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2011/026 First report of *Phytophthora lateralis* in the United Kingdom

The NPPO of the United Kindgom recently informed the EPPO Secretariat of the first record of *Phytophthora lateralis* (EPPO A1 List) in Scotland. In October 2010, dieback and mortality of *Chamaecyparis lawsoniana* trees was noticed at the Balloch Castle Country Park. This park is an important historical site located within the Loch Lomond and Trossachs National Park. Affected trees were predominantly mature (approximately 70-80 year old) and showed symptoms which varied from foliage dieback of discrete patches of the crown to mortality. Some of the declining *Chamaecyparis* trees were also showing resin bleeding on the stems and branches, which apparently originated at branch junctions or wounds. Root and stem samples were taken from 4 trees and tested. Laboratory tests (lateral flow device for *Phytophthora* spp., PCR and sequencing, morphology) confirmed the presence of *P. lateralis*.
During winter, further investigations on the site were hampered by bad weather conditions (heavy snow). However, by February 2011 a total of 90 symptomatic, including 10 confirmed positively by laboratory tests, infected *C. lawsoniana* had been identified and these were all felled and destroyed by burning by 23 February. A single *C. lawsoniana* was confirmed as infected by *P. ramorum* (EPPO Alert List), only the second specimen of this species found infected with *P. ramorum* in the UK. A Rhododendron plant was found positive for *P. ramorum* and has been destroyed. *P. cinnamomi* was also found infecting *Taxus baccata* on the site. These infected plants have also been voluntarily destroyed. Investigations are continuing at the site and surveys of all *C. lawsoniana* within 3 km of the park will be carried out in the spring, in order to determine future management measures. For the moment, it has not been possible to identify the source of introduction of *P. lateralis* into Scotland but it is suspected that the pathogen may have been present in this park for 5 to 10 years. Precautions are being taken to prevent any further spread of the pathogen (i.e. prohibition to move plant material from the infected site including composted material, disinfection of all machinery and equipment used for tree destruction, warning notices for visitors and disinfectant foot mats at all exit points of the park).
The pest status of *Phytophthora lateralis* in the United Kingdom is officially declared as: **Present, under eradication.**

Source: NPPO of the United Kingdom (2011-03).

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

2011/027 First report of *Phytophthora lateralis* in Taiwan

Studies were conducted in Taiwanese forests to detect the presence of unknown *Phytophthora* species or invasive species such as *P. ramorum* (EPPO Alert List) or *P. lateralis* (EPPO A1 List). In 2008, soil samples were collected in an old cypress stand (*Chamaecyparis obtusa* var. *formosana*) in the Ma-Kau ecological park in North-Eastern Taiwan. Collected samples were subject to *Phytophthora* baiting procedures at 18°C. Several isolates of *Phytophthora lateralis* were identified in one soil sample which had been obtained from water running through a cedar stand. This is the first time that *P. lateralis* is recorded from Taiwan. It is hypothetized that Asia (in particular Japan, Taiwan and Yunnan) is the area of origin for *P. lateralis*. The authors concluded that further surveys of *P. lateralis* in Taiwanese *Chamaecyparis* stands are needed, as well as comparative studies between isolates from different continents (Asia, Europe and North America).

Source: Brasier CM, Vettraino AM, Chang TT, Vannini A (2010) *Phytophthora lateralis* discovered in an old growth *Chamaecyparis* forest in Taiwan. *Plant Pathology* **59**(4), 595-603.

Additional key words: new record **Computer codes:** PHYTLA, TW

2011/028 *Phytophthora lateralis* detected again in the Netherlands

In 2005, *Phytophthora lateralis* (EPPO A1 List) was found for the first time in the Netherlands in the province Drenthe on *Chamaecyparis lawsoniana*. All *C. lawsoniana* plants in the nursery concerned were destroyed. Subsequent annual surveys on *P. lateralis* were focussed on this nursery and its vicinity and confirmed the absence of the disease. However, in 2010 *P. lateralis* was detected again on *C. lawsoniana* in a nursery located in Almedo (province of Overrijssel). No link could be established between these two findings (the two nurseries are 85 km apart).
In Almedo, the infected plants were found in a plot of 400 m² in which approximately 2000 *Chamaecyparis* plants were grown. During a field inspection, some plants showing brown discoloration at the stem base and general decline were noticed. The pathogen was isolated on agar medium and PCR testing confirmed the presence of *P. lateralis*. The possible sources of this infection have been investigated but could not be determined. Imports of *Chamaecyparis lawsoniana* from outside Europe are prohibited, and there was no evidence that planting material originally produced by another Dutch nursery was the source of infection. Although it could not be excluded that infected soil adjacent to roots of non-host plants might have been a pathway, nothing could confirm this hypothesis.
The infected area (approximately 100 m²) was delimited by collecting and testing additional plant samples. All plants in the infected area, as well as those located within a buffer zone of 2 m radius will be destroyed. Movements of the remaining *Chamaecyparis* plants will not be allowed until 2011-09-31 (and only after confirmation of the absence of *P. lateralis*). Precautions will also be taken to avoid the dissemination of spores by human activities (e.g. by cleaning of machinery, equipment and shoes). Annual surveys on *P. lateralis* will continue in the Netherlands.
The pest status of *Phytophthora lateralis* in the Netherlands is officially declared as: **Transient, under eradication.**

Source: NPPO of the Netherlands (2010-11).

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

2011/029 Situation of *Phytophthora lateralis* in France

In France, *Phytophthora lateralis* (EPPO A1 List) had been isolated from *Chamaecyparis lawsoniana* on two occasions (in 1996 and in 1998). The origin of these detections could not be fully traced-back (it can be recalled that imports of *C. lawsoniana* from third countries are prohibited in the European Union). The disease was no longer reported until 2005 when tree mortality and symptoms resembling those of *P. lateralis* were observed on several hedges of *C. lawsoniana* in Finistère department (Bretagne region, Western France). In Bretagne, *C. lawsoniana* trees were planted during the 1970s as windbreaks after removal of the traditional hedgerows (i.e. during the transformation of the historical low-intensity farming system into a more intensive one). Several samples were collected

and tested but *P. lateralis* could not be detected. Positive results confirming the presence of *P. lateralis* were obtained in 2009 in soil and in root samples of *C. lawsoniana* collected from 4 distantly separated municipalities in Finistère (Landrévarzec, Lopérec, Moëlan, Scaër). Although the presence of the pathogen was only confirmed in these 4 localities, it is noted that the disease has already had a serious impact on the landscape causing decline and mortality of several thousands of *Chamaecyparis* trees over an area covering approximately 400 km².
In Bretagne region, in addition to typical symptoms of *P. lateralis* (i.e. discoloration and decline of the whole canopy associated with root and collar necrosis) the presence of unusual symptoms was also noted. In two sites, dead branches with necrotic lesions were observed. The decline was localized in the middle or lower part of the canopy and seemed to be progressively spreading from the foliage towards the trunk. This type of decline could not be associated with any root or collar lesions. The observation of these aerial infections without root infections suggest that in addition to dissemination by water, soil and plants, *P. lateralis* might be air-dispersed (as in the case for *P. ramorum*).
The situation of *Phytophthora lateralis* in France can be described as follows: **Present, occurs in Bretagne region (Finistère) on** *Chamaecyparis lawsoniana* **trees planted as windbreaks, under official control.**

Source: NPPO of France (2010-12).

