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2005/025 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 record**

In autumn 2004, *Stephanitis pyroides* (Hemiptera: Tingidae – formerly on the EPPO Alert List) was recorded for the first time from Italy. Adults were found attacking azalea and rhododendron plants at the Botanical Gardens of Lucca in Toscana (Del Bene & Pluot-Sigwalt, 2005). **Present, found in 2004 in Toscana.**

- **Detailed records**

In Ontario, Canada, additional trees infested with *Anoplophora glabripennis* (Coleoptera: Cerambycidae – EPPO A1 list) were detected in the cities of Toronto and Vaughan in September 2005. This will imply the removal of an additional 2,000 trees from these locations. All infested trees were found within the regulated area established in 2004 to prevent spread of the pest (NAPPO Phytosanitary Alert System, 2005).

In Uganda, both B and Q biotypes of *Bemisia tabaci* (Hemiptera: Aleyrodidae - EPPO A2 list) were recorded (Sseruwagi *et al.*, 2005).

In Italy in 2005, *Erwinia amylovora* (EPPO A2 list) was found on *Malus* in the ‘Valle di Non’ province of Trento (Trentino-Alto Adige region). Phytosanitary measures are being applied to prevent any further spread. In this region, *E. amylovora* was first reported in 1999 (EPPO RS 2000/002) on pear (NPPO of Italy, 2005).

Glomerella acutata (anamorph *Colletrichum acutatum* – EU Annexes) was detected in a collection of isolates collected in Calabria (Italy) during the last 10 years from strawberry fields showing anthracnose symptoms (Agosteo *et al.*, 2005).

In USA, *Homalodisca coagulata* (Homoptera: Cicadellidae – EPPO Alert List) a vector of *Xylella fastidiosa*, was detected in Arizona (NAPPO Phytosanitary Alert System, 2005).

Tomato spotted wilt tospovirus (EPPO A2 list) was reported on *Capsicum annuum* in the Samsun province, Black Sea region, Turkey. The virus was also detected by ELISA in several weed species: *Amaranthus retroflexus*, *Datura stramonium*, *Hibiscus trionum*, and *Taraxacum officinale* (Arli-Sokmen *et al.*, 2005).



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In Italy, the presence of *Plum pox potyvirus* (EPPO A2 list) was reported in 2004 in Friuli-Venezia Giulia on plums (*Prunus domestica* cvs. 'Susina di Dro' and 'Locale'). PPV was detected in the localities of Chiampore and Santa Barbara (commune of Muggia, province of Trieste). Eradication measures were applied (NPPO of Italy, 2005).

In Canada, *Puccinia horiana* (EPPO A2 list) was detected in October 2005 on chrysanthemums growing outdoors in a British Columbia nursery and retail facility. Movements of plants from this nursery were prohibited and approximately 900 plants were destroyed. Surveys were conducted at the affected nursery and adjacent properties. Trace back and trace forward activities were also conducted and no other Canadian infestations of *P. horiana* were identified. The pest status of *P. horiana* in Canada is officially declared as follows: **Eradicated** (NAPPO Phytosanitary Alert System, 2005)

- **New host plants**

In USA, the occurrence of *Impatiens necrotic spot tospovirus* (INSV – EPPO A2 list) was reported on glasshouse-grown *Capsicum annuum* (Naidu *et al.*, 2005).

Phytophthora hibernalis, previously described as causing a brown rot on citrus, was isolated from rhododendron plants grown in nurseries in California and Oregon (US). It was shown that *P. hibernalis* is pathogenic to rhododendrons. In addition, in some PCR assays for the detection of *P. ramorum*, cross reactions were observed with *P. hibernalis* (Blomquist *et al.*, 2005).

Maianthemum racemosum (= *Smilacina racemosa*, Liliaceae) is reported as a host plant of *Phytophthora ramorum* (EPPO Alert list) in California (Hüberli *et al.*, 2005).

Adenium obesum (Apocynaceae) an ornamental species originating from Southeast Africa is reported as a host of *Tomato spotted wilt tospovirus* (EPPO A2 list) in Florida, US (Adkins and Baker, 2005).

In Spain, both *Tomato yellow leaf curl Sardinia begomovirus* (TYLCSV) and *Tomato yellow leaf curl begomovirus* (TYLCV) were reported on tomato crops. TYLCV was also reported in *Phaseolus vulgaris* and *Capsicum annuum* crops. During summer 2004, symptoms of yellowing, crumpling and necrosis of new leaves were observed sporadically in young, field-grown tobacco plants (*Nicotiana tabacum*) in the Badajoz province (Extremadura). The presence of TYLCV was detected in mixed infections with *Potato Y potyvirus* (PVY) in the tested samples (Font *et al.*, 2005).

Source:

- Adkins S, Baker CA (2005) *Tomato spotted wilt tospovirus* identified in desert rose in Florida. *Plant Disease* **89**(5), p 526.
- Agosteo GE, Macri C, Cacciola SO (2005) Characterization of *Colletotrichum acutatum* isolates causing anthracnose of strawberry in Calabria. *Journal of Plant Pathology* **87**(4, special issue), p 287.



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- Arli-Sokmen, Mennan H, Sevik MA, Ecevit O (2005) Occurrence of viruses in field-grown pepper crops and some of their reservoir weed hosts in Samsun, Turkey. *Phytoparasitica* **33**(4), 347-358.
- Del Bene G, Pluot-Sigwalt D (2005) *Stephanitis pyrioides* (Scott) (Heteroptera Tingidae): a lace bug new to Italy. *Bollettino di Zoologia Agraria e di Bachicoltura*, serie II, **37**(1), 71-76.
- Font MI, Córdoba C, García A, Santiago R, Jordá C (2005) First report of tobacco as a natural host of *Tomato yellow leaf curl virus* in Spain. *Plant Disease* **89**(8), p 910.
- Hüberli D, Ivors KL, Smith A, Tse JG, Garbelotto M (2005) First report of foliar infection of *Maianthemum racemosum* by *Phytophthora ramorum*. *Plant Disease* **89**(2), p 204.
- Sseruwagi P, Legg JP, Maruthi MN, Colvin J, Rey MEC, Brown JK (2005) Genetic diversity of *Bemisia tabaci* (Gennadius) (Hemiptera: Aleyrodidae) populations and presence of the B biotype and a non-B biotype that can induce silverleaf symptoms in squash, in Uganda. *Annals of Applied Biology* **147**(3), 253-265.
- NPPO of Italy, 2005-12.
- INTERNET
- Plant Management Network website - Plant Health Progress (Plant Health Research)
- Naidu RA, Deom CM, Sherwood JL (2005) Expansion of the host range of *Impatiens necrotic spot virus* to peppers.
- Blomquist C, Irving T, Osterbauer N, Reeser P (2005) *Phytophthora hibernalis*: a new pathogen on *Rhododendron* and evidence of cross amplification with two PCR detection assays for *Phytophthora ramorum*. <http://www.plantmanagementnetwork.org>
- NAPPO Phytosanitary Alert System
- Official Pest Reports – Canada (2005-11-18) Chrysanthemum White Rust - Find in British Columbia Nursery Facility <http://www.pestalert.org/oprDetail.cfm?oprID=178>
- Official Pest Reports – Canada (2005-09-28) Additional Asian Long-horned Beetle Infestations Found on Toronto and Vaughan. <http://www.pestalert.org/oprDetail.cfm?oprID=170>
- New Pest Stories (2005-09-22) Glassy-winged sharpshooter detected in Arizona. <http://www.pestalert.org/viewArchNewsStory.cfm?nid=357>

