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2006/138 New data on quarantine pests and pests of the EPPO Alert List

By browsing 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

The presence of Bois noir (Stolbur phytoplasma) is reported for the first time from Bosnia and Herzegovina. It was detected during surveys on grapevine yellows carried out in 2004/2005 in the major grapevine-growing regions (Mostar, Trebinje and Banjaluka) (Delić et al., 2006). Present, found in the major grapevine-growing regions (Mostar, Trebinje and Banjaluka).

Acizzia jamatonica (Homoptera, Psyllidae – formerly on the EPPO Alert List) was reported for the first time in Hungary in 2005. Damage was observed on Albizzia trees in Budapest (Rédei and Pénzes, 2006). Present, found in 2006 in Budapest.

Metcalfa pruinosa (Homoptera: Flatidae) is reported for the first time from Greece (Drosopoulos et al., 2004). The insect was found on olive and citrus in the Preveza area (Ipiros region) in June 2001 and 2002. Present, no detail.

Mycosphaerella fijiensis (causing Black Sigatoka of banana) is reported for the first time from Puerto Rico. In the Caribbean, M. fijiensis has now been reported from Bahamas, Cuba, the Dominican Republic, Haiti and Jamaica. In August 2004, symptoms of Black Sigatoka were first observed in Añasco (west of Puerto Rico), and samples were collected and tested. The presence of M. fijiensis was confirmed by PCR. The source of this infestation remains unknown. It is supposed that M. fijiensis may have been introduced with leaf material and/or wind dispersed ascospores from neighbouring countries (Irish et al., 2006). Present, no detail.

In the Caribbean, Scirtothrips dorsalis (Thysanoptera: Thripidae – EPPO A1 list) was first found in 2003 on Saint Lucia and Saint Vincent and the Grenadines (Seal et al., 2006). Present, no detail.

Detailed records

In the USA in the 1960s-early 1970s, Curtobacterium flaccumfaciens pv. flaccumfaciens (EPPO A2 list) was causing a serious disease of dry beans (Phaseolus vulgaris) throughout the irrigated High Plains (Colorado, Nebraska and Wyoming). But since then, the bacterium has no longer been observed. In August 2003, symptoms of bacterial wilt were noticed in 3 dry bean fields in Nebraska (Scotts Bluff County). In 2004, identical symptoms were observed in more than 40 fields in western Nebraska. Isolations were made from leaf and stem lesions, as well as from



seeds, and the bacterium found was identified as C. flaccumfaciens pv. flaccumfaciens (Harveson et al., 2006).

Source:

Delić D, Martini M, Ermacora P, Carraro L, Myrta A (2006) First report of grapevine bois noir in Bosnia and Herzegovina. Journal of Plant Pathology 88(2), p 226.

Drosopoulos A, Broumas T, Kapothanassi V (2004) Metcalfa pruinosa (Hemiptera, Auchenorrhyncha: Flatidae) an undesirable new species in the insect fauna of Greece. Annals of the Benaki Phytopathological Institute (N.S.) 20(1), 49-51.

Harveson RM, Schwartz HF, Vidaver AK, Lambrecht PA, Otto KL (2006) New outbreaks of bacterial wilt of dry bean in Nebraska observed from field infections. Plant Disease 90(5), p

Irish BM, Goenaga R, Ploetz RC (2006) Mycosphaerella fijiensis, causal agent of Black Sigatoka of *Musa* spp. found in Puerto Rico and identified by polymerase chain reaction. Plant Disease 90(5), p 684.

Rédei D, Pénzes (2006) First occurrence of *Acizzia jamatonica* (Kuwayama, 1908) (Sternorrhyncha: Psyllidae: Acizziinae) in Hungary. Növényvédelem 42(3), 153-157.

Seal DR, Ciomperlik M, Richards ML, Klassen W (2006) Comparative effectiveness of chemical insecticides against the chilli thrips, Scirtothrips dorsalis Hood (Thysanoptera: Thripidae), on pepper and their compatibility with natural enemies. Crop Protection 25(9), 947-955.

