

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

EPPO Reporting Service

No. 7 Paris, 2008-07-01

CONTENTO	
CONTENTS	Pests & Diseases
<u>2008/135</u>	- First record of <i>Tuta absoluta</i> in Algeria
<u>2008/136</u>	- First record of Anoplophora chinensis in Guernsey
2008/137	- Further details on the situation of Paysandisia archon in Northern Italy in 2008
<u>2008/138</u>	- First record of <i>Rhagoletis completa</i> in France
2008/139	- First record of Saperda candida in Germany: addition to the EPPO Alert List
2008/140	- First record of Mycosphaerella dearnessii in Slovenia
2008/141	- First record of Xanthomonas axonopodis pv. poinsettiicola in the Czech Republic
2008/142	- Eradication of Xanthomonas axonopodis pv. poinsettiicola in Austria
2008/143	- First detection of Xanthomonas axonopodis pv. phaseoli in the Czech Republic
2008/144	- First outbreak of <i>Pepino mosaic virus</i> in the Czech Republic
2008/145	- First record of Tomato apical stunt viroid on Solanum jasminoides in Finland
2008/146	- Molecular detection and identification of potato phytoplasmas in Russia
2008/147	- Current spread of the Ug99 strain of Puccinia graminis f.sp. tritici in Africa and Asia
	Invasive Plants
2008/148	- First official report of <i>Pueraria Iobata, Fallopia japonica</i> in Italy
2008/149	- Prioritized lists of invasive alien plants for Franche-Comté (France)
2008/150	- Current situation of Lysichiton americanus in France
2008/151	- First reports of exotic species in Limousin (France)
2008/152	- Stenopelmus rufinasus (Coleoptera: Curculionidae): a biological control agent of Azolla
	filiculoides recorded in Spain
<u>2008/153</u>	- International Symposium on Management of Alien Species for Sustainable Development of Aquaculture and Fisheries (MALIAF), Florence, IT, 2008-11-05/07

2008/135 First record of *Tuta absoluta* in Algeria

The NPPO of Algeria recently informed the EPPO Secretariat of the first record of *Tuta absoluta* (Lepidoptera: Geliichidae - EPPO A1 List) on its territory. It can be recalled that *T. absoluta* which originates from South America has recently been introduced into Spain (see EPPO RS 2008/001). In Algeria, *T. absoluta* was found on protected tomato crops in coastal areas (west, centre and part of the eastern coast). All inspections which had previously been carried out in these areas had not detected the pest, so it can be assumed that *T. absoluta* is of recent introduction into Algeria. The identity of the pest was confirmed by the NPPO laboratory of entomology on the basis of morphology (male genitalia). Phytosanitary measures have immediately been taken to prevent any further spread of *T. absoluta*. Infected plots have been placed under quarantine. It is prohibited to introduce tomato planting material from infested areas and to use planting material of unknown health status. Heavily affected tomato plants and leaves are destroyed by burning. Growers are allowed to use chemical control against *T. absoluta*. In addition, research will be undertaken to develop chemical and biological control methods.

Simultaneously, a paper has been published to report the first outbreak of *T. absoluta* in Algeria (Guenaoui, 2008) and provides further details. At the end of the winter, tomato growers in the region of Mostaganem (western coastal area) noticed the presence of unusual galleries on the leaves of tomatoes grown under glasshouses. At first, these were confused with damage caused by leafminers but closer observation revealed the presence of a microlepidoptera. Late instar larvae were collected and raised to the adult stage to allow the pest identification in spring 2008. The first outbreaks were observed in tomato glasshouses in the commune of Mazagran (near Mostaganem) and rapidly expanded to nearby communes. Foliar damage was reported in March and fruit damage appeared in May. Other outbreaks have also been reported in the commune of Hassi Bounif (near Oran). At present, damage has only been recorded on glasshouse tomatoes but it is feared that the pest will spread to outdoor tomato crops and eventually to other vegetable crops such as aubergine (*Solanum melongena*) and capsicum (*Capsicum annuum*).

The situation of *Tuta absoluta* in Algeria can be described as follows: Present, first found in 2008 on glasshouse tomatoes in coastal areas, under official control.

Note: Pictures of *T. absoluta* have been kindly provided by Prof. Yamina Guenaoui (University of Mostaganem, DZ) and Jean-François Germain (LNPV, Montpellier, FR) and can be viewed on the EPPO gallery of pictures, at the following address: <u>http://photos.eppo.org/index.php/album/219-tuta-absoluta-gnorab-</u>

Source: NPPO of Algeria, 2008-07.

Guenaoui Y (2008) Nouveau ravageur de la tomate en Algérie. Première observation de *Tuta absoluta*, mineuse de la tomate invasive, dans la région de Mostaganem, au printemps 2008. *Phytoma-La Défense des Végétaux* no. 617, 18-19.

Additional key words: new record

Computer codes: GNORAB, DZ

2008/136 First record of Anoplophora chinensis in Guernsey

In July 2008, *Anoplophora chinensis* (Coleoptera: Cerambycidae - EPPO A1 List) was detected in Guernsey on high grafted *Acer palmatum* plants imported from China via the Netherlands. The plants arrived in Guernsey in late February from the Netherlands and were placed into coldstore. A proportion of the plants were taken out of store and sent mail order to the United Kingdom. The remainder, a batch of 900 plants, was later taken to a standing out area in the nursery. In early July, 10 adult beetles were found crawling on these plants. Several cocoons of *Monema flavescens* (Lepidoptera: Limacodidae), a polyphagous forestry pest native to Asia, were also found on the plants. All the plants were immediately incinerated. Properties adjacent to the nursery were visited and leaflets supplied to make the owners aware of the situation. The local press, radio and TV stations were contacted and an island wide coverage was achieved. To date no further beetles have been found. The UK authorities (DEFRA) were contacted immediately to make them aware of the mail order connection.

The pest status of *Anoplophora chinensis* in Guernsey is officially declared as: Present at one nursery site on *Acer palmatum* plants imported from China, under eradication.

Source: NPPO of Guernsey, 2008-07.