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

Computer codes: ANOLGL, BEMITA, COLLAC,
ERWIAM, HOMLTR, INSV00, PHYTRA, PHYTSP,
PPV000, PUCCHN, STEPPY, TSWV0, TYLCSV,
TYLCV0, CA, IT, TR, UG, US

2006/026 *Opogona sacchari* found in Poland

The EPPO Secretariat was informed by the NPPO of Poland of the recent finding of *Opogona sacchari* (Lepidoptera: Tineidae – EPPO A2 list). In January 2006, plants of *Dracaena* were found infested by *O. sacchari* at 1 production site in the Warmińsko-Mazurskie voivodship (north-east of the country). Other potential hosts of *O. sacchari* grown on the premises were inspected but the pest was only found on *Dracaena*. No propagation material was produced on this site. Investigations showed that the infested *Dracaena* plants had been imported in March 2005 from the Netherlands. However, as from March 2005 (import of plants) to January 2006 (detection of the pest), the company had imported 92 consignments of pot plants from the Netherlands and 14 from Denmark, it was difficult to identify the possible source of infestation. Nevertheless, it is suspected that the infestation has taken place before the introduction of the plants into Poland. All infested plants were destroyed.



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The situation of *Opogona sacchari* in Poland can be described as follows: **Present, outbreaks are occasionally reported, under official control.**

Source: NPPO of Poland, 2006-02.

Additional key words: detailed record

Computer codes: OPOGSC, PL

2006/027 *Dryocosmus kuriphilus* reported in Abruzzo and Lazio (Italy)

The NPPO of Italy recently informed the EPPO Secretariat of the occurrence of *Dryocosmus kuriphilus* (Hymenoptera: Cynipidae – EPPO Action List) in the regions of Abruzzo and Lazio. This chestnut pest is now subject to official control in Italy (official texts will soon be published). The situation of *Dryocosmus kuriphilus* in Italy can be described as follows: **Present, reported in Piemonte, Abruzzo and Lazio, under official control.**

Source: NPPO of Italy, 2006-02.

Additional key words: detailed record

Computer codes: DRYCKU, IT

2006/028 Details on *Rhynchophorus ferrugineus* in Sicilia (Italy)

The presence of *Rhynchophorus ferrugineus* (Coleoptera: Curculionidae – EPPO Alert List) in Italy was recently reported in Campania, Toscana and Sicilia (EPPO RS 2006/001). Further details can now be provided for the situation in Sicilia. *R. ferrugineus* was first found in October 2005 on 4 *Phoenix canariensis* trees of approximately 100-years old in the historical centre of the city of Acireale. Other infestations were then found on *P. canariensis* in private gardens, public squares and parks in the nearby cities of Aci Castello, S. Giovanni La Punta, Trecastagni and Catania. Until now, no infestation has been detected in palm nurseries. Surveys are being carried out to delimit the outbreak in Sicilia and measures are being implemented to prevent any further spread.

Source: Website of the ‘Associazione Italiana Direttori Tecnici Pubblici Giardini’.
Gravi infestazioni di punteruolo rosso delle palme (*Rhynchophorus ferrugineus*) presso importanti centri storici della Sicilia orientale.
<http://www.pubblicigiardini.it/News/NewsDet.asp?id=2150>

Additional key words: detailed record

Computer codes: RHYCFE, IT



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2006/029 Studies on geographical populations of *Bemisia tabaci* in China

Bemisia tabaci (Homoptera: Aleyrodidae – EPPO A2 list) occurs in many parts of China but until the late 1990s, it was not considered as a major pest. But in recent years, outbreaks and serious damage were reported in most Chinese provinces. Earlier studies showed that populations of *B. tabaci* from Beijing, Guangzhou*, Xi'an (Shaanxi), Tulufan (Xinjiang*) and Shandong belonged to B-biotype, whereas populations from Guangxi and Fujian were identified as non B-biotype. Further molecular studies were made on populations of *B. tabaci* from different Chinese provinces (Jiangsu, Henan*, Hainan, Shandong, Shanghai, Beijing, Yunnan) and compared with populations from USA (Arizona, California, Texas – all B-biotype) and Israel (biotypes B and Q). Results showed that populations from Beijing, Henan, Shandong, Jiangsu, Shanghai and Hainan were B-biotype. These formed a clade with the known B-biotype populations from Texas, California and Israel. The population collected from Yunnan (previously reported as non B-biotype) could be assigned to Q-biotype, and is a close relative to the Q-biotype found in the Mediterranean region.

* new detailed records according to the EPPO Secretariat.

Source: Chu D, Zhang YJ, Cong B, Xu BY, Wu QJ, Zhu GR (2005) Sequence analysis of mtDNA COI gene and molecular phylogeny of different geographical populations of *Bemisia tabaci* (Gennadius). *Agricultural Sciences in China* **4**(7), 533-541.

Additional key words: detailed record

Computer codes: BEMITA, CN

2006/030 First report of *Nysius huttoni* in the Netherlands and Belgium: addition to the EPPO Alert List

Dr Aukema (retired from the Dutch NPPO) attracted the attention of the EPPO Secretariat to the introduction of a new polyphagous pest, *Nysius huttoni*, in Europe and suggested that it could be added to the EPPO Alert List.

Nysius huttoni (Heteroptera: Lygaeidae – wheat bug)

Why

Dr Aukema (retired from the Dutch NPPO) attracted the attention of the EPPO Secretariat to the introduction of a new polyphagous bug in Europe. Since 2002, an unfamiliar species of *Nysius* was found at different localities in the extreme Southwest of the Netherlands (province of Zeeland) and the adjacent Northwestern part of Belgium (provinces of West-and Oost



