

ORGANISATION EUROPEENNE ET MEDITERRANEENNE POUR LA PROTECTION DES PLANTES EUROPEAN AND MEDITERRANEAN PLANT PROTECTION ORGANIZATION

EPPO Reporting Service

No. 11 PARIS, 2011-11-01

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2011/235 First report of Rhynchophorus ferrugineus in Tunisia

In December 2011, *Rhynchophorus ferrugineus* (Coleoptera: Curculionidae, red palm weevil - EPPO A2 List) was detected for the first time on ornamental palm trees (*Phoenix canariensis*) in the city of Carthage (north of Tunis) by the NPPO of Tunisia. The identification of the pest was confirmed by the 'Laboratoire de Quarantaine'. Eradication measures have immediately been put into place and include the uprooting and burning of symptomatic plants, as well as treatment of asymptomatic plants and surveys of the neighbouring areas.

The pest status of *Rhynchophorus ferrugineus* in Tunisia is officially declared as: **Present**, only on a few plants of *Phoenix canariensis* (city of Carthage), under eradication/containment.

Source: NPPO of Tunisia (2011-12).

Additional key words: new record

Computer codes: RHYCFE, TN

2011/236 First report of Tuta absoluta in Croatia

In Croatia, the presence of *Tuta absoluta* (Lepidoptera: Gelechiidae - EPPO A2 List) was recorded for the first time at the end of 2009 in hydroponic production of cherry tomatoes. Pheromone traps were placed at a production site in Turanj (Zadarska county) which was suspected to be infested by *T. absoluta* due to the symptoms observed.

Following this first finding, a specific survey program for *T. absoluta* was carried out in 2010 in 19 glasshouse tomato production sites located in 8 counties (Grad Zagreb, Krapinsko-zagorska, Varaždinska, Međimurska, Istarska, Zadarska, Splitsko-dalmatinska and Dubrovačko-neretvanska) in order to determine the distribution of the pest. This survey included visual inspections and the use of pheromone traps. Signs of infestation were recorded at all inspected locations, and the subsequent observation in the laboratory of insect specimens caught in the pheromone traps confirmed the occurrence of *T. absoluta*. The species was identified on the basis of morphological characteristics of adult males in 17, out of the 21 collected pheromone traps, at 16 production sites located in 6 counties (Varaždinska, Međimurska, Istarska, Zadarska, Splitsko-dalmatinska and Dubrovačko-neretvanska). The identification was officially confirmed by the Agricultural and Forestry Institute ('Kmetijsko gozdarski zavod') in Nova Gorica, Slovenia.

The control of T. *absoluta* was carried out within the regular tomato protection program using plant protection products. In addition, growers were informed about the damage caused by T. *absoluta* and the measures which should be undertaken to prevent or slow down its further spread.

The pest status of *Tuta absoluta* in Croatia is officially declared as: **Present, first found in** 2009, new findings in Varaždinska, Međimurska, Istarska, Zadarska, Splitskodalmatinska and Dubrovačko-neretvanska counties, under official control.

Source: NPPO of Croatia (2011-11).

Additional key words: new record

Computer codes: GNORAB, HR

2011/237 First report of Tuta absoluta in Austria

In Austria, the presence of *Tuta absoluta* (Lepidoptera: Gelechiidae - EPPO A2 List) was reported for the first time in the region of Burgenland in 2010. This finding was an isolated one and since 2010 no other individuals of *T. absoluta* have been found at this site. In May 2011, *T. absoluta* was found in the region of Vienna during a monitoring programme. The pest was caught in pheromone traps placed in a traders' warehouse where tomato fruits were stored. The identity of the pest was determined on the basis of morphological characteristics by the laboratory of the Austrian Agency for Health and Food Safety (AGES). The origin of the pest could not be ascertained because, at the time of finding, several consignments from different southern countries had been delivered. The monitoring programme will continue and be extended to other districts of Vienna.

The pest status of *Tuta absoluta* in Austria is officially declared as: **Transient: actionable**, **under surveillance**.

Source: NPPO of Austria (2011-12).

Additional key words: new record

Computer codes: GNORAB, AT

2011/238 Eradication of Anoplophora chinensis in Croatia

As reported in EPPO RS 2009/047, Anoplophora chinensis (Coleoptera: Cerambycidae -EPPO A2 List) was found for the first time in Croatia in September 2007 in a nursery in Turanj (Zadarska county). The pest was identified on Acer palmatum and Lagerstroemia seedlings which had been originally imported from China in February 2007. Following the laboratory identification, eradication measures were taken. All infested, suspicious and susceptible plants were burnt. Other plants in the nursery were closely monitored and their movement was prohibited for a period of two years. A specific survey programme for A. chinensis was initiated in 2008 to determine whether the pest had been successfully eradicated at the location where it was first recorded, and to eventually detect its presence at other locations in Croatia. Intensive visual inspections and sampling programmes were carried out in nurseries and garden centres that are registered for import, distribution or production of A. chinensis host plants, as well as in forest areas located in the vicinity of Turanj and near large sea ports. Samples were collected from host plant seedlings showing signs of infestation (visible exit holes, living larvae in the stems, adult beetles and sawdust) and were inspected in the laboratory. In 2008, laboratory analysis confirmed the presence of A. chinensis at the same location on 22 samples of Acer palmatum imported from China and 7 samples of Rosa spp. seedlings produced in Croatia (out of a total of 38 collected samples).

In 2009, a total of 42 *Acer palmatum* samples were collected from the nursery in Turanj, tested in the laboratory and 38 were positive. All infested *Acer palmatum* seedlings were incinerated together with the soil.

As 2010 was the third year since the specific survey programme had been initiated and *A*. *chinensis* larvae were still being found, appropriate measures were ordered to prevent any further spread and damage to other plant species. In the nursery in Turanj, 45 infested *Acer palmatum* seedlings (out of 46 samples) and all remaining *Acer palmatum* seedlings (4 257) which originated from the same source (consignment imported from China in 2007), were incinerated together with the soil. Moreover, all *Rosa* spp. seedlings (41) from domestic production that were also subject to the specific survey in the nursery in Turanj were destroyed in the same way. So far, the pest has not been found in inspected locations in the forests. Further intensive surveys will nevertheless be continued in the future.

The pest status of *Anoplophora chinensis* in Croatia is officially declared as: Absent, first found in 2007 on *Acer palmatum* and *Lagerstroemia* seedlings imported from China, eradicated.

Source: NPPO of Croatia (2011-11).

Additional key words: absence, eradication

Computer codes: ANOLCN, HR

2011/239 Dead beetles of Anoplophora glabripennis found in Switzerland

The NPPO of Switzerland informed the EPPO Secretariat of the recent finding of dead beetles of Anoplophora glabripennis (Coleoptera: Cerambycidae - EPPO A1 List) on its territory*. On 2011-12-08, two dead beetles were discovered by a worker on a road construction site near Salenstein (Canton of Thurgau) and brought to the Cantonal Plant Protection Service. These dead insects were identified as A. glabripennis by Dr Beat Forster (Swiss Federal Institute for Forest, Snow and Landscape Research, WSL). This finding could be related to a consignment of granite stones and its wood packaging material (dunnage and pallets) imported from China. Although the packaging material had been marked according to ISPM 15, fresh insect galleries could be observed. The worker also mentioned that he had previously found another dead beetle (at the end of October) under very similar conditions. Tracing-back studies indicated that both consignments of stones belonged to larger consignments which had been broken down into smaller lots and dispatched to several destinations. Investigations are on-going. The wood packing material (dunnage and pallets) was destroyed under official control. Considering the period of the year during which both consignments arrived in Switzerland, it is considered that oviposition by female beetles is very unlikely. Nevertheless, monitoring will continue in the forthcoming years.

