ORGANISATION EUROPEENNE
ET MEDITERRANEENNE
POUR LA PROTECTION DES PLANTES

EUROPEAN AND MEDITERRANEAN
PLANT PROTECTION
ORGANIZATION

EPPO Reporting Service

NO. 4 PARIS, 2011-04-01

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21 Bld Richard Lenoir
75011 Paris

Tel: 33 1 45 20 77 94
Fax: 33 1 70 76 65 47

E-mail: hq@eppo.fr
Web: www.eppo.org

2011/069 First report of *Maconellicoccus hirsutus* in Cyprus

The NPPO of Cyprus recently informed the EPPO Secretariat of the occurrence of *Maconellicoccus hirsutus* (Hemiptera: Pseudococcidae – EPPO A1 List) on its territory. This mealybug was found mainly on hibiscus plants (*Hibiscus rosa-sinensis*) in private gardens, and garden centres. It was also occasionally found on grapevine (*Vitis* spp.) and guava (*Psidium guavaja*). During surveys carried out in 2010, it was found that the pest occurs throughout the island. Phytosanitary measures will be taken to contain the pest.
The situation of *Maconellicoccus hirsutus* in Cyprus can be described as follows: **Present, first reported in 2010, widespread, under official control.**

Source: NPPO of Cyprus (2010-12).

Additional key words: new record **Computer codes:** PHENHI, CY

2011/070 Situation of *Bursaphelenchus xylophilus* in Portugal

In 1999, *Bursaphelenchus xylophilus* (EPPO A2 List) was first found in Portugal (EPPO RS 99/152) and since then it has been submitted to an eradication campaign (destruction of infested trees, intensive surveys and restrictions on the movements of pine trees, wood and wood products). The first outbreak of *B. xylophilus* was detected near Setubal but despite phytosanitary measures, the pest continued to spread to other regions of Portugal (in particular in the central part of Portugal near Coimbra and in the south of the Alentejo region). Since mid-2008, the whole territory of continental Portugal has been considered to be a demarcated area and is subject to an official action plan.
In November 2009, the first outbreak of *B. xylophilus* was detected on the island of Madeira. A manager of a golf course near Funchal observed declining pine trees and notified the NPPO. Since then, a rapid increase in the number of declining trees has been observed across the island. Surveys were conducted in Madeira and in April 2010 the results were presented as follows: out of a total of 538 tested samples (taken from 1387 pine trees), *B. xylophilus* was detected in 117 samples (taken from 362 trees) collected from the following localities: Funchal (51 samples), Machico (23), São Vicente (17), Santa Cruz (16), Santana (9), and Calheta (1).
The situation of *Bursaphelenchus xylophilus* in Portugal can be described as follows: **Present, several outbreaks reported in mainland Portugal (Centro, Lisboa e Vale do Tejo, Alentejo regions) and Madeira, under official control.**

Source: FVO (2010) Final report of a mission carried out in Portugal from 26 April to 07 May 2010 in order to evaluate the situation and control for *Bursaphelenchus xylophilus*. (no. 2010-8611), Food and Veterinary Office, DG(SANCO), European Commission, 28 pp. http://ec.europa.eu/food/fvo/rep_details_en.cfm?rep_id=2550

Anonymous (2009) Commission staff working document concerning the control of pine wood nematode in the forestry sector in the European Union. http://ec.europa.eu/food/plant/organisms/imports/roadmap_renewned_strategy_en.pdf

Additional key words: detailed record **Computer codes:** BURSXY, PT

2011/071 First report of *Tuta absoluta* in Greece

In Greece, the presence of *Tuta absoluta* (Lepidoptera: Gelechiidae) was detected for the first time in June 2009 in Crete. The pest was then identified in 5 geographically distant regions of Crete (Chania, Heraklion), Peloponnese (Achaea, Trifilia) and Western Greece (Preveza), both in glasshouse and field tomato crops. The distribution of *T. absoluta* in Greece is localized and scattered, suggesting multiple and simultaneous introductions rather than natural spread resulting from a single introduction.
The situation of *Tuta absoluta* in Greece can be described as follows: **Present, first found in 2009 in Crete, Peloponnese and Western Greece.**

Source: Roditakis E, D. Papachristos D, Roditakis NE (2010) Current status of the tomato leafminer *Tuta absoluta* in Greece. *Bulletin OEPP/EPPO Bulletin* **40**(2), 163-166.

Additional key words: new record **Computer codes:** GNORAB, GR

2011/072 First report of *Tuta absoluta* in Lithuania

Following the detection of *Tuta absoluta* (Lepidoptera: Gelechiidae – EPPO A2 List) in imported tomato fruits, surveys were conducted from July to September 2009 in Lithuania. Yellow sticky traps with synthetic sex pheromones were located in tomato glasshouses in different parts of the country. Several specimens (40 in total) of *T. absoluta* were caught at 3 sites: Pagiriai (Vilnius city, Vilnius county), Vidmantai (Kretinga district, Klaipėda county) and Naujosios Kietaviškės (Elektrėnai municipality, Vilnius county).
The situation of *Tuta absoluta* in Lithuania can be described as follows: **Present, detected for the first time in 2009 in 3 sites, on glasshouse tomatoes only.**

Source: Ostrauskas H, Ivinskis P (2010) Records of the tomato pinworm (*Tuta absoluta* (Meyrick, 1917)) – Lepidoptera: Gelechiidae – in Lithuania. *Acta Zoologica Lituanica* **20**(2), 151-155.

Additional key words: new record **Computer codes:** GNORAB, LT

2011/073 First report of *Tuta absoluta* in Iraq

In Iraq, tomato crops were surveyed for the presence of *Tuta absoluta* (Lepidoptera: Gelechiidae – EPPO A2 List) during autumn 2010. The pest was found near Rabia (Ninawa Governorate, northern part of the country neighbouring Syria). The situation of *Tuta absoluta* in Iraq can be described as follows: **Present, first found in autumn 2010 in Ninawa Governorate.**

Source: Abdul Razzak AS, Al-Yasiri II, Fadhil HQ (2010) First record of tomato borer (tomato moth) *Tuta absoluta* (Meyrick) (Lepidoptera: Gelechiidae) on tomato crop in Iraq, 2010. *Arab and Near East Plant Protection Newsletter* no. 51, p 31.

Additional key words: new record **Computer codes:** GNORAB, IQ

2011/074 *Tuta absoluta* detected in Trentino-Alto Adige region(IT)

The presence of *Tuta absoluta* (Lepidoptera: Gelechiidae – EPPO A2 List) has been detected in the Autonomous provinces of Trento and Bolzano (Trentino-Alto Adige region), Italy. During monitoring surveys, adult specimens were caught by pheromone traps in both indoor and outdoor tomato crops.
The situation of *Tuta absoluta* in Italy can be described as follows: **First found in spring 2008 in Southern Italy, now reported from Abruzzo, Basilicata, Calabria, Campania, Lazio, Liguria, Lombardia, Molise, Puglia, Sardegna, Sicilia, Trentino-Alto Adidge Umbria and Veneto; under official control.**

Source: NPPO of Italy (2010-10).

Additional key words: detailed record **Computer codes:** GNORAB, IT

2011/075 *Tuta absoluta* in the United Kingdom

In the United Kingdom, 11 and 2 outbreaks of *Tuta absoluta* (Lepidoptera: Gelechiidae – EPPO A2 List) were found in tomato crops in 2009 and 2010, respectively. Eradication measures are continuing.
The situation of *Tuta absoluta* in the United Kingdom can be described as follows: **Small numbers of outbreaks were reported in 2009 and 2010, under eradication.**

Source: NPPO of the United Kingdom (2010-07).

Additional key words: detailed record **Computer codes:** GNORAB, GB

2011/076 *Tuta absoluta* continues to spread around the Mediterranean Basin

According to the Information Network on *Tuta absoluta* (Internet forum) and personal communications, the pest continues to spread, in particular towards the Eastern part of the Mediterranean Basin. The presence of *T. absoluta* (Lepidoptera: Gelechiidae – EPPO A2 List) has been detected in the following countries, but most of these records have not been confirmed officially by NPPOs or published in the scientific literature.

Bahrain and Kuwait: the presence of *T. absoluta* is suspected in these two countries on the basis of symptoms observed on tomato crops.

Egypt and Jordan: articles published in the Egyptian and Jordanian newspapers have indicated that *T. absoluta* is widespread in these countries and causing severe economic losses in tomato crops.

Lebanon: according to discussions on the Internet forum, *T. absoluta* is causing problems in tomato crops.

Libya: it was declared in July 2009 that *T. absoluta* was captured in pheromone traps in 2 locations.

Saudi Arabia: sporadic infestations of *T. absoluta* have been detected in different parts of the country, in tomato crops in Tabuk (northwest of the country near Jordan), in tomato and potato crops in the northern region of Hail, and also in farms close to Medina (Al-Medina Al-Mounawara).

Sudan: in June 2010, *T. absoluta* was observed in greenhouse tomatoes (summer production) showing severe foliar symptoms in Khartoum State. From February to April 2011, the pest was detected in tomatoes (both protected and outdoor crops), as well as in aubergine and potato crops using the pheromone traps. This the first record of *T. absoluta* in Sudan.

Syria: specimens of *T. absoluta* have been caught in various locations. Leaf damage was observed on many farms in the regions of Banyas and Tartous.

Source: Almatni W (2010) Tomato leaf miner *Tuta absoluta* invades East Mediterranean countries. *Arab and Near East Plant Protection Newsletter* no. 50, p 29.

INTERNET (last accessed April 2011)
Tuta absoluta – Information Network. www.tutaabsoluta.com

Personal communication with Dr Ensaf S.I. Mohamed, Agricultural Research Corporation, Shambat Research Station Khartoum North, Sudan (2011-04)

Additional key words: new records **Computer codes:** GNORAB

2011/077 EPPO/IOBC/FAO/NEPPO Joint International Symposium on management of *Tuta absoluta* (Agadir, Morocco, 2011-11-16/18)

The joint EPPO/IOBC/FAO/NEPPO symposium on management of *Tuta absoluta* (Lepidoptera: Gelechiidae) will be held on November 16-18, 2011 in Agadir, Morocco. The Symposium is organized in collaboration with IRAC (Insecticide Resistance Action Committee) and IBMA (International Biocontrol Manufacturers Association). The aim of this symposium is to provide a common forum for researchers, regulatory authorities, experts from extension services or advisory bodies, and the crop protection industry, to share their knowledge in pest biology, phytosanitary measures, control measures, particularly biological control and insecticide resistance; to identify gaps in knowledge and research needs in order to avoid duplication of work.