Additional key words: new records, detailed records

Computer codes: ACIZJA, CORBFL, METFPR, MYCOFI, PHYP10, SCITDO, BA, GR, HU, LC, PR, US, VC

2006/139 Eradication of *Monilinia fructicola* in Austria

The Austrian Plant Protection Service recently informed the EPPO Secretariat that Monilinia fructicola (EPPO A2 list) has now been eradicated from its territory. In Austria, M. fructicola was found for the first time in 2002 and 2003, in the framework of an official monitoring survey (EPPO RS 2002/170). It was found in Wien and Nieder-Österreich in 2 orchards but only on a few trees (*Prunus persica*). Eradication measures were carried out. Although investigations were done, the pathway of introduction remained unknown. Intensive official monitoring surveys were implemented in 2003, 2004 and 2005. No other occurrence has been detected since 2004, neither in Wien and Nieder-Österreich, nor in other regions.

The pest status for *Monilinia fructicola* is officially declared as follows: **Absent, eradicated.**

Source: NPPO of Austria, 2006-08.

Additional key words: eradication Computer codes: MONIFC, AT



2006/140 Plum pox potyvirus found in New York and Michigan (US)

In July 2006, the presence of *Plum pox potyvirus* (PPV – EPPO A2 list) was confirmed in samples collected from New York State (county of Niagara, US). So far in North America, PPV was only known to occur in Pennsylvania (US) and Ontario (CA). PPV has been detected in 1 block of plum trees (*Prunus domestica*) in an orchard which had been surveyed annually since 2000 without any evidence of the virus. PPV was detected only in 2 trees out of 108 trees in the block. The infected orchard is located within 8 km of the eradication zones in Canada. As in Canada and Pennsylvania, only PPV-D strain was found.

In August 2006, PPV was also detected in a plum tree sample (P. domestica) from south-west Michigan. The sample was collected at the Southwest Michigan Research and Experiment Centre. The PPV strain identified was PPV-D. Surveys are currently being done on all 14,000 host trees at the Research Centre, and will be expanded to include host trees within 3 km of the Centre.

The situation of *Plum pox potyvirus* in USA can be described as follows: **Present, first found in** Pennsylvania (1999) and on a few trees in New York State and Michigan (2006), under eradication.

Source: NAPPO Phytosanitary Alert System – Official Pest Reports

Plum pox virus Detected in Niagara County, New York (2006-08-31)

http://www.pestalert.org/oprDetail_print.cfm?oprid=211

Plant Health Progress

USDA Laboratory Confirms Plum Pox Virus in New York (2006-08-29) http://www.plantmanagementnetwork.org/pub/php/news/2006/plumpoxNY/ USDA Laboratory Confirms Plum Pox Virus in Michigan (2006-08-29) http://www.plantmanagementnetwork.org/pub/php/news/2006/plumpoxMI/

Additional key words: detailed record Computer codes: PPV000, US



2006/141 First report of Iris yellow spot tospovirus in France

The French NPPO recently informed the EPPO Secretariat of the first record of *Iris yellow spot* tospovirus (IYSV - EPPO Alert List) on its territory. The virus was detected by DAS-ELISA on 3 samples of leek (Allium porrum), all originating from the 'Pays de la Loire' region. The origin of the infection remained unknown. As the vector of IYSV, Thrips tabaci, is present in France and as disease symptoms are not very characteristic of the virus, a survey has been initiated to delimit the extent of the infection.

The situation of *Iris yellow spot tospovirus* in France can be described as follows: **Present, first** detected in August 2006 on 3 samples of Allium porrum, in 'Pays de la Loire' region, surveys are ongoing.

Source: NPPO of France, 2006-08.

Additional key words: new record Computer codes: IYSV00, FR

Isolated finding of *Potato spindle tuber viroid* on *Solanum jasminoides* in the 2006/142 Netherlands

The NPPO of the Netherlands informed the EPPO Secretariat of an isolated finding of *Potato* spindle tuber viroid (PSTVd - EPPO A2 list) during routine surveillance of ornamental Solanaceae. In May 2006, one lot of ornamental pot plants of *Solanum jasminoides* (Solanaceae) at a company specialized in the production of rooted plantlets was tested and found positive for PSTVd (PCR tests and genome sequencing). Investigations revealed that the infested lot had been imported from outside the European Union, although EU regulations prohibit the import of solaneacous plants for planting from third countries other than European and Mediterranean countries (EU Directive 2000/29, Annex III A 13). Measures have been taken to prevent reoccurrence of the import of S. jasminoides from prohibited origins. Further investigations were carried out in other companies, but no further infection of PSTVd on Solanaceae plants could be detected.