Piou D, Robin C (2010) Rapport sur la détection de *Phytophthora lateralis* en Bretagne (Finistère). INRA. Ministère de l'Alimentation de l'Agriculture et de la Pêche, 14 pp.

Robin C, Piou D, Feau N, Douzon G, Schenck N, Hansen EM (2011) Root and aerial infections of *Chamaecyparis lawsoniana* by *Phytophthora lateralis*: a new threat for European countries. *Forest Pathology* (in press).
Article first published online: doi: 10.1111/j.1439-0329.2010.00688.x

Additional key words: detailed record **Computer codes:** PHYTLA, FR

2011/030 *Meloidogyne chitwoodi* and *M. fallax* detected in France

The NPPO of France recently informed the EPPO Secretariat about the detection of *Meloidogyne chitwoodi* and *M. fallax* (both EPPO A2 List) on its territory. In 2008, *M. chitwoodi* and *M. fallax* were detected in Picardie region on scorzonera (*Scorzonera hispanica*) and ware potatoes (*Solanum tuberosum*). Surveys on vegetable crops carried out in 2009 detected another outbreak of *M. chitwoodi* and *M. fallax* in Bretagne on glasshouse vegetables (tomatoes and lettuce). It is suspected that these outbreaks resulted from the import of infested young plants from countries where the nematodes occur.
The situation of both *Meloidogyne chitwoodi* and *M. fallax* in France can be described as follows: **Present, detected in 2008 in Picardie (on scorzonera and ware potatoes) and in 2009 in Bretagne (on glasshouse vegetables).**

Source: NPPO of France (2010-11).

Additional key words: detailed records **Computer codes:** MELGCH, MELGFA, FR

2011/031 Eradication of *Globodera rostochiensis* from Western Australia (AU)

In Western Australia (AU), *Globodera rostochiensis* (EPPO A2 List) was detected for the first time in 1986 and an eradication programme was implemented. From 1986 to 1989, *G. rostochiensis* was detected on 6 properties near Perth (covering approximately 15 ha). All infested sites were intensively fumigated, phytosanitary regulations were implemented to prevent any further spread, and all potato crops from Western Australia were tested (in total more than 31 000 tests were performed). Since 1989, *G. rostochiensis* has not been detected in Western Australia. On the 13th of September 2010 and after a 24-year eradication programme, the NPPO of Australia officially declared that the pest has been eradicated from Western Australia.
The pest status of *Globodera rostochiensis* in Western Australia is officially declared as: **Absent**.

Source: INTERNET (last accessed in 2011-02)
IPPC website. Pest reports (AUS-39/1) Australia. Eradication of potato cyst nematode (PCN) from Western Australia. https://www.ippc.int/

Additional key words: eradication **Computer codes:** HETDRO, AU

2011/032 *Xanthomonas arboricola* pv. *pruni* detected on *Prunus laurocerasus* in Toscana (IT)

The NPPO of Italy recently informed the EPPO Secretariat of the detection of *Xanthomonas arboricola* pv. *pruni* (EPPO A2 List) on *Prunus laurocerasus*, in Toscana region. The bacterium was detected in a nursery in the province of Pistoia. All infected plants were immediately destroyed and surveys in the affected area were intensified. It can be recalled that *X. arboricola* pv. *pruni* had already been detected on this ornamental plant species in the Netherlands (EPPO RS 2009/178).

Source: NPPO of Italy (2010-11).

Additional key words: detailed record, host plant **Computer codes:** XANTPR, IT

2011/033 Details on *Pseudomonas syringae* pv. *actinidiae* in China

The following details on the distribution of *Pseudomonas syringae* pv. *actinidiae* in China could be found in abstracts of Chinese publications on the Internet.

Anhui province: bacterial canker of kiwifruit was first observed in 1999 in the district of Yuexi, and since 1991 outbreaks have been reported (Cheng *et al.*, 1995). It was observed that the kiwifruit bacterial canker was more severe in orchards at high elevation (above 750 m altitude), and on south facing slopes (Li *et al.*, 2001).

Sichuan province: bacterial canker appeared in 1989 in the district of Cangxi and has since become the most destructive kiwifruit disease in the region (Wang *et al.*, 1992).

Shaanxi province: bacterial canker appeared in the Chang'an (a district of Xi'an) in 1990 and since then it has become the most destructive disease in the region (Liang *et al.*, 2000; Shen *et al.*, 2009).

Source:

Cheng H, Li Y, Wan S, Zhang J, Ping Q, Li G, Xing J (1995) Pathogenic identification of kiwifruit bacterial canker in Anhui. *Journal of Anhui University*, unpaginated. http://en.cnki.com.cn/Article_en/CJFDTOTAL-ANHU503.006.htm

Li Y, Cheng H, Fang S, Qian Z (2001) Ecological factors affecting prevalence of kiwifruit bacterial canker and bacteriostatic action of bacteriocides on *Pseudomonas syringae* pv. *actinidae*. *Chinese journal of Applied Ecology*, unpaginated. http://en.cnki.com.cn/Article_en/CJFDTOTAL-YYSB200103012.htm

Liang Y, Zhang X, Tian C, Gao A, Wang P (2000) Pathogenic identification of kiwifruit bacterial canker in Shaanxi. *Journal of Northwest Forestry College*, unpaginated. http://en.cnki.com.cn/Article_en/CJFDTOTAL-XBLX200001006.htm

Shen Z, Huang L, Kang Z (2009) The investigation of kiwifruit bacterial canker in Guanzhong zone of Shaanxi province. *Acta Agriculturae Boreali-Occidentalis Sinica*, unpaginated. http://en.cnki.com.cn/Article_en/CJFDTOTAL-XBNX200901043.htm

Wang Z, Tang X, Liu S (1992) Identification of the pathogenic bacterium for bacterial canker on *Actinidia* in Sichuan. *Journal of Southwest Agricultural University*, unpaginated. http://en.cnki.com.cn/Article_en/CJFDTOTAL-XNND199206007.htm

Additional key words: detailed record **Computer codes:** PSDMAK, CN

2011/034 First report of *Pseudomonas syringae* pv. *aesculi* in Ireland

The NPPO of Ireland recently informed the EPPO Secretariat about the presence of *Pseudomonas syringae* pv. *aesculi* (EPPO Alert List) on its territory. The bacterium was detected on horse chestnut trees (*Aesculus hippocastanum*) in a public park (Phoenix Park) in Dublin. In this park, horse chestnut trees account for 9% of the tree cover (1,800 trees), the majority of which are mature trees. The park management observed a decline in the health of a small portion of these trees, and the presence of *P. syringae* pv. *aesculi* was confirmed. In order to prevent the spread of the horse chestnut bleeding canker, best practice guidelines have been put into place for the removal and burial of the diseased trees. A survey of the entire horse chestnut population in the park is being undertaken to assess the number of affected trees and the extent of the symptoms on individual trees.
The situation of *Pseudomonas syringae* pv. *aesculi* in Ireland can be described as follows: **Present, reported in 2010 in a public park in Dublin.**

Source: NPPO of Ireland (2010-09).