Additional key words: new record

Computer codes: ANOLCH, GS

2008/137 Further details on the situation of *Paysandisia archon* in Northern Italy in 2008

In Liguria region (Northern Italy), specimens of *Paysandisia archon* (Lepidoptera: Castiniidae - EPPO A2 List) were caught in July 2008. The insect had already been observed in the southern and central parts of Italy (EPPO RS 2004/162, 2005/051, 2006/105). Specimens were trapped on a single palm (*Phoenix canariensis*) recently transplanted at 1 site in the Liguria region (Varazze - province of Savona) by the Regional Plant Protection Service of Liguria (Servizio Fitosanitario - Regione Liguria). Specimens were sent to the Centro Regionale di Sperimentazione ed Assistenza Agricola (CERSAA - Albenga, province of Savona) for a first diagnosis. The identity of the insects caught was confirmed by the University of Torino (Di.Va.P.R.A. - Entomologia). In July 2008 the infested palm tree, previously removed and wrapped with a plastic film, was cut into pieces and destroyed. Palm trees in surrounding areas were monitored to check for the presence of the insect and so far, no other infestations have been detected.

The situation of *Paysandisia archon* in Italy can be described as follows: Present, found in several regions (Apulia, Campania, Liguria, Marche, Toscana, Sicilia), under official control.

Source: Personal communication with Centro Regionale di Sperimentazione ed Assistenza Agricola (CERSAA - Albenga, Savona, IT), 2008-07.

Additional key words: detailed record

Computer codes: PAYSAR, IT

2008/138 First record of *Rhagoletis completa* in France

The presence of *Rhagoletis completa* (Diptera: Tephritidae - EU Annexes) is reported for the first time in France. The pest was discovered in mid-August 2007 on walnut trees (*Juglans regia*) near Chabreuil (Drôme department, Rhône-Alpes region). In 2007, *R. completa* was caught in 13 communes. A trapping network was set up in summer 2008 in two departments (Drôme and Isère) but the results are not yet available.

The situation of *Rhagoletis completa* in France can be described as follows: Present, first caught in 2007 in Drôme department (Rhône-Alpes region), under official control.

Source: Anonymous (2008) Phyto-Région. Rhône-Alpes: gare à la mouche du brou sur noyer. *Phytoma-La Défense des Végétaux* no. 617, p 1.

Additional key words: new record

Computer codes: RHAGCO, FR

2008/139 First record of Saperda candida in Germany: addition to the EPPO Alert List

The NPPO of Germany recently informed the EPPO Secretariat that Saperda candida (Coleoptera: Cerambycidae) was observed for the first time on the Island of Fehmarn (Island in the Baltic Sea, part of Schleswig-Holstein). On the 2008-07-21, stems of Sorbus intermedia planted in a 30 year old avenue showed symptoms of infestation by wood boring insects. One beetle and a considerable number of circular bore holes of 9 mm diameter mainly located at the basis of the stems were observed. Fresh borings indicated that beetles had recently hatched. Living larvae were isolated from the felled trees. The beetle was identified as Saperda candida Fabricius 1787 by an entomologist Mr O. Nolte, and his result was confirmed by Dr Lingafelter, Washington (US). Within the focus zone, 18 trees out of a total of 250 trees of the avenue were felled and incinerated. An intensive monitoring programme is being carried out within a safety zone of 2 km radius around the infested trees. Similar symptoms were detected in the focus zone, on two Malus trees in a private property and on *Crataequs* in public green. Collected larvae are being identified by PCR. S. candida is a North-American wood boring pest of ornamental and fruit trees (Crategus, Cydonia, Malus, Prunus, Pyrus, Sorbus). The origin of its introduction into Germany is being investigated but remains unknown for the moment. This is the first time that S. candida is reported in the EPPO region.

The pest status of *Saperda candida* in Germany is officially declared as follows: in a limited area; Transient, actionable, under eradication.

The NPPO of Germany considered that *S. candida* could easily establish in Europe and that it has a high potential for damaging native trees, as a consequence the pest will be added to the EPPO Alert List.

Saperda candida (Coleoptera: Cerambycidae - round-headed apple tree borer)

- WhyIn summer 2008, the presence of Saperda candida was detected for the first time
in Germany and in Europe. This wood boring insect was observed on the island of
Fehmarn on urban trees and eradication measures were taken against it. S.
candida is considered as a pest of apple trees and other tree species in North
America. S. candida is a regulated pest in Quebec, Canada. Considering the risk
it may present to fruit trees and ornamental trees in Europe, the NPPO of
Germany suggested that it could be added to the EPPO Alert List.
- Where EPPO region: Germany (isolated findings on urban trees, *Sorbus intermedia, Malus* and *Crataegus*, on the island of Fehmarn, under eradication).
 - North America: Canada (Manitoba, Nova Scotia, Ontario, Quebec, Saskatchewan), USA (reported to be present across the USA, recorded at least in Arkansas, Colorado, Florida, Georgia, Minnesota, Mississippi, Missouri, North Dakota, West Virginia).

On which plants *Malus* is the preferred host plant, but *S. candida* also attacks *Amelanchier*, *Aronia*, *Cotoneaster*, *Crataegus*, *Cydonia*, *Prunus*, *Pyrus*, and *Sorbus*.

Damage Adults feed on foliage but damage is caused by the larvae which attack both healthy and weakened trees. They bore galleries into the stems and trunks, preferably at the base of the trunk. Feeding damage may girdle the stems, cause dieback and eventually tree mortality (particularly on young trees). Attacked trees are more susceptible to wind breakage.

In North America, the life cycle takes 2 to 3 years to complete. Adults are light brown beetles of with two white stripes extending along the length of the body on the back. The body is 20 mm long and the antennae are at least as long. Adults are present from May/June to July, during which time they mate and females deposit eggs in slits at the base of stems. The hatched larvae begin feeding within the bark and by September, they are found between the bark and the sapwood, usually creating some sap flow at the point where they begin to feed. Larvae are whitish or yellowish (mature larvae are 20 to 45 mm long). Pupation occurs within the galleries and adults emerge in June. Populations are not synchronized so adults are produced each year. Images can be viewed on the Internet:

http://www.barkbeetles.org/browse/getimage.cfm?imgnum=3066002 http://www.flickr.com/photos/gillesgonthier/2607652110/ http://bugguide.net/node/view/58896

Dissemination <u>http://www.pbase.com/tmurray74/image/48529356</u> There is no data on the natural spread of this insect. Over long distances, it may

be transported by infested plants.