The pest status of *Potato spindle tuber viroid* in the Netherlands is officially declared as follows: Absent, intercepted only.

Source: NPPO of the Netherlands, 2006-07.

Additional key words: phytosanitary incident, eradication Computer codes: PSTVD0, DE



2006/143 Current situation of Eutypella parasitica in Slovenia

The NPPO of Slovenia recently informed the EPPO Secretariat about the current situation of Eutypella parasitica (EPPO Alert List) on its territory. E. parasitica (maple canker) was reported for the first time in Europe around Ljubljana in 2005 (see EPPO RS 2005/176). Intensive surveys were then carried out, and showed that the distribution of the disease is still limited. By the end of January 2006, 76 diseased maple trees (Acer pseudoplatanus, A. platanoides, A. campestre) were found over the whole forest territory of Slovenia. Infections were detected either on old trees (more than 20 years old) or on young trees. Eradication measures were applied and all infected trees were cut and burnt.

The situation of Eutypella parasitica in Slovenia can be described as follows: Present, first found in 2005 in a few localities, under eradication.

Source: NPPO of Slovenia, 2006-05.

Additional key words: detailed record Computer codes: ETPLPA, SI

2006/144 Current situation of *Diaporthe vaccinii* in Lithuania

Diaporthe vaccinii (anamorph Phomopsis vaccinii – EPPO A1 list) was first found in Lithuania in 2000/2002 (see EPPO RS 2004/085). The NPPO of Lithuania recently informed the EPPO Secretariat about the current situation of D. vaccinii on its territory. Surveys on D. vaccinii are being done in cultivated and wild Vaccinium. Since the early 2000s, 7 outbreaks of D. vaccinii have been recorded. D. vaccinii was detected on Vaccinium oxycoccos naturally growing in a forest in the Marijampole region (2 ha). It was also detected on cultivated V. oxycoccos in one farm in the region of Kaunas. The origin of these outbreaks remains unknown. Phytosanitary measures are being taken to prevent any further spread of the disease.

The situation of Diaporthe vaccinii in Lithuania can be described as follows: Present, 7 outbreaks recorded since the 2000/2002 on wild and cultivated Vaccinium, under official control.

Source: NPPO of Lithuania, 2006-09.

Additional key words: detailed record Computer codes: DIAPVA, LT



2006/145 First report of Glomerella acutata in Malta

In Malta, strawberry is an expanding crop. In December 2005, severe symptoms of black spot (anthracnose) were observed on strawberries growing under plastic tunnels at St Paul's Bay. Glomerella acutata (anamorph Colletotrichum acutatum – EU Annexes) was constantly isolated from fruit lesions. This is the first record of G. acutata on strawberry in Malta.

The situation of Glomerella acutata in Malta can be described as follows: Present, first observed in 2005 on strawberries, St Paul's Bay.

Source: Porta-Puglia, Mifsud (2006) First report of Colletotrichum acutatum on

strawberry in Malta. Journal of Plant Pathology 88(2), p 228.

Additional key words: new record Computer codes: COLLAC, MT

2006/146 First report of Bactrocera invadens in Comoros

Bactrocera invadens (Diptera: Tephritidae – EPPO Alert List), a new fruit fly recently described in East Africa (EPPO RS 2005/085), has been detected for the first time on the island of Ngazidja in Comoros. Phytosanitary measures are being taken to prevent any further spread. It is suspected that this fruit fly has been introduced with trade.

Source: Web site of the 'Programme Régional de Protection des Végétaux dans

l'Océan Indien' - Bactrocera invadens aux Comores.

http://www.prpv.org/index.php/fr/layout/set/print/content/view/full/995

Additional key words: new record Computer codes: BCTRIN, KM



2006/147 Frankliniella cephalica: a new vector of Tomato spotted wilt tospovirus

Frankliniella cephalica (Thysanoptera: Thripidae) is a pest of tropical and subtropical crops which has been found for the first time in the late 1990s-early 2000s in Japan (Yaeyama islands, Okinawa prefecture). It was isolated from wild flowers of *Bidens pilosa* and *Ipomoea batatas* growing in the vicinity of cultivated fields. During transmission studies done in Japan, it was shown that *F. cephalica* can transmit *Tomato spotted wilt tospovirus* (EPPO A2 list).