The pest status of *Anoplophora glabripennis* in Switzerland is officially declared as: **Transient, actionable, under surveillance.**

Additional key words: incursion

Computer codes: ANOLGL, CH

2011/240 Situation of Dryocosmus kuriphilus in Croatia

Dryocosmus kuriphilus (Hymenoptera: Cynipidae - EPPO A2 List) was found for the first time in Croatia in 2010 during a specific survey programme (EPPO RS 2011/193). The first infested chestnut (*Castanea sativa*) trees were detected in May 2010 in one forest in Lovran (Primorsko-goranska county), and then in June 2010 at several other localities in the City of Zagreb, Samobor (Zagrebačka county), Ozalj (Karlovačka county), Stubičko podgorje and Hum na Sutli (Krapinsko-zagorska county). According to the number of galls per shoot observed during the survey, it can be estimated that in the localities of Lovran, Samobor and Ozalj (single galls per leaf/shoot) *D. kuriphilus* has been recently introduced.

^{*} It can be recalled that in September 2011, an isolated finding of 2 living beetles had been reported in the Canton of Fribourg. It is suspected that the insect was most probably introduced with a consignment of granite stones with infested wood packing material imported from China (EPPO RS 2011/189).

Source: NPPO of Switzerland (2011-12).

However, the localities in Zagreb (Zagrebačka gora, Bundek, Grmoščica, Gornje Prekrižje) had high infestation rates (numerous galls per leaf/shoot), therefore it can be estimated that for these locations *D. kuriphilus* has been present since 2007 or 2008.

Subsequently, visual inspections of chestnut seedlings revealed the presence of the pest in one fruit nursery in the locality of Čremušnica (Gvozd, Sisačko-moslavačka county). Laboratory analyses showed the presence of *D. kuriphilus* larvae in galls on two *C. sativa* seedlings that had been produced and imported from a nursery in Slovenia. Phytosanitary measures were taken immediately and the two infested seedlings were uprooted and destroyed, before the adults could emerge from the galls. Demarcated zones (infested zone + focus zone of 5 km radius + buffer zone of 10 km radius) have been established in the infested forest areas.

The pest status of *Dryocosmus kuriphilus* in Croatia is officially declared as: **Present**, first found in 2010 in 12 localities, under official control.

Source: NPPO of Croatia (2011-11).

Additional key words: detailed record

Computer codes: DRYCKU, HR

2011/241 Ditylenchus destructor does not occur in Virginia (US)

The EPPO Secretariat was recently informed by CABI that *Ditylenchus destructor* (EU Annexes) is absent from Virginia (US). The previous EPPO record was based on an official statement sent to the EPPO Secretariat in 1994 but this was erroneous. There are no published records of *D. destructor* in Virginia, and this species has never been detected during nematode surveys.

The situation of *Ditylenchus destructor* in Virginia can be described as follows: Absent, the earlier record was erroneous, confirmed by survey.

Source: Correspondence via CABI with the Virginia Department of Agriculture and Consumer Services, USA (2011-11).

Additional key words: denied record, absence

Computer codes: DITYDE, US

2011/242 Ralstonia solanacearum detected for the first time in Poland in a water sample

The NPPO of Poland recently informed the EPPO Secretariat of the first report of *Ralstonia* solanacearum (EPPO A2 List) on its territory. During the annual official survey, the bacterium was detected in 1 sample of water taken from a sewage treatment unit in Nowy Sącz in Małopolskie voivodeship (Southern Poland, region bordering Slovakia). The bacterium was identified by the Central Laboratory of Poland and these results were confirmed on the 2011-11-03 by the laboratory of Food and Environment Research Agency (United Kingdom). Appropriate quarantine measures have been taken and nationwide inspections for R. solanacearum will continue.

The pest status of *Ralstonia solanacearum* in Poland is officially declared as: **Transient:** actionable, under surveillance.

Source: NPPO of Poland (2011-11).

Additional key words: new record

Computer codes: RALSSO, PL

2011/243 First report of Xanthomonas fragariae in Finland

The NPPO of Finland recently informed the EPPO Secretariat of the first outbreak of *Xanthomonas fragariae* (EPPO A2 List) on its territory. The bacterium was detected during an inspection carried out in a strawberry fruit production site on 2011-07-22. A sample was taken from symptomatic plants and tested according to the EPPO Standard PM 7/65(1). The strawberry plants had been delivered by a Dutch company in 2010. Because there are no previous records of *X. fragariae* in Finland, it is suspected that that the bacterium was introduced with strawberry planting material. All plants of the infested lot will be destroyed and cultivation of strawberry will be prohibited for two years on the site concerned.

The pest status of *Xanthomonas fragariae* in Finland is officially declared as: **Present**, **under eradication**.

Source: NPPO of Finland (2011-11).

EPPO Standard PM 7/65(1) Diagnostic protocol Xanthomonas fragariae http://onlinelibrary.wiley.com/doi/10.1111/j.1365-2338.2006.00926.x/pdf

Additional key words: new record

Computer codes: XANTFR, FI

2011/244 Situation of Phytophthora ramorum in Croatia

Specific surveys on *Phytophthora ramorum* (EPPO Alert List) have been conducted in Croatia since 2004 and during that period a total of 291 samples (leaves and shoots) were collected from symptomatic ornamental plants (*Rhododendron*, *Viburnum*, *Camellia*, *Syringa*, *Pieris*, *Nerium*, *Photinia*, *Magnolia*, *Leucothoe*) at 134 locations, and tested in the laboratory using morphological characteristics according to the EPPO Standard PM 7/66(1).

P. ramorum was first recorded in 2007 on 1 sample of *Rhododendron* collected from a nursery in Čakovec (Međimurska county) and on 1 sample of *Rhododendron* collected from a garden centre in Lučko (City of Zagreb). Investigations showed that both infected samples were part of the same consignment imported from the Netherlands in March 2007. All infected and susceptible plants from the consignment were destroyed and additional inspections were carried out at those locations.

After this first finding, symptoms resembling those of *P. ramorum* were observed in 2009, on 2 *Rhododendron* plants at 2 locations in Lučko (City of Zagreb) and Turanj (Zadarska county), and again in 2010, on 3 *Rhododendron* and 1 *Leucothoe* plant at 4 locations in Turanj, Štefanec (Međimurska county) and 2 in Zagreb. After the infection had been confirmed, eradication measures were ordered. All infected plants, and all susceptible plants located within a radius of 2 m from the infected plants, were destroyed. Two additional inspections were carried out within three months. During that period, the application of the plant protection products that may cover up the symptoms of infection was forbidden. Cultivation of susceptible plants within 4 m of the infected plants has been prohibited for a period of three years.

The pest status of *Phytophthora ramorum* in Croatia is officially declared as: **Several** outbreaks on *Rhododendron* spp. and *Leucothoe* plants from imported consignments, eradication measures conducted, under official control.

Source: NPPO of Croatia (2011-11).