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Where	<p>Vlaanderen and Brabant). The species was identified as <i>Nysius huttoni</i>, a species originating from New Zealand. So far, <i>N. huttoni</i> had not been reported outside New Zealand.</p> <p>EPPO region: Belgium (Brabant, West-and Oost Vlaanderen), Netherlands (Zeeland).</p> <p>Oceania: New Zealand (widespread in North and South Islands).</p> <p>Pathways of introduction of <i>N. huttoni</i> into Europe are unknown, but as the international harbour of Antwerpen is close to the infested sites, it is suspected that it arrived accidentally with shipments from New Zealand.</p>
On which plants	<p><i>N. huttoni</i> is a polyphagous species which feeds on a large number of weeds and crops. In New Zealand, it is mainly reported as a pest of wheat and Brassicaceae, but it can feed on many plant species. It can attack: <i>Brassica</i> spp., <i>Medicago sativa</i> (alfalfa), <i>Trifolium dubium</i>, <i>T. pratense</i>, <i>T. repens</i> (clovers), and Poaceae such as: <i>Avena sativa</i> (oat), <i>Bromus</i>, <i>Hordeum sativum</i> (barley), <i>Lolium</i>, <i>Secale cereale</i> (rye), <i>Triticum aestivum</i> (wheat). The following weeds have been reported as hosts: <i>Anagallis arvensis</i>, <i>Calandrinia caulescens</i>, <i>Capsella bursa-pastoris</i>, <i>Cassinia leptophylla</i>, <i>Chenopodium album</i>, <i>Coronopus didymus</i>, <i>Hieracium</i>, <i>Polygonum aviculare</i>, <i>Rumex acetosella</i>, <i>Senecio inaequidens</i>, <i>Silene gallica</i>, <i>Soliva sessilis</i>, <i>Spergularia rubra</i>, <i>Stellaria media</i>. It is also suggested that the presence of mosses (e.g. <i>Ceratodon</i>, <i>Sphagnum</i>, <i>Polytrichum</i> spp.) may be crucial for the overwintering period.</p>
Damage	<p><i>N. huttoni</i> is a sap feeding insect which can attack many plant parts including seeds. Both adults and nymphs can cause damage. On wheat, damage is essentially observed when grains are attacked at the milk-ripe stage. The insect saliva contains an enzyme which affects the gluten proteins. This causes severe quality deterioration in baked products (sticky dough, poor loaf volume and poor bread texture). It is reported that during the worst outbreak recorded in New Zealand in 1970, about 10,000 tons of wheat were damaged by <i>N. huttoni</i>. On brassicas damage is observed when young plants are attacked. Feeding punctures are made around stems at ground level, often leading to plant wilting and collapse. For example during experiments, serious damage was observed on swede seedlings (<i>B. napus</i> var. <i>napobrassica</i>) with up to 70% of young plants being lost.</p> <p>In New Zealand, <i>N. huttoni</i> has a wide ecological distribution from coastal locations to altitudes of over 1800 m. It is noted that <i>N. huttoni</i> usually feeds on weeds growing on waste lands or roadsides, often in the vicinity of crops, and only migrates to crops in dry years. In the Netherlands and Belgium, it was found in dry, warm waste grounds and roadsides with sparse vegetation (e.g. in Oost Vlaanderen, large numbers of <i>N. huttoni</i> were found in an abandoned wheat field). <i>N. huttoni</i> overwinters as adult and has 2 or 3 generations per year in New Zealand. Under European conditions, the situation is still unclear but related species have 1 to 2 generations per year.</p> <p>Pictures of the pest can be viewed on Internet http://www.hortnet.co.nz/key/stone/bugkey2a/wings/dblwing/clrwings/wbugad1.htm</p>
Dissemination	<p>Data is lacking on the natural spread of <i>N. huttoni</i>. Over long distances, movements of infested plants could theoretically transport the pest, but its major host plants (e.g. cereals) are not traded in this form. <i>N. huttoni</i> is reported as being a contaminating pest often found on apple fruit packages exported from New Zealand.</p>
Pathway	<p>Plants for planting? vegetables? Pathways are difficult to identify as it seems that the pest is mainly a hitchhiker.</p>
Possible risks	<p>In New Zealand, <i>N. huttoni</i> is reported as an economically important pest of wheat and brassicas. It is reported as a pest of other Poaceae (cereals and grasses) and of Fabaceae but more data is needed on type and extent of damage. Wheat and brassica crops are widely grown and economically important throughout the EPPO region. Control is difficult because <i>N. huttoni</i> usually feeds on weeds and only migrates to crops under certain circumstances. In New Zealand, no natural enemies are known (except starlings). Laboratory studies on thermal requirements of <i>N. huttoni</i> concluded that the pest was probably able to establish in regions with mild to warm climates. Its recorded presence in some parts of the EPPO region over several years showed that it can establish in Europe. More information is needed on its pathways of introduction. It may have to be recognised that it will be difficult to prevent its</p>



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further spread, as *N. huttoni* is polyphagous, spreading naturally and is most likely a contaminant of many traded products.

Source(s)

Aukema B, Bruers JM, Viskens G (2005) A New Zealand endemic *Nysius* established in The Netherlands and Belgium (Heteroptera: Lygaeidae). *Belgian Journal of Entomology* **7**, 37-43.

He XZ, Wang Q (1999) Laboratory assessment of damage to swede, *Brassica napus rapifera*, by wheat bug *Nysius huttoni*. Paper presented at the 52nd Conference of the New Zealand Plant Protection Society. Available on-line: <http://www.hortnet.co.nz>

Bejakovich D, Pearson WD, O'Donnell MR (1998) Nationwide survey of pests and diseases of cereal and grass seed crops in New Zealand. 1. Arthropods and molluscs. Paper presented at the 51st Conference of the New Zealand Plant Protection Society. Available on-line: <http://www.hortnet.co.nz>

Every D, Farrell JA, Stufkens MW, Wallace AR (1998) Wheat cultivar susceptibility to grain damage by the New Zealand wheat bug, *Nysius huttoni*, and cultivar susceptibility to the effects of bug proteinase on baking quality. *Journals of Cereal Science* **27**(1), 37-46. (Abstract).

He XZ, Wang Q, Carpenter A (2003) Thermal requirements for the development and reproduction of *Nysius huttoni* White (Heteroptera: Lygaeidae). *Journal of Economic Entomology* **96**(4), 1119-1125.

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Panel review date

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2006/031 Strawberry is a host plant for *Meloidogyne fallax*

In 2003, studies were done in the Netherlands in cooperation with the Dutch NPPO on the host suitability of 4 strawberry cultivars (*Fragaria ananassa* cvs. 'Ciflorette', 'Elsanta', 'Kimberly', 'Mara des bois') for *Meloidogyne fallax* (EPPO A2 list). The experiment was conducted on a field naturally infested by *M. fallax* but not by *M. hapla*, near Wintelre (province of Noord-Brabant). At harvest time in October, the number of root galls was assessed. Cultivars 'Mara des bois' and 'Ciflorette' did not show any typical root-knot symptoms; 'Elsanta' and 'Kimberly' expressed only few galls. But high numbers of nematodes were extracted from the roots using the centrifugal floating method. These results suggested that despite the lack of clear root-galling or visible plant reduction, the tested strawberry cultivars were good hosts for *M. fallax*. In addition, this suggested that strawberry transplants grown in infested soil could spread *M. fallax*. The Dutch NPPO will envisage the possibility of having a root-knot nematode test in addition to visual root inspection, before strawberry plants are shipped and planted.

Source: van der Sommen ATC, den Nijs LJMF, Karssen G (2005) The root-knot nematode *Meloidogyne fallax* on strawberry in the Netherlands. *Plant Disease* **89**(5), p 526.