More information about the meeting venue, main topics, accommodation and registration (deadline for registration is the end of May) can be found on the EPPO webpage: http://archives.eppo.org/MEETINGS/2011_conferences/tuta_absoluta.htm

Source: EPPO Secretariat (2011-04)

Additional key words: conferences **Computer codes:** GNORAB, MA

2011/078 First record of *Epitrix similaris* in Galicia, Spain

The presence of *Epitrix similaris* (Coleoptera: Chrysomelidae –EPPO A2 List) in Galicia (Spain) was first reported in a paper by Boavida and Germain (2009). As a consequence, the competent authorities of the Autonomous Community of Galicia initiated an intensive survey to verify the situation in Galicia. As a result, *E. similaris* was found in several potato (*Solanum tuberosum*) plots located in different parts of Galicia. Concerning damage, small holes were detected in leaves (this may reduce photosynthesis and affect the final crop yield). Small galleries and warts were also observed on the surface of affected potato tubers. Several measures are being taken to control the pest, including preventive measures (e.g. destruction of affected plant waste, crop rotation in infested fields), and chemical treatments. A fact sheet providing information about the pest is also available (in Spanish) on the official website of the Autonomous Community of Galicia.

Source: NPPO of Spain (2010-12)

Boavida C, Germain JF (2009) Identification and pest status of two exotic flea beetle species newly introduced in Portugal: *Epitrix similaris* Gentner and *Epitrix cucumeris* (Harris). *Bulletin OEPP/EPPO Bulletin* **29**(3), 501-508.

Deputación Pontevedra. Estación Fitopatolóxica do Areeiro. *Epitrix similaris* Gentner. Pulguilla de la patata. http://www.efa-dip.org/comun/publicaciones/FTecnicas/Download/Ficha54_Epitrix.pdf

Additional key words: new record **Computer codes:** EPIXSI, ES

2011/079 Situation of *Dacus ciliatus* in Israel

The presence of *Dacus ciliatus* (Diptera: Tephritidae – EPPO A1 List) in Israel was first reported in 1996 (EPPO RS 96/065) when a local outbreak was discovered at Neot Smadar in the Arava valley. According to the NPPO of Israel, the pest is still present there.
The pest status of *Dacus ciliatus* in Israel is officially declared as: **Present, in Arava area, distribution under surveillance.**

Source: NPPO of Israel (2010-12).

Additional key words: detailed record, **Computer codes:** DACUCI, IL

2011/080 Update on the situation of *Drosophila suzukii* in France

The presence of *Drosophila suzukii* (Diptera: Tephritidae - EPPO Alert List) in France was first reported in spring 2010 (EPPO RS 2010/11). Official surveys carried out in 2010 have confirmed the presence of the pest in the following regions on various fruit crops:

- Aquitaine (strawberry)
- Corse (apple, apricot, cherry, peach and nectarine, plum, strawberry)
- Languedoc-Roussillon (apple, cherry, grapevine, peach, plum, tomato, walnut)
- Midi-Pyrénées (cherry, kiwi, nectarine, plum)
- Provence-Alpes-Côte d'Azur (apricot, cherry, grapevine, peach, raspberry, strawberry, tomato)
- Rhône-Alpes (apple, apricot, cherry, nectarine, raspberry, red currant, strawberry)

It is considered that *D. suzukii* probably occurs in a large part of Southern France, but for the moment it has mainly been caught around the Mediterranean Basin and the Rhône valley. Although, unusual damage has been observed in numerous cases on cherry, strawberry, peach and apricot, it has not always been possible to confirm the identity of the pest by rearing larvae to the adult stage. Similarly to reports in other countries, observations made in France showed that *D. suzukii* is particularly attracted by small fruits (cherries and other berries). However, the pest has also been caught in significant numbers on peaches, apricots, plums and tomatoes and to a lesser extent on nectarines, apples, grapes and kiwis.
The situation of *Drosophila suzukii* in France can be described as follows: **Present, first detected in spring 2010, it occurs in Aquitaine, Corse, Languedoc-Roussillon, Midi-Pyrénées, Provence-Alpes-Côte d'Azur, and Rhône-Alpes.**

Source: NPPO of France (2010-12).

Additional key words: detailed record **Computer codes:** DROSSU; FR

2011/081 *Trogoderma granarium* does not occur in Austria

As already stated in EPPO RS 2001/131, *Trogoderma granarium* (Coleoptera: Dermestidae – EPPO A2 List) does not occur in Austria. The NPPO of Austria recently confirmed that the situation has not changed. In 1953, 1 living specimen of *T. granarium* was detected in a consignment of imported grain in a storage facility near Wien (Faber, 1953). Since 1953, the pest has never been reported again from Austria. A national survey was carried out in 2009/2010 in Austrian mills and storage facilities and did not detect the pest.
The pest status of *Trogoderma granarium* in Austria is officially declared as: **Absent, intercepted only.**

Source: NPPO of Austria (2011-03).

Faber W (1953) [Khapra beetle: a new storage pest for Austria]. *Der Pflanzenarzt* **6**(11), 1-2 (in German).

Additional key words: absence **Computer codes:** TROGGA, AT

2011/082 New pest records in EPPO member countries

The following pests have recently been reported in some EPPO member countries.

INSECTS

- ***Neuroterus saliens* (Hymenoptera: Cynipidae) found in the Netherlands**

The NPPO of the Netherlands informed the EPPO Secretariat of the first report of an oak cynipid *Neuroterus saliens* (Hymenoptera: Cynipidae) on its territory. *N. saliens* was found in 2008 on *Quercus cerris* in public green in the South of Limburg. The main host plant of *N. saliens* is *Quercus cerris* but other oak species are mentioned as hosts in the literature (e.g. *Q. robur, Q. brantii*). The insect has two alternating generations: a spring generation (with both males and females) developing inside young acorns in separated chambers or on leaf buds (causing galls which resemble a sea anemone), and an autumn generation (with

females only) developing in 3-4 mm elongated galls on the mid-veins on the underside of the leaves. Pictures of the galls can be viewed on the Internet:
http://www.hainaultforest.co.uk/3Oak%20galls.htm
http://people.zeelandnet.nl/grada/gallen/W-Eik.shtml
Studies in Hungary have showed that *N. saliens* could reduce the production of viable *Q. cerris* acorns, as attacked acorns stop their development and fall prematurely. However, *N saliens* is generally not considered as a major pest of oaks in forests. Although data is lacking on its detailed geographical distribution, *N. saliens* occurs in approximately the same areas as its main host *Q. cerris* (Mediterranean Basin and Central Europe). According to Stone *et al*. (2002), *Q. cerris* has been intensively planted north and west of its native range over the past 400 years, and as a consequence several cynipid species, including *N. saliens*, have subsequently invaded Northwestern Europe. Because *N. saliens* already occurs in Europe without causing economic damage and has the potential to spread naturally, no phytosanitary measures were taken in the Netherlands.
The pest status of *Neuroterus saliens* in the Netherlands is officially declared as: **Present, at low prevalence.**

- ***Otiorhynchus armatus* (Coleoptera: Curculionidae) found in the Netherlands**

In August 2010, the NPPO of the Netherlands reported the occurrence of *Otiorhynchus armatus* (strawberry root weevil) on *Ligustrum* and *Eriobotrya japonica* in 1 nursery. The origin of this finding is unknown but *O. armatus* may have been introduced with planting material imported from Southern Europe where the pest occurs. *O. armatus* is polyphagous and causes the same feeding damage on leaves and roots as other *Otiorhynchus* species. *O. armatus* occurs in Europe (Belgium, Croatia, France, Germany, Greece, Italy, Sweden (under glasshouse), Switzerland) and Piry *et al*. (1999) mention its presence in Mongolia and the Near East.

- ***Phenacoccus solenopsis* (Hemiptera: Pseudococcidae) found in Cyprus**

The NPPO of Cyprus recently reported the presence of *Phenacoccus solenopsis* (solenopsis or cotton mealybug) on its territory. This mealybug was found mainly in private gardens on ornamental plants such as *Hibiscus rosa-sinensis, Lantana,* and *Chrysanthemum*. It was also occasionally found on okra (*Abelmoschus esculentus*), grapevine (*Vitis* spp.) and solanaceous ornamentals. The NPPO of Cyprus will take phytosanitary measures to contain the pest. *P. solenopsis* is a highly polyphagous species which is considered as an invasive pest of cotton in China, India and Pakistan. A tentative distribution list is presented below:
EPPO region: Cyprus, Egypt.
Asia: China (Guangxi, Guangdong, Zhejiang), India (Gujarat, Haryana, Karnataka, Maharashtra, Punjab), Pakistan.
Africa: Egypt, Nigeria.
North America: Mexico, USA (Arizona, California, Florida, District of Columbia, Michigan, Mississippi, New Mexico, Texas).
Central America and the Caribbean: Cuba, Dominican Republic, Ecuador, Panama.
South America: Brazil, Chile, Colombia.
Oceania: Australia (Queensland).

- ***Protopulvinaria pyriformis* (Hemiptera: Coccidae) found in Sicilia (IT)**

The NPPO of Italy reported in 2010 the occurrence of *Protopulvinaria pyriformis* in Sicilia. This scale insect was found in citrus orchards in the Ionian coast of the island. On the mainland, it has also been found in Liguria (Pellizzari and Sacco, 2010). *P. pyriformis* is a polyphagous species which can be a serious pest of fruit trees (in particular of avocado (*Persea americana*)), and of ornamental plants. It is recorded in North and South America,

Asia, Africa and the Mediterranean region (e.g. France, Greece (including Crete), Israel, and Spain).

- ***Tropidosteptes pacificus* (Hemiptera: Miridae) found in the Netherlands**

As a result of monitoring activities, the NPPO of the Netherlands reported in April 2010, the occurrence of *Tropidosteptes pacificus* (Heteroptera: Miridae) on *Fraxinus excelsior* in a public green area (province of Noord-Brabant). This was also the first record of this North American bug in Europe. *T. pacificus* mainly feeds on ash trees (*F. latifolia, F. velutina, F. pennsylvanica, F. excelsior*), although there are some reports on *Acer* and *Populus*. This bug can cause damage on buds, leaves, seeds and young twigs, which may lead to early defoliation. *T. pacificus* is known to occur in Canada and the USA. The origin of its introduction into the Netherlands is not known. The most probable pathway is the import of infested ash trees from North America. No phytosanitary measures were taken.
The pest status of *Tropidosteptes pacificus* in the Netherlands is officially declared as: **Present, limited distribution in public green area.**

- ***Umbonia crassicornis* (Hemiptera: Membracidae) found in the Netherlands**

In June 2010, the NPPO of the Netherlands reported the occurrence of *Umbonia crassicornis* on its territory. This showy 'thorn bug' (pictures can be viewed on the Internet, e.g. http://bugguide.net/node/view/4387) was found on *Dracaena marginata* grown in a greenhouse. This insect occurs in South America and Southern USA, and can feed on various ornamental trees and shrubs (e.g. *Acacia, Albizzia, Cassia, Calliandra, Jacaranda, Hibiscus*). It is considered that *U. crassicornis* has probably been introduced with plants for planting from Florida (US) or Costa Rica. Since this insect is a minor pest that is not able to survive outdoors in the Netherlands, no phytosanitary measures were taken.
The pest status of *Umbonia crassicornis* in the Netherlands is officially declared as: **Present, isolated finding on *Dracaena marginata* in greenhouse.**

PATHOGENS

- ***Drechslera cactivora* found in Israel on Cactaceae**

The NPPO of Israel declared that *Drechslera cactivora* has been found on its territory on pitaya (*Hylocereus* spp., Cactaceae). According to the CMI description of Fungi and Bacteria no. 1008 (CABI, 1990), *D. cactivora* is a weak parasite attacking cacti in favourable conditions which does not cause a very important disease. It has been reported in America and Europe (without any further details).
The pest status of *Drechslera cactivora* in Israel is officially declared as: **Present, only in some areas where host crop is grown.**

- ***Pilidiella (Coniella) granati* (pomegranate fruit rot) found in Israel**

The NPPO of Israel reported that *Pilidiella (Coniella) granati* has been found in pomegranates (*Punica granatum*) in a storage house. A survey is being carried out to discover the source of this infection. This fungus has been reported from different regions of the world, causing decay of pomegranate fruits in the orchard or during storage. A tentative distribution list is presented below.
Asia: India (Himachal Pradesh, Rajasthan), Korea Republic, Pakistan.
Africa: Kenya.
EPPO region: Cyprus, Greece, Spain, Turkey.
Americas: Brazil, USA.