Pathway Plants for planting of *Malus* and other hosts, wood?

Possible risks Fruit trees species such as *Malus*, *Pyrus* and *Prunus* are widely grown across the EPPO region. Cotoneaster, Crataegus, and Sorbus are widely planted in parks and gardens for ornamental purposes and also occur in the wild. S. candida is causing problems in nurseries and young plantations. Because of the hidden behaviour of S. candida, the pest is likely to be moved undetected inside infected host plants. Control is difficult as the insect spends most of its life cycle inside the trees. Chemical control may be applied around the egg-laying period to kill adults and young larvae before they enter into the trees. In areas where the pest occurs, it is usually recommended to inspect trees for signs of infestation (e.g. sap flows, sawdust, exit holes) and kill larvae with flexible wires probed into the galleries, and also to destroy heavily infested trees. No natural enemies are reported, only woodpeckers might impact pest populations. Considering its host plants and its area of origin (present across Canada and USA), it is likely that S. candida can establish in the EPPO region. Although more information would be needed on the economic damage in North America, S. candida may be a threat for the EPPO region, more particularly to fruit trees in nurseries and young plantations.

Source(s)	Bousquet Y (ed.) (1991) Checklist of beetles of Canada and Alaska. Agriculture Canada, 430 pp.
	NPPO of Germany, 2008-07.
	INTERNET
	Becker GG (1918) The round-headed apple-tree borer <i>Saperda candida</i> Fab. Univ. Arkansas Agric. Exp. Stn. Bull. 146, 92 pp. <u>http://elibrary.unm.edu/sora/Auk/v035n04/p0493-p0495.pdf</u>
	Guide d'identification des insectes adultes les plus communs au Québec.
	http://www.lesinsectesduguebec.com/insecta/24-coleoptera/saperda_candida.htm
	Manitoba Agriculture, Food and Rural Initiatives. Round-Headed Apple Tree Borer (Saperda candida).
	http://www.gov.mb.ca/agriculture/crops/insects/fad82s00.html
	Mississippi Entomological Museum. Cerambycidae of Mississippi by Terence L. Schiefer.
	http://mississippientomologicalmuseum.org.msstate.edu/Researchtaxapages/Cerambycidae%20pag
	es/MS.Cerambycid.list.htm
	Ministry of Agriculture Food and Rural Affairs. Ontario. Apple borers.
	http://www.omafra.gov.on.ca/english/crops/facts/apborers.htm
	Missouri Nursery Pest News. http://www.mda.mo.gov/Pest/nursery/pdf/NPN_06042004.pdf
	Morris RF (2002) Distribution and biological notes for some Cerambycidae (Coleoptera) occurring in
	the southeastern United States. Insecta Mundi 16(4), 209-213.
	http://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=1552&context=insectamundi
	Museum of Entomology. Florida State Collection of Arthropods Gainesville. <u>http://www.fsca-</u>
	<u>dpi.org/Coleoptera/Mike/FloridaCerambycids/Saperda_candida.htm</u>
	Quality Tree Services. Flight Periods and Hosts of Common Shade Tree Borers in Colorado.
	http://www.qualitytree.org/insectinfo.pdf
	Réseau d'avertissements phytosanitaires. Pépinières ornementales, no. 13, 2008-06-17 (Canada).
	http://www.agrireseau.qc.ca/Rap/documents/a13pep08.pdf
	University of Minnesota. IPM of Midwest Landscapes. Pests of trees and shrubs. Roundheaded apple
	tree borer. http://www.entomology.umn.edu/cues/Web/195RoundheadedAppletreeBorer.pdf
EPPO RS 2008/139	
Panel review date	- Entry date 2008-07

2008/140 First record of *Mycosphaerella dearnessii* in Slovenia

The NPPO of Slovenia informed the EPPO Secretariat of the first finding of *Mycosphaerella dearnessii* (anamorph *Lecanosticta acicola* - EPPO A2 List) on its territory. The causal agent of brown spot needle blight was observed on the crowns of pine trees (*Pinus sylvestris*, *P. mugo*) in a park in Bled.

The situation of *Mycosphaerella dearnessii* in Slovenia can be described as follows: Present, first reported in 2008 on *Pinus sylvestris* and *P. mugo*, in a park in Bled.

Source: NPPO of Slovenia, 2008-07.

Additional key words: new record

Computer codes: SCIRAC, SI

2008/141 First record of Xanthomonas axonopodis pv. poinsettiicola in the Czech Republic

In the Czech Republic, a company located in Brno asked the regional NPPO in July 2007 to identify the possible cause of symptoms observed on potted plants of poinsettia (*Euphorbia pulcherrima*) growing in a glasshouse. Samples were tested by the NPPO laboratory. These tests (gas chromatography) revealed the presence of *Xanthomonas axonopodis* pv. *poinsettiicola* (EPPO Alert List). Young plants of *E. pulcherrima* had been supplied from the Netherlands and Germany and the pathogen occurred on plants from both countries. No official measures were taken by the NPPO but all diseased plants were destroyed and symptomless plants were released for distribution to the final consumers within the country. This is the first report of *X. axonopodis* pv. *poinsettiicola* in the Czech Republic.

The situation of *Xanthomonas axonopodis* pv. *poinsettiicola* in the Czech Republic can be described as follows: Transient, it was detected in 2007 in a single glasshouse and affected plants were destroyed.

Source: NPPO of Czech Republic, 2008-08.

Additional key words: first record

Computer codes: XANTPN, CZ

2008/142 Eradication of Xanthomonas axonopodis pv. poinsettiicola in Austria

As reported in EPPO RS 2008/126, *Xanthomonas axonopodis* pv. *poinsettiicola* (EPPO Alert List) was detected for the first time in Austria in September 2007. The disease was observed on potted plants of *Euphorbia pulcherrima* in one commercial nursery in Kärnten (Carinthia), Southern Austria. The NPPO of Austria informed the EPPO Secretariat that the affected plant lot was completely destroyed and no other outbreak was found. Therefore, the disease is now considered eradicated.

The pest status of *Xanthomonas axonopodis* pv. *poinsettiicola* in Austria is officially declared as: Absent, eradicated.

Source: NPPO of Austria, 2008-08.