Additional key words: new host plant

Computer codes: MELGFA, NL



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2006/032 First report of *Cucurbit yellow stunting disorder crinivirus* and *Cucumber vein yellowing ipomovirus* in Cyprus

In Cyprus, a survey was done in 2000/2002 to determine the identity and prevalence of viruses of cucurbit crops. Cucurbits are major vegetable crops in Cyprus and are produced mainly in the coastal regions of Famagusta, Larnaca, Limmasol and Paphos districts. Cucurbits are mainly cultivated in open fields, but cucumbers are usually grown under plastic greenhouses. A total of 2993 samples of cucumber (*Cucumis sativus*), courgette (*Cucurbita pepo*), melon (*C. melo*) and watermelon (*Citrullus lanatus*) were collected from the major cucurbit-growing regions. Samples were tested by serological or molecular methods for the following viruses:

- Beet pseudo-yellows crinivirus* (BPYV),
- Cucumber mosaic cucumovirus* (CMV),
- Cucumber vein yellowing ipomovirus* (CVYV – EPPO Action List),
- Cucurbit aphid-borne yellows polerovirus* (CABYV),
- Cucurbit yellow stunting disorder crinivirus* (CYSDV – EPPO Action List),
- Papaya ringspot potyvirus* type W (PRSV-W),
- Squash mosaic comovirus* (SqMV),
- Watermelon mosaic potyvirus* (WMV),
- Zucchini yellow mosaic potyvirus* (ZYMV)

ZYMV was the most prevalent virus with an overall incidence of 45 %. PRSV-W, CABYV and WMV were detected in 20.8%, 20.8% and 7.8% of the samples tested, respectively. CMV and SqMV were not detected during this survey. CYSDV was detected in 88% of the tested cucumber samples which had been collected from protected crops all over the country. It is noted that CYSDV was also found in 12 samples of melon grown in the field. The presence of CYSDV was associated with high populations of its vector *Bemisia tabaci*. CVYV was detected in protected crops of cucumbers but with a low incidence (9.5%). The EPPO Secretariat had previously no data on the occurrence of CYSDV and CVYV in Cyprus.

The situation of *Cucurbit yellow stunting disorder crinivirus* in Cyprus can be described as follows: **Present, first found in 2000, widespread in protected crops of cucumbers.**

The situation of *Cucumber vein yellowing ipomovirus* in Cyprus can be described as follows: **Present, first found in 2000 with a low incidence.**

Source: Papayiannis LC, Ioannou N, Boubourakas IN, Dovas CI, Katis NI, Falk BW (2005) Incidence of viruses infecting cucurbits in Cyprus. *Journal of Phytopathology* **153**(9), 530-535.

Additional key words: new records

Computer codes: CVYV00, CYSDV0, CY



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2006/033 Studies on Tomato yellow leaf curl begomoviruses in Jordan

Several viruses have been reported to cause tomato yellow leaf curl disease, in particular *Tomato yellow leaf curl begomovirus* (TYLCV – EPPO A2 list*) and *Tomato yellow leaf curl Sardinia begomovirus* (TYLCSV). In Jordan, the disease was first reported in 1978. Since then, it has spread to all tomato-producing regions where it has become a limiting factor to tomato production in summer and autumn (in some cases, up to 100 % yield losses have been observed). Surveys were conducted in 2002/2003 in 3 tomato-growing regions (Jordan Valley, Al-Mafraq and Amman). Leaf samples (78 samples in 2002 and 259 in 2003) showing symptoms of curling, yellowing and stunting were collected and tested by dot blot hybridization and PCR. Results showed that *Tomato yellow leaf curl begomovirus* (TYLCV) was widespread in the main tomato-growing regions. The highest rate of TYLCV was recorded in Al-Mafraq (76%), whereas samples collected from the Northern Jordan Valley showed the lowest virus incidence (13%). *Tomato yellow leaf curl Sardinia begomovirus* (TYLCSV) was also detected but with a lower incidence (6% in Al-Mafraq and 27% in central Jordan Valley). In 2003, both viruses were detected again, sometimes in mixed infections. This is the first report of TYLCSV in Jordan.

The situation of *Tomato yellow leaf curl begomovirus* in Jordan can be described as follows:

Present, widespread in the main tomato-growing regions.

The situation of *Tomato yellow leaf curl Sardinia begomovirus* in Jordan can be described as follows: **Present, first detected in 2002/2003 with a low incidence.**

* At present, only *Tomato yellow leaf curl begomovirus* is listed as such but with the description of several virus species involved in tomato yellow leaf curl disease, this entry may need to be revised.

Source: Anfoka GH, Abhary M, Nakhla MK (2005) Molecular identification of species of the Tomato yellow leaf curl virus complex in Jordan. *Journal of Plant Pathology* **87**(1), 65-70.

Additional key words: new record, detailed record

Computer codes: TYLCSV, TYLCV0, JO

2006/034 New disorder of chestnut found in Marche region (Italy)

In Italy, a new disorder of chestnut has recently been reported by the Plant Protection Service of the region Marche. This disorder was observed on *Castanea sativa* growing within the National Park 'Gran Sasso', on the commune of Acquasanta Terme (province of Ascoli Piceno). The outbreak covered approximately 15 ha. Affected trees showed leaf yellowing, distortion, chlorosis followed by marginal necrosis and production of fruits was drastically reduced. Among cultivars present in the affected area, cv. 'Marone di Acquasanta Terme' was particularly



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susceptible. It is suspected that a pathogen is involved in this disorder as it was possible to transmit the disease by grafting. However, in preliminary studies, it was not possible to detect viral dsRNA in symptomatic samples.

Interestingly, it can be recalled that in 1996, a similar disorder called 'chestnut yellows' was reported by Mittempergher and Sfalanga in Emilia-Romagna and Toscana (see EPPO RS 99/044). Similar symptoms (yellowing, distortion, marginal necrosis) and severe reduction of fruit production were reported. Tree decline and death were also mentioned. At that time, phytoplasmas were suspected but PCR tests failed to detect them. The etiology of the disease remained unknown. The disease was included on the EPPO Alert List but was subsequently deleted in the absence of any information about its etiology. Further studies are needed on the etiology of these disorders of chestnut and their possible relationships.

Source: NPPO of Italy, 2006-02.
Mittempergher L, Sfalanga A (1998) Chestnut yellows: a new disease for Europe. *Phytopathologia Mediterranea* **37**(3), 143-145.