Additional key words: new record **Computer codes:** PSDMAX, IE

2011/035 Situation of *Pseudomonas syringae* pv. *aesculi* in Germany

As reported in EPPO RS 2009/117, the presence of *Pseudomonas syringae* pv. *aesculi* (EPPO Alert List) in Germany was confirmed in 2008 in one horse chestnut (*Aesculus hippocastanum*) tree in Hamburg. The NPPO of Germany recently informed the EPPO Secretariat that the disease has also been detected in Sachsen. Six horse chestnut trees that had been planted in 2008 showed bleeding and bark necrosis. One of the trees has been destroyed for diagnostic purposes, and the remaining five are under supervision. The NPPO of Germany explained that the pest status of *P. syringae* pv. *aesculi* in Germany was difficult to describe because the diagnostics for this disease is complex and the presence of the bacterium could only be confirmed in a few cases. Nevertheless, based on this uncertain data, the pest status of *Pseudomonas syringae* pv. *aesculi* in Germany is officially declared as: **Present, verified only in parts of the area / single cases.**

Source: NPPO of Germany (2011-02).

Additional key words: detailed record **Computer codes:** PSDMAX, DE

2011/036 First report of *Xanthomonas arboricola* pv. *corylina* in Poland

In Poland, hazelnut (*Corylus avellana*) has been traditionally grown in gardens and small family orchards but recently its commercial production has become more widespread. In 2007, unusual symptoms were observed on different hazelnut cultivars grown in one orchard in Central Poland. In this orchard, the majority of 15-year-old trees showed angular necrotic lesions on leaves and involucres (husks), and twig cankers. In 2009, similar symptoms were observed in this orchard, as well as in a young hazelnut orchard located nearby where almost all trees (4-year-old trees, covering 1 ha) were affected. Bacterial colonies were consistently isolated from diseased trees and further analysis following the EPPO Standard PM7/22 confirmed the presence of *Xanthomonas arboricola* pv. *corylina* (EPPO A2 List). The pathogenicity of the Polish bacterial isolates was tested in glasshouse experiments and *X. arboricola* pv. *corylina* could be re-isolated from symptomatic tissues of inoculated plants, thus completing Koch's postulates. This is the first time that *X. arboricola* pv. *corylina* has been detected in Poland. The authors noted that an extensive survey carried out in the early 2000s had not detected the bacterium in the Polish hazelnut plantations, which suggests that its introduction in Poland is recent.
The situation of *Xanthomonas arboricola* pv. *corylina* in Poland can be described as: **Present, first detected in 2007 in Central Poland, in a limited number of orchards.**

Source: Pulawska J, Kaluzna M, Kolodziejska A, Sobiczewski P (2010) Identification and characterization of *Xanthomonas arboricola* pv. *corylina* causing bacterial blight of hazelnut: a new disease in Poland. *Journal of Plant Pathology* **92**(3), 803-806.

EPPO (2004) EPPO Standards PM7/22. Diagnostic protocols for regulated pests: *Xanthomonas arboricola* pv. *corylina*. *Bulletin OEPP/EPPO Bulletin* **34**, 155–157. http://archives.eppo.org/EPPOStandards/PM7_DIAGNOS/pm7-22(1).pdf

Additional key words: new record **Computer codes:** XANTCY, PL

2011/037 First report of *Strauzia longipennis* in Germany: addition to the EPPO Alert List

The NPPO of Germany recently informed the EPPO Secretariat of the first record of *Strauzia longipennis* (Diptera: Tephritidae – sunflower maggot) on its territory, which also represents a first record for Europe. In June 2010, *S. longipennis* was found on a single sunflower plant (*Helianthus annuus*) in a private garden in Berlin (locality of Johannisthal in the Berlin borough of Treptow-Köpenick). This sunflower plant did not show external symptoms, but two female flies were observed walking on the leaves and ovipositing in the stem. Three other findings were made in 2010 in Berlin, in the localities of Wartemberg, Lankwitz and Tempelhof (boroughs of Lichtenberg, Steglitz-Zehlendorf, Tempelhof-Schöneberg, respectively). Investigations suggested that *S. longipennis* has probably been present since 2008 in Berlin. The Regional Plant Protection Service will carry out a survey in 2011 at the locations where the pest has been recorded. A rapid PRA conducted by the NPPO suggested that *S. longipennis* could represent a medium risk for Germany. Further more, considering the importance of sunflower cultivation in the EPPO region, the German NPPO suggested that *S. longipennis* should be added to the EPPO Alert List.

Strauzia longipennis (Diptera: Tephritidae – Sunflower maggot)

Why	An isolated finding of *Strauzia longipennis*, a North American pest of sunflowers, was reported in 2010 from Germany. Considering the importance of sunflower (*Helianthus annuus*) cultivation in the EPPO region, the German NPPO suggested that *S. longipennis* should be added to the EPPO Alert List.
Where	*S. longipennis* is a North American species which had not been reported outside its native area, so far. **EPPO region:** Germany (incursions detected in 2010 in Berlin). **North America:** Canada (Alberta, Manitoba, Ontario, and possibly other provinces), USA (Arizona, California, Colorado, Connecticut, Florida (not established), Idaho, Illinois, Indiana, Iowa, Kansas, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oregon, Pennsylvania, South Dakota, Texas, Utah, Virginia, Wisconsin).
On which plants	*Helianthus annuus* (sunflower), and other *Helianthus* species such as *H. maximilianii* and *H. tuberosus* (Jerusalem artichoke). *S. longipennis* has also been observed on other Asteraceae (e.g. *Ageratina altissima, Ambrosia trifida, Smallanthus uvedalia*). *S. longipennis* is a morphologically variable species and its taxonomy is still uncertain (several varieties have been proposed and some elevated to species rank although this is still being debated). Recent studies have suggested that *S. longipennis* might be a complex of host-associated populations that are in the process of divergence (incipient species).
Damage	Larvae of *S. longipennis* bore tunnels in the pith of sunflower stalks. Depending on the number of larvae, injury may vary from a short tunnel to complete destruction of the pith. Large infestations can weaken the stalk and eventually lead to plant breakage. Secondary fungal infections (e.g. *Sclerotinia*) can be associated with larval feeding inside the stalk. However, in the major sunflower-producing regions of North America (North and South Dakota, Minnesota and Manitoba), *S. longipennis* is usually considered as a minor pest. Even when high percentages of plants are infested, larval feeding is confined to the pith, which acts a supporting structure and is not critical for plant nutrition. Studies carried out in the 1950s in Manitoba (CA) in fields where a high percentage of sunflower plants were infested concluded that feeding damage caused by larvae to the pith of the sunflower stalk had no apparent affect on head diameter, seed yield and quality. Adults of *S. longipennis* are showy yellow tephritid flies (body length around 6 mm, wingspan of 13 mm) with bright green eyes. Wings have dark brown bands

that form a fairly distinct F pattern near the wing tip. Larvae are creamy white and attain approximately 7 mm length at maturity.
Pictures can be viewed on the Internet:
http://www.insectimages.org/browse/subthumb.cfm?sub=7967
http://bugguide.net/node/view/36888/bgimage
S. longipennis has one generation per year. Female lay eggs (white, elongated, 1 mm long) in the stem tissue of young plants and larvae feed in the stem pith tissue. Larvae develop though 3 instars before pupation takes place. The insect usually overwinters as larvae in plant debris in the soil, but in regions such as Manitoba and Ontario (CA), observations have shown that larvae leave the plant at the end of summer and enter the soil where they overwinter as pupae.