- ***Puccinia argentata* (Impatiens rust) on *Impatiens* spp. found in the Netherlands**

In September 2010, the NPPO of the Netherlands reported the first finding of *Puccinia argentata* (*Puccinia impatientis*) in *Impatiens* spp. on its territory. This fungus develops uredospores and teleutospores on *Impatiens* (Balsaminaceae), and aecidiospores and spermogonia on *Adoxa moschatellina* (Adoxaceae). *P. argentata* is reported from different continents [North America, Asia, Europe (e.g. Austria, Belgium, Denmark, Germany, and Norway.)] but does not cause significant damage.
The pest status of *Puccinia argentata* in the Netherlands is officially declared as: **Present**.

- ***Plantago asiatica mosaic virus* (*Potexvirus*, PlAMV) found on *Lilium* spp. in the Netherlands**

In July 2010, the NPPO of the Netherlands reported the first finding of *Plantago asiatica mosaic virus* (PlAMV) on its territory. This virus was detected in *Lilium* spp. (Oriental types) showing severe necrotic symptoms on leaves. The virus was first detected in glasshouses producing lily flowers and then in open fields producing bulbs. Leaves of affected *Lilium* plants showed rust-coloured veins followed by necrotic lesions. In affected glasshouses, losses up to 80% were reported whereas in the outdoor flower bulb production no severe damage or crop loss was observed. The host plants of PlAMV are: *Lilium* spp., *Nandina domestica*, *Plantago asiatica* and *Primula* spp. This virus has been reported in Japan, Russia and the USA and possibly occurs in Chile, New Zealand and the Republic of Korea.
The origin of the virus is unknown but it is suspected that infected plant material (or plant tissue culture) is the main pathway for introducing and disseminating PlAMV. Little information is available on the disease epidemiology but because PlAMV is a *Potexvirus*, it might be mechanically transmitted. The lily production industry has initiated an action plan, including prophylactic measures and testing procedures for mother bulbs, to eradicate the virus from breeding and propagation systems. No official phytosanitary measures will be taken against PlAMV but specific surveys will be carried out to determine its pest status in the Netherlands.

Source: Aukema B, Schwartz MD, Den Bieman K (2009) *Tropidosteptes pacificus* (Van Duzee, 1921), another Nearctic mirid in Europe (Hemiptera: Heteroptera: Miridae: Mirinae). *Zootaxa* 2135, 65-68.

Hirka A, Csóka G (2006) Direct effects of carpophagous insects on the germination ability and early abscission of oak acorns. *Acta Silvatica et Lignaria Hungarica* **2**, 57-58.

Internet (last accessed 2011-03)
Anonymous (2009) Nederlandse Plantengallenwerkgroep – Nieuwsbrief No. 1 2009, 12 februari, 6 pp.
http://www.plantengallen.com/datanederlands/Nieuwsbrief%20Gallenwerkgroep%202009%20feb.pdf
Waarneming.nl. Zeeanemonngalwesp – *Neuroterus saliens*.
http://waarneming.nl/soort/maps/29066?from=2007-07-18&to=2009-07-18

Nazemi J, Talebi AA, Sadeghi SE, Melika G, Lozan A (2008) Species richness of oak gall wasps (Hymenoptera: Cynipidae) and identification of associated inquilines and parasitoids on two oak species in western Iran. *North-Western Journal of Zoology* **4**(2), 189-202.

NPPO of Cyprus (2010-12).

NPPO of Israel (2010-12).

NPPO of Italy (2010-11).

NPPO of the Netherlands (2009-06, 2010-04, 2010-06, 2010-10).

Pellizzari G, Sacco M (2010) [The scale insects of ornamental plants in Liguria region (Italy)]. *Protezione delle Colture* **4**, 27-36 (in Italian).

Piry S, Gompel N, Allemand R (1999) Acclimatation dans le sud de la France *d'Otiorhynchus* (*Dorymerus*) *armatus* Boheman, 1843 (Coleoptera, Curculionidae). *Bulletin de la Société entomologique de France* **104**(5), 455-457.

Stone GN, Schönrogge K, Atkinson RJ, Bellido D, Pujade-Villar J (2002) The population biology of oak gall wasps (Hymenoptera: Cynipidae). *Annual Review of Entomology* **47**, 633-668.

Vacante V (2010) Review of the phytophagous mites collected on citrus in the world. *Acarologia* **50**(2), 221-241.

Additional key words: new record

Computer codes: CONLGR, DRECCA, NEUTSP, NEOBSP, OTIOAA, PHENSO, PROPPY, PUCCSP, CY, IL,IT, NL

2011/083 Situation of several quarantine pests in Lithuania in 2009

The NPPO of Lithuania has informed the EPPO Secretariat of the results of national surveys conducted in 2009 on several quarantine pests. The pest status officially declared by the NPPO is indicated in bold. Results of earlier surveys were presented in EPPO RS 2005/075.

Anoplophora chinensis (EPPO A2 List)
In October 2008, the presence of *A. chinensis* was detected in *Acer* trees which had been imported from Japan to establish a Japanese garden near Klaipeda (see EPPO RS 2008/193). Emergency measures were taken and all potential host plants (68 plants in total) were removed and burned. Phytosanitary measures were taken in accordance with Commission Decision 2008/840/EC. In April 2009, inspections were carried out in the demarcated area and *A. chinensis* was not detected. **No longer found, first found in 2008, under intensive official control for the next 3 years.**

Clavibacter michiganensis* subsp. *sepedonicus (EPPO A2 List)
In 2009, 38 ware potato farms were found infected by *C. michiganensis* subsp. *sepedonicus*. Ring rot was not detected in seed potato production. 48 samples of ware potatoes (21 cultivars) tested positive: 2 samples were taken from potato fields and all others (46) were taken from storage. Phytosanitary measures were applied in accordance with Council Directive 2006/56/EEC. All infected potatoes were destroyed and potentially contaminated potatoes were used for animal feed (after steaming) or human consumption. **Present, found in 38 ware potato farms, eradicated, under official control for the next 4 years.**

Diaporthe vaccinii (EPPO A2 List)
In recent year, *D. vaccinii* has been detected in Lithuania on *Vaccinium* plants (see EPPO RS 2004/085 and 2006/144). In 2009, inspections were carried out on 26 farms growing *Vaccinium* spp. plants and on 44 sites in natural habitats. In total, 49 samples were collected and tested in the laboratory. All results were negative. **No longer found, first found in 2003 in some localities, under official control for the next 3 years.**

Didymella ligulicola (EPPO A2 List)
An outbreak of *D. ligulicola* was found for the first time in Lithuania. Symptomatic samples of chrysanthemum were collected in summer and autumn 2009. *D. ligulicola* was detected at 1 location in the region of Kaunas. All infected material and other potential host plants

located in the immediate vicinity were destroyed (land burial). **Present, found in 1 location in Kaunas region, eradicated, under official control.**

Ditylenchus destructor (EU Annexes)
Outbreaks of *D. destructor* were detected in 2 seed potato farms. 30 tonnes of potatoes were found infested and subsequently destroyed. **Present found in few areas (2 seed potato farms), eradicated, under official control.**

Erwinia amylovora (EPPO A2 List)
During the annual survey on fireblight, only 1 sample was found positive. *E. amylovora* was detected in Kaunas region on old *Crataegus* plants in a private property. *Pyrus, Sorbus*, and many *Crataegus* plants growing in the immediate vicinity were destroyed. The possible source of this infestation remains unknown. This outbreak site was located within the buffer zone already delimited in 2007. **Present, found in Kaunas region, eradicated, under official control for the next 2 years.**

Globodera rostochiensis (EPPO A2 List)
In 2009, samples were collected from 9 seed potato and 567 ware potato farms, and 110 outbreaks of *G. rostochiensis* were detected. **Present, found in some areas (110 outbreaks), under official control.**

Plum pox virus (*Potyvirus*, PPV - EPPO A2 List)
In 2009, one outbreak of PPV was identified in Kaunas region. All infected trees and those growing in their immediate vicinity were destroyed. **Present, found in 1 outbreak, eradicated, under official control for the next 3 years.**

Puccinia horiana (EPPO A2 List)
P. horiana was found in 1 glasshouse on chrysanthemum plants grown for flower production. All infected plants were removed. **Present, found in 1 glasshouse, eradicated, under official control.**

Source: NPPO of Lithuania (2010-06).

Additional key words: new record, detailed record, eradication

Computer codes: ANOLCN, CORBSE, DIAPVA, DITYDE, ERWIAM, HETDRO, MYCOLG, PPV000, PUCCHN, LT

2011/084 First report of *Mycosphaerella pini* in Lithuania

In recent years, premature death and defoliation of pine trees have been noticed in some forests of Lithuania. During autumn 2008, samples of infected needles of *Pinus* spp. were collected from different parts of the country. The presence of *Dothistroma septosporum* (anamorph of *Mycospherella pini* – EU Annexes) was observed in diseased needles of *Pinus sylvestris*. It is noted that in 2002, *D. septosporum* had been found once in a private garden on a small plantation of *Pinus mugo* (20-year old trees) but could not be detected afterwards. Results of the present study showed that *D. septosporum* was widely present in *P. sylvestris* in eastern, central and southern parts of Lithuania. Inspections found that 20 % to 50 % of the juvenile pine trees (5-20 years old) were infected by *D. septosporum*. Although the disease is not yet causing significant ecological or economic losses, it was noticed that in some cases, defoliation reached more than 50%. It is hypothetized that *D. septosporum* is of recent introduction in Lithuania and that its rapid spread may have been favoured by warmer winters.

The situation of *Mycosphaerella pini* in Lithuania can be described as follows: **Present, confirmed in 2008, widely present in pine forests (*Pinus sylvestris)* in eastern, central and southern parts of Lithuania.**

Source: Markovskaja S, Treigienė A (2009) New data on invasive pathogenic fungus *Dothistroma septosporum* in Lithuania. *Botanica Lithuanica* **15**(1), 41-45.