Additional key words: absence, eradication

Computer codes: XANTPN, AT

2008/143 First detection of Xanthomonas axonopodis pv. phaseoli in the Czech Republic

In March 2007, the NPPO of Czech Republic carried out surveillance inspections in a company storing seeds of *Phaseolus vulgaris*. Seeds of several bean cultivars were sampled and tested by the NPPO laboratory. These tests (gas chromatography) revealed the presence of *Xanthomonas axonopodis* pv. *phaseoli* (EPPO A2 List) in samples of *P. vulgaris* cvs Aidagold and Gama. These results were confirmed by pathogenicity tests. The two infected lots had been imported from Tanzania (8 tonnes for cv. Aidagold and 4 tonnes for cv. Gama). Official measures were applied. Both contaminated lots were disqualified as seed material. A portion of the Aidagold lot (300 kg) was burned and the remaining seeds were processed (canned beans). This is the first time that *X. axonopodis* pv. *phaseoli* is detected in Czech Republic. The NPPO of Czech Republic now considers that *X. axonopodis* pv. *phaseoli* has been eradicated.

The pest status of *Xanthomonas axonopodis* pv. *phaseoli* in the Czech Republic is officially declared as: Absent: eradicated.

Source: NPPO of Czech Republic, 2008-08.

Additional key words: phytosanitary incident

Computer codes: XANTPH, CZ

2008/144 First outbreak of *Pepino mosaic virus* in the Czech Republic

The NPPO of the Czech Republic recently informed the EPPO Secretariat of the first outbreak of *Pepino mosaic virus* (*Potexvirus*, PepMV - EPPO Alert List). As a result of an official survey, PepMV was found in May 2008 at one company producing tomato fruits under glass. This company was located in the Břeclav District (South Moravian region). PepMV was identified by the NPPO diagnostic laboratory using ELISA and PCR for confirmation. The origin of this outbreak could not be reliably identified. PepMV was first detected in tomato plants (*Lycopersicon esculentum* cvs. Tricia F1 and Gaheris) imported from the Netherlands (originally delivered as grafted seedlings and seeds). However, at this company, PepMV was later detected in tomato plants of other cultivars and/or origins. Official measures are currently being taken. After harvest, all plants and growing media will be removed from the glasshouses, composted and covered with soil. Weed host species of PepMV occurring at the place of production and its close vicinity will also be destroyed. This is the first record of PepMV in the Czech Republic.

The pest status of *Pepino mosaic virus* in the Czech Republic is officially declared as: Present, under eradication.

Source: NPPO of the Czech Republic, 2008-07.

Additional key words: new record

Computer codes: PEPMV0, CZ

2008/145 First record of *Tomato apical stunt viroid* on *Solanum jasminoides* in Finland

In June 2008, the presence of *Tomato apical stunt viroid* (*Pospiviroid*, TASVd - EPPO Alert List) was reported for the first time in Finland. TASVd was detected in a Finnish glasshouse on symptomless *Solanum jasminoides* plants which had been imported from the Netherlands. The contaminated consignments were destroyed. The infected sample had been collected for a survey of another viroid *Potato spindle tuber viroid* (EPPO A2 List) which has not been detected in Finland, so far. The Finnish NPPO warns tomato growers about the risk of spreading viroids such as TASVd and PSTVd on symptomless ornamental plants of the Solanaceae family. Tomato growers are advised to grown tomatoes in areas which are well separated from other Solanaceae.

The situation of *Tomato apical stunt viroid* in Finland can be described as follows: Transient, detected in June 2008 on symptomless *Solanum jasminoides* in a single glasshouse, infected plants were destroyed.

Source: EVIRA website (last accessed in 2008-07). New tomato pathogen found in Finland (2008-06-05). <u>http://www.evira.fi/portal/en/evira/current_issues/?id=1097</u>

Additional key words: new record

Computer codes: TASVD0, FI

2008/146 Molecular detection and identification of potato phytoplasmas in Russia

In Russia, phytoplasma diseases of potatoes have long been suspected to occur in several potato-growing regions on the basis of symptoms and the presence of insect vectors. Symptoms of Potato stolbur phytoplasma (*Candidatus* Phytoplasma solani' - EPPO A2 List) are most prevalent, but round leaf disease, potato witches' broom and potato purple top wilt also occur. During summer 2006, 33 potato plants showing symptoms of phytoplasma diseases (e.g. purple top, stunting, bud proliferation, aerial tubers) were collected from the regions of the Volga River, Central Russia and Northern Caucasus. PCR tests with different sets of primers detected the presence of phytoplasmas in 12 samples out of 33. RFLP analysis showed that among the 12 PCR positive potato samples, 10 presented identical or very similar RLFP profiles to stolbur phytoplasma and 2 presented profiles similar to those of the aster yellows phytoplasma group. According to the authors, this is the first confirmation by molecular procedures that stolbur phytoplasma (*Ca.* P. solani' and phytoplasmas of the aster yellows group occur on potato crops in Russia

Source: Girsova N, Bottner KD, Mozhaeva KA, Kastalyeava TB, Owens, RA, Lee IM (2008) Molecular detection and identification of Group 16SrI and 16SrXII phytoplasmas associated with diseased potatoes in Russia. *Plant Disease* 92(4), p 654.

Additional key words: detailed record

Computer codes: PHYP10, RU

2008/147 Current spread of the Ug99 strain of *Puccinia graminis* f.sp. *tritici* in <u>Africa and Asia</u>

Black stem rust caused by *Puccinia graminis* f.sp. *tritici* is a worldwide disease of wheat with a long history. Rusts were already occurring on cultivated cereals during the Bronze Age, and they have caused very severe crop losses until the middle of the 20th century. Concerning black stem rust, control measures which had progressively been put into place (destruction of the alternate host *Berberis vulgaris* and the use of resistant cultivars) have maintained the disease at very low levels in most countries. In Europe, the disease was observed sporadically until 1980 in France and Switzerland on old wheat cultivars, as well as in a few Southern and Eastern European countries which were not using modern resistant varieties. However, in 1999 a new virulent strain of P. graminis f.sp. tritici was observed in Uganda on wheat varieties which were previously considered to be resistant to the disease (i.e. varieties carrying resistance genes Sr31 and Sr38). This new strain was called Ug99 to recall the year and country of first discovery. Ug99 then spread to other East African countries (Kenya in 2001, Ethiopia in 2003) causing very severe damage. It continued to spread eastwards to Sudan, and then jumped over the Red Sea to reach Yemen in the Middle East. In early 2008, Ug99 was discovered in Iran. The anticipated spread of Ug99 poses a risk for the whole world production of wheat. For the EPPO region, it might be considered that it poses a more immediate risk to countries in the Near East (Israel, Turkey), the Caucasus (Armenia, Azerbaijan, Georgia) and Central Asia (Kazakhstan, Kyrgyzstan, Tajikistan, Uzbekistan), but other parts of the region are also at risk.