Dissemination: Adults are reported as strong fliers but no data is available on their potential for natural spread. Over long distances, sunflower plants, soil and eventually cut flowers may transport the pest. Seeds are not considered as a likely pathway.

Pathway: Plants for planting, cut flowers of host plant species, soil and growing medium (no data is available to evaluate the possibility that tubers of *H. tuberosus* with adhering soil could transport the pest).

Possible risks: Sunflower (*Helianthus annuus*) is native to the Americas. In the EPPO region, it is an economically important crop which is widely grown for agricultural purposes (oil, seeds, animal feed, biofuel) and to a lesser extent for ornamental purposes. The cultivation of other *Helianthus* species, such as *H. tuberosus* (Jerusalem artichoke), is of much lesser economic importance. In North America, *S. longipennis* is usually considered as a minor pest but it may be possible that its populations are kept under economic threshold by natural enemies (e.g. parasitoids like *Coptera strauziae* (Hymenoptera: Diapriidae)) or insecticide treatments targeting other pests (e.g. sunflower beetle *Zygogramma exclamationis* (Coleoptera: Chrysomelidae), absent in Europe). Although, there are still uncertainties about the potential of damage of *S. longipennis* to sunflower crops in Europe (as very high populations are needed to cause stem breakage and lodging), it is desirable to avoid its spread within the EPPO region. It can be noted that in the EPPO region, sunflower crops are subject to a limited number of insect pests which usually do not require specific treatments and therefore, it is highly desirable to maintain this rather favourable situation.

Source(s)

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EPPO RS 2011/037
Panel review date - Entry date 2011-02

2011/038 Situation of *Rhagoletis completa* in France in 2010

As reported in EPPO RS 2008/138, *Rhagoletis completa* (Diptera: Tephritidae – EU Annexes) was reported for the first time in South-Eastern France on walnut trees (*Juglans regia*) in 2007. In 2009 and 2010, *R. completa* was also detected in South-Western France, as well as in the northern part (EPPO RS 2010/182). A national survey was conducted in 2010 to determine the extent of the pest spread. As a result, the presence of *R. completa* was confirmed in the following regions (and departments):

South-East
- Languedoc-Roussillon (Aude, Hérault, Gard)
- Provence-Alpes-Côte d'Azur (Alpes de Haute Provence, Bouches du Rhône, Hautes-Alpes, Vaucluse)
- Rhône-Alpes (Ardèche, Drôme, Isère, Rhône, Savoie)

South-West
- Aquitaine (Dordogne, Gironde, Lot-et-Garonne)
- Midi-Pyrénées (Gers, Haute-Garonne, Lot, Tarn-et-Garonne, Tarn)

North
- Alsace (Bas-Rhin, Haut-Rhin)
- Ile-de-France (Essonne, Hauts de Seine, Seine Saint Denis, Yvelines)

The situation of *Rhagoletis completa* in France can be described as follows: **Present, first found in 2007 in Rhône-Alpes; it then spread to several regions (Alsace, Aquitaine, Ile de France, Languedoc-Roussillon, Midi-Pyrénées, Provence-Alpes-Côte d'Azur, Rhône-Alpes).**

Source: NPPO of France (2010-12).

Additional key words: detailed record **Computer codes:** RHAGCO, FR

2011/039 Situation of *Ips duplicatus* in the Czech Republic

Until the beginning of the 20th century, *Ips duplicatus* (Curculionidae, Scolytinae - EU Annexes) occurred only in the Euro-Siberian taiga from Sweden to the Sakhalin Island and in the Alps. During the subsequent decades the pest has expanded its range to Central Europe (e.g. Czech Republic, Poland, and Slovakia). In the Czech Republic, the insect was first recorded in the 1920s and outbreaks have been reported since the 1970s in the North-East. Monitoring surveys with pheromone traps were carried out from 1997 to 2009 in state forests and showed that *I. duplicatus* now occurs practically across the whole territory of the Czech Republic, mainly on spruce (*Picea abies*). The numbers of insects caught fluctuated over time (low populations were observed in 2002 and a peak was observed in

2008). Insect populations were higher in the North-Eastern and Eastern parts of the country (Northern Moravia and Silesia) where *I. duplicatus* was first recorded but observations showed that it is currently spreading towards the South and West. In the North-Eastern parts of Czech Republic up to 80% of the spruce trees which had been felled for sanitary reason were infested by *I. duplicatus*. However, it is acknowledged that several factors are involved in spruce decline, including low soil pH, nutrient deficiency, drought, infections by *Armillaria ostoyae* and bark beetles. In the South and West parts of the country where populations of *I. duplicatus* were lower, no economically significant damage was observed. The situation of *Ips duplicatus* in the Czech Republic can be described as follows: **Present, mainly in the north-eastern and eastern parts on** *Picea abies* **but spreading towards the south and west.**

Source: Holuša J, Grodzki W (2008) Occurrence of *Ips duplicatus* (Coleoptera: Curculionidae, Scolytinae) on pines (*Pinus* sp.) in the Czech Republic and southern Poland – Short Communication. *Journal of Forest Science* **54**(5), 234–236.

Holuša J, Lubojacky J, Knizek M (2010) Distribution of the double-spined spruce bark beetle in the Czech Republic: spreading in 1997-2009. *Phytoparasitica* **38**(5), 435-443.

Additional key words: detailed record **Computer codes:** IPSXDU, CZ

2011/040 First report of *Dryocosmus kuriphilus* in Sicilia (IT)

The NPPO of Italy recently informed the EPPO Secretariat of the first record of *Dryocosmus kuriphilus* (Hymenoptera: Cynipidae – EPPO A2 List) in Sicilia region. In 2010, *D. kuriphilus* was found in three neighbouring municipalities (Sant' Alfio, Milo and Linguaglossa) of the province of Catania. The Regional PPO of Sicilia has launched a specific monitoring programme in order to delimit the extent of the infestation and define demarcated areas. The situation of *Dryocosmus kuriphilus* in Italy can be described as follows: **Present, first found in 2008 near Cuneo, scattered outbreaks reported from Abruzzo, Calabria, Campania, Emilia-Romagna, Friuli-Venezia Giulia, Lazio, Liguria, Lombardia, Marche, Molise, Toscana, Trentino-Alto Adige, Piemonte, Sardegna, Sicilia, Umbria, Valle d'Aosta and Veneto; under official control.**

Source: NPPO of Italy (2010-10).