Additional key words: new record **Computer codes:** SCIRPI, LT

2011/085 First report of *Plasmopara halstedii* in the United Kingdom

The NPPO of the United Kingdom informed the EPPO Secretariat of the first report of *Plasmopara halstedii* (EU Annexes) on its territory. In October 2010, an outbreak was detected in a 5 ha field of *Helianthus annuus* cv. 'Galilee Adami' in Spalding, Lincolnshire. This infested sunflower crop had been grown from imported seeds whose origin could not be fully traced back. The infested plot was destroyed by ploughing in and planting of sunflowers has been prohibited for 10 years due to the long term survival of the pathogen in the soil. Investigations are continuing to trace back the origin of the imported seeds and determine if other crops have been grown from the same seed stock.
The pest status of *Plasmopara halstedii* in the United Kingdom is officially declared as: **Transient: actionable, under eradication.**

Source: NPPO of the United Kingdom (2010-10).

Additional key words: new record **Computer codes:** PLASHA, GB

2011/086 First report of *Plum pox virus* in Japan

In spring 2009, *Plum pox virus* (*Potyvirus*, PPV – EPPO A2 List) was detected for the first time in Japan. Symptomatic trees (ringspots on leaves, flower breaking) were observed in Japanese apricot orchards (*Prunus mume*) in Ome City (Prefecture of Tokyo) and the virus was detected in petal samples collected from these orchards. The Ministry of Agriculture, Forestry and Fisheries and prefectural governments conducted a nationwide detection survey for PPV in 2009. PPV was only found in *P. mume* in the following prefectures:

- Tokyo (several orchards in the cities/towns of Ome, Akiruno, Hachioji, Hinode and Okutama)
- Ibaraki (1 orchard in the city of Mito)
- Kanagawa (1 orchard in the city of Odawara),

Eradication measures are being implemented (e.g. destruction of all infested trees, prohibition to move host plant material from demarcated areas). Surveys on PPV are continuing in Japan.
The pest status of *Plum pox virus* in Japan is officially declared as: **Present, under eradication.**

Source: NPPO of Japan (2010-02). Official pest report.
http://www.pps.go.jp/english/pestreport/index.html

Additional key words: new record **Computer codes:** PPV000, JP

2011/087 *Tobacco ringspot virus* detected on *Phlox subulata* in the Netherlands

During a regular survey, *Tobacco ringspot virus* (*Nepovirus*, TRSV - EPPO A2 List) was found in the Netherlands on *Phlox subulata*. In February 2010, TRSV was detected (DAS-ELISA, biological tests) in asymptomatic samples of *P. subulata* cv. 'Alexander's Surprise' in 1 production site (glasshouse) in Boskoop. Planting material of this cultivar had been delivered by a Dutch nursery located in Voorhout. 11 samples were taken from the nuclear stock of cv. 'Alexander's Surprise' and were all found to be infected by TRSV. According to delivery notes, this nursery had not exported cuttings of this cultivar to other countries but only to 11 Dutch production sites where investigations were conducted. Later in 2010, another finding was made in a different cultivar, *P. subulata* cv. 'Temiskaming' in another location. The infected lot had been produced from nuclear stock originally obtained from another nursery. This new finding indicates that TRSV has probably occurred on some cultivars of *P. subulata* for a longer period in the Netherlands because this nuclear stock material has been used for many years.
The main vector of TRSV is the nematode *Xiphinema americanum* which does not occur in the Netherlands, vegetative propagation is thus considered to be the most probable pathway for spreading TSRV in the Netherlands. Eradication measures are being taken in all infested or potentially infested sites. In particular, a compulsory testing protocol will be initiated on propagation material, and all infected lots of nuclear stock plants will be destroyed. Eradication efforts will be targeted at cultivars 'Alexander's Surprise' and 'Temiskaming', but depending on the results they may be extended to other *Phlox* cultivars or other plant genera. It is finally noted that these findings on *Phlox* are not related to earlier outbreaks of TRSV on *Iris* and *Hemerocallis* which have been eradicated (see EPPO RS 2009/033). The pest status of *Tobacco ringspot virus* in the Netherlands is officially declared as: **Transient on *Phlox subulata* cvs. 'Alexander's Surprise' and 'Temiskaming', under eradication.**

Source: NPPO of the Netherlands (2010-03, 2010-10).

Website of the Dutch Food and Consumer Product Safety Authority - Pest reports.
http://www.vwa.nl/onderwerpen/english/dossier/pest-reporting/pest-reports

Additional key words: detailed record **Computer codes:** TRSV00, NL

2011/088 New data on quarantine pests and pests of the EPPO Alert List

By searching through the literature, the EPPO Secretariat has extracted the following new data concerning quarantine pests and pests included on the EPPO Alert List. The situation of the pest concerned is indicated in bold, using the terms of ISPM no. 8.

- **New records**

Two new eucalyptus gall wasps have been detected on the foliage of *Eucalyptus camaldulensis* in Tunisia. *Leptocybe invasa* (Hymenoptera: Eulophidae – formerly EPPO Alert List) and *Ophelimus maskelli* (Hymenoptera: Eulophidae) were recorded for the first time in 2004 and 2006, respectively. The authors noted that more precautions should be taken when exchanging eucalyptus plants for planting and that research should also be carried out to identify resistant or tolerant eucalyptus species (Dhahri *et al.*, 2010). **Present, no details.**

Cacoecimorpha pronubana (Lepidoptera: Tortricidae – EPPO A2 List) has been observed in a garden centre near Budapest (Hungary). Larvae were feeding on the foliage of container plants of Japanese willow (*Salix integra* cv. 'Hakuro Nishiki') which had been imported from Italy. Adult moths of *C. pronubana* have also been observed flying in a fruit and vegetable shop in Budapest. This is the first time that *C. pronubana* is reported from Hungary (Bodor & Szabóky, 2011). **Present, detected once in a garden centre near Budapest.**

Drosophila suzukii (Diptera: Drosophilidae – EPPO Alert List) occurs in North Korea, Pakistan and Taiwan (Calabria *et al.*, 2010). **Present, no details.**

During inventory studies carried in the coastal and sub-coastal areas of Algeria, *Frankliniella occidentalis* (Thysanoptera: Thripidae – EPPO A2 List) has been collected from roses, *Cucurbita pepo* and *Cucumis sativus*. This is the first time that *F. occidentalis* is reported from Algeria (Benmessaoud-Boukhalfa *et al.*, 2010). **Present, no details**.

The presence of Black Sigatoka caused by *Mycosphaerella fijiensis* in Martinique is officially confirmed by the French NPPO. M. *fijiensis* was identified on 2010-09-22 in a banana plantation. It is suspected that spores of the fungus have been spread by strong winds from other Caribbean islands where the disease occurs. This is the first record of *M. fijiensis* in Martinique where an early detection and monitoring programme has been carried out for the last 3 years. A control strategy is being developed against the disease (NPPO of France, 2010). **Present, no details.**

Opogona sacchari (Lepidoptera: Tineidae – EPPO A2 List) occurs in Japan. It was first detected in 1986 on *Dracaena* at the Moji Plant Protection Station (Kyushu). In 1999, it was also found in Chichi-Jima (Ogasawara Archipelago). Other reports have then been made in other localities (Prefectures of Chiba, Fukuoka, Gifu, Ibaraki, Kochi, Kumamoto, Nara, Niigata, Ogasawara, Okinawa, Tokyo), mainly from the warm regions of Honshu, Shikoku, Kyushu and the Ryukyu Islands (Yoshimatsu *et al.*, 2004). **Present, found in several localities in Southern Japan.**

- **Detailed records**

Blueberry scorch virus (*Carlavirus*, BlScV – EPPO A2 List) occurs in Michigan (US). In 2009, BlScV was first found in several commercial fields in the western part of Michigan, and all infested plants were destroyed. In 2010, infected plants were detected in fields adjacent to the infected areas found in 2009, eradication measures were applied again (Michigan State University website, 2010).

Chrysomphalus aonidum (Hemiptera: Diaspididae) has been found again in Calabria region, Italy (see also EPPO RS 2010/012). The pest was found on ornamental plants (*Camellia* spp.) in several companies in the municipality of Lamezia Terme (province of Catanzaro). Surveys have been intensified in this area to determine the extent of this infestation and take appropriate control measures (NPPO of Italy, 2010-11).

In the USA, *Drosophila suzukii* (Diptera: Drosophilidae – EPPO Alert List) has recently been reported in Michigan and Wisconsin (Stocks, 2011).

As reported in EPPO RS 2007/156, *Globodera rostochiensis* (EPPO A2 List) was detected in Québec (CA) in August 2006. The pest was found in the municipality of Saint-Amable, as

well as in portions of nearby municipalities (Sainte-Julie, Saint-Marc-sur-Richelieu and Saint-Mathieu-de-Beloeil). Further studies have recently been carried out to determine the pathotype(s) present in the Saint-Amable regulated area. Results showed that the pathotype of *G. rostochiensis* collected from all infested fields was Ro1 (Mahran *et al.*, 2010).

In spring 2010, *Impatiens necrotic spot virus* (*Tospovirus*, INSV – EPPO A2 List) was detected in greenhouse-grown potatoes (*Solanum tuberosum* cv. 'Atlantic') in Washington State (US). These potato plants had been grown from pre-nuclear minitubers. The original source of the INSV inoculum remains unknown (Crosslin & Hamlin, 2010).

In June 2010, symptoms of *Iris yellow spot virus* (*Tospovirus*, IYSV –EPPO Alert List) were observed on onion crops (*Allium cepa* cv. 'Linda Vista') on the Island of Maui, Hawaii (US). Laboratory analysis confirmed the presence of IYSV. So far, IYSV has not been detected on other islands (Kauai, Oahu, Molokai or Hawaii) but its distribution and economic consequences on the onion production of Hawaii are under investigation (Sether *et al.*, 2010).

In 2010, *Iris yellow spot virus* (*Tospovirus*, IYSV –EPPO Alert List) was reported from the Piemonte region, Italy (NPPO, 2010-09).

Potato mop-top virus (*Pomovirus*, PMTV) was detected for the first time in spring 2010 in North Dakota (US). PMTV was detected on samples of potato tubers (*Solanum tuberosum* cv. 'Russet Burbank') collected from a commercial farm in Grand Forks County. Infected tubers had internal symptoms; i.e. concentric, necrotic arcs and circles (David *et al.*, 2010).

Tomato yellow leaf curl virus (*Begomovirus*, TYLCV – EPPO A2 List) was detected for the first time in Hawaii (US) in 2009. Infected tomato plants were found in a private garden in Wailuku (Maui Island) and in the research farm of the University of Hawaii in Poamoho (Oahu Island). It is hypothetized that TYLCV has been introduced into Hawaii on infected plant material (Melzer *et al.*, 2010).