Source: Ohnishi J, Katsuzaki H, Tsuda S, Sakurai T, Murai T (2006) Frankliniella

cephalica, a new vector for Tomato spotted wilt virus. Plant Disease 90(5), p

685.

Additional key words: epidemiology Computer codes: FRANCE, TSWV00

<u>2006/148</u> Homalodisca coagulata can transmit citrus variegated chlorosis

Citrus variegated chlorosis is caused by a strain of Xylella fastidiosa (EPPO A1 list) which is transmitted by several species of xylem-feeding insects. Homalodisca coagulata (Homoptera: Cicadellidae – EPPO Alert List) has become an important pest of citrus and grapevine in California (US). It has been shown that it can transmit X. fastidiosa strains to several crops including grapevine (causing Pierce's disease), oleander (oleander leaf scorch) and almond (almond leaf scorch). In California, the establishment of H. coagulata has led to an increase of grapevine Pierce's disease. So far, citrus variegated chlorosis has not been reported outside Argentina, Brazil and Costa Rica and it is not known whether H. coagulata can transmit this disease. Transmission studies were done in quarantine facilities in Maryland (US) using H. coagulata collected from California, a Brazilian strain of citrus variegated chlorosis and sweet orange seedlings as test plants (Citrus sinensis ev. Madam Vinous). The presence of X. fastidiosa in the test plants was detected on the basis of visual symptoms, PCR with specific primers, membrane entrapment immunofluorescence and electron microscopy. Results showed that H. coagulata could transmit citrus variegated chlorosis but with a low level of transmission. It is concluded that citrus variegated chlorosis represents a serious threat to citrus-growing areas of North America where *H. coagulata* is now established such as Florida, Texas and California.

Source: Damsteegt VD, Brlansky RH, Phillips PA, Roy A (2006) Transmission of

Xylella fastidiosa, causal agent of citrus variegated chlorosis by the glassy-

winged sharpshooter, *Homalodisca coagulata*. *Plant Disease* **90(5)**, 567-570.

Additional key words: epidemiology Computer codes: HOLMTR, XYLEFA



2006/149 Successful control of the introduced species *Ctenarytaina eucalypti* with *Psyllaephagus pilosus* in Germany

The blue gum psyllid *Ctenarytaina eucalypti* (Homoptera, Psyllidae) originating from Australia, has been accidentally introduced into many parts of the world. In America and in Europe, it caused severe damage on Eucalyptus cut-foliage plantations. In Europe, it was first reported in the United Kingdom in 1922 and then in France, Portugal, Italy, Spain and Ireland. *C. eucalypti* was successfully controlled in California (US), the United Kingdom and France by releasing a hymenopteran parasitoid *Psyllaephagus pilosus* (Hymenoptera, Encyrtidae). In Germany, several introductions of *C. eucalypti* have been noted. The pest was first recorded in Sachsen in 2000 on *Eucalyptus globosus*, in the botanical garden of Dresden University of Technology. However, the spontaneous attack by *P. pilosus* during the following 2 years successfully eradicated the pest. In order to better control the unintentionally introduced pests, the authors of this paper stressed the need to establish regulations at national and EU level for the safe use of biological agents which could be based on the existing FAO and EPPO standards (FAO, 2005; EPPO 1999, 2000 & 2002).

Source:

Schnee H, Voigt D, Kaufer B (2006) [Biological control of the blue gum psyllid *Ctenarytaina eucalypti* (Maskell) (Hemiptera, Psyllidae) by the encyrtid *Psyllaephagus pilosus* Noyes (Hymenoptera, Encyrtidae) a success not only in California and Western Europe but also in Saxony.] *Gesunde Pflanzen* **58(2)**, 99-106.

International Standards

EPPO (1999) EPPO Standard PM6/1(1) Safe use of biological control. First import and release of exotic biological control agents for research under contained conditions. Bulletin OEPP/EPPO Bulletin 29(2), 279-272. Also available on-line: http://archives.eppo.org/EPPOStandards/biocontrol.htm

EPPO (2000) EPPO Standard PM6/2(1) Import and release of exotic biological control agents. Bulletin OEPP/EPPO Bulletin 31(1), 29-36. Also available on-line: http://archives.eppo.org/EPPOStandards/biocontrol.htm

