilous, ruderal habitats, i.e. in strongly disturbed stands of floodplain forests of willows and poplars. The population is relatively large and consists of a few hundred individuals climbing on neighbouring trees and shrubs, covering approximately 100 m². The species mainly reproduces vegetatively through tubers, and it is not known if this dioecious species can reproduce sexually. *T. dubia* is thought to have entered Croatia through contaminated soil. Although the species is considered as non-invasive, it could be usefully monitored.

Source: Alegro A, Bogdanović S, Rešetnik I, Boršić I (2010) *Thladiantha dubia* Bunge (Cucurbitaceae), new alien species in Croatian flora. *Natura Croatica* 19, 281-286.
<http://bib.irb.hr/datoteka/473919.alegro-et-al-thladiantha-dubia.pdf>

DAISIE Species factsheet - *Thladiantha dubia*
<http://www.europe-aliens.org/speciesFactsheet.do?speciesId=14797#>

Additional key words: invasive alien plant, new record

Computer codes: THDDU, HR

2012/250 *Eichhornia crassipes* and *Pistia stratiotes* in Campania and Sardinia (Italy)

Eichhornia crassipes (Pontederiaceae, EPPO A2 List) and *Pistia stratiotes* (Araceae, EPPO List of IAP) were introduced in Campania and Sardinia in Italy for ornamental and bioremediation purposes. The 2 species are now invasive in these provinces and are being mechanically controlled.

Source: Brundu G, Stinca A, Angius L, Bonanomi G, Celesti-Grappo L, D'Auria G, Griffio R, Migliozi A, Motti R, Spigno P (2012) *Pistia stratiotes* L. and *Eichhornia crassipes* (Mart.) Solms.: emerging invasive alien hydrophytes in Campania and Sardinia (Italy). *EPPO Bulletin/Bulletin OEPP* 42(3), 568-579.

Additional key words: invasive alien plants

Computer codes: EICCR, PIIST, IT

2012/251 Environmental factors promoting the spread of *Pennisetum setaceum*

Pennisetum setaceum (Poaceae, EPPO List of Invasive Alien Plants) is a perennial grass native to the North African arid Mediterranean area (Algeria, Morocco, Tunisia) and naturalized in the EPPO region in France, Italy (including Sardinia) and Spain (including Balears and Islas Canarias). The species is invasive in South Africa where it is declared a noxious weed. Research has therefore been undertaken to understand the factors promoting the spread of this emergent alien grass. The effects of temperature regimes, nutrient and moisture addition, and soil type on seedling growth rates and biomass allocation were investigated. The results suggest that *P. setaceum* seedlings do not tolerate drought (they died within 1 month without water). Additional nutrients and extra water increased seedling growth rates throughout the study period. Higher temperatures with extra moisture increased seedling growth rates and the development of belowground biomass throughout the study period. This study demonstrates the importance of available environmental resources and their interaction with habitat conditions in promoting *P. setaceum* growth. These findings suggest that soil moisture and nutrient availability are critical factors affecting successful establishment of *P. setaceum* in arid environments. Managers should aim for removal of seedlings following precipitation and in areas of nutrient enrichment, such as near rivers and at road-river crossings.

Source: Rahlaoui JS, Esler KJ, Milton SJ, Barnard P (2010) Nutrient addition and moisture promote the invasiveness of crimson fountaingrass (*Pennisetum setaceum*). *Weed Science* **58**(2), 154-159.

Additional key words: invasive alien plant, management

Computer codes: PESSA

2012/252 A review of research on biological invasions

Species introductions of anthropogenic origins are a major aspect of rapid ecological change globally. The literature on biological invasions is enormous; it has grown rapidly since the mid-twentieth century as scientists, managers, policy makers, and the public have become increasingly aware of the many applied issues of managing invasive species, as well as the fundamental ecological questions raised by biological invasions. This paper identified 2398 relevant studies of the biological invasions literature. A majority of these studies (58%) were dealing with hypotheses for causes of biological invasions, while studies on impacts of invasions were the next most common (32% of the publications). 1537 papers were examined in greater detail in a systematic review. Superior competitive abilities of invaders, environmental disturbance, and invaded community species richness were the most common hypotheses examined. Most studies examined a single hypothesis. Almost half of the papers were field observation studies. Although this research was widely distributed globally, studies were clustered in North America, Western Europe, Eastern Australia, New Zealand, and Hawaii, with smaller clusters in South Africa, temperate South America, China, and scattered studies elsewhere. A dramatic lack of studies was noted for the tropics. Studies of terrestrial invasions dominate the literature, with most of these concerning plant invasions.