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

2011/041 *Glycaspis brimblecombei* occurs in Sardinia, Italy

In Italy, *Glycaspis brimblecombei* (Hemiptera: Psyllidae – formerly EPPO Alert List) was detected for the first time in March 2010 on the foliage of *Eucalyptus camaldulensis* trees in several provinces of Campania (see EPPO RS 2010/186 and article from Laudonia & Garonna on the EPPO website). The NPPO of Italy recently informed the EPPO Secretariat that the pest has also been found in Sardinia on trees of *E. camaldulensis*. Surveys are being carried out in Sardinia to delimit the extent of the infestation.
The situation of *Glycaspis brimblecombei* in Italy can be described as follows: **Present, found in Campania and Sardinia on *Eucalyptus camaldulensis*.**

Source: NPPO of Italy (2010-12).

EPPO Website
Laudonia S & Garonna AP (2011) First record of the redgum lerp psyllid, *Glycaspis brimblecombei*, a new exotic pest of *Eucalyptus camaldulensis* in Southern Italy. http://www.eppo.org/QUARANTINE/Glycaspis_brimblecombei_IT/Glycaspis_brimblecombei_IT.htm

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

2011/042 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**

Arabis mosaic virus (*Nepovirus*, ArMV - EU Annexes) was reported for the first time in Spain in 2007. ArMV was detected on grapevine in Galicia (in Val de Salnés on Rias Baixas appellation) and in Pais Vasco (in Barriobusto on appellation Rioja). In the infected vineyard in Galicia, the presence of the nematode vector, *Xiphinema diversicaudatum*, was detected in the soil. A preliminary survey showed that the virus incidence is low and that only a minimal spread occurred. In Spain as a whole, ArMV seems to be rare and associated with the Atlantic biogeographic region (Abelleira *et al.*, 2010).

Acizzia jamatonica (Hemiptera: Psyllidae – formerly EPPO Alert List) was detected for the first time in Greece. In August 2009, damage caused by this psyllid was noticed in *Albizia julibrissin* trees in the centre of Thessaloniki (Pásztor *et al.*, 2010). In 2009, the presence of *A. jamatonica* has also been reported from Serbia (Vétek *et al.*, 2009), and Bulgaria in the city of Nessebar (Vétek and Rédei, 2009).

Cowpea mild mottle virus (*Carlavirus* – EU Annexes) was first found in Southern Iran (Khorestan province) during the 2006 and 2007 soybean growing seasons (Tavassoli *et al.*, 2009). **Present, first found in 2006 on soybean in Khorestan province.**

In Iran, almond witches' broom disease has recently been observed in the centre and south of the country. Trees showing different symptoms (yellowing and little leaf) were also observed. Studies were conducted from 2001 to 2005 and showed that several phytoplasmas could be detected in diseased almond trees. They were closely related to '*Candidatus* Phytoplasma phoenicium' (associated with almond witches' broom in Lebanon

– formerly EPPO Alert List), '*Ca.* P. aurantifolia', '*Ca*. P. solani' and '*Ca*. P. trifolii' (Zirak *et al*., 2009). **Present, in the centre and south.**

Radopholus similis (EPPO A2 List) occurs in New Caledonia (Grandison *et al*., 2009). **Present, no details.**

Xiphinema rivesi (EPPO A2 List) occurs in Chile where it was first reported in 2002. Experiments showed that *X. rivesi* populations from Chile were able to transmit *Tomato ringspot virus* to cucumber test plants (Auger *et al*., 2009). **Present, first found in 2002.**

- **Detailed records**

Frankliniella occidentalis (Thysanoptera: Thripidae – EPPO A2 List) occurs in the Azores (Portugal). It is reported from the islands of Faial, Saõ Jorge and Terceira (Borges *et al*., 2005).

The presence of *Globodera pallida* (EPPO A2 List) in Bulgaria was confirmed in 2006. It is the prevalent *Globodera* species in the Smolian region, and mixed populations with *G. rostochiensis* were found in the regions of Blagoevgrad, Sofia, Plovdiv, and Pazardzik (Laginova and Hristova, 2009).

Halyomorpha halys (Heteroptera: Pentatomidae – EPPO Alert List) occurs in Shandong province, China (Yang *et al*., 2009).

Potato purple top disease (EPPO A1 List) occurs in Montana (US). At least 7 distinct phytoplasma strains belonging to 5 different phytoplasma groups (16SrI, 16SrII, 16SrVI, 16SrXVIII) have been reported to cause purple top and related symptoms in potato. In Montana, a phytoplasma belonging to 16SrIII group was detected in diseased potatoes (Lee *et al.*, 2009).

Rice stripe necrosis virus (*Benyvirus*, RSNV – formerly EPPO Alert List) continues to spread in Latin America due to the international trade of rice seed produced in fields contaminated with RSNV-carrying cytosori of *Polymyxa graminis* (fungal vector). After the severe disease outbreaks observed in the eastern plains of Columbia in 1991 (EPPO RS 97/019), the virus has been detected in Ecuador, Panama and Brazil. However, no severe outbreaks have been observed in these countries (Lozano and Morales, 2009).

In Turkey, two years after its first discovery in Mersin province (Mediterranean region), *Rhynchophorus ferrugineus* (Coleoptera: Curculionidae – EPPO A2 List) is now widely distributed in parks and gardens over most parts of the Mediterranean and Aegean regions of Turkey (Atakan *et al.*, 2009).

In August 2008, symptoms of grapevine yellows were observed in vineyards near Podgorica, in Montenegro. Laboratory analysis confirmed the presence of stolbur phytoplasma (associated with bois noir) in diseased samples. A survey showed that stolbur phytoplasma could be detected in all grapevine-growing regions, and that the disease incidence could reach 20% in some vineyards. This is the first time that bois noir is reported from Montenegro (Radonjić *et al*., 2009).

Xanthomonas axonopodis pv. *dieffenbachiae* (EPPO A2 List) was found 2006 in Zhejiang province, China. It was found in *Anthurium andraeanum* in a park in Hangzhou (Su *et al.*, 2008).

In Iran, *Xanthomonas axonopodis* pv. *phaseoli* (EPPO A2 List) was first reported in 2002 from Markazi province. Since then, it has spread from Markazi to neighbouring provinces (e.g. Lorestan, Isfahan and Chahar-Mahaal and Bakhtiari) and it has become one of the major diseases of the common bean (*Phaseolus vulgaris*) (Osdaghi *et al.*, 2009).

In the 2000s, *Xylella fastidiosa* (EPPO A1 List) was found for the first time on blueberries (*Vaccinium* spp.) causing a leaf scorch disease in Oregon, USA (EPPO RS 2008/074). In May 2008, similar symptoms were observed on *Vaccinium corymbosum* hybrids in Florida and the presence of *X. fastidiosa* was confirmed in symptomatic samples (Harmon and Hopkins, 2009).

- **Host plants**

Surveys of *Impatiens walleriana* and *Verbena* hybrids in nurseries located in Fredericton (New Brunswick, Canada) and *Verbena* hybrids in New Delhi (India) showed widespread infection of *Citrus exocortis viroid* (*Pospiviroid*, CEVd) in vegetatively propagated and seed-grown plants. Infected plants did not show any symptoms (Singh *et al.*, 2009).