Additional key words: new pest

Computer codes: IT

2006/035 A new *Alternaria* species identified on Ya Li pears (*Pyrus bretschneideri*)

In the early 1990s, China began to export fruits of Ya Li pears (*Pyrus bretschneideri*) from Hebei province to several countries including Australia, Canada, New Zealand and USA. In 2001/2002, 27 consignments of Ya Li pear fruits showing symptoms of an *Alternaria* disease were rejected at different points of entry in USA. Interceptions of similarly decayed Ya Li pear fruits were noted in 2001 in Australia, New Zealand and United Kingdom. In Canada, Ya Li pear fruits with symptoms of *Alternaria* sp. had been reported as early as 1993. In March 2002, imports into the USA were suspended essentially because of the detection of the *Fusicladium* anamorph of *Venturia nashicola* (EU Annexes) but also because of the repeated interceptions of *Alternaria* sp. Affected fruits showed dark lesions (chocolate brown) with pale reddish brown margins, often associated with stem lesions. Studies were done to identify the causal agent. Morphological, pathological and genetic characteristics of the *Alternaria* isolates clearly differentiate them from *Alternaria alternata*, *A. gaisen* and other species known to occur commonly on pome fruits. Although the disease might be caused by several species of *Alternaria*, one of these taxa could be described as a new and distinct species called *Alternaria yaliinficiens* sp. nov.

Source: Roberts RG (2005) *Alternaria yaliinficiens* sp. nov. on Ya Li pear fruit: from interception to identification. *Plant Disease* **89**(2), 134-145.

Additional key words: new pest

Computer codes: ALTESP



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2006/036 PCR test to detect *Apiosporina morbosa*

A specific and sensitive PCR test was developed in Canada to detect *Apiosporina morbosa* (EPPO A1 List). *A. morbosa* is a serious disease of *Prunus* causing black knots on twigs and branches. It has a long latent period, as knots usually appear 1 year after infection. *A. morbosa* affects a wide range of wild and cultivated *Prunus* species. In Ontario, *A. morbosa* is found on many wild hosts (*P. americana*, *P. virginiana*, *P. pensylvanica*). In the Niagara peninsula, significant production losses have been observed on sour cherry (*P. cerasus*). Cultivated plums (*P. domestica* and *P. salicina*) are also susceptible to the disease in Eastern Canada. In the Prairie Provinces, the disease incidence has recently increased in nurseries and city plantings on the ornamental cultivar *P. virginiana* 'Shubert Select'.

A pair of specific primers was designed. Specificity was tested with DNA derived from 64 pure cultures of *A. morbosa* (including 42 single-spore isolates), 22 isolates of other fungi (including species which are often associated with knots), as well as healthy and diseased plant branches collected from the field. Almost all tested isolates of *A. morbosa* had been collected from wild *P. virginiana* and the ornamental *P. virginiana* cv. 'Shubert Select'. This PCR assay showed high specificity and sensitivity in detecting *A. morbosa*.

Source: Zhang JX, Fernando WGD, Remphrey WR (2005) Molecular detection of *Apiosporina morbosa*, causal agent of black knot in *Prunus virginiana*. *Plant Disease* **89**(8), 815-821.

Additional key words: detailed record, diagnostics

Computer codes: DIBOMO, CA

2006/037 Absence of *Potato spindle tuber pospiviroid* in Canada

As reported in EPPO RS 2003/077, surveys are being carried out in Canada to verify the absence of *Potato spindle tuber pospiviroid* (PSTVd - EPPO A2 List) from potato production. Occurrences of PSTVd were reported in the 1950s and a seed potato certification programme was initiated to eradicate it from Canada. Within this programme, all nuclear stock is tested by electrophoresis (rPAGE) to ensure freedom from PSTVd. Every year, seed potato fields are visually inspected (twice or more) for the presence of PSTVd and viruses. Symptoms of PSTVd have not been observed in the field for at least the last 25 years. In the provinces of Prince Edward Island and New Brunswick, PSTVd has been considered officially eradicated since 1989 on the basis of field inspections and tests (rPAGE and nucleic acid dot blot hybridization). More recently, surveys also confirmed its absence from Alberta, British Columbia and Saskatchewan. During 2000-2004, the PSTVd survey was extended to the provinces of Manitoba, Ontario, Québec, Nova Scotia and Newfoundland in which 211, 188, 95, 6 and 10 samples, respectively, were collected. Each sample consisted of 400 randomly selected leaves from selected potato



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fields (corresponding to seed lots at various stages of the certification scheme and to a few lots (11%) taken from commercial ware potato fields). All samples were tested by dot blot and a proportion of them (10%) were retested by rPAGE and northern blot. All test results were negative. Considering the cumulative results of the PSTVd surveys in all 10 Canadian provinces and the absence of the disease in the field, Canada declares that PSTVd is absent within its potato industry.

Source: De Boer SH, DeHann TL (2005) Absence of potato spindle tuber viroid within the Canadian potato industry. *Plant Disease* **89**(8), p 910.

Additional key words: absence

Computer codes: PSTVD0, CA

2006/038 Phytoplasma classification

Phytoplasmas constitute a large and diverse group of pathogens which cannot be cultured *in vitro* and which are associated with several hundreds of plant diseases. In EPPO RS 2005/060, the current classification of phytoplasmas was summarized in a table. More recently, Firrao *et al.* (2005) provided a short taxonomic guide to the genus '*Candidatus* Phytoplasma'. This short guide gives useful explanations on how the scientific community is attempting to provide a classification which takes into account both the phylogenetic and the biological/ecological characteristics of phytoplasmas.

It is recalled that the category '*Candidatus*' was introduced to allow unambiguous reference to organisms that could not be cultivated *in vitro*. In principle, a *Candidata* species had to be defined on the basis of habitat and nucleic acid sequence data. So for phytoplasmas, it was understood that they would be described on the basis of their host plants and sequence data of the 16S rRNA gene (which is the main studied one). According to the original proposal, classification should be based on a unique sequence, but this was not practical for phytoplasmas which show a great diversity. This would have led to an impractical number of species. It was agreed that a strain that shared more than 97.5% of its 16S rRNA gene sequence with an already described species should not be described as a new *Candidata* species unless it was demonstrated that the organism belonged to an ecologically distinct population. The analysis of more than 200 different sequences of phytoplasma 16S rRNA gene has delineated less than 20 clusters of strains at 97.5 % similarity. But, as within these clusters, some phytoplasmas presented different biological, phytopathological and other molecular properties a few more species were proposed. The following rules were agreed when describing new phytoplasma species which shared more than 97.5% of their 16S rRNA gene. These species can be considered as different only when: they are transmitted by different vectors; they have different natural host plants (or at least show a different behaviour on the same host); and there is evidence of significant molecular diversity (using hybridization tests with cloned DNA probes, serological or PCR-based tests).



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As a result, the new genus ‘*Candidatus Phytoplasma*’ now comprises 21 species (see below) which have been validly described and 6 additional species which have an informal description (‘*Ca. Phytoplasma cocosnigeriae*’, ‘*Ca. Phytoplasma cocostanzaniae*’, ‘*Ca. Phytoplasma luffae*’, ‘*Ca. Phytoplasma palmae*’, ‘*Ca. Phytoplasma pruni*’, ‘*Ca. Phytoplasma solani*’, ‘*Ca. Phytoplasma vitis*’). This short taxonomic guide summarized the details needed for the identification of each species (host plants and distinctive nucleotide sequences). For practical reasons, the EPPO Secretariat has extracted the following details about species names and host plants, data about the nucleotide sequences can be found in the original paper.