Xanthomonas arboricola pv. *pruni* (EPPO A2 List) occurs in Pennsylvania (US), where it is considered as the most important bacterial disease of peach and nectarine (Bardsley & Ngugi, 2010).

- **Denied record**

The NPPO of Poland considers that the following statement appearing in the EPPO datasheet on *Clavibacter michiganensis* subsp. *insidiosus* (EPPO A2 List) is erroneous 'In the EPPO region, the disease causes losses, particularly in Poland and …'. From 2006 to 2009, 199 samples of *Medicago sativa* (lucerne) have been collected and tested for the presence of *C. michiganensis* subsp. *insidiosus*. As a result, the presence of the bacterium was detected in only 1 crop which was consequently destroyed. This was the second detection of *C. michiganensis* subsp. *insidiosus* on the Polish territory since 1965. Therefore, it cannot be considered that the disease is causing economic losses in the production of lucerne in Poland (NPPO of Poland, 2010-07).

- **Taxonomy**

The box tree moth, *Diaphania perspectalis* (EPPO Alert List) has been placed in various genera including *Palpita, Diaphania, Glyphodes* and *Neoglyphodes*. In a recent taxonomic review, it is proposed that it should be transferred to the genus *Cydalima*, and therefore be called *Cydalima perspectalis* (Mally and Nuss, 2010).

Source:

Bardsley SJ, Ngugi HK (2010) Reliability and accuracy of visual methods used to quantify foliar symptoms of bacterial spot of peach and nectarine. *Phytopathology* **100**(6 suppl.), S11.

Benmessaoud-Boukhalfa H, Mouhouche F, Belmazouzi FZ (2010) Inventory and identification of some *Thrips* species in coastal and subcoastal regions of Algeria. *Agriculture and Biology Journal of North America*, **1**(5), 755-761.

Bodor J, Szabóky C (2011) [New records of the carnation tortrix moth (*Cacoecimorpha pronubana* Hübner, 1799). *Növényvédelem* **47**(1), VI-VII (in Hungarian).

Calabria G, Máca J, Bächli G, Serra L, Pascual M (2010) First records of the potential pest species *Drosophila suzukii* (Diptera : Drosophilidae) in Europe. *Journal of Applied Entomology* (in press) DOI: 10.1111/j.1439-0418.2010.01583.x

Crosslin JM, Hamlin LL (2010) First report of *Impatiens necrotic spot virus* infecting greenhouse-grown potatoes in Washington State. *Plant Disease* **94**(12), p 1507.

David N, Mallik I, Crosslin JM, Gudmestad NC (1011) First report of *Potato mop-top virus* in North Dakota. *Plant Disease* **94**(12), p 1506

Dhahri S, Ben Jamaa ML, Lo Verde G (2010) First record of *Leptocybe invasa* and *Ophelimus maskelli* eucalyptus gall wasps in Tunisia. *Tunisian Journal of Plant Protection* **5**, 231-236.

INTERNET

Michigan State University. Integrated Pest Management Resources. Update on 2010 statewide survey for blueberry scorch and blueberry shock diseases by A. Schilder (dated 2010-08). http://www.ipmnews.msu.edu/fruit/Fruit/tabid/123/articleType/ArticleView/articleId/3104/Update-on-2010-statewide-survey-for-blueberry-scorch-and-blueberry-shock-diseases.aspx

Mahran A, Turner S, Martin T, Yu Q, Miller S, Sun F (2010) The golden cyst nematode *Globodera rostochiensis* pathotype Ro1 in the Saint-Amable regulated area in Quebec, Canada. *Plant Disease* **94**(12), p 1510.

Mally R, Nuss M (2010) Phylogeny and nomenclature of the box tree moth, *Cydalima perspectalis* (Walker, 1859) comb. n., which was recently introduced into Europe (Lepidoptera: Pyraloidea: Crambidae: Spilomelinae). *European Journal of Entomology* **107**, 393-400.

Melzer MJ, Ogata DY, Fukuda SK, Shimabuku R, Borth WB, Sether DM, Hu JS (2010) First report of *Tomato yellow leaf curl virus* in Hawaii. *Plant Disease 94*(5), p 641.

NPPO of France (2010-10).

NPPO of Italy (2010-10, 2010-11).

NPPO of Poland (2010-07).

Sether DM, Borth WB, Shimabuku RS, Pappu HR, Melzer MJ, Hu JS (2010) First report of *Iris yellow spot virus* in onion in Hawaii. *Plant Disease* **94**(12), p 1508.

Stocks S (2011) Additional detections of the spotted wing drosophila. National Plant Diagnostic Network. First Detector Network News 6(3), p 1. http://www.sepdn.org/webfm_send/250

Yoshimatsu S, Miyamoto Y, Hirowatari T, Yasuda K (2004) [Occurrence of *Opogona sacchari* (Bojer) in Japan (Lepidoptera: Tineidae)]. *Japanese Journal of Applied Entomology and Zoology* **48**(2), 135-139 (in Japanese).

Additional key words: new records, detailed records, host plants

Computer codes: CHRYFI, DROSSU, FRANOC, HETDRO, INSV00, IYSV00, LPCYIN, MYCOFI, OPGSC, OPHEMA, PMTV00, TORTPR, TYLCV0, XANTPR, CA, DZ, HU, IT, JP, KP, MT, PK, TN, TW, US

2011/089 Interception of *Astylus atromaculatus* and *Tetranychus fijiensis* in the Netherlands

The following insect pests have recently been detected on imported plant material (interceptions) by the Dutch NPPO.

- ***Astylus atromaculatus* (Coleoptera: Melyridae) on imported sorghum seeds**

In October 2010, the NPPO of the Netherlands reported the interception of sorghum seeds imported from Argentina because of the presence of *Astylus atromaculatus* (spotted maize beetle). This insect originates from South America (Argentina, Bolivia, Brazil), and also occurs in South Africa (introduced in the 1910s as a pollinator) and Swaziland. Adults feed on pollen from many cultivated plants (e.g. *Arachis hypogaea, Cucurbitaceae, Fragaria ananassa, Glycine max, Helianthus annuus, Medicago sativa, Sorghum, Vigna unguiculata, Zea mays*), and weeds. Large populations of beetles may cause damage on flowers and seeds. Larvae live in the soil and feed on decaying plant material, but in the case of large populations, they may feed on young, germinating plants. Adult beetles can be toxic to cattle when ingested in large numbers, as they contain high concentrations of batrachotoxins. In countries where it occurs, *A. atromaculatus* is generally not considered as a major pest.

- ***Tetranychus fijiensis* (Acari: Tetranychidae) on imported palm trees**

In April 2010, the NPPO of the Netherlands reported the interception of *Tetranychus fijiensis* on *Livistona* palms imported from Sri Lanka. *T. fijiensis* is a polyphagous mite which can attack many cultivated plants such as: *Areca catechu, Carica papaya, Citrus, Cocos nucifera, Dieffenbachia, Morus alba, Passiflora, Plumeria, Prunus persica, Pyrus communis*. Its currently known distribution is as follows:
Africa: Seychelles.
Asia: China (Hainan), India, Malaysia, Philippines, Sri Lanka, Taiwan, Thailand.
Oceania: Australia (Northern Territory), Federated states of Micronesia, Fiji, Kiribati, Marshall Islands, Northern Mariana Islands, New Caledonia, Papua New Guinea.
Considering the fact that *T. fijiensis* is not expected to establish outdoors under the climatic conditions prevailing in the Netherlands, no specific phytosanitary measures were taken by the Dutch NPPO.
The pest status of *Tetranychus fijiensis* in the Netherlands is officially declared as: **Absent, only intercepted during import inspection of *Livistona* palms originating from Sri Lanka**.

Source: NPPO of the Netherlands (2010-04, 2010-10).

Additional key words: interception **Computer codes:** ASTYAT, TETRFI, NL

2011/090 Interception of *Bursaphelenchus xylophilus* on wood chips from Portugal

The Swiss authorities (Office fédéral de l'environnement and Office fédéral de l'Agriculture) have reported their first interception of *Bursaphelenchus xylophilus* (EPPO A2 List) in a consignment of wood chips imported from Portugal. These wood chips were intended to be used for ornamental purposes in gardens. On the 2011-05-11, it was decided that all lots of conifer wood chips imported from Portugal should not be sold or distributed. These lots should be stored (in a way to avoid any further spread) before being tested for the possible presence of the nematode. Their commercialization will only be possible when the absence of *B. xylophilus* is confirmed.

Source: Confédération Suisse. Office fédéral de l'environnement (OFEV) Communiqués aux médias (2011-05-05) Organismes nuisibles: réglementation plus stricte de la vente d'écorce du Portugal.
http://www.bafu.admin.ch/dokumentation/medieninformation/00962/index.html?lang=fr&msg-id=39005

Additional key words: interception **Computer codes:** BURSXY, PT

2011/091 EPPO report on notifications of non-compliance

The EPPO Secretariat has gathered below the notifications of non-compliance for 2010 received since the previous report (EPPO RS 2011/062). Notifications have been sent via Europhyt for the EU countries. The EPPO Secretariat has selected notifications of non-compliance made because of the detection of pests. Other notifications of non-compliance due to prohibited commodities, missing or invalid certificates are not indicated. It must be pointed out that the report is only partial, as many EPPO countries have not yet sent their notifications. When a consignment has been re-exported and the country of origin is unknown, the re-exporting country is indicated in brackets. When the occurrence of a pest in a given country is not known to the EPPO Secretariat, this is indicated by an asterisk (*).