Tomato spotted wilt virus (Tospovirus, TSWV – EPPO A2 List) has been detected in *Opuntia ficus-indica* in Spain. Affected plants showed chlorotic mottle and/or mosaic symptoms on fruits, uneven ripening and fruit deformation (Córdoba-Sellés *et al.*, 2010).

- **Taxonomy**

Sequencing studies have been carried out to determine the relationships between the following three viruses of *Rubus* spp:
- Raspberry mottle virus (RMoV) a tentative closterovirus recently found in the USA;
- Raspberry leaf mottle virus (RLMV) and Raspberry leaf spot virus (RLSV) which are both components of the raspberry mosaic disease observed in Europe.
Results suggest that these pathogens correspond to isolates of the same virus species. It is proposed that they should all refer to Raspberry leaf mottle virus (RLMV) (McGavin and MacFarlane, 2009).

Source: Abelleira A, Mansilla JP, Padilla V, Hita I, Cabaleiro C, Bertolini E, Olmos A, Legorburu JF (2010) First report of *Arabis mosaic virus* on grapevine in Spain. *Plant Disease* **94**(5), p 635.

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

Computer codes: ACIZJA, ARMV00, CEVD00, CPMMV0, FRANOC, HALYHA, HETDPA, HETDRO, PHYP10, PHYPPH, POPTW0, RADOSI, RHYCFE, RLMV00, RLSV00, RMOV00, RSNV00, XANTDF, XANTPH, XIPHRI, XYLEFA, BG, BG, BR, CA, CL, CN, CN, EC, ES, GR, IN, IR, IR, ME, NC, PA, PT, RS, TR, US

2011/043 New record of *Pistia stratiotes* in Italy

Pistia stratiotes (Araceae, EPPO Alert List) is now recorded in Italy in Campania, Emilia Romagna, Lombardia, Toscana and Veneto.
In Campania, the occurrence of the species was confirmed by the Plant Protection Service of the Campania region and by the Department of Botany of the Università Federico II di Napoli in November 2010, in the cities of Villa Literno (Caserta) and Giugliano in Campania (Napoli).
The Assessorato all'Agricoltura, the Plant Protection Service of the Campania region and the Università degli Studi di Napoli Federico II have published a leaflet presenting the species and the threats it represents. The leaflet invites the institutions in charge of environmental protection as well as citizens to report any suspected occurrence of the species to the Plant Protection Service of the Campania region and to the Università degli Studi di Napoli Federico II. In addition, the Plant Protection Service of the Campania region has launched surveys to limit the spread and impacts of *Pistia stratiotes*.

Source: Assessorato all'Agricoltura, Servizio Fitosanitario Regionale, Università degli Studi di Napoli Federico II (2010) Lattuga d'acqua. *Pistia stratiotes* L. Progetto Piante Aliene della Regione Campania. 6 p.
http://www.agricoltura.regione.campania.it/difesa/pistia.html

Contact: Dott. Raffaele Griffo, Plant Protection Service of the Campania region, Email: r.griffo@maildip.regione.campania.it

Additional key words: invasive alien plants, new record **Computer codes:** IT, PIIST

2011/044 New records of exotic plants in Corse (FR)

New exotic plant species have been recorded in Corse. Some of them have exhibited an invasive behavior in some places of the world, and are listed below with their origin, status in the Global Compendium of Weeds, situation in Corse, and occurrence in the EPPO region according to the DAISIE database and EPPO records:

Species and family	Origin	Global Compendium of Weeds*	Situation in Corse	Occurrence in the EPPO region
Arctotheca calendula (Asteraceae)	Af.	AW, EW, NW, SW, W	Escaped from garden, naturalizing in the oriental plain.	ES, FR, IT (Sardinia, Sicily), PT (incl. Azores)
Bothriochloa barbinodis (Poaceae)	N-Am.	/	Several plants over 250 m transect, probably introduced accidentally.	FR
Chamaerops humilis (Arecaceae)	N-Af., S-Eur.	W	One plant observed near Cap Corse, subspontaneous.	IT, PT (Azores)
Euphorbia cyparissias (Euphorbiaceae)	Eurasia	AW, EW, NW, SW, W	Large population that is in the process of naturalization, near Cap Corse.	DK, ES, FR, GB, IE, LV, LT, NO, SE, etc.
Leontodon hispidus subsp. *hispidus* (Asteraceae)	Eurasia	AW, EW, W	Found in Col de Prato, probably introduced with agricultural material (seeds, hay, livestock, etc.)	Widespread (native)

Species and family	Origin	Global Compendium of Weeds*	Situation in Corse	Occurrence in the EPPO region
Physalis peruviana (Solanaceae)	S-Am.	AW, EW, W	Near a water course in the Marana plain, probably escaped from the disposal of its fruits. Will probably not establish.	ES, GB, IT, MT, PT (Azores, Madeira)
Soliva sessilis (Asteraceae)	S-Am.	AW, EW, NW, W	Abundant in Biguglia.	FR, ES, PT (incl. Azores),

* Abbreviations for the Global Compendium of Weeds column:
AW: agricultural weed; EW: environmental weed; NW: noxious weed; SW: sleeper weed; W: weed

In addition, *Ludwigia peploides* subsp. *montevidensis* (Onagraceae, EPPO List of Invasive Alien Plants) has been found in another site, near the golf course of Lezza where it is cultivated for ornamental purposes. The species grows in the river, and has not outcompeted the existing vegetation, probably because the water course is only temporary, not allowing the species to exhibit invasive behavior.

Source: A Global Compendium of Weeds.
http://www.hear.org/gcw/alpha_select_gcw.htm

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

Jeanmonod D & Schlüssel A (Eds) (2010) Notes and contributions on Corsican flora, XXIII. *Candollea* **65**, 267-290.

Additional key words: invasive alien plants, new records **Computer codes:** FR, ANOBA, AROCA, CMEHU, EPHCY, LEBHI, LUDPM, PHYPE, SOSVE

2011/045 The Black book of invasive alien plants in Central Russia

Russian scientists have produced a black book of invasive alien plants representing an environmental problem in Central Russia. This book describes 52 invasive alien plants that are widespread in Central Russia and considered as the most aggressive species, and 48 invasive alien plants that are still of limited distribution. Information on the distribution of these species, estimations of economic impacts, control methods, etc. is provided. Data was retrieved from herbarium and the literature. Distribution maps with the first years of reporting of the species in Central Russia are also produced.