EPPO Standard PM 7/66(1) Diagnostic protocol *Phytophthora ramorum*. http://onlinelibrary.wiley.com/doi/10.1111/j.1365-2338.2006.00927.x/pdf

Additional key words: new record

Computer codes: PHYTRA, HR

2011/245 First report of *Pepino mosaic virus* in Croatia

In Croatia, the presence of *Pepino mosaic virus* (*Potexvirus*, PepMV - EPPO Alert List) in domestic production was first confirmed in 2010. During a specific survey, the virus was found on tomato hybrids Belle and Dirk cultivated in greenhouses, at 3 (out of 24) inspected locations: in Gajić and Magadenovac (Osječko-baranjska county) and in Krasica (Istarska county). According to laboratory analyses of collected tomato samples (leaves and fruits), the presence of PepMV was confirmed at the above locations in 48 samples using serological methods (DAS- and DASI-ELISA). The presence of PepMV could be further confirmed by molecular methods (IC-RT-PCR) in 18 of the positive samples. Infected tomato samples had been collected in June and September 2010.

Official eradication measures were taken. All infected plant material and growing media were destroyed and buried. Weeds occurring within a minimum of 1 m from the production areas were destroyed using herbicides, and the complete production system and equipment were cleaned and disinfected. In addition, the producers were informed via brochures about the symptoms and damage that this virus can cause in tomato production, as well as of control and eradication measures.

The pest status of *Pepino mosaic virus* in Croatia is officially declared as: Absent, in domestic production found for the first time in 2010 at three locations (two in Osječko-baranjska county and one in Istarska county), eradicated.

Source: NPPO of Croatia (2011-11).

Additional key words: new record

Computer codes: PEPMV0, HR

2011/246 Impatiens necrotic spot virus found again in Austria

In Austria, an isolated finding of *Impatiens necrotic spot virus* (*Tospovirus*, INSV - EPPO A2 List) had been reported in 2004 in Tyrol on *Nemesia* plants, and subjected to eradication measures (EPPO RS 2004/138). The NPPO of Austria recently informed the EPPO Secretariat of further findings of INSV on plants of *Ocimum basilicum* (basil) in Niederösterreich and Steiermark. Infested plants were found in nurseries where plants had been produced from seeds. The virus was detected by RT-PCR according to the EPPO Standard PM 7/34(1) at the laboratory of the Austrian Agency for Health and Food Safety (AGES) for the first case and by ELISA at the laboratory of the Plant Protection Service of Nordrhein-Westfalen (DE) in the second case. The NPPO has ordered the destruction of all infested plants.

The pest status of *Impatiens necrotic spot virus* in Austria is declared as follows: **Present**, **few occurrences**.

Source: NPPO of Austria (2011-12).

EPPO Standard PM 7/34(1) Diagnostic protocol. Tomato spotted wilt tospovirus,

Impatiens necrotic spot tospovirus and Watermelon silver mottle tospovirus http://archives.eppo.org/EPPOStandards/PM7_DIAGNOS/pm7-34(1).pdf

Additional key words: detailed record

Computer codes: INSV00, AT

<u>2011/247 First finding of Tomato spotted wilt virus on plants of Osteospermum</u> <u>ecklonis in Austria</u>

The Austrian NPPO recently informed the EPPO Secretariat of the first finding of *Tomato spotted wilt virus* (*Tospovirus*, TSWV - EPPO A2 List) on plants of *Osteospermum ecklonis* in the region of Vienna in May 2011. TSWV is listed on different plant species in Annex II/A2 of the EU Directive 2000/29/EC, but not on plants of *Osteospermum* spp. The infected plants were found in a nursery and had been vegetatively propagated from mother plants. It is suspected that this infection resulted from natural spread by thrips vectors. The virus was detected by RT-PCR according to the EPPO Standard PM 7/34(1) at the laboratory of the Austrian Agency for Health and Food Safety (AGES). The regional Plant Protection Service has ordered the destruction of all infested plants and their mother plants.

The pest status of *Tomato spotted wilt virus* in Austria is officially declared as: **Present**, **few occurrences**.

Source: NPPO of Austria (2011-12).

EPPO Standard PM 7/34(1) Diagnostic protocol. *Tomato spotted wilt tospovirus*, *Impatiens necrotic spot tospovirus* and *Watermelon silver mottle tospovirus*. http://archives.eppo.org/EPPOStandards/PM7_DIAGNOS/pm7-34(1).pdf

Additional key words: detailed record, host plant

Computer codes: TSWV00, AT

2011/148 Tomato apical stunt viroid detected in Germany

The NPPO of Germany recently informed the EPPO Secretariat of the current situation of *Tomato apical stunt viroid (Pospiviroid*, TASVd - EPPO Alert List). It is noted that TASVd was detected in 2009 in *Solanum jasminoides* plants in a nursery in Rheinland-Pfalz; all infested plants were destroyed. In March 2011, TASVd was detected for the first time in Sachsen on asymptomatic solanaceous plants during a survey on another viroid (*Potato spindle tuber viroid*). The presence of TASVd was detected in samples collected from a lot of approximately 7500 *Solanum jasminoides* and 200 *S. rantonetii* plants grown in a glasshouse nursery. The proportions of infested plants in the concerned lots are not known. Part of the lot had already been sold when the samples were taken. The Regional Plant Protection Service of Sachsen ordered that the plants should be sold to final consumers only. It is suspected that TASVd had been introduced into this nursery with infested plant material.

The pest status of *Tomato apical stunt viroid* in Germany is officially declared as: **Transient, actionable, under eradication.**

Source: NPPO of Germany (2011-11).

Additional key words: detailed record

Computer codes: TASVD0, DE

2011/249 Chrysanthemum stunt viroid detected in Lazio region (IT)

In 2011, *Chrysanthemum stunt viroid* (*Pospiviroid*, CSVd - EPPO A2 List) was found in one nursery in the Lazio region, Italy. CSVd was detected in *Chrysanthemum* plants (1 lot) which had been imported from Brazil. The infested lot was destroyed and phytosanitary measures were taken to prevent the spread of CSVd.

The situation of *Chrysanthemum stunt viroid* in Italy can be described as follows: **Present**, **few occurrences**, **under official control**.

Source: NPPO of Italy (2011-08).

Additional key words: detailed record

Computer codes: CSVD00, IT

2011/250 EPPO report on notifications of non-compliance

The EPPO Secretariat has gathered below the notifications of non-compliance for 2011 received since the previous report (EPPO RS 2011/178). Notifications have been sent directly to EPPO by Algeria, Croatia, 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	Saintpaulia ionantha	Cuttings	Canada	Germany	1
Agromyzidae	Apium graveolens Apium graveolens Apium graveolens Ocimum basilicum Ocimum basilicum Ocimum basilicum Ocimum basilicum	Vegetables Vegetables Vegetables (leaves) Vegetables (leaves) Vegetables (leaves) Vegetables (leaves)	Thailand Vietnam Spain (Canary Isl.) Vietnam Vietnam Vietnam	Switzerland Germany Switzerland Switzerland Germany Switzerland United Kingdom	3 2 1 2 2 1 1
Agromyzidae, Pseudo- coccidae, <i>Trialeurodes</i>	Ocimum basilicum	Vegetables (leaves)	Vietnam	Germany	1
Aleyrodidae	Erysimum Polygonum odoratum	Cuttings Vegetables (leaves)	Israel Vietnam	United Kingdom France	1 1
Aonidiella citrina	Mangifera indica	Fruits	India	United Kingdom	1
Aphididae	Hemerocallis	Plants for planting	USA	Belgium	1
Bemisia	Mandevilla	Cuttings	Israel	Italy	1
Bemisia tabaci	Aglaonema, Cryptocoryne, Nomaphila Ajuga Alternanthera	Plants for planting Cuttings Plants for planting	Sri Lanka Israel Indonesia	United Kingdom United Kingdom France	1 1 1