EPPO (2002) EPPO Standard PM6/3(2) List of biological control agents widely used in the EPPO region. http://archives.eppo.org/EPPOStandards/biocontrol_web/bio_list.htm

FAO (2005) ISPM no. 3 Guidelines for the export, shipment, import and release of biological control agents and other beneficial organisms. FAO, Rome. Also available on-line: https://www.ippc.int/id/13399?language=en

Additional key words: biological control Computer codes: CTNREU, DE



<u>2006/150</u> <u>Leptographium longiclavatum:</u> a new species associated with <u>Dendroctonus</u> ponderosae

In British Columbia (Canada), an epidemic of *Dendroctonus ponderosae* (EPPO A1 list) has been observed for the last 12 years. It is reported that the pest has spread over 10.1 million ha and infested 173.5 million m³ of *Pinus contorta* var. *latifolia* (lodgepole pine). Damage is caused by the insect itself which feeds on the phloem and by associated fungi which discolour sapwood and disrupt transportation of water to the tree crown. The infested trees are killed by simultaneous infection of the beetle and fungi. During studies on fungal species associated with the beetle, a new species of *Leptographium* was isolated from *D. ponderosae*, from bark and stained sapwood of infested *P. contorta* var. *latifolia*. So far, only *Ophiostoma montium* and *O. clavigerum* were reported in association with *D. ponderosae*. The new *Leptographium* species could be clearly distinguished from the *Leptographium* anamorph of *O. clavigerum*. The new species was described and called *Leptographium longiclavatum*. *Leptographium* species are usually weak pathogens (although there are a few exceptions like *L. wageneri*), however more studies are needed on the pathogenicity of *L. longiclavatum* to pine trees.

Source: Lee S, Kim JJ, Breuil C (2005) Leptographium longiclavatum sp. nov., a new

species associated with the mountain pine beetle, Dendroctonus ponderosae.

Mycological Research, 109(10), 1162-1170.

Additional key words: biology Computer codes: DENCPO, CA

2006/151 Surveys on phytoplasma diseases of fruit trees in Turkey

Stone fruits are important crops in Turkey, but since 1999 severe decline of plums (*Prunus domestica* and *P. salicina*), apricots (*Prunus armeniaca*) and pears (*Pyrus communis*) has been observed in nurseries and commercial orchards. Observed symptoms suggested phytoplasma infections. Earlier studies had detected '*Candidatus* Phytoplasma prunorum' (associated with European stone fruit yellows) in 1 Japanese plum at Izmir (Aegean region), in apricot trees in the provinces of Içel and Adana (Mediterranean region) and in 1 almond (*P. amygdalus*), 1 myrobalan (*P. cerasifera*) and 2 peach (*P. persicae*) trees in the east part of the Mediterranean region. '*Candidatus* Phytoplasma pyri' (associated with pear decline – EPPO A2 list) was also detected in 1 pear tree in the east Mediterranean region. In order to better understand the situation of phytoplasma diseases, surveys were carried out in 10 provinces of Turkey in commercial orchards of Bursa (Marmara region), Içel, Hatay, Kahramanmaraş (Mediterranean region) and Malatya (East Anatolia region), as well as in germplasm orchards of Adana, Antalya, Gaziantep, Isparta, Içel (all in Mediterranean region) and Yalova (Marmara region). In total, 270 stone fruit trees (almond, apricot, nectarine, peach, plum) and 6 pear trees showing phytoplasma symptoms



were collected and tested (PCR, RFLP). The overall phytoplasma infection in tested samples was 10.2%. 54.8% of samples from germplasm orchards (mainly planted with cultivars of foreign origin) were infected by 'Ca. P. prunorum' whereas the disease incidence was only 3.2% in commercial orchards. 'Ca. P. prunorum' was detected in all provinces studied (except Malatya and Kahramanmaraş). The high incidence in germplasm orchards could indicate that imported material is largely responsible for its introduction into Turkey. 'Ca. P. pyri' was detected in commercial orchards of Bursa, as well as in its vector Cacopsylla pyri (specimens were collected from symptomatic pear trees). It is underlined that there is no established certification programme for fruit trees in Turkey. The EPPO Secretariat had previously no data on the occurrence of both phytoplasmas in Turkey.

The situation of 'Candidatus Phytoplasma prunorum' in Turkey can be described as follows: Present, found on several Prunus species in the Aegean and Mediterranean regions.