Stem rust produces huge numbers of urediniospores during the crop season which are dispersed by the wind over long distances and across continents. These spores can also be transported by travellers' clothing or infected plant material. Considering the biology of this disease, quarantine measures are not considered adequate. However, as international cooperation is needed to protect wheat production at a global level, FAO, CIMMYT, and BGRI (Borlaug Global Rust Initiative) are currently coordinating the development of

management strategies. The main elements to control Ug99 include: disease surveillance, breeding for durable resistance, seed multiplication and distribution of resistant cultivars, and field management (e.g. different planting dates, adequate use of fungicides).

Source:

Bernard JL (2008) La rouille noire des céréales ou l'éternel retour. *Phytoma-La Défense des Végétaux* no. 617, p 4-7.
Délos M, de Vallavieille Pope C (2008) La rouille noire et le blé : passé récent, présent, futur. Géographie de l'Ouganda à l'Iran, biologie, risques et avenir de la lutte en France et ailleurs. *Phytoma-La Défense des Végétaux* no. 617, p 8-11.

INTERNET (last accessed 2008-07) Borlaug Global Rust Initiative (BGRI) website. <u>http://www.globalrust.org</u>

CIMMYT website

Ug99 - RustMapper. <u>http://www.cimmyt.org/GIS/RustMapper/Index.htm</u> Hodson DP, Singh RP, Dixon JM (2007) An initial assessment of the potential impact of stem rust (race Ug99) on wheat producing regions of Africa and Asia using GIS. <u>http://www.cimmyt.org/gis/pdf/UG99postH.pdf</u>

FAO NewsRoom, Rome, 2008-03-05. Wheat killer detected in Iran. Dangerous fungus on the move from East Africa to the Middle East. http://www.fao.org/newsroom/en/news/2008/1000805/index.html

Additional key words: geographical distribution

Computer codes: PUCCGT

2008/148 First official report of Pueraria Iobata, Fallopia japonica in Italy

In Italy, *Pueraria lobata* (Fabaceae, EPPO A2 List) was observed in October 2007 in Viggiù (Lombardia) and covers an area of approximately 1000 m². *Fallopia japonica* (Polygonaceae, EPPO List of Invasive Alien Plants) was observed in May 2008 in Villasanta (Milan province) and covers an area of approximately 300 m². This is the first official report of an invasive alien plant received at EPPO. The EPPO Secretariat encourages member countries to send us this type of information.

Source: NPPO of the Lombardy Region, Italy, Laboratorio fitopatologico SFR di Minoprio, 2008-02 and 2008-06.

Additional key words: new record

Computer codes: POLCU, PUELO, IT

2008/149 Prioritized lists of invasive alien plants for Franche-Comté (France)

In France, the "Conservatoire Botanique de Franche-Comté" (a Department in Eastern France) has elaborated priority lists of invasive alien plants. These lists are based on 3 criteria, assessed according to expert judgement:

- impacts on biodiversity, human health and economy (with scores ranking from 1 to 4 "+").
- potential invasiveness of the species in Franche-Comté according to its behaviour elsewhere in the country
- the current distribution of the species in Franche-Comté.

The lists are as follows and the species have been checked against the Global Compendium of Weeds.

List 1: the 5 species listed below have major potential impacts. Their distribution remains limited in Franche-Comté, the invasion of these species might be controlled.

Species	Origin	GCW*	Biodiv.	Human health	Economic impact
Ambrosia artemisiifolia (Asteraceae) (EPPO List of Invasive Alien Plants)	N-Am.	W, NW, EW, AW	++	+++	+++
Heracleum mantegazzianum (Apiaceae) (EPPO List of IAP)	Caucasus	W, NW, SW, EW, AW	+++	+	
Ludwigia uruguayensis (Onagraceae) (EPPO List of IAP)	S-Am.	W, NW, EW	+++	•	++
<i>Myriophyllum aquaticum</i> (Haloragaceae) (EPPO List of IAP)	S-Am.	W, NW, EW, AW	++		++
Senecio inaequidens (Asteraceae) (EPPO List of IAP)	S-Am.	W, EW, AW	+++	•	+

List 2: the 11 species listed below can potentially have major impacts but these impacts are mainly restricted to biodiversity. Their distribution remains limited in Franche-Comté, the invasion of these species might be controlled.

Species	Origin	GCW*	Biodiv.	Human health	Economic impact
Amorpha fruticosa (Fabaceae) (EPPO List of IAP)	N-Am.	W, NW, EW, AW	++	•	+
Aster novi-belgii (Asteraceae)	N-Am.	W, SW, EW	+++		
Aster laevis (Asteraceae)	N-Am.	EW, AW	+++		
Aster lanceolatus (Asteraceae)	N-Am.	W, EW, AW	+++	•	•
Aster novae-angliae (Asteraceae)	N-Am.	W, EW	+++	•	•
Aster x-salignus (Asteraceae)	N-Am.	/	+++	•	
Cotoneaster dammeri (Rosaceae)	As.	W	++	•	•
Cotoneaster horizontalis (Rosaceae)	China	W, SW, EW	++	•	•
<i>Lindernia dubia</i> (Scrophulariaceae)	Am.	W, EW, AW	+++	•	•
<i>Phytolacca americana</i> (Phytolaccaceae)	N-Am.	W, AW	++	+	+
Rudbeckia laciniata (Asteraceae)	N-Am.	W, EW, AW	+++	•	+

List 3: the 22 species listed are already invasive in Franche-Comté, and long term specific management plans have to be considered.