The 52 invasive alien plants already widespread are the following:
Acer negundo (Sapindaceae), *Acorus calamus* (Acoraceae), *Amaranthus albus* (Amaranthaceae), *Amaranthus retroflexus* (Amaranthaceae), *Ambrosia artemisiifolia* (Asteraceae, EPPO List of Invasive Alien Plants), *Amelanchier spicata* (Rosaceae, EPPO List of IAP), *Amelanchier alnifolia* (Rosaceae), *Anisantha tectorum* (Poaceae), *Aster x salignus* (Asteraceae), *Atriplex tatarica* (Amaranthaceae), *Bidens frondosa* (Asteraceae, EPPO List of IAP), *Cardaria draba* (Brassicaceae), *Conyza canadensis* (Asteraceae), *Crataegus monogyna* (Rosaceae), *Cyclachaena xanthiifolia* (Asteraceae), *Echinocystis lobata* (Cucurbitaceae), *Elaeagnus angustifolia* (Elaeagnaceae), *Elodea canadensis* (Hydrocharitaceae), *Epilobium adenocaulon* (Onagraceae), *Epilobium pseudorubescens*

(Onagraceae), *Elsholtzia ciliata* (Lamiaceae), *Erigeron annuus* (Asteraceae), *Erucastrum gallicum* (Brassicaceae), *Euphorbia peplus* (Euphorbiaceae), *Festuca trachyphylla* (Poaceae), *Fraxinus pennsylvanica* (Oleaceae), *Galinsoga ciliata* (Asteraceae), *Galinsoga parviflora* (Asteraceae), *Helianthus tuberosus* (Asteraceae, EPPO List of IAP), *Heracleum sosnowskyi* (Apiaceae, EPPO A2 List), *Hippophae rhamnoides* (Elaeagnaceae), *Hordeum jubatum* (Poaceae), *Impatiens glandulifera* (Balsaminaceae, EPPO List of IAP), *Impatiens parviflora* (Balsaminaceae), *Juncus tenuis* (Juncaceae), *Lepidium densiflorum* (Brassicaceae), *Lupinus polyphyllus* (Fabaceae, EPPO List of IAP), *Matricaria discoidea* (Asteraceae), *Oenothera biennis* (Onagraceae), *Oxalis stricta* (Oxalidaceae), *Poa supina* (Poaceae), *Populus alba* (Salicaceae), *Puccinellia distans* (Poaceae), *Reynoutria x bohemica* (Polygonaceae, EPPO List of IAP), *Reynoutria japonica* (Polygonaceae, EPPO List of IAP), *Sisymbrium volgense* (Brassicaceae), *Senecio viscosus* (Asteraceae), *Sorbaria sorbifolia* (Rosaceae), *Solidago canadensis* (Asteraceae, EPPO List of IAP), *Solidago gigantea* (Asteraceae, EPPO List of IAP), *Symphytum caucasicum* (Boraginaceae), *Xanthium albinum* (Asteraceae).

The 48 alien plants considered as invasive which are still of limited distribution in Central Russia are the following:
Acer ginnala (Sapindaceae), *Adenocaulon adhaerescens* (Asteraceae), *Amaranthus blitoides* (Amaranthaceae), *Ambrosia trifida* (Asteraceae), *Amorpha fruticosa* (Fabaceae, EPPO List of IAP), *Aronia x mitchurinii* (Rosaceae), *Arrhenatherum elatius* (Poaceae), *Artemisia dubia* (Asteraceae), *Artemisia siversiana* (Asteraceae), *Asclepias syriaca* (Apocynaceae), *Aster novi-belgii* (Asteraceae), *Bellis perennis* (Asteraceae), *Brunnera sibirica* (Boraginaceae), *Calystegia sepium* subsp. *americanum* (Convolvulaceae), *Caragana arborescens* (Fabaceae), *Corispermum declinatum* (Chenopodiaceae), *Cornus alba* (Cornaceae), *Cotoneaster lucidus* (Rosaceae), *Cuscuta campestris* (Convolvulaceae), *Erigeron droebachensis* (Asteraceae), *Gaillardia aristata* (Asteraceae), *Galega orientalis* (Fabaceae), *Geum macrophyllum* (Rosaceae), *Juglans mandshurica* (Juglandaceae), *Kochia scoparia* (Amaranthaceae), *Lemna minuta* (Araceae), *Lonicera tatarica* (Caprifoliaceae), *Oenothera rubricaulis* (Onagraceae), *Parthenocissus inserta* (Vitaceae), *Persicaria weyrichii* (Polygonaceae), *Petasites hybridus* (Asteraceae), *Physocarpus opulifolius* (Rosaceae), *Prunus virginiana* (Rosaceae), *Quercus rubra* (Fagaceae), *Ribes aureum* (Grossulariaceae), *Robinia pseudoacacia* (Fabaceae), *Rosa rugosa* (Rosaceae), *Rudbeckia hirta* (Asteraceae), *Salsola tragus* (Amaranthaceae), *Sambucus racemosa* (Adoxaceae), *Symphytum x uplandicum* (Boraginaceae), *Telekia speciosa* (Asteraceae), *Thladiantha dubia* (Cucurbitaceae), *Ulmus pumila* (Ulmaceae), *Veronica filiformis* (Plantaginaceae), *Veronica persica* (Plantaginaceae), *Vinca minor* (Apocynaceae), *Zizania latifolia* (Poaceae).

Source: Vinogradova Yu K, Maiorov S R, Khorun L V (2010) Black book of the flora of Central Russia: alien plant species in Central Russian ecosystems. GEOS Moscow (RU). 512 p. Website: www.bookblack.ru

Additional key words: invasive alien plants

Computer codes: RU, ABOMI, ACRGN, ACRNE, ACSCA, AMAAL, AMABL, AMARE, AMBEL, AMBTR, AMEAL, AMESP, AMHFR, ARREL, ARTDU, ARTSI, ASCCU, ASTNB, ASTSL, ATXTA, BELPE, BIDFR, BROTE, CADDR, CAGSA, CRAAR, CRWAL, CSCMO, CTTLU, CVCCA, ECNLO, ELDCA, ELHCI, ELGAN, EPHPE, EPIAC, ERIAN, ERICA, ERWGA, FESTR, FRXPE, GAGOR, GAIAR, GASCI, GASPA, GEUMA, HELTU, HERSO, HIORH, HORJU, IPAGL, IPAPA, IUGMN, IUNTE, KCHFC, KYCXA, LEMMT, LEPDE, LONTA, LUPPO, MATMT, OEOBI, OEORU, OXAST, PEDHY, PHPOP, POASU, POLCU, POLWE, POPAL, PRNVG, PRTIN, PUCDI, QUERU, REYBO, RIBAU, ROBPS, ROSRG, RUDHI, SAMRA, SASKT, SENVI, SOISO, SOOCA, SOOGI, SSYVO, SYMUP, TEKSP, THDDU, ULMPU, VERFI, VERPE, VINMI, XANRI, ZIZLA

2011/046 A management strategy against invasive alien species in Reunion Island (FR)

Reunion Island is a French oversea Department located in the Indian Ocean. It is a biodiversity hotspot hosting primary ecosystems which represent 30% of the territory of the island. A National Park was created in 2007 and was registered as UNESCO World Heritage in 2010. This oceanic island is particularly sensitive to biological invasions. Among 2000 vascular plants, 892 are native, and 133 are considered invasive.