The situation of 'Candidatus Phytoplasma pyri' in Turkey can be described as follows: **Present**, **detected in the province of Bursa (Marmara region).**

Source: Ulubaş Serçe Ç, Gazel M, Çaglayan K, Baş, Son L (2006) Phytoplasma disease

of fruit trees in germplasm and commercial orchards in Turkey.

Journal of Plant Pathology 88(2), 179-185.

Additional key words: new records Computer codes: PHYPPR, PHYPPY, TR



<u>2006/152</u> <u>Impact assessment of Ailanthus altissima, Carpobrotus spp. and Oxalis pescaprae</u> on eight Mediterranean islands

A study was done on eight Mediterranean islands to assess how the impact of three widespread plant invaders (*Ailanthus altissima*, *Carpobrotus* spp. and *Oxalis pes-caprae*, all on the EPPO list of invasive alien plants), varied according to the species and the invaded island. Floristic surveys and soil analysis were conducted in Crete and Lesbos (Greece), Sardinia (Italy), Corse, Bagaud and Porquerolles (France), and Mallorca and Menorca (Spain).

On average, a reduction in native plant diversity and richness was found associated with the invasion of these three species. Compared with uninvaded controls, plots invaded by *Carpobrotus* (Aizoaceae) exhibited 36% lower species richness, those invaded by *Ailanthus* (Simaroubaceae) showed 23% lower species richness and by *Oxalis pes-caprae* (Oxalidaceae) a reduction of 10%. When community was species-rich, species loss was not higher, suggesting that areas of higher native plant diversity are not protected against species loss.

As regards life forms, therophytes appeared to be the most negatively influenced by the presence of an invader, but the effect among islands was significant only for *Ailanthus* and *Carpobrotus*. The therophytes decrease is of concern because they represent a large proportion of endemic species in the Mediterranean Basin. High rates of therophyte extinction (90%) have already been documented, especially at low altitudes. The decrease of therophytes in plots invaded by *Ailanthus* was possibly a consequence of allelopathic substances reducing establishment by inhibiting seed germination. In plots invaded by *Carpobrotus*, the dense mat of overlapping stems and considerable litter layer could be a substantial obstacle to the germination and establishment of therophytes. The low impact of *Oxalis* on therophytes may be explained by its early and short season phenology (rosette production in late autumn and senescence in early spring), limiting competition with annuals.

Changes in soil properties were less evident than changes in vegetation structure. Comparing habitats invaded, *Carpobrotus* occurs in dunes, rocky cliffs and coastal garrigues, encompassing a high number of endemic, rare or vulnerable species, thus its consequences on native species is of particular concern. *Ailanthus* and *Oxalis* occur in anthropogenic and ruderal habitats. Although in general ruderal communities are not perceived as having high conservation value, many Mediterranean endemic and vulnerable segetal plants occur in these habitats.

Source:

Vila M, Tessier M, Suehs CM, Brundu G, Carta L, Galanidis A, Lambdon P, Manca M, Médail F, Moragues E, Traveset A, Troumbis AY, Hulme PE (2006) Local and regional assessments of the impacts of plant invaders on vegetation structure and soil properties of Mediterranean islands. *Journal of Biogeography*, **33**, 853-861.

Additional key words: impacts, Mediterranean **Computer codes:** AILAL, CBSAC, CBSEB, OXAPC, islands, invasive alien plants ES, FR, GR, IT



<u>Impact of Impatiens glandulifera</u> on riparian habitats in the Czech Republic and the UK

Effect of invasion by *Impatiens glandulifera* (Balsaminaceae, EPPO list of invasive alien plants) on the community and species composition of invaded riparian communities was studied on six rivers in the Czech Republic. The massive invasion of *I. glandulifera* is considered a conservation problem in riparian habitats. Riparian zones are unique and dynamic ecosystems with complex disturbance regimes and river bank communities are generally considered to be prone to plant invasions. The dominance of *I. glandulifera* has been reported to cause problems in stream management. Furthermore, being the tallest annual herbaceous plant in Europe (reaching up to 2.5 m in height), it is highly competitive and is considered to replace native flora in invaded sites.