Pest	Consignment	Type of commodity	Country of origin	Destination	nb
<i>B. tabaci</i> (cont.)	Alternanthera Alternanthera sessilis Amaranthus tricolor Anubias barteri Aphelandra	Plants for planting Plants for planting Cut flowers Plants for planting Plants for planting	Singapore Indonesia Bangladesh Singapore Brazil	United Kingdom United Kingdom United Kingdom United Kingdom Netherlands	1 1 1 1
	Apium graveolens	Vegetables	Inaliand	United Kingdom	1
	Cansicum annuum	Cuttings	Israel	Snain	1
	Corchorus olitorius	Vegetables	Jordan	France	1
	Corchorus olitorius	Vegetables	Lebanon	France	2
	Cryptomeria, Hemigraphis colorata	Plants for planting	Singapore	United Kingdom	1
	Echinodorus	Plants for planting	Singapore	United Kingdom	2
	Echinodorus cordifolius	Plants for planting	Singapore	United Kingdom	1
	Echinodorus, Hygrophila angustifolia	Plants for planting	Sri Lanka	United Kingdom	1
	Echinodorus, Hygrophila polysperma	Plants for planting	Singapore	United Kingdom	1
	Eryngium foetidum	Vegetables (leaves)	Malaysia	Switzerland	1
	Eryngium foetidum	Vegetables (leaves)	Vietnam	France	/ F
	Erysimum Eunhorhia nulchorrima	Cuttings Plants for planting	Israel Ethionia	United Kingdom	5 1
	Euphorbia pulcherrima	Plants for planting	Germany	Ireland	1
	Euphorbia pulcherrima	Plants for planting	Germany	Ireland	1
	Euphorbia pulcherrima	Cuttings	Guatemala	United Kingdom	1
	Euphorbia pulcherrima	Plants for planting	Kenya	Sweden	1
	Hemigraphis colorata	Plants for planting	Singapore	United Kingdom	1
	Hygrophila angustifolia	Plants for planting	Singapore	United Kingdom	1
	Hygrophila angustifolia, Lysimachia nummularia, Nomaphila	Plants for planting	Singapore	United Kingdom	1
	Hygrophila polysperma	Plants for planting	Singapore	United Kingdom	1
	Lavatera	Plants for planting	Israel	Netherlands	1
	Lavatera	Cuttings	Israel	United Kingdom	1
	Limnophila	Vegetables (leaves)	Sri Lanka	France	2
	Limnophila	Vegetables (leaves)	Thailand	France	1
	Limnophila aromatica	Vegetables (leaves)	Vietnam	France	5 1
	Lippia	Plants for planting	Israel	Beigium	1
	Lippia Lippia Salvia officinalis	Cuttings	Isidei	I Inited Kingdom	1
	Ludwigia palustris, L vsimachia nummularia	Plants for planting	Singapore	United Kingdom	1
	Mandevilla	Cut flowers	Israel	Netherlands	1
	Mandevilla	Cuttings	Israel	Netherlands	1
	Manihot esculenta	Vegetables	Congo, Democratic Rep.	France	1
	Nomaphila	Plants for planting	Singapore	United Kingdom	2
	Ocimum	Vegetables (leaves)	Israel	Netherlands	2
	Ocimum	Vegetables (leaves)	Lao*	United Kingdom	1
	Ocimum basilicum	Vegetables (leaves)	Israel	France	5
	Ocimum basilicum	vegetables (leaves)	Israel	Ireland	1
	Ocimum basilicum	vegetables (leaves)	ISFAEL	Latvia	5
	Ocimum basilicum	vegetables (leaves)	ISIZEI	Switzerland	∠ 1
	Ocimum basilicum	Venetables (leaves)	Israel	Switzerland	ı و
	Ocimum basilicum	Vegetables (leaves)	Israel	United Kingdom	9
	Ocimum basilicum	Vegetables (leaves)	Malavsia	United Kingdom	4
		90			•

Pest	Consignment	Type of commodity	Country of origin	Destination	nb
<i>B. tabaci</i> (cont.)	Ocimum basilicum, Salvia Ocimum sanctum Ocimum sanctum Origanum vulgare Salvia officinalis Solidago Solidago Solidago Trachelium Unspecified aquarium plants	Vegetables (leaves) Vegetables (leaves) Vegetables (leaves) Vegetables (leaves) Vegetables (leaves) Cuttings Cut flowers Cut flowers Cut flowers Cut flowers Cut flowers Plants for planting	Israel Cambodia Malaysia Vietnam Israel Israel Israel Israel Israel Israel Israel Singapore	Ireland France United Kingdom United Kingdom United Kingdom Netherlands Spain Sweden Netherlands Ireland	1 1 1 2 4 2 1 1 1 1
Bemisia tabaci, Liriomyza	Ocimum basilicum	Vegetables (leaves)	Malaysia	United Kingdom	1
Bemisia tabaci, Liriomyza sativae	Ocimum basilicum Ocimum basilicum Ocimum basilicum	Vegetables (leaves) Vegetables (leaves) Vegetables (leaves)	Israel Israel Israel	Belgium Latvia United Kingdom	1 1 1
Bemisia tabaci, Liriomyza trifolii	Solidago	Cut flowers	Israel	Netherlands	1
Cicadellidae	Cucurbita maxima	Vegetables	Argentina	Spain	1
Citrus exocortis viroid	Solanum jasminoides Solanum jasminoides Solanum jasminoides	Plants for planting Plants for planting Cuttings	Germany Italy Netherlands*	Austria Austria Belgium	1 1 1
Clavibacter michiganensis subsp. michiganensis	Lycopersicon esculentum	Seeds	Thailand*	France	1
Coleoptera	Gossypium hirsutum	Stored products	Ghana	Spain	1
Corticium rolfsii	Mangifera indica	Fruits	India	United Kingdom	1
Diaphania indica	Momordica charantia	Vegetables	Pakistan	Germany	1
<i>Diaphania indica,</i> Thripidae	Momordica	Vegetables	Pakistan	Germany	1
Diptera	Foeniculum vulgare var.	Seeds	Chile	Italy	1
Dryocosmus kuriphilus	Castanea sativa	Plants for planting	Italy	Austria	2
Elsinoe australis	Citrus sinensis	Fruits	Uruguay	Spain	1
Elsinoe fawcettii	Citrus limon	Fruits	Argentina	Cyprus	2
Ephestia	Ceratonia siliqua	Stored products	Morocco	Spain	1
Ephestia, Coleoptera	Ceratonia siliqua Cyperus esculentus Schinus	Stored products Stored products Stored products	Tunisia Burkina Faso Peru	Spain Spain Spain	1 1 1
Erwinia amylovora	Cotoneaster horizontalis Malus domestica	Plants for planting Plants for planting	United Kingdom Italy	Ireland Austria	1 1