Species	Origin	GCW*	Biodiv.	Human health	Economic impact
Acer negundo (Aceraceae) (EPPO List of IAP)	N-Am.	W, SW, EW, AW	+++		•
Ailanthus altissima (Simaroubaceae) (EPPO List of IAP)	China	W, NW, EW, AW	+++		
<i>Bidens frondosa</i> (Asteraceae) (EPPO List of IAP)	N-Am.	W, NW, EW, AW	+++	•	•
<i>Buddleia davidii</i> (Buddleiaceae) (EPPO List of IAP)	China	W, NW, SW, EW, AW	++		
Campylopus introflexus (Dicrananceae)	S-Hemisph.	EW	+++	•	•
Datura stramonium (Solanaceae)	Am.	W, NW, EW, AW	++	+	•
Elodea canadensis (Hydrocharitaceae)	N-Am.	W, NW, SW, EW, AW	++		+
<i>Elodea nuttallii</i> (Hydrocharitaceae)	N-Am.	W, EW, AW	+++		++
Fallopia japonica (Polygonaceae) (EPPO List of IAP)	As.	W, NW, SW, EW, AW	++++	•	+

Species	Origin	GCW*	Biodiv.	Human health	Economic impact
<i>Fallopia sachalinensis</i> (Polygonaceae) (EPPO List of IAP)	As., Japan	W, EW, AW	++++		+
Galega officinalis (Fabaceae)	S-Eur.	W, NW, EW, AW	++	•	++
Helianthus tuberosus (Asteraceae) (EPPO List of IAP)	N-Am.	W, NW, EW, AW	+++		•
Hypericum majus (Clusiaceae)	N-Am.	-	+++	•	•
<i>Impatiens glandulifera</i> (Balsaminaceae)	Himalaya	W, NW, EW, AW	++++	•	+
Impatiens parviflora (Balsaminaceae)	Cent. Asia	W, EW	+++	•	•
Panicum capillare (Poaceae)	N-Am.	W, NW, EW, AW	+++	•	•
Panicum dichotomiflorum (Poaceae)	N-Am.	W, NW, AW	+++	•	•
Panicum miliaceum (Poaceae)	Cent. As.	-	++	•	
Pinus nigra (Pinaceae)	S-Eur.	W, EW	+++		
Robinia pseudoacacia (Fabaceae)	N-Am.	W, NW, SW, EW, AW	++++		
Solidago canadensis (Asteraceae) (EPPO List of IAP)	N-Am.	W, EW, AW	+++		+
Solidago gigantea (Asteraceae) (EPPO List of IAP)	N-Am.	W, EW, AW	+++	•	+

List 4: the 49 species listed are not yet considered invasive in Franche-Comté, but have shown invasive behaviour in other areas of France, or in other countries (mainly Switzerland). A surveillance of these species should be envisaged.

Origin	GCW*	Biodiv.	Human health	Economic impact
N-Am.	W, AW	+	•	•
S-Am.	W, EW,	+	•	•
	AW			
Subcosm.	W, EW,	+	•	•
	AW			
N-Am.	W, NW,	+	•	•
	EW, AW			
E-As.	W, EW	+	•	•
N-Am.	W, EW,		•	+
	AW			
Am. Trop	W, NW,	++	•	+
and temp.	EW, AW			
Eur., As.	W, NW,	+	•	•
	EW, AW			
N-Am.	W, AW	+	•	•
	N-Am. S-Am. Subcosm. N-Am. E-As. N-Am. Am. Trop and temp. Eur., As.	N-Am.W, AWS-Am.W, EW, AWSubcosm.W, EW, AWN-Am.W, NW, EW, AWE-As.W, EWN-Am.W, EW, AWMAm.W, EW, AWEur., As.W, NW, EW, AW	N-Am.W, AW+S-Am.W, EW, AW+Subcosm.W, EW, AW+Subcosm.W, EW, AW+N-Am.W, NW, E'As.+N-Am.W, EW, AW+N-Am.W, EW, AW.N-Am.W, EW, AW.Lam.W, EW, AW.Lam.W, EW, AW.Lam.W, NW, EW, AW++Eur., As.W, NW, EW, AW+	N-Am.W, AW+.N-Am.W, EW, AW+.Subcosm.W, EW, AW+.N-Am.W, NW, EW, AW+.E-As.W, EW AW+.N-Am.W, EW, AW+.N-Am.W, EW, AW+.E-As.W, EW, AWEur., As.W, NW, EW, AW++.Eur., As.W, NW, EW, AW+.

Species	Origin	GCW*	Biodiv.	Human health	Economic impact
Bromus catharticus (Poaceae)	S-Am.	W, EW, AW	+	•	
<i>Bunias orientalis</i> (Brassicaceae)	SE-Eur.	W, EW, AW	+	•	•
Conyza bonariensis (Asteraceae)	Trop. Am.	W, EW, AW	+	•	•
Conyza canadensis (Asteraceae)	N-Am.	W, EW, AW	+	•	•
Conyza floribunda (Asteraceae)	Trop. Am.	W, AW	+	•	•
Coronopus didymus (Brassicaceae)	N-Am.	W, EW, AW	+	•	•
Duchesnea indica (Rosaceae)	E-As.	W, SW, EW, AW	+	•	•
Epilobium ciliatum (Onagraceae)	N-Am.	W, EW, AW	+	•	•
<i>Egeria densa</i> (Hydrocharitaceae) (EPPO List of IAP)	S-Am.	W, SW, EW, AW	+++		++
Erigeron annuus (Asteraceae)	N-Am.	W, AW	+		
Eschscholzia californica (Papaveraceae)	N-Am.	W, EW, AW	+	•	•
Fallopia aubertii (Polygonaceae)	As.	-	+	•	•
Galinsoga parviflora (Asteraceae)	S-Am.	W, SW, EW, AW	+	•	+
Galinsoga ciliata (Asteraceae)	S-Am.	W, EW, AW	+	•	+
Impatiens balfouri (Balsaminaceae)	Himalaya	W, EW	++	•	•
Isatis tinctoria (Brassicaceae)	SE-Eur., As.	W, NW, EW, AW	++	•	•
Juncus tenuis (Juncaceae)	Am.	W, EW, AW	+	•	•
Lemna minuta (Lemnaceae)	Am.	-	++		
Lupinus polyphyllus (Fabaceae) (EPPO List of IAP)	N-Am.	W, SW, EW, AW	+		+
Matricaria discoidea (Asteraceae)	NE-As.	W, EW, AW	+	•	•
Oenothera biennis (Onagraceae)	N-Am.	W, AW	+	•	•
Orthodontium lineare (Bryaceae)	/	EW	+	•	•
Orthotrichum consimile (Orthotrichaceae)	/	/	+	•	•
Oxalis fontana (Oxalidaceae)	N-Am.	W, AW	+	•	
Parthenocissus quinquefolia (Vitaceae)	Am.	W, SW, EW, AW	+	•	•
Parthenocissus tricuspidata (Vitaceae)	As.	W, EW	+	•	•
Phyllostachys sp. (Poaceae)	Japan	1	++		+
Physocarpus opulifolius (Rosaceae)	N-Am.	W, EW	+	•	•