Pest	Consignment	Type of commodity	Country of origin	Destination	nb
Agromyzidae	*Apium graveolens*	Vegetables	Vietnam	Switzerland	1
	Ocimum basilicum	Vegetables (leaves)	Thailand	United Kingdom	1
Aleuroclava	*Sageretia thea*	Plants for planting	China	United Kingdom	1
Bemisia	*Limnophila aromatica*	Vegetables (leaves)	Vietnam	France	1
	Solidago	Cut flowers	Israel	Belgium	1
Bemisia tabaci	*Alternanthera sessilis*	Aquarium plants	Sri Lanka	France	1
	Artemisia dracunculus	Cuttings	Israel	United Kingdom	2
	Citrus limon, Ocimum	Fruits and vegetables	Nigeria	Ireland	1
	Corchorus olitorius	Vegetables	Lebanon	France	3
	Dianthus, Rosa	Cut flowers	Israel	Ireland	1
	Echinodorus bleheri	Aquarium plants	Sri Lanka	United Kingdom	1
	Eryngium foetidum	Vegetables (leaves)	Thailand	Denmark	2
	Eryngium foetidum	Vegetables (leaves)	Thailand	France	2
	Eryngium foetidum	Vegetables (leaves)	Thailand	Switzerland	3
	Eryngium foetidum	Vegetables (leaves)	Vietnam	France	3
	Hygrophila corymbosa	Aquarium plants	Sri Lanka	United Kingdom	1
	Ipomoea	Vegetables	Congo	France	1
	Limnophila aromatica	Vegetables (leaves)	Thailand	France	1
	Manihot esculenta	Vegetables	Cameroon	France	2
	Melissa officinalis	Vegetables (leaves)	Israel	France	1
	Ocimum	Vegetables (leaves)	Colombia	Netherlands	1
	Ocimum	Vegetables (leaves)	Thailand	Switzerland	2
	Ocimum basilicum	Vegetables (leaves)	Israel	France	2
	Ocimum basilicum	Vegetables (leaves)	Israel	Switzerland	2
	Ocimum basilicum	Vegetables (leaves)	Thailand	France	1
	Ocimum sanctum	Vegetables (leaves)	Thailand	France	1
	Polygonum odoratum	Vegetables (leaves)	Thailand	France	1
	Salvia officinalis	Plants for planting	Israel	United Kingdom	1
	Shinnersia rivularis	Aquarium plants	Singapore*	Denmark	1
	Solidago	Cut flowers	Israel	France	1
Bemisia tabaci, Thrips palmi	*Solanum melongena*	Vegetables	Surinam	Netherlands	1
Coleoptera	*Allium sativum*	Vegetables	China	Spain	1
	Citrus	Cut foliage	Iran	Spain	1
	Cyperus esculentus	Stored products	Mali	Spain	1

Pest	Consignment	Type of commodity	Country of origin	Destination	nb
Curculionidae, Esphestia	*Ceratonia siliqua*	Stored products	Morocco	Spain	1
Diptera (Sciaridae)	*Dracaena sanderiana*	Plants for planting	China	Spain	1
Ephestia	*Carthamus tinctorius*	Stored products	India	Spain	1
	Citrus	Stored products	Iran	Spain	1
Guignardia citricarpa	*Citrus limon*	Fruits	South Africa	United Kingdom	2
	Citrus reticulata	Fruits	South Africa	Netherlands	1
	Citrus sinensis	Fruits	Argentina	Netherlands	1
	Citrus sinensis	Fruits	Bangladesh*	United Kingdom	1
	Citrus sinensis	Fruits	Brazil	Netherlands	4
	Citrus sinensis	Fruits	Ghana*	United Kingdom	5
	Citrus sinensis	Fruits	South Africa	Netherlands	4
	Citrus sinensis	Fruits	Swaziland*	Netherlands	3
	Citrus sinensis	Fruits	Swaziland*	United Kingdom	1
	Citrus sinensis	Fruits	Uruguay*	Greece	1
Lepidoptera	*Solanum melongena*	Vegetables	Sri Lanka	Italy	1
Leucinodes orbonalis	*Solanum aethiopicum*	Vegetables	(Ghana)	Germany	4
	Solanum aethiopicum	Vegetables	Ghana	Germany	9
	Solanum melongena	Vegetables	Thailand	Germany	2
	Solanum melongena	Vegetables	Thailand	Luxemburg	1
	Solanum melongena	Vegetables	Thailand	Switzerland	1
Liriomyza	*Artemisia*	Vegetables	Vietnam	Czech Republic	1
	Artemisia absinthium	Vegetables	Vietnam	Czech Republic	1
	Dendranthema grandiflorum	Cut flowers	Colombia	United Kingdom	1
	Ocimum americanum	Vegetables (leaves)	Thailand	Denmark	1
	Ocimum americanum	Vegetables (leaves)	Thailand	France	1
	Ocimum basilicum	Vegetables (leaves)	Israel	Ireland	1
	Ocimum basilicum	Vegetables (leaves)	Spain	Ireland	1
	Ocimum basilicum	Vegetables (leaves)	Thailand	France	6
	Ocimum sanctum	Vegetables (leaves)	Thailand	United Kingdom	1
Liriomyza huidobrensis	*Aster*	Cut flowers	Ecuador	Netherlands	1
	Eryngium	Cut flowers	Kenya*	Netherlands	1
	Solidago	Cut flowers	Kenya*	Netherlands	3
Liriomyza sativae	*Ocimum basilicum*	Vegetables (leaves)	Israel	Netherlands	1
	Ocimum basilicum	Vegetables (leaves)	Thailand	France	1
	Spinacia	Vegetables (leaves)	Congo*	France	2
Liriomyza sativae, Spodoptera littoralis	*Ocimum basilicum*	Vegetables (leaves)	India	Netherlands	1
Liriomyza trifolii	*Chrysanthemum cinerariifolium*	Cut flowers	Colombia	Netherlands	1
	Gypsophila	Cut flowers	Israel	Belgium	2
Meloidogyne, Pratylenchus	*Ficus microcarpa*	Plants for planting	China	Switzerland	1
Meloidogyne, Pratylenchus, Xiphinema	*Aucuba, Cryptomeria, Enkianthus, Pieris, Stewartia*	Plants for planting	Japan	Germany	1
Oemona hirta	*Wisteria*	Plants for planting	New Zealand	United Kingdom	1
Orthoptera	*Cucurbita*	Vegetables	Argentina	Spain	1
Pepino mosaic virus	*Lycopersicon esculentum*	Seeds	Israel	Bulgaria	1
	Lycopersicon esculentum	Vegetables	Netherlands	Ireland	1
	Lycopersicon esculentum	Vegetables	Spain	Ireland	1
	Lycopersicon esculentum	Seeds	USA	France	1
Phytophthora ramorum	*Rhododendron hybrids*	Plants for planting	Netherlands	Sweden	1
	Rhododendron yakushimanum	Plants for planting	Germany	Ireland	1
	Viburnum tinus	Plants for planting	Italy	Ireland	1

Pest	Consignment	Type of commodity	Country of origin	Destination	nb
Potato spindle tuber viroid	*Calibrachoa*	Cuttings	Israel*	Germany	1
	Petunia	Cuttings	Israel*	Germany	2
Rots	*Allium ampeloprasum, Capsicum, Cucurbita, Daucus carota, Zea mays*	Vegetables	Kenya	Spain	1
	Allium cepa	Vegetables	Egypt	Spain	1
	Citrullus lanatus, Cucumis melo	Vegetables	Senegal	Spain	1
	Cucumis melo	Vegetables	Egypt	Spain	1
	Cucurbita maxima	Vegetables	Argentina	Spain	1
	Eucheuma spinosum	Plant products (Algae)	Indonesia	Spain	1
	Mangifera indica	Fruits	Brazil	Spain	2
Spodoptera littoralis	*Rosa*	Cut flowers	Kenya	Netherlands	1
	Rosa	Cut flowers	Zimbabwe	Netherlands	11
	Solidago	Cut flowers	Kenya	Netherlands	1
	Solidago	Cut flowers	Zambia	Netherlands	1
Spodoptera litura	*Brassica alboglabra*	Vegetables	Thailand	Netherlands	1
	Forsythia, Juniperus, Photinia	Plants for planting	China	Netherlands	1
	Ocimum basilicum	Vegetables (leaves)	Thailand	Netherlands	1
	Rosa	Cut flowers	India	Netherlands	1
Thripidae	*Momordica*	Vegetables	Dominican Rep.	United Kingdom	1
	Momordica	Vegetables	India	United Kingdom	1
	Momordica charantia	Vegetables	India	United Kingdom	1
	Momordica charantia	Vegetables	Thailand	United Kingdom	1
	Solanum melongena	Vegetables	Ghana	United Kingdom	2
Thrips	*Momordica charantia*	Vegetables	Thailand	Denmark	1
Thrips palmi	*Aranda, Cordyline, Dendrobium hybrids*	Cut flowers	Thailand	Netherlands	1
	Dendrobium hybrids	Cut flowers	Thailand	Belgium	1
	Momordica	Vegetables	India	United Kingdom	1
	Momordica charantia	Vegetables	Sri Lanka	France	1
	Momordica charantia	Vegetables	Thailand	Denmark	1
	Solanum melongena	Vegetables	Surinam	Netherlands	11
Thrips tabaci, Tetranychus	*Dianthus*	Cut flowers	Morocco	Spain	3
Thysanoptera	*Dendrobium hybrids*	Cut flowers	Thailand	Switzerland	1
	Momordica charantia	Vegetables	Dominican Rep.	France	2
	Momordica charantia	Vegetables	Dominican Rep.	Switzerland	2
	Momordica charantia	Vegetables	India	Switzerland	3
	Momordica charantia	Vegetables	Sri Lanka	France	1
	Momordica charantia	Vegetables	Thailand	France	4
	Momordica charantia	Vegetables	Thailand	Switzerland	3
	Momordica charantia	Vegetables	Vietnam	France	1
	Orchidaceae	Cut flowers	Thailand	Switzerland	1
	Solanum melongena	Vegetables	Dominican Rep.	France	3
	Solanum melongena	Vegetables	Sri Lanka	France	1
	Solanum melongena	Vegetables	Thailand	France	1
Tuta absoluta	*Lycopersicon esculentum*	Vegetables	Albania	Bulgaria	1
Xanthomonas axonopodis* pv. *citri	*Citrus*	Fruits	Bangladesh	United Kingdom	2
	Citrus aurantifolia	Fruits	Bangladesh	United Kingdom	1
	Citrus sinensis	Fruits	Uruguay	Greece	1
Xanthomonas fragariae	*Fragaria x ananassa*	Plants for planting	Spain	Belgium	2
Xiphinema		Soil / growing medium	Ghana	Netherlands	1

- **Fruit flies**

Pest	Consignment	Country of origin	Destination	nb
Anastrepha	*Mangifera indica*	Dominican Rep.	Netherlands	1
Bactrocera cucurbitae	*Momordica*	Bangladesh	Italy	1
	Momordica charantia	Bangladesh	Italy	1
Bactrocera dorsalis	*Annona muricata*	Vietnam	France	2
	Annona squamosa	Vietnam	France	5
	Mangifera indica	Vietnam	France	2
	Psidium	India	United Kingdom	1
	Ziziphus mauritiana	Vietnam	France	1
Bactrocera latifrons	*Capsicum annuum*	Thailand	France	5
	Capsicum frutescens	Thailand	France	2
Bactrocera zonata	*Mangifera indica*	Mauritius	France	1
	Mangifera indica	Pakistan	United Kingdom	1
	Psidium guajava	Thailand	France	1
Tephritidae (Non-European)	*Annona squamosa*	Vietnam	France	1
	Capsicum annuum	Thailand	France	16
	Capsicum annuum, Capsicum frutescens	Thailand	France	1
	Capsicum frutescens	Thailand	France	2
	Citrus sinensis	South Africa	Germany	1
	Citrus sinensis	South Africa	Netherlands	1
	Fortunella	Argentina	Germany	1
	Mangifera	Ghana	Luxemburg	1
	Mangifera indica	Brazil	France	2
	Mangifera indica	Brazil	Spain	1
	Mangifera indica	Dominican Rep.	Switzerland	1
	Mangifera indica	Jamaica	United Kingdom	1
	Mangifera indica	Pakistan	United Kingdom	1
	Psidium	Egypt	United Kingdom	1
	Psidium guajava	India	France	1
	Psidium guajava	India	Switzerland	1
	Psidium guajava	Sri Lanka	Switzerland	1
	Psidium guajava	Thailand	France	1
	Psidium guajava	Thailand	Switzerland	2
	Psidium guajava	Thailand	Switzerland	1
	Psidium guajava, Syzygium	Surinam	Netherlands	1
	Syzygium samarangense	Thailand	Switzerland	3