A study by Hejda and Pyšek (2006) consisted of comparing both invaded and uninvaded plots and of removal experiments. It showed that invasion by *I. glandulifera* had no significant impact on species diversity and composition. Other major invasive species in Central Europe such as Heracleum mantegazzianum or Reynoutria spp., invading rapidly and building large stands with high cover in riparian habitats, have a very strong effect on the species diversity of invaded habitats. Pyšek and Pyšek (1995) showed that communities invaded by Heracleum mantegazzianum had 40.5% fewer species than not-invaded communities. Thus H. mantegazzianum produced a much greater impact upon species diversity than I. glandulifera. One possible reason for this difference could be the character of *I. glandulifera* cover; although this cover is high in invaded communities, it is not spatially homogenous as it is with *Heracleum* mantegazzianum and Reynoutria spp. The patches with lower I. glandulifera cover provide other species with an opportunity to survive in the invaded community. I. glandulifera did not seem to change soil characteristics even when growing with a high cover in invaded communities. Moreover, the effect of I. glandulifera on species composition was marginal: only the proportional covers, especially those of tall native nitrophilous dominant species, have slightly changed. It appeared that I. glandulifera merely took over the role of native tall nitrophilous dominants (Urtica dioica, Chaerophyllum bulbosum, Chenopodium album) while shorter species in the undergrowth were not principally affected. It was concluded that I. glandulifera exerted negligible effect on the characteristics of invaded riparian communities, hence it does not represent a threat to the plant diversity of invaded areas.

On the other hand, Hulme and Breller (2006) assessed the impact of *I. glandulifera* along the River Wear in the City of Durham (NE England, UK) with removal experiments. This study is one of the first to assess both the impact of the plant at the plot scale and at the community scale. Results show that *I. glandulifera* has a significant effect at both the local plot scale and the scale of the riparian community. Moreover, plant community response to *I. glandulifera* removal was rapid, with a significant increase in seedling recruitment resulting in an average increase of 4 species per m². However, all of the species encountered in the plots are widespread in the UK and the threat to any individual species may be small. The impact of *I. glandulifera* invasion was most marked for light demanding species. Furthermore, in the absence of *I. glandulifera*, other



non-native species may comprise a greater proportion of the vegetation (*Aegopodium podagraria, Myrrhis odorata*), several of which may also exclude native species. That the same removal treatment did not result in a significant effect in the Czech Republic while it did in the UK may be attributed to the difference in cover of the invading species. While in the British study the cover varied from 80% to 100%, it only reached on average 43% in the Czech sites. As a conclusion of both studies, while several authors recommend the removal of *I. glandulifera*, such action should be undertaken with care as it may only lead to a compensatory increase in the abundance of other non-native species and thus fail to achieve desired conservation goals.

Source:

Hejda M, Pyšek P (2006) What is the impact of *Impatiens glandulifera* on species diversity of invaded riparian vegetation? *Biological conservation* **132**, 143-152.

Hulme P, Bremmer E (2006) Assessing the impact of *Impatiens glandulifera* on riparian habitats: partitioning diversity components following species removal. *Journal of Applied Ecology* **43**, 43-50.

Pyšek P, Pyšek A (1995) Invasion by *Heracleum mantegazzianum* in different habitats in the Czech Republic. *Journal of Vegetation Science* **6**, 711-718.

Additional key words: impacts, invasive alien plants
Computer codes: IPAGL, HERMZ, POLCU, CZ, GB

<u>Commelina communis and Atriplex oblongifolia:</u> two alien plants spreading in the north-east of France (Alsace)

Commelina communis (Commelinaceae) is a small herbaceous plant with a blue corolla. It originates from Asia (Far East). It was first recorded in the 1960s in Alsace (France) and has lately been more and more often recorded as naturalized in different habitats: forest borders (Schirrhoffen), wastelands and gardens (Barr, Obernai) and on very urbanized places such as pavements (Strasbourg). However the plant is only considered as a "weed" or "naturalized" by the Global Compendium of Weeds, it is quoted as an invasive alien plant in Montenegro (Stevesic *et al.*, pers. comm.) and in Lithuania (Lithuanian Invasive Species Database).

Atriplex oblongifolia (Chenopodiaceae) originates from a zone extending from Ukraine to Iran and is a chamephyte growing up to 1.5 m in eight. It is frequently found along roads. It is only known as "naturalized" by the Global Compendium of Weeds. It is recorded in Belgium and in Germany. In France, it recently proliferated in Alsace (Haut-Rhin) and is also known in the Rhône area (JM Tison, pers. comm.)