Species	Origin	GCW*	Biodiv.	Human health	Economic impact
Prunus laurocerasus (Rosaceae)	S-Eur., As.	W, SW, EW, AW	++	+	
Prunus serotina (Rosaceae)	N-Am.	W, SW, EW, AW	+++	•	+
<i>Puccinellia stricta (=Glyceria stricta)</i> (Poaceae)	N-Am.	W	+	•	•
Rhus typhina (Anacardiaceae)	N-Am.	W, AW	++	+	
<i>Rumex patientia</i> (Polygonaceae)	SE-Eur.	W, EW, AW	+	•	
Rumex thyrsiflorus (Polygonaceae)	Euro- siberian	W, AW	+	•	•
Setaria sp. (Poaceae)	Subcosm.	/	++	•	
Sorghum halepense (Poaceae)	E-Medit.	W, NW, EW, AW	+	•	
<i>Spiraea hypericifolia</i> subsp. <i>obovata</i> (Rosaceae)	SE-Eur.	-	++	•	
Spiraea salicifolia (Rosaceae)	SE-Eur., As.	-	++	•	
<i>Veronica peregrina</i> (Scrophulariaceae)	Am.	W, EW, AW	+	•	•
Veronica persica (Scrophulariaceae)	SE-As.	W, EW, AW	+	•	•

* Abbreviations for the Global Compendium of Weeds column:

W: weed; SW: sleeper weed; NW: noxious weed; AW: agricultural weed; EW: environmental weed, /: not mentioned; -: not quoted as invasive.

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

Ferrez Y (2006) Définition d'une stratégie de lutte contre les espèces invasives en Franche-Comté. Conservatoire Botanique de Franche-Comté, DIREN Franche-Comté, Union Européenne, 71p.

Additional key words: invasive alien plants, new records

Computer codes: ACRNE, AILAL, AMABO, AMACH, AMADE, AMARE, AMBEL, AMHFR, ARTVE, ASCSY, ASTLN, ASTLV, ASTNA, ASTNB, ASTSL, AZOFI, BEFIN, BIDCN, BIDFR, BIKAU, BROCA, BUNOR, CTTDA, CTTHO, COPDI, DATST, DUCIN, ELDCA, ELDDE, ELDNU, EPIAC, ERIAN, ERIBO, ERICA, ERIFL, ESHCA, GAGOF, GASPA, HELTU, HERMZ, IPABF, IPAGL, IPAPA, ISATI, IUNTE, KMPIN, LEMMT, LIDDU, LUDUR, LUPPO, MATMT, MYPBR, OEOBI, OTDLI, OXAEU, PANCA, PANDI, PANMI, PHPOP, PHTAM, PIUNI, POLCU, PRNLR, PRNSO, PRTQU, PRTTR, PUCST, REYSA, RHUTY, ROBPS, RUDLA, RUMPA, RUMPH, SENIQ, 1SETG, SOOCA, SOOGI, SORHA, SPVHY, SPVSA, VERPE, VERPG, FR

2008/150 Current situation of *Lysichiton americanus* in France

Lysichiton americanus (Araceae, EPPO A2 List) was reported for the first time in 1995 in the Loire Department (Haute Vallée du Furan, Pont Souvignet, in Bessat) in France, where it escaped from a garden. Except for this locality, the species remained confined to gardens in France, but in 2005, the plant also escaped in the Haute-Vienne Department. The species was found on Saint-Léonard de Noblat (Ancien Moulin du Repaire) and developed in the understorey of a *Salix acuminata* (Salicaceae) forest.

Four plants of *L. americanus* were observed in 2005 and the population expanded to 12 plants in 2006, thus confirming that the species can thrive at this location.

It was observed in the Haute-Vienne Department that each plant could develop 3 to 4 inflorescences.

Source: Lebreton A (2007) Présence du Lysichite jaune ou Faux arum, *Lysichiton americanus* Hultén & St John (Araceae), en France. *Symbioses* 20, 60-64.

Additional key words: invasive alien plants, record

Computer codes: FR, LSYAM

2008/151 First reports of exotic species in Limousin (France)

Since 2000, the following exotic plants have been observed in the Limousin region (France). Their origin and comments on habitats are provided, and their distribution in Europe has been checked against the DAISIE database. They have also been checked against the Global Compendium of Weeds.

Species	Origin	GCW*	Comment/Habitat in Limousin	EPPO Distribution
Aponogeton distachyos (Aponogetonaceae)	S-Af.	W, EW	Aquatic plant, often traded for ornamental purposes. Generally occurs in continental waters: water courses, water bodies.	FR, GB
<i>Bidens frondosa</i> (Asteraceae, EPPO List of Invasive Alien Plants)	N-Am.	W, NW, AW, EW	Banks of continental water, riverbanks / canalsides (dry river beds), road and rail networks and associated land	AT, BE, FR (incl. Corse), CH, CZ, DE, ES, GB, HU, IT (incl. Sardinia), LT, LU, NL, PL, PT, SI, SK, RO
Bromus carinatus (Poaceae)	N-Am.	W, AW	Road and rail networks and associated land, other artificial surfaces (wastelands)	BE, FR, DE, GB, IE, IT, NL, PL
Bromus catharticus (Poaceae)	S-Am.	W, AW, EW	Road and rail networks and associated land, other artificial surfaces (wastelands)	AD, ES (incl. Baleares, Canarias), FR (incl. Corse), DE, GB, GR, IT, PT (incl. Açores, Madeira)
<i>Cyperus eragrostis</i> (Cyperaceae)	S-Am.	W, NW, AW, EW	Road and rail networks and associated land, other artificial surfaces (wastelands)	BE, FR (incl. Corse), DE, GB, IE, IT (incl. Sardinia), PT (incl. Açores, Madeira)