Pest	Consignment	Type of commodity	Country of origin	Destination	nb
Fungi	Allium cepa Cucurbita Eucheuma spinosum	Vegetables Vegetables Algae	Senegal Argentina Tanzania	Spain Spain Spain	1 2 1
Globodera pallida, Globodera rostochiensis	Solanum tuberosum	Ware potatoes	Italy	Ireland	1
Globodera rostochiensis	Solanum tuberosum	Ware potatoes	Cyprus	Austria	1
Guignardia citricarpa	Citrus limon Citrus paradisi Citrus sinensis Citrus sinensis Citrus sinensis Citrus sinensis Citrus sinensis Citrus sinensis	Fruits Fruits Fruits Fruits Fruits Fruits Fruits Fruits	South Africa South Africa Brazil Brazil South Africa South Africa Swaziland Zimbabwe	Spain Netherlands Netherlands Portugal Netherlands Spain Netherlands Netherlands	1 22 14 15 1 1
Helicoverpa armigera	Zea mays	Vegetables	Uganda	United Kingdom	1
Heliothis	Polygonum odoratum	Vegetables (leaves)	Vietnam	Germany	1
Helminthosporium solani	Solanum tuberosum	Seed potatoes	Netherlands	Algeria	1
Impatiens necrotic spot virus, Tomato spotted wilt virus	Unspecified	Plants for planting	Germany	Austria	1
Leucinodes orbonalis	Solanum aethiopicum,	Vegetables	Ghana	Germany	1
	Solanum melongena Solanum aethiopicum, Solanum melongena Solanum melongena Solanum melongena Solanum melongena Solanum melongena	Vegetables Vegetables Vegetables Vegetables Vegetables Vegetables Vegetables	Ghana Bangladesh Bangladesh Ghana Malaysia Sri Lanka Vietnam	Germany Sweden United Kingdom Germany Belgium Italy Germany	1 1 3 1 1
Liriomyza	Apium graveolens Apium graveolens Apium graveolens Apium graveolens Apium graveolens Apium graveolens var. dulce Chrysanthemum Gypsophila Gypsophila Gypsophila Ocimum basilicum Ocimum basilicum Ocimum basilicum Ocimum basilicum Ocimum basilicum Ocimum basilicum Ocimum basilicum Ocimum basilicum Ocimum basilicum Ocimum basilicum	Vegetables Vegetables Vegetables Vegetables Vegetables Cut flowers Cut flowers Cut flowers Cut flowers Vegetables (leaves) Vegetables (leaves)	Thailand Thailand Vietnam Vietnam Colombia Ecuador Ethiopia Israel Vietnam Israel Israel Israel Kenya Malaysia Spain (Canary Isl.) Vietnam Vietnam	Germany United Kingdom Sweden United Kingdom United Kingdom United Kingdom United Kingdom United Kingdom Czech Republic France United Kingdom United Kingdom United Kingdom United Kingdom United Kingdom United Kingdom	1 1 1 1 1 1 1 2 2 2 2 1 1 5 1

Pest	Consignment	Type of commodity	Country of origin	Destination	nb
<i>Liriomyza</i> (cont.)	Ocimum basilicum	Vegetables (leaves)	Vietnam	United Kingdom	22
Liriomyza huidobrensis	Apium graveolens Dianthus Dianthus, Gypsophila, Impatiens, Lepidium, Osteospermum, Pentaglottis, Verbena	Vegetables Cut flowers Cuttings	Vietnam Ecuador Israel	Sweden Netherlands Netherlands	1 1 1
	Gypsophila Gypsophila Mentha Solidago	Cut flowers Cut flowers Cuttings Cut flowers	Ecuador Kenya Kenya Kenya	Netherlands Netherlands Netherlands Netherlands	6 4 1 4
Liriomyza sativae	Brassica Brassica alboglabra Ocimum basilicum Ocimum basilicum Ocimum basilicum Ocimum basilicum	Vegetables Vegetables (leaves) Vegetables (leaves) Vegetables (leaves) Vegetables (leaves) Vegetables (leaves)	Congo* Thailand Israel Israel Vietnam Vietnam	France Netherlands Belgium Latvia Netherlands France Netherlands	1 2 2 1 1
Liriomyza sativae, Liriomyza trifolii	Ocimum basilicum	Vegetables (leaves)	Spain (Canary Isl.)	Switzerland	1
Liriomyza trifolii	Apium graveolens Ocimum basilicum Ocimum basilicum Ocimum basilicum Solidago Solidago	Vegetables Vegetables (leaves) Vegetables (leaves) Vegetables (leaves) Vegetables (leaves) Cut flowers Cut flowers	Thailand* Israel Israel Vietnam Vietnam Israel Zimbabwe	Sweden Belgium France Sweden Switzerland Netherlands Netherlands	1 2 1 2 1 1
Noctuidae	Momordica	Vegetables	Pakistan	Spain	1
Noctuidae, Tephritidae (non- European)	Cyamopsis tetragonoloba	Vegetables	Pakistan	Spain	1
Opogona sacchari	Beaucarnea Unspecified	Plants for planting Plants for planting	(Netherlands) Netherlands Antilles	Germany Cyprus	1 1
Oryctes rhinoceros	Arecaceae, Phoenix roebelinii	Plants for planting	Dominican Rep.	Spain	1
Pepino mosaic virus	Lycopersicon Lycopersicon esculentum Lycopersicon esculentum Lycopersicon esculentum	Vegetables Plants for planting Plants for planting Vegetables	Netherlands Italy Italy Netherlands	Sweden Austria Bulgaria Latvia	2 1 1 5
Pepino mosaic virus, Liriomyza bryoniae, Xanthomonas axonopodis pv. vesicatoria	Lycopersicon esculentum	Plants for planting	Italy	Bulgaria	1
Pepino mosaic virus, Tomato spotted wilt virus	Lycopersicon esculentum	Plants for planting	Germany	Austria	1

Pest	Consignment	Type of commodity	Country of origin	Destination	nb
Phytoplasma pruni	Prunus armeniaca	Plants for planting	Germany	Austria	1
Ralstonia solanacearum	Solanum tuberosum	Ware potatoes	Egypt	Croatia	1
Rhagoletis	Prunus	Fruits	Iran	United Kingdom	1
Spodoptera	Rosa Solanum melongena	Cut flowers Vegetables	Ecuador Morocco	Germany Spain	1 1
Spodoptera littoralis	Eryngium Gypsophila, Rosa Ocimum basilicum Rosa Rosa Rosa Solidago	Cut flowers Cut flowers Vegetables (leaves) Cut flowers Cut flowers Cut flowers Cut flowers	Kenya Kenya Israel Tanzania Uganda Zimbabwe Kenya	Netherlands Netherlands Netherlands Netherlands Netherlands Netherlands	1 1 1 2 1
Spodoptera litura	Limonium Ocimum basilicum	Plant tissue culture Vegetables (leaves)	India Vietnam	Netherlands United Kingdom	1 2
Thaumatotibia leucotreta	Citrus sinensis Citrus sinensis	Fruits Fruits	South Africa Swaziland	Spain Spain	3 2
Thripidae	Momordica Momordica Momordica Momordica Momordica charantia Momordica charantia Solanum melongena Solanum melongena	Vegetables Vegetables Vegetables Vegetables Vegetables Vegetables Vegetables Vegetables	Bangladesh Dominican Rep. India Sri Lanka Dominican Rep. Pakistan Ghana Sri Lanka	United Kingdom United Kingdom United Kingdom United Kingdom United Kingdom United Kingdom United Kingdom	1 1 2 1 16 1
Thrips	Momordica charantia	Vegetables	Pakistan	Spain	1
Thrips palmi	Dendrobium Dendrobium, Vanda Mangifera indica, Momordica Momordica Momordica Momordica charantia Momordica charantia, Solanum melongena Solanum melongena Solanum melongena Solanum melongena Solanum melongena Solanum melongena	Cut flowers Cut flowers Cut flowers Fruits Vegetables Vegetables Vegetables Vegetables Vegetables Vegetables Vegetables Vegetables Vegetables Vegetables Vegetables Vegetables Vegetables Vegetables	Malaysia Thailand Thailand Dominican Rep. India Pakistan Sri Lanka India Pakistan Thailand Dominican Rep. Dominican Rep. Ghana Ghana Surinam	Netherlands Netherlands United Kingdom United Kingdom United Kingdom United Kingdom United Kingdom Sweden Austria Netherlands United Kingdom Netherlands United Kingdom Netherlands	3 1 1 1 2 4 1 1 2 2 1 1 5 2
Thrips palmi, Scirtothrips	Momordica charantia	Vegetables	India	Sweden	1
Thrips tabaci	Asparagus officinalis	Vegetables	Thailand	Netherlands	1