- **Wood**

Pest	Consignment	Type of commodity	Country of origin	Destination	nb
Anoplophora	Unspecified	Wood packing material	China	Germany	1
Bursaphelenchus mucronatus	Unspecified	Wood packing material	Belarus	Latvia	1
Cerambycidae	*Larix*	Wood and bark	Russia	Germany	1
Coleoptera	Unspecified	Wood packing material	China	Germany	1
	Unspecified	Wood packing material	India	Germany	1
Grub holes > 3 mm	*Larix*	Wood and bark	Russia	Germany	1
Monochamus	Unspecified	Wood packing material	China	Germany	1
Nematodes	Unspecified	Wood packing material	Taiwan	Finland	1
Platypodidae, Scolytidae	*Aucoumea klaineana*	Wood and bark	Congo	Spain	1
	Chlorophora excelsa	Wood and bark	Congo	Spain	1
Scolytidae	*Copaifera salikounda*	Wood and bark	Congo	Spain	1

Pest	Consignment	Type of commodity	Country of origin	Destination	nb
Sinoxylon	Unspecified	Wood packing material (crate)	India	Germany	3
	Unspecified	Wood packing material (pallet)	India	Germany	5
	Unspecified	Wood packing material (pallet)	Malaysia	Netherlands	1
Sinoxylon senegalense	Unspecified	Wood packing material (pallet)	China	Germany	1
Xylotrechus rusticus	Unspecified	Wood packing material (pallet)	India	Lithuania	1

- **Bonsais**

Pest	Consignment	Country of origin	Destination	nb
Helicotylenchus dihystera, Pratylenchus brachyurus	*Ficus, Sageretia thea, Serissa, Zelkova*	China	United Kingdom	1

Source: EPPO Secretariat, 2011-03.

2011/092 First record of *Ludwigia grandiflora* in Germany

Ludwigia grandiflora was first recorded in the wild in Germany in 2009 North-Western Niedersachsen (Hussner, 2009). Dense growth of the species has been confirmed near Leer in Niedersachsen, in a former branch of the River Leda, a tributary of the River Ems. This stagnant stretch of water is 510 m long and on average 30 m wide with a maximum depth of 1 m. It is separated from the River Leda by an embankment. . The population of *L. grandiflora* found was very dense, with several stands of different size. The old river branch has been used for fishing, and several fishermen commented that they had first observed the plant in 2004, but the pathway of introduction of the species remains unknown.
Considering the high invasive potential of this species and the fact that only one stand has been observed in Germany, eradication is strongly advocated.

Source: Hussner A (2009) [Erstnachweis von *Ludwigia grandiflora* in Deutschland] (in German). http://www.aquatischeneophyten.de/

Nehring S, Kolthoff D (2011) The invasive water primrose *Ludwigia grandiflora* (Michaux) Greuter & Burdet (Spermatophyta: Onagraceae) in Germany: first record and ecological risk assessment. *Aquatic invasions* **6**, 83-89. http://www.aquaticinvasions.net/2011/AI_2011_6_1_Nehring_Kolthoff.pdf

Additional key words: invasive alien plants, record **Computer codes:** LUDUR, DE

2011/093 Guidelines for the management of *Ambrosia artemisiifolia* from the EUPHRESCO project

The following guidelines for the management of *Ambrosia artemisiifolia* (Asteraceae, EPPO List of Invasive Alien Plants) are based on the results of the European project "Strategies for Ambrosia control (AMBROSIA)" funded by EUPHRESCO in 2008 and 2009. Project partners were the Aarhus University (Denmark), the Agricultural Institute of Slovenia (Slovenia), Agroscope ACW (Switzerland), the Julius Kühn Institute (Germany) and the Copenhagen University (Denmark).
The guidelines present the native range and the distribution of *A. artemisiifolia*, information on its identification and morphological descriptions with pictures of species that could be mistaken for it, including the seedling stage. In addition to descriptions of *Ambrosia maritima*, *Ambrosia trifida* and *Ambrosia coronopifolia*, examples of species which have been mistaken for *A. artemisiifolia* in different habitats are given:

Species mistaken for *Ambrosia artemisiifolia*	Habitats
Achillea millefolium (Asteraceae)	Natural habitats
Amaranthus powellii (Amaranthaceae)	Gardens and parks
Amaranthus retroflexus (Amaranthaceae)	Gardens and parks
Artemisia absinthium (Asteraceae)	Construction sites, road verges, gardens and parks, natural habitats
Artemisia annua (Asteraceae)	Agricultural fields, construction sites
Artemisia verlotiorum (Asteraceae)	Agricultural fields, road verges
Artemisia vulgaris (Asteraceae)	Agricultural fields, road verges
Bidens tripartita (Asteraceae)	Agricultural fields, natural habitats
Fumaria officinalis (Papaveraceae)	Agricultural fields, construction sites
Senecio jacobaea (Asteraceae)	Agricultural fields, natural habitats

Species mistaken for *Ambrosia artemisiifolia*	Habitats
Senecio erucifolius (Asteraceae)	Agricultural fields, natural habitats
Solidago canadensis (Asteraceae, EPPO List of IAP)	Road verges
Solidago gigantea (Asteraceae, EPPO List of IAP)	Road verges
Tagetes tenuifolia (Asteraceae)	Gardens and parks
Tagetes erecta (Asteraceae)	Gardens and parks
Tanacetum coccineum (Asteraceae)	Gardens and parks
Tanacetum vulgare (Asteraceae)	Road verges

The guide also contains information on the biology and ecology of *A. artemisiifolia* and on its seed dispersal. The pathways of introduction identified are the following:
- Sunflower seeds.
- Birdseed mixture: in a survey in Germany, fruits of *A. artemisiifolia* were found in about 70% of the samples of birdseed mixture. Surveys in Switzerland and Denmark gave similar results.
- Transport by machinery/equipment: *A. artemisiifolia* is reported to have been introduced in the region of Geneva (CH) by combine harvesters rented in the area of Lyon (FR).
- Transport of soil/gravel: transport of soil and gravel between neighboring countries is a common practice in parts of Europe, particularly between Switzerland, France and Italy.
- Compost: compost may allow surviving seeds to be dispersed, as the seeds of *A. artemisiifolia* seem to be heat tolerant.
- Water courses: some seeds of *A. artemisiifolia* can float and be spread by water currents.

The guidelines then indicate preventive measures, control methods and strategies, as well as data on the negative impacts of this species on human health and the economy.

Source: Buttenschøn RM, Waldispühl S, Bohren C (2009) Guidelines for management of common ragweed, *Ambrosia artemisiifolia*. EUPHRESCO project AMBROSIA 2008-09. 53 p
Available in English at http://xwww.agrsci.dk/ambrosia/outputs/ambrosia_eng.pdf
In French at http://xwww.agrsci.dk/ambrosia/outputs/ambrosia_fra.pdf
In German: http://xwww.agrsci.dk/ambrosia/outputs/ambrosia_deu.pdf

Additional key words: invasive alien plants, management

Computer codes: ACHMI, AMAPO, AMARE, AMBEL, ARTAB, ARTAN, ARTVE, ARTVU, BIDTR, CHYCC, CHYVU, FUMOF, SENER, SENJA, SOOCA, SOOGI, TAGER, TAGTE

2011/094 The aquarium pathway for non-indigenous plants to the Saint Lawrence Seaway in Canada

The Saint Lawrence River is an entry point into the Great Lakes Basin, in which substantial resources are spent each year to control plant invaders (29 USD million). The aquarium trade is a major source of introduction of invasive alien plants into the Saint Lawrence River. A new method has been developed to quantify propagule pressure by analyzing each step in the pathway of introduction, then synthesizing this information to calculate propagule pressure for each species. The propagule pressure is a single value that expresses the number of individuals of a species introduced into a given area. Propagule pressure is therefore considered by the authors as a mean for predicting invasion success.
The study was performed by first collecting copies of invoices of aquatic plants from all 16 aquarium and related product stores in Montreal. A total of 138 species of aquarium plants sold in Montreal per year. It was assumed that all plants ordered from distributors were sold. The proportion of plants entering each disposal sub-pathway (sub-pathways consist in

direct release, waste, escape due to a storm, and other ways of escape) was estimated for each species by customers (75 respondents to a questionnaire left in stores) and these results were analyzed through Bayesian statistics, taking into account uncertainty. The proportion of each species entering each disposal sub-pathway was then multiplied by the probability of introduction associated with that sub-pathway, summed across sub-pathways, and multiplied by the total number for each plant sold per year to determine the final propagule pressure in the Saint Lawrence Seaway.
The estimated propagule pressures (in plant/year) for the top 10 species are: 247 for *Microsorium pteropus* (Polypodiaceae), 201 for *Cladophora aegagropila* (Cladophoraceae), 187 for *Egeria densa* (Hydrocharitaceae, EPPO List of Invasive Alien Plants), 145 for *Vallisneria gigantea* (Hydrocharitaceae), 131 for *Hygrophila corymbosa* (Acanthaceae), 124 for *Bacopa caroliniana* (Plantaginaceae), 116 for *Cabomba caroliniana* (Cabombaceae, EPPO List of IAP), 105 for *Egeria najas* (Hydrocharitaceae), 92 for *Anubias barteri* (Aroideae) and 87 for *Vallisneria spiralis* (Hydrocharitaceae). Although this study focused on the Montreal aquarium trade, the authors recommend that the estimate of the propagule pressure could be used for other pathway analyses and other organisms.
The list of 138 species recorded with their relative frequency and propagule pressure has nevertheless not been checked against the list of invasive species in Canada. Such a comparison could effectively test the hypothesis that propagule pressure is the most important factor in determining whether a species will become invasive.

Source: Cohen J, Mirotchnick N, Leung B (2007) Thousands introduced annually: the aquarium pathway for non-indigenous plants to the St Lawrence Seaway. *Frontiers in Ecology and the Environment* 5, 528-532.
http://biology.mcgill.ca/faculty/leung/articles/Cohen_etal_thousands.pdf

Additional key words: invasive alien species, pathway analysis

Computer codes: AUIBA, BAOCA, CABCA, CDPAE, EERNA, ELDDE, HYGCR, MSOPT, VAIGI, VAISP, CA

2011/095 A new collaborative platform on invasive alien plants in the French overseas territories

A new collaborative platform on invasive alien plants in French overseas territories has been launched. This platform has been developed in the framework of the project Pl@ntNet of which the International Union for Conservation of Nature (IUCN) French committee is a partner.
The objective of this platform is to facilitate the exchange of information on invasive alien species in overseas territories, and the members can easily discuss and share documents, pictures, etc. Information on 294 introduced species considered invasive is provided along with high quality pictures (that can be zoomed in on) and distribution maps, as well as the risk analyses performed for some of these species.