The first global strategy for the management of invasive alien species in Reunion Island was adopted in July 2010. This strategy is composed of 4 parts:

- (1) prevention of the introduction of new invasive species; this involves the development of a surveillance programme, inspections and interceptions at entry points, risk analyses, improved implementation of the legislation, establishment of "green lists" of species that can be imported and used safely, research support, development of cooperation with other countries in the Indian ocean area.
- (2) active management; this includes early warning through careful monitoring at entry points, in protected areas, and in agricultural and urban areas by setting cost-benefit analyses to determine whether management is needed and by mobilizing all existing expertise (government organizations, NGOs, research institutes, etc.); rapid response through the coordination of different actions and conventions with private stakeholders, and through the setting of emergency plans for action and dedicated funds; eradication, containment and control.
- (3) awareness raising, communication, education and training; such action will investigate how the public pictures invasive alien species to best-adapt communication actions. Communication actions will then be undertaken toward decision makers, socioprofessional stakeholders and the general public.
- (4) governance and promotion; a coordination structure will be established to coordinate all actions; a database will be created; monitoring of results will be undertaken as well as national and international cooperation.

The implementation of this strategy is ongoing since 2010 and is planned until 2013.

Source: DIREN 974, Parc National de La Réunion, Région Réunion, Conseil Général 974 & ONF (2010) Stratégie de lutte contre les espèces invasives à La Réunion. Parc National de La Réunion. 97 p.
http://www.reunion.ecologie.gouv.fr/rubrique.php3?id_rubrique=360

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Additional key words: invasive alien plants **Computer codes:** FR

2011/047 European biofuel policies may increase biological invasions

Piero Genovesi, Chair of the World Conservation Union (IUCN) Invasive Species Specialist Group has published a report on the increased risk of biological invasions due to European biofuel policies. This report is summarized below.
In order to respond to climate change by reducing CO_2 emissions, the EU has recently adopted policies that encourage the expansion of non-food or non-feed crops. According to the "climate and energy package", the European Parliament and Council require by law a 20% cut in emissions of greenhouse gases by 2020, compared with the 1990 levels. Meeting

these targets will require a significant change in the use of land in Europe, which may cause both direct and indirect negative environmental effects, because of the changes in the use of semi-natural habitats, or of the overall loss of forest areas. The potential increase in invasions that biofuel plants may cause has been scarcely considered in the European context. In fact, biofuel crops are selected for many biological traits which are common in invasive species: adaptability to poor quality habitats, rapid growth, high seed production, resistance to pests, etc. The European Union has a political mandate to develop a regional policy on invasive alien species that should cover the biofuels issue. The key elements to control the introduction of biofuel crops could be ensured by either adapting the existing legislations on plant health, by creating a new sectorial policy on biofuels, or by integrating these aspects in a comprehensive European policy on invasive alien species. One example of a recent sectorial policy that follows similar principles to those recommended for biofuel, is the aquaculture regulation 708/2007 of 11 June 2007. This legislation has introduced a ban on the introduction of any alien species used for aquaculture, unless a detailed risk assessment has proven that the species is at low risk of becoming invasive. It is interesting to notice that this innovative approach for Europe has been applied to a sector with a significant economic value.

Source: Genovesi P (2010) European biofuel policies may increase biological invasions: the risk of inertia. *Current Opinion in Environmental Sustainability* **3**, 1-5.

Additional key words: invasive alien species, biofuel

2011/048 Social sciences perspective: weeds and urban space management

The intensive use of herbicides in city parks and gardens can lead to problems of residues in city waters (above the accepted standards), as this has been observed for example in Bretagne in the city of Rennes (FR). Tackling this problem implies changing management techniques for green spaces, but also changing the perception that citizens have of weeds. Menozzi has therefore undertaken a sociological study on the perception of weeds in cities, which is summarized below.

In Rennes (FR), in the framework of sustainable management of green areas, a project consisting of avoiding the use of phytosanitary products both in public and private spaces has been launched in 2 districts. The sociological study then consisted in showing inhabitants of these 2 districts pictures of places where spontaneous plants were present and to ask them their opinion on them. Many inhabitants were surprised that the pictures had been taken in their district and did not recognize the places. The enquiries also highlighted a lack of observation and recognition of plants. Very few of the species growing spontaneously were recognized, and plants were generally quoted under generic names such as “forget-me-not”, or “dandelion”. These species were generally designated as “weeds”, and were not considered to be in the right place in urban areas. It appeared that in the inhabitants’ perception, the city is opposed to the countryside. The presence of weeds in the city therefore appears out of place to the public, while these species are tolerated in areas such as riverbeds or along peripheral roads. Pictures showing spontaneous plants growing along railways were perceived as representing hostile environments. Interviewees associated areas where herbs grew with the presence of rats or snakes. Other fears linked to the presence of these plants included insecurity, and the potential risk of these plants to hide road signs. The presence of weeds was considered to make the place dirty and neglected. These plants were perceived differently according to the age and the socio-professional category of the respondents. In public and private areas, popular socio-professional classes as well as elders were sensitive to the cleanness

of garden and had a negative opinion on "weeds", as they regarded them as wild (i.e. uncontrolled by man). Weeds were better accepted by younger persons and middle and upper classes, who associated them with nature (as opposed to artificial), especially when these species are in flower. Although native species may be of interest for experts such as ecologists or biologists as part of "biodiversity", this concept was not meaningful to the inhabitants. To be accepted in the city, weeds therefore need to be controlled. In addition, it appeared that the link between weeds and water pollution was not made by interviewed persons. Although these persons mentioned being concerned by environmental problems, they did not feel responsible for resolving them and placed the responsibility to other stakeholders, in particular blamed agricultural practices for water pollution.

Source: Menozzi MJ (2007) "Mauvaises herbes", qualité de l'eau et entretien des espaces. *Natures Sciences Sociétés* **15**, 144-153

Additional key words: invasive alien plants, social sciences **Computer codes:** FR

2011/049 11th International Conference on the Ecology and Management of Alien Plant Invasions: Bridging the gap between scientific knowledge and management practice (Zsombathely, HU; 2011-08-30/09-03)

The 11th International Conference on the Ecology and Management of Alien Plant Invasions (EMAPi), to be held in Szombathely (Hungary) between the 30th August and the 3rd of September 2011, will be dedicated to "Bridging the gap between scientific knowledge and management practice". The aims of the conference are to present new results from research and to exchange information related to any aspects of plant invasions, as well as to facilitate the communication between scientists, stakeholders and practitioners working on nature conservation, land management or any other area influenced by plant invasion.
The conference will address the following topics:
1. Pathways of introduction and spread of invasive species
2. Biology and ecology of invasive plants
3. Interaction with other trophic levels: enemies and symbiotic species
4. Genetics and evolution of invasive plants
5. Invasion patterns and invasibility of habitats
6. Impact of plant invasions (on plant communities, on other trophic levels, and on ecosystem functions and services)
7. Mapping, inventories, databases and internet resources
8. Risk assessment, prioritization, policy and programs for early detection and rapid response
9. Managing alien plant invasions through policy and vegetation management practices
10. Restoration and rehabilitation after successful control
11. Plant invasion in a changing world: relationship between plant invasion and other global change components (climate change, pollution, eutrophication and land use change)
12. Communication and outreach
13. Networking and international cooperation.

The call for abstracts is open until the 31st of March.

Source: EMAPI Website: http://www.emapi2011.org/modules.php?name=home&PHPSESSID=l00f6ppc7cavkbi76a797si1h5

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