Source:

Danijela Stesevic and Danka Petrovic, Snezana Vuksanovic and Nada Bubanja, Urban area of Podgorica (capital), Babji zubb (central part) and Ulcinjska beac (southern part), personal communication, denist@cg.yu

The Global Compendium of Weeds: http://www.hear.org/gcw/alpha_select_gcw.htm
Lithuanian Invasive Species Database: http://www.ku.lt/lisd/species.html
Lithuanian Invasive Species Database: http://www.ku.lt/lisd/species.html

Jean-Marc Tison, personal communication, jmt6@wanadoo.fr

Additional key words: new record, invasive alien plants **Computer codes:** COMCO, ATXOB, FR



2006/155 Conclusions and recommendations from the EPPO/FAO workshop on *Solanum* elaeagnifolium

An International EPPO/FAO Workshop on "How to manage invasive alien plants: The case study of *Solanum elaeagnifolium*" (Solanaceae, EPPO List of invasive alien plants) was held in Sousse (TN) on 2006-05-29/31. The Workshop recognized that *Solanum elaeagnifolium* is an invasive alien plant of economic importance threatening Mediterranean agro-ecosystems. It was considered that this plant has not reached its geographical distribution limits and presents a threat for southern and south-eastern countries of the EPPO region.

The Workshop made recommendations for:

- International measures: phytosanitary measures to avoid the introduction of *S. elaeagnifolium*, regional and international collaboration.
- National measures: elaboration of an action plan, management measures recommended for infested areas, management measures recommended in very infested areas in order to prevent further spread of the plant and eradication measures for low infestation areas.

The complete recommendations, presentations of the communications and pictures of the plant are available on the EPPO Website

Source: EPPO Website:

http://archives.eppo.org/MEETINGS/2006 meetings/solanum presentations/w

orkshop solanum TN.htm

Additional key words: conference Computer codes: SOLEL, TN



2006/156 IUCN Information Platform on Invasive Alien Species in the Mediterranean Basin

Following the International Workshop on "Invasive Plants in the Mediterranean Type Regions of the World" held in Mèze (FR) on 2005-05-25/27, UICN – Centre for Mediterranean cooperation – responded to the need of experts to develop a web-based information platform. The aims of this platform are mainly to present initiatives and to reinforce partnerships that are relevant to management of invasive alien species in the Mediterranean Basin and to facilitate the exchange of information and expertise on invasive alien species in the region.

This information platform can be further enriched by contributions from managers, scientists, and experts. Pictures of invaders, case studies (Eradication of *Carpobrotus* in Minorca) and documents (Plant invaders in Spain, Study on Invasive plants in the Mediterranean Basin...) can be downloaded from the website.

Source: IUCN – Centre for Mediterranean cooperation – Invasive Alien Species in the

Mediterranean

http://iucn.org/places/medoffice/invasive species/index en.html

EPPO Website - International Workshop on Invasive Plants in the

Mediterranean Type Regions of the World, Mèze, FR, 2005-05-25/27

http://archives.eppo.org/MEETINGS/2005 meetings/workshop invasive/work

shop.htm

Additional key words: information exchange, Mediterranean Basin, invasive alien plants



2006/157

12th ISBCW International Symposium on Biological Control of Weeds (La Grande Motte, FR, 2006-04-22/27)

The 12th International Symposium on Biological Control of Weeds returns near to Montpellier (FR) after 34 years. However, biological control of weeds and invasive alien plants remains in its infancy in Europe, without a single release of a classical biological control agent.

The scope of this 12th symposium is to deal with all types of biological control of all weeds through the use of living organisms as biological control agents, including augmentative biocontrol (arthropods, mycoherbicides) and conservation of natural enemies. The increasing use of molecular and novel approaches in all aspects of weed biological control will also be embraced.

The proposed program topics are the following:

- Ecology & modelling,
- Evolutionary processes,
- Benefit-risk-cost analyses,
- Regulations & public awareness,
- Target and agent selection,
- Pre-release specificity & efficacy testing,
- Post-release activities.
- Management specifics,
- Novel mpproaches,
- Opportunities and constraints for biological control in Europe.

More information is available on the Symposium website.

Source: CILBA Website: http://www.cilba.agropolis.fr/Weeds2007/Welcome.html

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Additional key words: conference, biological control Computer codes: FR