Pest	Consignment	Type of commodity	Country of origin	Destination	nb
Thysanoptera	Momordica	Vegetables	Dominican Rep.	Switzerland	1
	Momordica charantia	Vegetables	Dominican Rep.	France	2
	Momordica charantia	Vegetables	Dominican Rep.	Switzerland	1
	Momordica charantia	Vegetables	Malaysia	France	1
	Orchidaceae	Cut flowers	Malaysia	Switzerland	1
	Orchidaceae	Cut flowers	Thailand	Switzerland	2
	Solanum	Vegetables	Dominican Rep.	France	1
	Solanum macrocarpon	Vegetables	Mauritius	France	1
	Solanum melongena	Vegetables	Dominican Rep.	France	5
	Solanum melongena	Vegetables	Dominican Rep.	Switzerland	2
	Solanum melongena	Vegetables	Vietnam	France	1
Tomato apical stunt viroid	Solanum jasminoides	Plants for planting	Italy	Austria	2
Xanthomonas axonopodis pv. citri	Citrus latifolia	Fruits	Pakistan	United Kingdom	1

• Fruit flies

Pest Consignment		Country of origin Destinati		
Anastrepha	Mangifera Mangifera Mangifera Mangifera indica Mangifera indica	Dominican Rep. Dominican Rep. Jamaica Dominican Rep. Dominican Rep.	Netherlands United Kingdom United Kingdom France Netherlands	1 1 1 4
	Mangifera indica	Dominican Rep.	United Kingdom	2
	Mangnera mulca	Jamaica	Onited Kingdom	5
Anastrepha obliqua	Mangifera indica	Dominican Rep.	United Kingdom	1
Bactrocera	Annona	India	United Kingdom	1
	Capsicum frutescens	Lao	Sweden	1
	Capsicum frutescens	Vietnam	France	1
	Mangifera	India	United Kingdom	3
	Mangifera	Pakistan	United Kingdom	4
	Mangifera indica	Côte d'Ivoire	France	15
	Mangifera indica	India	United Kingdom	1
	Mangifera indica	Mali	Belgium	1
	Mangifera indica	Mali	France	8
	Mangifera indica	Mali	Netherlands	1
	Mangifera indica	Pakistan	Spain	2
	Mangifera indica	Pakistan	United Kingdom	8
	Mangifera indica	Senegal	France	3
	Momordica	Bangladesh	United Kingdom	3
	Momordica	India	United Kingdom	1
	Momordica	Pakistan	United Kingdom	1
	Momordica	Sri Lanka	United Kingdom	1
	Psidium guajava	Bangladesh	United Kingdom	2
	Psidium guajava	Pakistan	United Kingdom	1
	Psidium guajava	Thailand	France	3
	Psidium guajava	Thailand	United Kingdom	1
	Syzygium samarangense	Thailand	France	3
	Trichosanthes cucumerina	Bangladesh	United Kingdom	2
	Ziziphus mauritiana	Thailand	France	2

Pest	Consignment	Country of origin	Destination	nb
Bactrocera dorsalis	Annona squamosa	Thailand	France	1
	Mangifera indica	India	France	4
	Mangifera indica	Pakistan	France	1
	Mangifera indica	Thailand	France	5
	Mangifera indica	Vietnam	Czech Republic	1
	Mangifera indica	Vietnam	France	2
		Thailand	France	2
	Surveium somorongonso	Thailand	France	3
	Zizinhus jujuha	Viotnom	France	J 1
	Zizipilus jujuba	Vietilalli	FIGULE	I
Bactrocera invadens	Mangifera indica	Guinea Bissau	Portugal	1
	Mangifera indica	Mali	Belgium	1
	Mangifera indica	Mali	Netherlands	1
	manghora marca		Tothonando	•
Bactrocera latifrons	Capsicum	Vietnam	France	1
	Capsicum frutescens	Vietnam	France	9
	,			
Ceratitis	Psidium guajava	Egypt	United Kingdom	2
Ceratitis cosvra	Mangifera indica	Burkina Faso	France	1
······································	Mangifera indica	Côte d'Ivoire	France	2
	Mangifera indica	Mali	France	3
	Mangifera indica	Sudan	France	1
	manghora maloa	oddan	Tranco	
Dacus	Momordica charantia	Kenya	United Kingdom	1
Dacus ciliatus	Benincasa hispida	Pakistan	France	1
Tephritidae (non-European)	Capsicum annuum	Vietnam	France	3
,	Capsicum frutescens	Cambodia	France	1
	Capsicum frutescens	Malaysia	France	1
	Capsicum frutescens	Vietnam	France	27
	Capsicum frutescens	Vietnam	Germany	1
	Fortunella	South Africa	France	3
	Mangifera	Dominican Rep.	United Kingdom	1
	Mangifera	Pakistan	Switzerland	1
	Mangifera	Pakistan	United Kingdom	7
	Mangifera indica	Cameroon	Switzerland	1
	Mangifera indica	Colombia	France	1
	Mangifera indica	Côte d'Ivoire	France	4
	Mangifera indica	Equat	France	1
	Mangifora indica	India	United Kingdom	6
	Mangifera indica	lamaica	United Kingdom	2
	Mangifera indica	Moli	Eronoo	2
	Mangifera indica	Mali	Nothorlanda	3
	Mangifera indica	Nall	Franco	Z 1
	Mangifera indiaa	Pakistan	Chain	1
	Mangifera indica	Pakistan	Spain	1
	Mangliera Indica	Pakistan	Switzenand	1
	wangilera indica	Pakistan	United Kingdom	3
	wangilera indica	Senegal		1
	iviangitera indica	i nalland	rrance	1
	Mangifera Indica	Vietnam	France	1
	iviomoraica	Bangladesn	italy	
	Momordica	Bangladesh	United Kingdom	3
	Momordica	India	United Kingdom	1
	Momordica	Kenya	United Kingdom	1
	Momordica	Vietnam	Netherlands	1