‘<i>Candidatus Phytoplasma</i> species’	Host plants	Main symptoms
‘ <i>Ca. Phytoplasma allocasuarinae</i> ’	<i>Allocasuarina muelleriana</i>	Yellows
‘ <i>Ca. Phytoplasma asteris</i> ’	Very wide range of host plants	Symptoms can include: virescence, phyllody, flower streaking and malformation, yellowing and upright position of leaves, elongation and etiolation of internodes, witches’ broom and stunting
‘ <i>Ca. Phytoplasma aurantifolia</i> ’	<i>Citrus aurantifolia</i>	Witches’ broom
‘ <i>Ca. Phytoplasma australasiae</i> ’	<i>Carica papaya</i> (related strains found on other hosts)	Yellow crinkle and mosaic
‘ <i>Ca. Phytoplasma australiense</i> ’	<i>Vitis</i> , <i>Carica papaya</i> , <i>Phormium tenax</i> , <i>Fragaria</i>	Yellows
‘ <i>Ca. Phytoplasma brasiliense</i> ’	<i>Hibiscus rosa-sinensis</i>	Witches’ broom
‘ <i>Ca. Phytoplasma castaneae</i> ’	<i>Castanea sativa</i>	Witches’ broom
‘ <i>Ca. Phytoplasma cynodontis</i> ’	<i>Cynodon dactylon</i>	Chlorosis, proliferation, stunting
‘ <i>Ca. Phytoplasma fraxini</i> ’	<i>Fraxinus</i> , <i>Syringa</i>	Yellows
‘ <i>Ca. Phytoplasma japonicum</i> ’	<i>Hydrangea</i>	Phyllody
‘ <i>Ca. Phytoplasma mali</i> ’	<i>Malus</i> , occasionally on other hosts	Proliferation
‘ <i>Ca. Phytoplasma oryzae</i> ’	<i>Oryza sativa</i>	Yellowing, stunting
‘ <i>Ca. Phytoplasma phoenicium</i> ’	<i>Prunus dulcis</i>	Lethal disease of almond
‘ <i>Ca. Phytoplasma pini</i> ’	<i>Pinus halepensis</i> , <i>P. sylvestris</i>	Abnormal shoot branching, dwarfed needles
‘ <i>Ca. Phytoplasma prunorum</i> ’	<i>Prunus</i> spp. (detected also on other hosts)	Yellows and decline
‘ <i>Ca. Phytoplasma pyri</i> ’	<i>Pyrus</i> (detected also in <i>Corylus avellana</i>)	Decline
‘ <i>Ca. Phytoplasma rhamni</i> ’	<i>Rhamnus catharticus</i>	Witches’ broom
‘ <i>Ca. Phytoplasma spartii</i> ’	<i>Spartium junceum</i> , <i>Sarothamnus scoparius</i>	Witches’ broom
‘ <i>Ca. Phytoplasma trifolii</i> ’	<i>Trifolium</i> (closely related phytoplasmas or strains reported on many other hosts)	Virescence, proliferation
‘ <i>Ca. Phytoplasma ulmi</i> ’	<i>Ulmus</i> (closely related phytoplasmas or strains are reported on many other hosts)	Elm yellows
‘ <i>Ca. Phytoplasma ziziphi</i> ’	<i>Zizyphus jujuba</i>	Witches’ broom



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Source: Firrao G, Gibb K, Streten C (2005) Short taxonomic guide to the genus 'Candidatus Phytoplasma'. *Journal of Plant Pathology* **87**(4), 249-263.

Additional key words: taxonomy

Computer codes: PHYSPS

2006/039 International course on 'The use of real-time BIO-PCR for detecting brown rot and ring rot bacteria on potatoes', Ankara, 2006-06-26/30

An international course on the use of RealTime BIO-PCR to detect brown rot (*Ralstonia solanacearum*) and ring rot (*Clavibacter michiganensis* subsp. *sepedonicus*) will be organized by the Plant Protection Central Research Institute of Ankara in collaboration with the Foreign Diseases and Weed Science Research Unit, USDA Fort Detrick, USA. The course will be hosted at the Campus of Agriculture in Ankara and will be held over a period of 5 days from the 26th to 30th of June, 2006, in morning and afternoon sessions. Lecturers will be Dr. Norman W. Schaad (USDA, USA) and Dr. Meriç Özakman (PPCRI, Turkey). This course is addressed to professionals who are already directly involved in the detection, diagnosis and research on plant pathogenic bacteria. The official language of the course will be English and no translation will be made. The **deadline** for the submission of application is **12 May 2006**. Registration fees of the course amount to 300 euros. This sum covers tuition fee, leaflets and lunches during the course. Hotel reservation will be made for the participants. The **course is limited to 10 participants**.

Programme

Theoretical part

- Introduction
- Recent information on *Ralstonia solanacearum*
- Recent information on *Clavibacter michiganensis* subsp. *sepedonicus*
- Strategies for detecting bacteria
- Role of detection in quarantine programs
- Real-time PCR
- Real-time BIO-PCR

Practical part

- Extraction of bacteria from potato tubers
- Preparing PCR mixtures and agar media for BIO-PCR
- Programming and using Cepheid SmartCycler
- RealTime PCR
- Evaluation of results



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Source: Personal communication with Dr Ozakman (PPCRI, Ankara), 2006-02.

Additional key words: training

Computer codes: CORBSE, PSDMSO, TR

2006/040 International Symposium on pine wilt disease, Lisbon (2006-07-10/14)

An International Symposium on pine wilt disease (caused by *Bursaphelenchus xylophilus*): 'Pine wilt disease: a worldwide threat to forest ecosystems' will be held at the Fundação Calouste Gulbenkian, in Lisbon (PT), on the 2006-07-10/14.

The main topics of this Symposium will be:

- Pine wilt disease: global issues, trade and economic impact
- *Bursaphelenchus xylophilus*: biology and microbial inter-relationships
- *B. xylophilus*: taxonomy and detection methods
- The insect vectors: biology and ecology
- The tree: physiology, resistance and histopathology as a result of pine wilt disease
- Ecology and modelling
- *B. xylophilus* and insect vector control methods

There are no registration fees for this Symposium.

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Source: **Personal communication with P. Vieira, Universidade de Évora, Portugal, 2006-01.**

Additional key words: conference

Computer codes: BURSXY



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2006/041 Management of invasive alien plants in Islas Canarias (Spain): regulations are in preparation

The “Boletín oficial del Parlamento de Canarias” of the 2004-04-07 presents a project of law to protect Biodiversity on the Islas Canarias. The seventh chapter is dedicated to the management of exotic species and states that three lists should be created:

- a “list of weeds, threatening crops and forests”,
- a “list of invasive alien species, threatening indigenous species”,
- a “list of potentially harmful species”: species which could be on the 2 previous lists if they escape in natural ecosystems.