To consult the freely data accessible:
http://book.plantnet-project.org/pg/groups/516/plntinvasion/
To register to the platform and contribute information exchange:
http://book.plantnet-project.org/

Source: Contact: Thomas Le Bourgeois, CIRAD, E-mail: thomas.le_bourgeois@cirad.fr
or Yohann Soubeyran, IUCN French Committee, E-mail: yohann.soubeyran@uicn.fr

Additional key words: invasive alien plants

2011/096 IUCN Guidelines on biofuels and invasive alien species

Many governments are actively encouraging private investment in biofuel developments for reasons such as agricultural development, increased energy security and independence, improved balance of trade, etc. However, the risk of introducing potentially invasive species has received little or no attention and is not being adequately prevented or managed. The International Union for Conservation of Nature (IUCN) therefore developed guidelines on biofuels and invasive alien species during two workshops organized in Nairobi. The guidelines are directed to biofuel producers and decision makers, and provide guidance to importing companies and countries.
These guidelines refer to the 'Roundtable on Sustainable Biofuels', which is a multi-stakeholder initiative that developed a Standard for sustainable biofuel production addressing environmental, social and economic issues related to biofuel production. A standard was published in 2009 and one of the criteria that has to be met is that biofuel producers and processors shall not use any plant species officially prohibited in the country of operation. When the species is not prohibited, information about its invasiveness shall be investigated, and when the species is recorded as highly invasive under similar conditions, it should not be used.
The IUCN guidelines have been divided into 4 sections representing intervention points along the supply chain:

- Planning: cost-benefit analysis including estimation of the potential costs of an invasion shall be conducted. Strategic environment assessments including weed risk analysis shall be undertaken. A contingency fund for any necessary remedial action should also be planned.
- Importation: importation of biofuels (plants, seeds and propagules) should occur within a suitable robust quarantine system. The regulations relating to the importation and introduction of live plants or propagules should be respected, and monitoring in this respect strengthened.
- Production: an environmental management plan should be developed, with provisions for a contingency plan in case of the escape of invasive species, with a fund for eradication, containment or management, as well as for the development of a monitoring system.
- Transportation/processing: the distances of transport should be minimized to reduce the risks of invasion, and ideally, processing should take place on-site.

Source: IUCN (2009) Guidelines on biofuels and invasive alien species. Gland, Switzerland, 20 p.
http://www.gisp.org/whatsnew/docs/Biofuels%20and%20invasive.pdf

Additional key words: invasive alien plants, biofuel

2011/097 *Miscanthus sinensis* in the EPPO region: addition to the EPPO Alert List

Why
Miscanthus sinensis (Poaceae) is a tall perennial grass originating from Asia. It is used for ornamental purposes, and is increasingly being planted as a crop for biofuel production. Its common name is 'Chinese silver grass'. It spreads via a prolific seed production. It is considered invasive in the USA, and some escapes have already been noted in the EPPO region in Austria, Belgium, Czech Republic, France, Georgia, Germany, Italy, Russia, Switzerland, Spain, the United Kingdom. Because it has shown invasive behaviour where it

has been introduced elsewhere in the world, and is increasingly planted while no risk analyses have been undertaken on its invasive behavior, this species should be monitored. *Miscanthus sacchariflorus* may also represent a risk, although much less information is available on this species.

Geographical distribution

EPPO region: Austria, Belgium, Czech Republic, France, Georgia, Germany, Italy, Russia (native), Switzerland, Spain, the United Kingdom.
North America: USA (Alabama, California, Colorado, Connecticut, District of Columbia, Delaware, Florida, Georgia, Illinois, Kentucky, Louisiana, Maryland, Massachusetts, Michigan, Mississippi, Missouri, North Carolina, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, South Carolina, Tennessee, Virginia, West Virginia), Canada (Ontario).
Asia (native): China, Indonesia, Japan, Philippines, Republic of Korea, Taiwan.
Oceania: Australia (New South Wales, Tasmania), New Zealand
South America: Chile

Morphology
M.sinensis is a robust perennial herb reaching up to 2 m high (occasionally 3 m), usually found in clumps. Mature plants have extensive root systems. Leaves can reach 1 m long and 25 mm wide, each with sharp margins. Panicles are large and feather like, 15-60 cm long, silvery to pale pink, which remain during winter and become golden brown. Seeds are yellowish brown to slightly redish, sparsely hairy, with a twisted tip, 3-4 mm long.

Habitats
The species is often found on roadsides, forest edges and abandonned fields following fires. According to the Corine Land Cover nomenclature, these habitats correspond to: banks of continental water, riverbanks/canalsides (dry river beds), pastures, road and rail networks and associated land, other artificial surfaces (wastelands).

Biology and ecology
M. sinensis prefers rich, moist, well-drained soils and can tolerate various pH. *M. sinensis* can even grow both on nutrient poor soils and on soils rich in heavy metals. The species can tolerate cold temperatures, as well as heat and drought, but does not grow well in humid, hot southern climates. It is reported either in cold areas (plant hardiness zone 5), as well as hot areas (plant hardiness zone 9). *M. sinensis* needs full light to establish and reproduce.
The species reproduces vegetatively through rhizomes. New growths emerge in mid spring and replace the previous year's dried erect leaves. Rhizomes allow a moderate horizontal expansion. The species also reproduce by seeds. Flowering takes place in August-October in the Northern hemisphere. Each plant can produce 100 panicles producing 6500 to 140 000 seeds per m^2. Seeds occur from September to January and are dispersed by wind up to 400 m from the mother plant, or via machinery. Spread by rivers has also been reported. The seed viability depends on the varieties.

Pathways
M. sinensis is used as an ornamental plant for its large inflorescences, as well as a barrier along roadsides and agricultural fields. Many varieties exist and for example in France, the species is increasingly being used in gardens and for the flowering of the urban spaces. It is also increasingly being used as a biofuel species. In France, 600 ha have been planted with *Miscanthus* spp. in 2007. In Great Britain, plantations are well developed, 204 varieties were planted in the Ceredigion (formerly Cardiganshire). The species may also be used in phytoremediation on polluted soils.

Impacts
Cases of escapes have been noted: in Austria, in the Voralberg valley, the planted populations spread along a river; in France, the species escaped from urban plantations in La Roche sur Yon.
These fast growing grasses can reduce the photosynthetic capacity of competitors by reducing light availability at the soil surface. *M. sinensis* is also reported to carry several pathogens, in particular barley yellow dwarf luteovirus-MAV, barley yellow dwarf luteovirus-PAV and cereal yellow dwarf luteovirus. In addition, the species is very flammable and may enhance fire hazards.

Control
Cutting panicles will prevent the spread of the plant through seeds.
The ability of the plant to produce new shoots from pieces of rhizome makes control difficult. Mechanical destruction methods such as cutting and disking methods may result in the spread of parts of rhizomes. Repeated mowing may kill the plant in 2 seasons, and is particularly efficient when it is in a growing stage and combined with grazing of cattle, horses or sheep.
Digging out the root system is an efficient method for removing individuals, but may result in resprouts that would require further treatment if the whole roots system is not removed. Burning increases growth, vigor and seed set.
Chemical control may also be efficient but the treatment of an abundant amount of green foliage is necessary.

In conclusion, *Miscanthus sinensis* may have the potential to establish in most of the EPPO region, in particular in the Continental and Atlantic biogeographical regions. The invasive behaviour of the species has not been clearly demonstrated so far, but monitoring of this species and of other *Miscanthus* species in the EPPO region will provide useful information.

Source: Global invasive species database – *Miscanthus sinensis*
http://www.issg.org/database/species/ecology.asp?si=1121&fr=1&sts=sss&lang=EN

Schnitzler A (2011) Miscanthus: l'homme cultive-t-il un nouvel envahisseur? Agence de l'eau Rhin-Meuse. 41 pp.
http://www.liebe.univ-metz.fr/rapports/2011%20A%20Schnitzler%20Miscanthus%20AERM.pdf

Southeast Exotic Pest Plant Council, Invasive Plant Manual – *Miscanthus sinensis*
http://www.se-eppc.org/manual/MISI.html

Additional key words: invasive alien plants, alert list **Computer codes:** MISSA, MISSI

2011/098 2nd World Conference on Biological Invasions and Ecosystem Functioning, Mar del Plata (AR), 2011-11-21/24

The 2nd World Conference on Biological Invasions and Ecosystem Functioning (BIOLIEF 2011) will be organized in Mar de Plata (Argentina) on 2011-11-21/24. This conference is dedicated to scientific work on the biology, ecology, and population dynamics of invasive alien species and will cover as many ecosystems and kingdoms as possible. The conference will place a particular emphasis on research concerning the impact of invasive alien species on ecosystem functioning and/or services. Topics such as

the spread of invasive species into ecosystems, the biogeography and history of species introductions will also be covered.
The call for oral presentations and poster submission is open till the 30th of June 2011.

Source: BIOLIEF 2011
http://www.grieta.org.ar/biolief/index.htm

Additional key words: invasive alien species, conference **Computer codes:** AR

2011/099 Launch of the EPPO/CoE/EEA questionnaire on the implementation of the Code of conduct on horticulture and invasive alien plants

In 2009, EPPO and the Council of Europe jointly drafted and published a European Code of conduct on horticulture and invasive alien plants. This Code of conduct, initially available in English and French, has also been translated in Spanish, Polish and Czech.

In order to assess the implementation of this Code of conduct within European and Mediterranean countries, EPPO, the Council of Europe and the European Environment Agency (EEA) are joining forces to launch an electronic questionnaire to gather information on this matter. The questionnaire is directed to the 50 National Plant Protection Organizations of the EPPO region (through EPPO), Ministries of the Environment, NGOs and the general public through the Council of Europe and the EEA.

This questionnaire only takes 20 minutes to complete and is open till the 31th of May at the following link: http://survey.eppo.org/codeconduct.php

Source: The EPPO Guideline on the implementation of this Code of conduct is available at http://onlinelibrary.wiley.com/doi/10.1111/j.1365-2338.2009.02306.x/abstract;jsessionid=EDA1A4B6BBB1435D5C9A59B5FC647357.d01t04

The full version of this Code of conduct is available:
In English at https://wcd.coe.int/wcd/ViewDoc.jsp?id=1473857&Site=DG4-Nature&BackColorInternet=DBDCF2&BackColorIntranet=FDC864&BackColorLogged=FDC864
In French at https://wcd.coe.int/wcd/ViewDoc.jsp?Ref=T-PVS/Inf(2008)2&Language=lanFrench&Ver=original&Site=DG4-Nature&BackColorInternet=DBDCF2&BackColorIntranet=FDC864&BackColorLogged=FDC864
In Spanish at
http://www.coe.int/t/dg4/cultureheritage/nature/Bern/IAS/CODIGO%20HORTICULTURA%20MAIL.pdf

Additional key words: invasive alien plants, code of conduct