Pest	Consignment Country of origin		in Destination	
Tephritidae (non-European)	Momordica charantia	Sri Lanka	France	1
,	Psidium	Egypt	United Kingdom	1
	Psidium guajava	India	Switzerland	1
	Psidium guajava	Sri Lanka	Switzerland	1
	Psidium guajava	Thailand	Netherlands	1
	Solanum melongena	Ghana	United Kingdom	1
	Syzygium	Thailand	United Kingdom	1
	Syzygium samarangense	Thailand	France	1
	Syzygium samarangense	Thailand	Netherlands	1
	Syzygium samarangense	Thailand	Switzerland	1
	Syzygium samarangense	Vietnam	Switzerland	2
	Ziziphus mauritiana	Thailand	France	2
Tephritidae (non-European), Thysanoptera (larvae)	Momordica charantia	Pakistan	Germany	1

• Wood

Pest	Consignment	Type of commodity	Country of origin	Destination	nb
Anoplophora glabripennis	Unspecified Unspecified	Wood packing material (crate) Wood packing material (pallet)	China China	Belgium Germany	1 3
Bostrichidae	Unspecified Unspecified	Wood packing material (pallet) Wood packing material (pallet)	India Sri Lanka	Germany Germany	11 1
Cerambycidae	Unspecified Unspecified Unspecified Unspecified	Wood packing material (pallet) Wood packing material (crate) Wood packing material Wood packing material	Belarus China China Portugal	Germany Belgium Germany Switzerland	1 1 2 1
Cerambycidae, Heterobostrychus, Sinoxylon	Unspecified	Wood packing material (crate)	Indonesia	Germany	1
Cerambycidae, Scolytidae	Diospyros	Wood and bark	Congo, Dem. Rep.	Spain	1
Coleoptera	Unspecified	Wood packing material (pallet)	India	Spain	1
Grub holes > 3 mm	Unspecified	Wood packing material	Pakistan	Germany	1
Heterobostrychus	Unspecified	Wood packing material (crate)	Sri Lanka	Germany	1
Heterobostrychus aequalis	Unspecified	Wood packing material	India	Germany	1
Insecta	Unspecified	Wood and bark	Indonesia	Spain	1
Lepidoptera, Siricidae	Quercus alba	Wood and bark	(USA)	Spain	1
Lyctus	Unspecified Unspecified	Wood packing material (pallet) Wood packing material	India Indonesia	Germany Germany	3 1
Monochamus galloprovincialis.	Unspecified	Wood packing material	Russia	Lithuania	1

galloprovincialis, Monochamus sator (?sutor ?sartor)

Pest	Consignment	Type of commodity	Country of origin	Destination	nb
Monochamus sutor	Unspecified	Dunnage	Russia	United Kingdom	1
Platypodidae, Scolytidae	Aucoumea klaineana Chlorophora excelsa	Wood and bark Wood and bark	Equatorial Guinea Central African Republic	Spain Spain	1 1
	Chlorophora excelsa Entandrophragma cylindricum	Wood and bark Wood and bark	Congo, Dem. Rep. Congo, Dem. Rep.	Spain Spain	1 1
	Khaya anthotheca Populus	Wood and bark Wood and bark	Congo, Dem. Rep. USA	Spain Spain	1 2
Sinoxylon	Unspecified Unspecified Unspecified Unspecified Unspecified Unspecified Unspecified	Wood packing material (pallet) Wood packing material (crate) Wood packing material (crate) Wood packing material (pallet) Wood packing material Wood packing material (pallet) Wood packing material (crate)	China India India India India Indonesia Sri Lanka	Germany Belgium Germany Netherlands Poland Germany Germany	2 4 61 2 1 2 1
Sinoxylon anale	Unspecified	Wood packing material (pallet)	India	Germany	1
Tenebrionidae	Juglans	Wood and bark	USA	Spain	1
Xyleborus	Unspecified	Wood packing material	India	Germany	1

• Bonsais

Pest	Consignment	Country of origin	Destination	nb
Criconematidae	Pinus parviflora	Japan	France	1
Cryphodera brinkmanii	Pinus pentaphylla	Japan	Germany	1
Helicotylenchus, Meloidogyne	Ficus microcarpa, Ligustrum, Zelkova carpinifolia	China	Italy	1
Pratylenchus	Juniperus chinensis	Japan	Germany	1
Tylenchorhynchus	Pinus parviflora	Japan	France	1

Source: EPPO Secretariat, 2011-11.

2011/251 Myriophyllum heterophyllum in Belgium and in the Netherlands

In Belgium, *Myriophyllum heterophyllum* (Haloragaceae, EPPO Alert List) was first recorded in 1993 and isolated populations are still occurring in freshwater habitats in the Kempen region (Limburg province).

In the Netherlands, *M. heterophyllum* was first recorded in 1997-1999 in a gravel pit (now transformed into a fish pond) near Arcen (Limburg). According to Bruinsma (2009), the species was initially recorded in canals in the Brabant and Limburg regions and is suspected to have arrived via the Meuse river (originating in France and flowing through Belgium and the Netherlands before draining into the North Sea). *M. heterophyllum* is now commonly found in the Netherlands in North Brabant, Utrecht, Gelderland, Drenthe and Groningen. A distribution map of *M. heterophyllum* in the Netherlands is available in the Q-Bank database.

In both countries, the species is exhibiting a high spread potential, and forms dense populations.

Source: Johan van Valkenburg, Plant Protection Service of the Netherlands, E-mail: j.l.c.h.van.valkenburg@minlnv.nl

Van der Meijden R, Holverda W J & Duistermaat H (1999) Nieuwe vondsten en zaldzame planten 1997, 1998 en 1999 [New records of rare plants in 1997, 1998 and 1999]. *Gorteria* **25**, 117-136.

Bruinsma J (2009) *Myriophyllum heterophyllum*. Werkgroep Aquatische Planten. 3 pp.

Invasive Species in Belgium (2011) *Myriophyllum heterophyllum*. http://ias.biodiversity.be/species/show/117

Q-Bank Invasive Plants in the Netherlands (2011) *Myriophyllum heterophyllum* http://www.q-bank.eu/Plants/BioloMICS.aspx?Table=Plants%20-%20Species&Rec=37&Fields=All

Additional key words: Invasive alien plant

Computer codes: MYPHE, BE, NL

2011/252 *Myriophyllum aquaticum* in the Netherlands

Myriophyllum aquaticum (Haloragaceae, EPPO List of Invasive Alien Plants) was first recorded in the Netherlands in the 1990s according to the National Database Flora and Fauna, although some herbarium vouchers, stored at Leiden, indicate an earlier presence of the species in the Netherlands. *M. aquaticum* is now widespread across the whole country.

Source: Johan van Valkenburg, Plant Protection Service of the Netherlands, E-mail: j.l.c.h.van.valkenburg@minlnv.nl

University of Amsterdam, National Database Flora and Fauna http://www.science.uva.nl/ibed/home.cfm/31A0354E-5168-487E-8FBE6738A56505F4

Q-Bank Invasive Plants in the Netherlands (2011) *Myriophyllum aquaticum* <u>http://www.q-bank.eu/Plants/BioloMICS.aspx?Link=T&TargetKey=491790000000500&Rec=63</u>

Additional key words: Invasive alien plant

Computer codes: MYPBR, NL

2011/253 First record of Hydrocotyle verticillata in Israel

During the field trip of the EPPO Panel on Invasive Alien Species held on 2010-05-05 in Israel, *Hydrocotyle verticillata* (Apiaceae) was observed growing profusely in the river Yarkon, near the city of Tel Aviv. This is the first record of this species in Israel. The identity of the species was confirmed by M. van Valkenburg from the Plant Protection Service of the Netherlands. *H. verticillata* probably escaped from a garden where it was present as an ornamental aquatic plant.