These lists will have to be elaborated within a maximum period of 1 year after the entry into force of the project of law. Possession, exhibition, use and trade in Islas Canarias of species registered on the “list of potentially harmful species” are prohibited. A few authorizations may be granted for particular agricultural uses, biological control, education programmes or scientific studies. New incursions of exotic species must be notified to the administration service in charge of the environment within the Islas Canarias. The authorities will implement management programmes to contain and eradicate these invasive species or potentially invasive species. Deliberate introduction of exotic species into natural ecosystems is forbidden. Clear and well defined benefits will have to be identified before any release of exotic species in nature can be authorized.

Source: Boletín oficial del parlamento de Canarias. VI Legislatura nùm. 49. 7 de abril de 2004. <http://www.parcn.es>

El gobierno canario impulsará la elaboración de una estrategia de biodiversidad. <http://www.agroterra.com/noticias/imprimir.asp?IdNoticia=7798>

Additional key words: regulation

Computer codes: ES

2006/042 *Ipomoea triloba*, a new exotic species for the Iberian peninsula

Ipomoea triloba (Convolvulaceae) is an annual vine climber, with long stems of up to 5 m and numerous pinkish flowers. This plant is native from Central America and was introduced into East and South-East United States (Arizona, California, Florida and North Carolina), Mexico, Ecuador, Peru, Indonesia, Thailand, Hawaii and Australia. It is considered by the Global Compendium of Weeds as a noxious weed and a quarantine weed. It is considered as a noxious weed in rice and cotton fields by the Natural Resource Conservation Service (NRCS) of the United States Department of Agriculture.

In Spain, it was recorded in October 2002 near Sevilla (Andalucía) covering more than 1 km of the eutrophised Barbolí water course. The spread of the plant is being controlled by farmers with different phytosanitary products to which the plant is sensible. Individual plants can cover more



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than 1 m², they flower abundantly from July to November and produce many fertile seeds (200-228 plantules found per m²). *Ipomoea indica*, *I. purpurea* and *I. hederacea* are already considered as invasive in some Mediterranean countries. It seems that *I. triloba* is a potentially invasive plant which should be monitored and contained by the authorities, and even eradicated whenever possible.

Source: Silvestre S (2004) *Ipomoea triloba* L. (Convolvulaceae) una nueva especie aloctona para la Peninsula. *Lagascalia*. **24**,63-66.

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

Additional key words: new record

Computer codes: IPOTR, ES

2006/043 *Solanum elaeagnifolium* and *Solanum mauritianum* naturalized in Taiwan

Solanum elaeagnifolium (Solanaceae, EPPO list of invasive alien plants) was recorded by Hsu and Tseng (2003) in southern Taiwan and in the Penghu Islands. *Solanum mauritianum* (Solanaceae) was found in Nantou County of central Taiwan and occurs in open situation. It forms a shrub or a dense tree of 2-4 m tall, branched above to form a rounded canopy, all parts are densely pubescent. Leaves are simple, alternate and elliptic, up to 30 cm long and 12 cm wide. Branched corymbs hold numerous flowers, corolla are lilac blue with a pale star-shaped area at base and are 1.5-2.5 cm in diameter. Berries are dull yellowish, they measure 1-1.5 cm in diameter and contain numerous seeds. The native range of *S. mauritianum* is Northern Argentina, Uruguay, Paraguay and Southern Brazil. The known introduced range of the plant is Africa (Cameroon, Comoros, Reunion, Mauritius, Madagascar, South Africa, Swaziland and Uganda), USA (California, Florida, Hawaii), India and Oceania (Australia, New Caledonia, Norfolk Island, Solomon Islands, Tonga). In Europe it is naturalized in Azores (Portugal) where it is found near villages and along water stream margins (Silva, pers. com.). The plant is considered invasive in New Zealand and South Africa. The plant seems to tolerate most soil types, but thrives in those with high water retention. The plant is also able to tolerate low temperatures and occurs in areas that are subject to light frost. The weed is both frost-tolerant and shade-tolerant to a certain degree. *S. mauritianum* is a coloniser of disturbed sites and can invade urban areas, native forest margins and pastoral land. All parts of the plant are poisonous to humans, especially the green berries. It has been introduced to New-Zealand as a garden plant. There are no records of the weed being spread by trade or transport, although the potential for this may well exist. The greatest risks are probably posed by deliberate introductions for ornamental or commercial purposes. Unlike *S. elaeagnifolium*, *S. mauritianum* seems too thermophile to be considered as a potential invader for the EPPO region.

Source: Wang CM (2003) *Solanum mauritianum* Scop. (Solanaceae), a Newly Naturalised Plant in Taiwan. *Coll. And Res.* **16**, 67-70.

Hsu TW, Tseng YH (2003) *Solanum elaeagnifolium* Cav. (Solanaceae): a



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noxious weeds newly naturalised to Taiwan. *Endemic Species Research*, **5**(1), 49-51.

Global Invasive database: <http://www.issg.org/database/species/ecology.asp?si=209&fr=1&sts>

Additional key words: new records

Computer codes: SOLEL, SOLMR

2006/044 *Senecio inaequidens* naturalized in Taiwan

A single population of *Senecio inaequidens* (Asteraceae, EPPO list of invasive alien plants) was found at Tenghie, the middle-altitude mountain area in Southern Taiwan. It was discovered in the same area where the following European species had already been found naturalized: *Hypochaeris radicata*, *Plantago lanceolata* and *Verbena bonariensis*.

Source: Jung MJ, Yang SZ, Kuoh CS (2005) Notes on Two Newly Naturalized Plants in Taiwan. *Taiwania*. **50**(3), 191-199.

Additional key words: new record

Computer codes: SENIC

2006/045 Eradication project of *Senecio inaequidens* in Corse, France

Senecio inaequidens (Asteraceae, EPPO list of invasive alien plants) was first found in a Natural Reserve in Corse in 2002. Considering the risk presented by this invasive plant for the island, the land manager decided to eradicate it while this was still possible by hand pulling and destroying the up-rooted plant material. New outbreaks have been discovered this year by the "Observatoire de l'Environnement de Corse" in Calvi and Haro. In Calvi, it colonized about 3 ha of a car park and river banks. In Haro, it invaded a waste land surrounded by 'maquis'. The plant has the potential to spread in Corse. It could invade roadsides and urban areas, as well as pastures, dunes and cliffs in coastal areas, and temporary ponds, as it did in Southern France. According to the local farmers, the plant arrived about 20 years ago as a hay contaminant. The "Observatoire de l'Environnement de Corse" plans to eradicate the plant on 1-4 April. Plants will be hand-pulled and all up-rooted plant material will be destroyed as it can still produce achenes for 2 or 3 days. Monitoring and control should be carried out over several years to remove all seed bank and any plant material should be eliminated. More investigations will be undertaken on the origin of hay imported in Corse during the last 20 years. The introduction of *S. inaequidens* will be officially addressed by the Regional Administration for Agriculture.

Source: Laetitia Hugo, Observatoire de l'Environnement de Corse. Email : hugot@oec.fr, Personal communication, 2006-01.