Species	Origin	GCW*	Comment/Habitat in Limousin	EPPO Distribution
<i>Egeria densa</i> (Hydrocharitaceae, EPPO List of IAP)	S-Am.	W, NW, AW, EW	Continental waters: water courses, water bodies	AT, BE, CH, ES, FR, GB, IT, PT (Açores), TR
Euphorbia maculata (Euphorbiaceae)	N-Am.	W, AW, EW	Rare in Limousin, Green urban areas, including parks, gardens, sport and leisure facilities	Not recorded in DAISIE. According to EPPO: ES, IT, SE
Heracleum mantegazzianum (Apiaceae, EPPO List of IAP)	Cauc.	W, SW, NW, AW, EW	The species is not established, it is only present in green urban areas, including parks, gardens, sport and leisure facilities	BE, CH, CZ, DE, DK, FI, FR, GB, HU, IE, IS, IT, LV, LU, NL, NO, PL, SE, SK
Lysichiton americanus (Araceae, A2 List)	N-Am.	EW	Present in a <i>Salix</i> forest, broad-leaved forests.	DK, GB, IE, NO, SE
<i>Myriophyllum aquaticum</i> (Haloragaceae, EPPO List of IAP)	S-Am.	W, NW, AW, EW	Continental waters (water courses, water bodies)	BE, DE, FR (incl. Corse), GB, IE, IT, PT
Paspalum dilatatum (Poaceae)	S-Am.	W, AW, EW	Road and rail networks and associated land	ES (incl. Baleares, Canarias), GR, IT (incl. Sardinia), PT (incl. Açores, Madeira)
<i>Phytolacca americana</i> (Phytolaccaceae)	N-Am.	W, AW	Inland wetlands (marshes, peat bogs)	EŚ (Baleares), CH, CY, FR (incl. Corse), GR, HU, IT (incl. Sardinia), MT, NL, PT (Açores, Madeira), RO, SK, TR

* Abbreviations for the Global Compendium of Weeds column:

W: weed; SW: sleeper weed; NW: noxious weed; AW: Agricultural Weed; EW: Environmental Weed., /: not mentioned; -: not quoted as invasive.

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

Chabrol L, Guerbaa K, Raynard P (2007) Espèces nouvelles et remarquables observées en Limousin depuis 2000. *Bulletin de la Société Botanique du Centre-Ouest*. 38, 53-72.

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

Additional key words: new records

Computer codes: FR, APGDI, BIDFR, BROCN, BROCA, CYPER, ELDDE, EPHMA, HERMZ, LYSAM, MYPBR, PASDI, PHTAM

2008/152 Stenopelmus rufinasus (Coleoptera: Curculionidae): a biological control agent of Azolla filiculoides recorded in Spain

Stenopelmus rufinasus (Coleoptera: Curculionidae) was intentionally introduced in 1997 to South Africa as a host specific biological control agent for the invasive South American aquatic fern *AzolIa filiculoides* (Azollaceae, EPPO List of Invasive Alien Plants) (Hill, 1998). The introduction of this insect led to the complete control of the weed by 2000 in South Africa (McConnachie *et al.*, 2004). This weevil was first recorded in Europe in the United

Kingdom by Jansen (1921) where it is thought to have been introduced along with *A. filiculoides.* In 2007 it was recorded in Ireland (J-R. Baars, pers comm., 2008) and Southern France (McConnachie, pers comm., 2008). Most recently the weevil was recorded on *A. filiculoides* on the Guadiana River, Extremadura Province in Western Spain in early June 2008. Although the weevil does not appear to have had the same impact on *A. filiculoides* in Europe as it does in South Africa (Gassmann *et al.*, 2006), it has reduced the invasive potential of this weed in Europe.

Source: Contact: Martin Hill, Department of Zoology and Entomology, Rhodes University, South Africa. E-mail: <u>M.Hill@ru.ac.za</u>

Gassmann A, Cock MJW, Shaw R & Evans H (2006) The potential for biological control of invasive alien aquatic weeds in Europe: a review. *Hydrobiologia* 570, 217-222.

Hill MP (1998) Life history and laboratory host range of *Stenopelmus rufinasus*, a natural enemy for *Azolla filiculoides* in South Africa. *Biocontrol* 43, 215-224

Janson OE (1921) *Stenopelmus rufinasus* Gyll. an addition to the list of British Coleoptera. *Entomologists Monthly Magazine* 57, 225-226.

McConnachie AJ, Hill MP & Byrne MJ (2004) Field assessment of a frond-feeding weevil, a successful biological control agent of red water fern, *Azolla filiculoides*, in southern Africa. *Biological Control* 29, 326-33.

Additional key words: new record, biocontrol agent

Computer codes: AZOFI, STNPRU, ES

2008/153 International Symposium on Management of Alien Species for Sustainable Development of Aquaculture and Fisheries (MALIAF), Florence, IT, 2008-11-05/07

The international symposium on Management of Alien Species for Sustainable Development of Aquaculture and Fisheries (MALIAF) will be held in Florence (IT) on 2008-11-05/07. This symposium is open to scientists engaged in research on invasive alien species, practitioners, stakeholders and regulatory agencies. It aims to propose strategies for effective management of aquatic ecosystems and for the mitigation of risks posed by invasive alien species.

The themes developed will be the following:

- reviews of introductions of aquatic alien species in different environments, countries and regions
- impacts (environmental, ecological, social and economic) arising from the introduction of non-native aquatic species
- aquaculture and aquaculture-related operations involving non-native species
- analysis of the reasons for the use of introduced species
- constraints in establishing good practices in the introduction of aquatic species
- dispersal mechanisms from aquaculture-related activities
- risk assessment and management
- quarantine procedures
- recommendations on potential mitigation-remediation procedures and contingency plans.

Source: Website: <u>www.dbag.unifi.it/maliaf</u>

Additional key words: invasive alien species, conference

Computer codes: IT