This species, originating from North America, is also recorded as present in Spain and in the United Kingdom. It is regulated in Japan and in Western Australia. A study about the species competitiveness has been conducted in New Zealand and concluded that it was unlikely that *H. verticillata* would become a significant weed under New Zealand conditions. It was found that *H. verticillata* was able to slowly spread and form monospecific mats, but it did not displace other species.

The behavior of this species could nevertheless be monitored in the EPPO countries where it is recorded.

Source: Tuvia Yaacoby, Plant Protection & Inspection Services, E-mail: <u>tobyy@moag.gov.il</u>

Johan van Valkenburg, Plant Protection Service of the Netherlands, E-mail: j.l.c.h.van.valkenburg@minlnv.nl

CABI Invasive Species Compendium http://www.cabi.org/isc/

Champion PD, Hofstra DE, Clayton JS(2007) Border control for potential aquatic weeds. Stage 3. Weed risk management. Science for Conservation 271. 41 pp.

http://www.doc.govt.nz/upload/documents/science-and-technical/sfc271.pdf

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

Sanz-Elorza M, Dana Sánchez ED, Sobrino Vesperinas E (2004) Atlas de las plantas aloctonas invasoras en España, Direccion General para la Biodiversidad, Madrid, Spain, 378 pp.

Additional key words: Invasive alien plant, new record

Computer codes: HYDVE, IL

2011/254 Publication of the proceedings of the 2nd Workshop on invasive alien plants in Mediterranean type regions of the world

The proceedings of the 2nd Workshop on invasive alien plants in Mediterranean type regions of the world held on 2010-08-02/06 in Trabzon (Turkey) are now available on the EPPO website.

This Workshop included 4 sections during which oral and poster presentations were made: Plant invasions in the Mediterranean: where do we stand?; early warning; communication, policies & strategies for tackling invasive alien plants; management of invasive alien plants. These 4 sections were followed by 3 concomitant thematic workshops which outcomes are also provided in the proceedings.

The proceedings of the Workshop are available from the EPPO website: http://archives.eppo.org/MEETINGS/2010_conferences/mediterranean_ias.htm

Source: EPPO Secretariat (2011-11).

Additional key words: Invasive alien plant

2011/255 Prioritization of potential invasive alien plants in France

Fried (2011) presents the results of a comparison between the outcomes of the EPPO Prioritization Process and the Weber & Gut risk assessment system when used on a selection of 303 alien species occurring in France to identify those that may represent a threat, or species absent in France but considered as invasive in neighboring countries.

Overall, both methods yielded similar results, although agricultural weeds are not taken into account by Webber & Gut. *Solidago canadensis* (Asteraceae, EPPO List of Invasive Alien Plants), *Acacia dealbata* (Fabaceae, EPPO List of IAP), *Baccharis halimifolia* (Asteraceae, EPPO List of IAP) and *Reynoutria japonica* (Polygonaceae, EPPO List of IAP) were identified among those species which presented the highest risk according to the Webber & Gut risk assessment system. These species are also considered invasive by the EPPO prioritization process, but they are already too widespread in France for preventive measures to be efficient (except *B. halimifolia*).

The advantage of the EPPO prioritization process is that it makes a clear distinction between species with high impact, and emergent invasive (or potentially invasive) species for which preventive action will be most cost effective in France, e.g. *Alternanthera philoxeroides* (Amaranthaceae, EPPO Alert List), *Eriochloa villosa* (Poaceae, EPPO List of IAP), *Humulus japonicus* (Cannabaceae, EPPO List of IAP), *Myriophyllum heterophyllum* (Haloragaceae, EPPO Alert List).

Sources: Brunel S, Branquart E, Fried G, van Valkenburg J, Brundu G, Starfinger U, Buholzer S, Uludag A, Joseffson M & Baker R (2010) The EPPO prioritization process for invasive alien plants. *Bulletin OEPP/EPPO Bulletin* 40, 407-422.

Fried G (2011) Prioritization of potential invasive alien plants in France. *Proceedings* of the 2nd International Workshop on Invasive Plants in the Mediterranean Type Regions of the World, 2010-08-02/06, Trabzon, Turkey, pp. 120-134. http://archives.eppo.org/MEETINGS/2010_conferences/ias_trabzon/Proceedings_Tr abzon_Workshop.pdf

Weber E, Gut D (2004) Assessing the risk of potentially invasive plant species in central Europe. *Journal for Nature Conservation* **3**, 171-179.

Additional key words: Invasive alien plant

Computer codes: ACADA, ALRPH, BACHA, ERBVI, HUMJA, MYPHE, POLCU, SOOCA, FR

2011/256 Latest findings on the biology of Verbesina encelioides in Morocco

Verbesina encelioides (Asteraceae, EPPO Alert List) has recently been introduced into Morocco where it has spread throughout the region of Agadir. Research has been carried out to better understand its biology under Moroccan conditions. Regarding its growth and development, *V. encelioides* completes its life cycle (from emergence to the maturity of first akenes) in 80 days. Seed production was abundant and continuous. The akenes of *V. encelioides* are able to germinate within a temperature range of 8°C to 35°C (optimum 15-25°C). The maximum emergence was recorded when seeds were buried in the soil at a depth of 1.5 cm (followed by 0, 2.5 cm and 3.5 cm). Below 7 cm burial depth, no emergence occurred.

Source: Taleb A, Bouhache M & El Mfadi B (2011) New species threatening the biodiversity in Morocco: Verbesina encelioides (Asteraceae). Proceedings of the 2nd International Workshop on Invasive Plants in the Mediterranean Type Regions of the World, 2010-

08-02/06, Trabzon, Turkey, pp. 156-167. http://archives.eppo.org/MEETINGS/2010_conferences/ias_trabzon/Proceedings_Tr abzon_Workshop.pdf

Additional key words: Invasive alien plant

Computer codes: VEEEE, MA

2011/257 Methodologies to increase public awareness about invasive alien plants in Portugal

Citizens can be responsible for the introduction and spread of invasive alien species (IAS) but, on the other hand, they can play a major role in helping to prevent and control IAS. Even though IAS and their consequences are recognised by the Portuguese law since 1999, a large proportion of the population is still unaware of biological invasions. To reduce this knowledge gap, the Portuguese research team on IAS has devoted a considerable effort to promote public awareness and engage the public on the topic of invasive alien plants. A web page was developed (Plantas invasoras em Portugal), field-work projects for university students, and training courses for professionals dealing with exotic plants and for teachers were organized. Printed documents about invasive plants in Portugal, including a field guide, a technical document about the identification and control of IAS, as well as bookmarks and postcards were produced. An evaluation of the effectiveness of these various approaches is being undertaken. In general, public awareness about IAS in Portugal is increasing, but further work is needed.

Source: Marchante E, Marchante H, Morais M & Freita H (2011) Combining methodologies to increase public awareness about invasive alien plants in Portugal. *Proceedings of the* 2nd International Workshop on Invasive Plants in the Mediterranean Type Regions of the World, 2010-08-02/06, Trabzon, Turkey, pp. 227-239. http://archives.eppo.org/MEETINGS/2010_conferences/ias_trabzon/Proceedings_Tr abzon_Workshop.pdf

Plantas invasoras em Portugal Website http://www1.ci.uc.pt/invasoras/

Additional key words: Invasive alien plant, communication