Source: Lowry E, Rollinson EJ, Laybourn AJ, Scott TE, Aiello-Lammens ME, Gray SM, Mickley J, Gurevitch J (2012) Biological invasions: a field synopsis, systematic review, and database of the literature. *Ecology and Evolution*.
<http://onlinelibrary.wiley.com/doi/10.1002/ece3.431/pdf>

Additional key words: biological invasions

2012/253 Conclusions from the Seminar on International Trade and Invasive Alien Species of the Standards and Trade Development Facility

The Standards and Trade Development Facility (STDF), in collaboration with the International Plant Protection Convention (IPPC) and the World Organisation for Animal Health (OIE) organized a Seminar on International Trade and Invasive Alien Species (IAS) in Geneva on 12-13 July 2012.

The seminar sought to:

- raise awareness about the mutually beneficial goals of the SPS Agreement and Convention on Biological Diversity (CBD);
- foster collaboration between the SPS and the CBD "communities" at both regional and national levels; and
- review initiatives that aim to build national and/or regional capacities to manage the entry and spread of IAS, including pests and diseases, and discuss common challenges, good practices, and additional capacity building efforts required (e.g. assessment needs, pest risk analyses (PRA), surveillance, development of training toolkits and materials, etc.).

The Seminar was attended by approximately 110 participants working in areas related to both biodiversity and SPS measures.

The key findings and conclusions are summarized in a briefing note which can be viewed on the seminar webpage: <http://www.standardsfacility.org/en/TAIAS.htm>

Source: EPPO Secretariat (2012-11)

Additional key words: invasive alien species, trade

Computer codes: CH

2012/254 Freshwater invasive species conference (Galway, IE, 2013-04-8/11)

The 'Freshwater Invasives - Networking for Strategy' (FINS) conference will be hosted by Inland Fisheries Ireland (IFI) and the European Inland Fisheries and Aquaculture Advisory Commission (EIFAAC). FINS will address key topics relating to freshwater invasive species and harmful aquatic pathogens (including invasive alien plants).

The primary objective of the conference is to provide a forum where international scientists, policy makers and stakeholders will address designated themes with a view to informing management and policy development in the area. The themes that will provide the focus for deliberations during the conference will be policy & strategy, biosecurity, management and economics.

Source: Freshwater Invasives - Networking for Strategy
<http://finsconference.ie/sample-page/>

Additional key words: Invasive alien plants, conference

Computer codes: IE

**2012/255 4th EWRS International Symposium on Weeds & Invasive Plants
'Intractable Weeds and Plant invaders' (Montpellier, FR, 2014-05-18/23)**

The 4th EWRS Symposium on Weeds & Invasive Plants will be held in Montpellier (FR) on 2014-05-18/23. The series of meetings entitled 'Intractable Weeds and Plant invaders' was initiated in 2006 and takes place every three years in a different European country. The objective of this Symposium is to bring together specialists on biology, ecology, invasive weed science and management practices, and to share experiences on plant invaders and intractable weeds in both agricultural and natural ecosystems. For this 4th symposium, a particular focus will be given to invasive weeds in the Mediterranean region.

The provisional sessions of the scientific program are indicated below:

- Agricultural weeds and invasive plants in the Mediterranean region;
- Ragweeds (*Ambrosia artemisiifolia*, *A. trifida*, *A. psilostachya*, etc.) and other emerging invasive plants affecting human health;
- Invasive plants in aquatic ecosystems;
- Biology, ecology and impacts of invasive plants;
- Management strategies for invasive plants: prevention and control;
- Economic, sociological and ethical aspects.

Contact: Guillaume Fried (French Plant Health Laboratory, Anses)
E-mail: guillaume.fried@anses.fr

Christian Bohren (Coordinator of EWRS -WG Invasive Plants)
E-mail: christian.bohren@acw.admin.ch

Symposium website: <http://www.ansespro.fr/invasiveplants2014/>

Source: EPPO Secretariat (2012-11).

Additional key words: invasive alien plants, conference

Computer codes: FR