Additional key words: new record

Computer codes: SENIC, FR



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2006/046 Observations on *Elide asparagoides* and *Polygala myrtifolia* in Corse, France

Elide asparagoides (= *Asparagus asparagoides*, Liliaceae) is an ornamental species originating from South Africa. This plant is a geophyte producing climber stems up to 2.5 m long. The plant is known to be naturalized in Portugal (including Azores), Sicilia (Italy), South of France (including Corse). This plant is known to be very invasive in Australia. According to a field survey made in 2002, the plant is expanding in Corse. This study provided useful information on its biology and ecology. It is not sold by local horticulturists but is supposed to have escaped from gardens. *E. asparagoides* is heliophile, susceptible to drought and its seeds are thought to be propagated by birds. This plant has a long growing period (from October to April) and produces very rapidly a huge biomass and a lot of seeds. It has a wide ecological tolerance (it grows from 0 to 210 m of altitude). *E. asparagoides* could represent a threat to indigenous species having the same life cycle as *Prasium majus* (Lamiaceae) which is rare in Corse. Although the species is stopped by dense vegetations, its extension is favoured by transportation routes (roads, paths ...) and fires. This plant might cover large surfaces in the future and become very invasive. It should be monitored and contained.

Polygala myrtifolia (Polygalaceae) is an ornamental shrub originating from South Africa. The plant is present in Sicilia, Southern France and Corse where it is casual. It is considered invasive in Hawaii (USA). The study shows that the plant does not resist very well to summer drought, that it is heliophile and its seeds seem to be dispersed by wind. Even if the plant should be monitored, its susceptibility to winter low temperatures and to drought limits its populations and it is not considered invasive or potentially invasive.

Source: Paradis G (2004) Observations sur les stations de l'espèce subspontanée *Polygala myrtifolia* L. à l'ouest d'Ajaccio (Corse). *Bulletin de la Société Botanique du Centre-Ouest*. **35**, 91-102

Paradis G, Piazza C (2004) Précisions sur les stations d'*Elide asparagoides* (Asparagaceae) à l'île Rousse et Tiuccia (Corse Occidentale). *Le Monde des Plantes*. **482**,1-2.

Paradis G (2002) Expansion à Ajaccio (Corse) de l'espèce introduite *Elide asparagoides* (L.) Kerguelen (Asparagaceae). *Le Monde des Plantes*. **476**, 16-20.

Additional key words: new records

Computer codes: ASPAS, POGMY, FR



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2006/047 Invasive plants in Belgium

The Belgian Forum on Invasive Species is an informal expert group aiming at stimulating scientific research on the ecology of invasive alien species as a support to develop efficient monitoring and management strategies. It regularly updates the reference list of alien species invading terrestrial, freshwater and marine ecosystems in Belgium and acts as the national node of the IUCN Invasive Species Specialist Group. This forum is animated in collaboration with the Belgian National Focal Point for the Convention on Biological Diversity and the research teams involved in the INPLANBEL project.

The INPLANBEL project aims at giving references to assess the threats and develop a strategy for management and further research programmes on invasive plants.

The main objectives are:

- definition of studied species and landscapes,
- elaboration of a list of exotic species and their success of invasion in Belgium,
- monitoring of the species dynamism,
- analysis of the characteristics of invasive species and invaded habitats,
- impacts of invasive species on the ecosystems' functioning.

On the 2006-03-09, a workshop was dedicated to the recent knowledge on biological invasions in Belgium. It took place in Brussels, information is available at http://www.biodiversity.be/static/thematic_forums/invasive_species/invasions/FR/workshop_FR.htm

In the National Plant Protection of Belgium official publication C2005/23058 – object2 Contractual research Unit SPS/FOD, there is a call for PRA on invasive alien species for “Risk Analysis for the introduction of pests (noxious non-indigenous plant included) in the vegetal sector”. This offer is restricted to Belgium Organizations. The call is based on the EPPO list, selected by the EPPO Panel on invasive alien species.

Source: The Belgian forum on Invasive Species:
<http://www.biodiversity.be/thematic-forums/invasive-alien-species>

INPLANBEL Project: <http://www.belspo.be/belspo/fedra/proj.asp?l=fr&COD=EV/27>

Workshop on biological invasions:
http://www.biodiversity.be/static/thematic_forums/invasive_species/invasions/FR/workshop_FR.htm

Additional key words: invasive plants

Computer codes: BE



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2006/048 EWRS Working Group on Invasive Plants

The inaugural meeting of the European Weed Research Society new group on invasive plants took place at the Swiss Agricultural Research Station of Changins on the 2006-02-06 with 23 specialists participating to this meeting (EWRS members, representatives of 17 different institutions of 6 European countries). The following statement was unanimously agreed:

Mission

The EWRS Working Group on Invasive Plants will develop an international and interdisciplinary platform dedicated to monitor, study, warn and advise on the management of invasive plant species in Europe. This mission will be achieved through the integration of existing and/or execution of especially designed research taking into account agronomic, environmental, health and economic aspects of plant invasion.

Existing actions and uniqueness of a EWRS-Working Group

One unique point of this Working Group could be that it would facilitate the transfer of knowledge, experiences and know-how, developed by weed scientists in agricultural systems, in order to contribute to solve the issues raised in other areas, particularly environmental weeds. Conversely, experience gained by professionals dealing with environmental weeds, for instance in the biological, ecological and phyto-sociological aspects of plant invasion, can be valuable for agronomists. Another uniqueness of the Working Group could be the development of projects on species or in special habitats. To promote exchanges in the working group, ring trials could be established. Several possibilities were discussed.

Ambrosia artemisiifolia

Ragweed was the most frequently cited species during all the discussions. Exchanging information and carrying out common experiments could contribute to better management of this plant in infested areas and prevent its spread in other places. Evolution, public health, economy, management control, and information were mentioned as important fields of activity.

Set-asides, ecological surfaces and semi-natural habitats

With the “extensification” of agricultural practices in several places in Europe, new types of areas are emerging in the agricultural landscape (set-asides with the problem of *Cirsium*). Moreover, management of semi-natural habitats such as pastures is also evolving. These new practices can foster invasive species (e.g. *Solidago* sp., *Senecio* sp.). A species monitoring could be helpful.

Woody invasive plants

Several of the most invasive and threatening plants are woody species. Management options and management technologies were mentioned as important topics to work on.



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Further priorities were identified which might form foci for interested parties who were not able to attend:

- a) Knowledge transfer outside intensive cropping (agronomic toolkit). The following terms were discussed: wet lands, still waters, river boards, road sides, parasitic weeds.
- b) Early detection of plant invaders. As possible fields of activity the introduction pathways (seeds, supermarkets, golf courses) and the possibilities to push legal basis for control of plant invaders were discussed as points of interest.

The next EWRS meeting will take place during the **Symposium on invasive plants** held in the Azores on 2006-07-17/21.

Source: Contact for Working Group on Invasive Plants
All interested persons are invited to participate. For more information please contact the coordinator:
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Symposium on invasive plants in Ponte Delgada (Azores, Portugal)
<http://www.uac.pt/isiwpi/>

Additional key words: invasive plants, conference