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2004/083 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 geographical records**

Clavibacter michiganensis subsp. *michiganensis* (EPPO A2 list) was isolated in 2002 from 2 asymptomatic lots of tomato seeds, which had been produced on Java. This is the first report of bacterial canker of tomato in Indonesia (Anwar *et al.*, 2004). **Present, first found in 2002 in Java.**

Black sigatoka of banana caused by *Mycosphaerella fijiensis* is reported for the first time from the Bahamas. The disease was observed in February 2004 on two isolated sites on Grand Bahama island (Ploetz, 2004). **Present, first found in 2003 on Grand Bahama island.**

In Uruguay, *Liriomyza huidobrensis* (Diptera: Agromyzidae – EPPO A2 list) is considered as a pest of lettuce, tomato, potato; and *Frankliniella occidentalis* (Thysanoptera: Thripidae – EPPO A2 list) as a pest of strawberry (JUNAGRA website). **Present, no details.**

The presence of *Unaspis citri* (Homoptera: Diaspididae – EPPO A1 list) is recorded in Egypt and Syria, as well as in Japan (Danzig & Pellizzari, 1998). **Present, no details.**

- **Detailed records**

In Argentina, Ovruski *et al*. (2003) stated that *Anastrepha fraterculus* (Diptera: Tephritidae – EPPO A1 list) is mainly restricted to the northwestern provinces of Tucumán, Salta, Jujuy, Catamarca, and the northeastern provinces of Missiones, Corrientes and Entre Ríos.

Choristoneura rosaceana (Lepidoptera: Tortricidae – EPPO A1 list) occurs in Minnesota (US), and many growers consider it as a pest of apples (Fadamiro, 2004)

Field surveys were carried out in the Bekaa valley in Lebanon to assess the phytosanitary status of potato crops. Results showed that *Potato virus Y* was the most prevalent virus (found in 98.8% of the virus-infected samples), followed by *Potato virus A*, *Potato virus X* and *Potato leafroll virus*. The presence of PVY^{NTN} was also detected. The fungi *Thanatephorus cucumeris*, *Verticillium dahliae*, *Fusarium* sp. and *Sclerotinia sclerotiorum,* and the bacterium *Erwinia carotovora,* were the main pathogens found. *Clavibacter michiganensis* subsp. *sepedonicus* and *Ralstonia solanacearum* (both on the EPPO A2 list) were not detected (Choueiri *et al*., 2004).

Liriomyza huidobrensis (Diptera: Agromyzidae – EPPO A2 list) was first recorded in Yunnan Province (CN) in 1993. Since then, the pest has spread to more than 10 Provinces of China, ranging from southern subtropical areas to northern temperate regions, including at least: Beijing, Hubei, Neimenggu, Shaanxi, Shandong, Sichuan (Chen & Kang, 2004).

In Mexico, *Maconellicoccus hirsutus* (Homoptera: Pseudococcidae – EPPO A1 list) was first detected in 1999 in Mexicali, Baja California. So far, the pest remained confined to a urban area adjacent to the border strip with USA, as a result of strict phytosanitary measures. But in February 2004, an outbreak of *Maconellicoccus hirsutus* was confirmed in teak (*Tectona grandis*) in the municipality of Bahia de Banderas, State of Nayarit. Teak is an introduced forest species in this state. A survey showed that the pest is present in the areas of El Porvenir, San Vicente, Valle de Banderas, San Jose, San Juan de Abajo and Colomo (total infested surface of 63 ha). The origin of the outbreak appears to be the introduction of infested ornamental plant products in tourist's luggage (NAPPO Pest Alert, 2004).

In USA, *Maconellicoccus hirsutus* (Homoptera: Pseudococcidae – EPPO A1 list) was first discovered in Florida in June 2002. In February 2004, its presence was also detected on *Hibiscus* at four residences in the southeast of Pinellas County (Florida Pest Alert, 2004).

In China, *Phellinus weirii* (EPPO A1 list) was found in 2003, in natural forests of the Qilian Mountains, Qinghai Province. The fungus was found on *Sabina przewalskii* (syn. *Juniperus przewalskii*) showing slow growth, thin crowns, chlorotic foliage, cambial necrosis and wood decay (Dai, 2004).

In recent year, symptoms resembling those of *Plum pox potyvirus* (PPV - EPPO A2 list) have repeatedly been observed in plum orchards located in the vicinity of Berlin, Germany. In 2000, leaf samples were collected from four plum orchards and tested (serological and molecular assays). PPV was detected in 52% of all tested symptomatic samples (13 out of 25). Only PPV-D was detected. Further studies will be done on a larger number of samples for an accurate evaluation of the occurrence of the different strains of PPV (Rebenstorf & Büttner, 2004).

- **New host plants**

Studies showed that the leguminous weed, *Macroptilium lathyroides*, can be a host plant for *Bean golden yellow mosaic begomovirus* (EPPO A1 list; Bracero *et al*., 2003).

In June 2003, *Erwinia amylovora* (EPPO A2 list) was recorded for the first time on *Pyracantha coccinea* in Bulgaria, in the region of Plovdiv (Bobev *et al*., 2004).

Impatiens necrotic spot tospovirus (EPPO A2 list) was detected in *Cyperus esculentus* and *C. rotundus* in Georgia, US (Martínez-Ochoa *et al.*, 2004).

In Cuba, *Tomato yellow leaf curl begomovirus* (EPPO A2 list) was found infecting squash (*Cucurbita pepo*). Affected plants showed leaf curling and light yellowing (Martinez Zubiaur *et al*., 2004).

In Spain, several weeds were found naturally infected by *Tomato chlorosis* (ToCV) and *Tomato infectious chlorosis criniviruses* (TICV - both on the EPPO Alert List). ToCV was detected in *Solanum nigrum*, and TICV was detected in *Chenopodium album* and *C. murale* (Font, *et al.*, 2004).

Source:

Anwar, A.; van der Zouwen, P.S.; Ilyas, S.; van der Wolf, J.M. (2004) Bacterial canker (*Clavibacter michiganensis* subsp. *michiganensis*) of tomato in commercial seed produced in Indonesia. **Plant Disease, 88(6), p 680.**

Bobev, S.G.; Baeyen, S.; Crepel, C.; Maes, M. (2004) First report of fire blight caused by *Erwinia amylovora* on *Pyracantha coccinea* in Bulgaria. **Plant Disease, 88(4), p 427.**

Bracero, V.; Rivera, L.I.; Beaver, J.S. (2003) DNA analysis confirms *Macroptilium lathyroides* as alternative host of *Bean golden yellow mosaic virus*. **Plant Disease, 87(9), 1022-1025.**

Chen, B.; Kang, L. (2004) Variation in cold hardiness of *Liriomyza huidobrensis* (Diptera: Agromyzidae) along latitudinal gradients. **Environmental Entomology, 33(2), 155-164.**

Choueiri, E.; El-Zammar, S.; Jreijiri, F.; Mnayer, D.; Massaad, R.; Saad, A. T.; Hanna, L.; Varveri, C. (2004) Phytosanitary status of potato in the Bekaa valley in Lebanon. **Bulletin OEPP/EPPO Bulletin, 34(1), 117-212.**

Dai, Y.C. (2004) First report of laminated root rot on *Sabina przewalskii* caused by *Phellinus weirii* sensu stricto in China. **Plant Disease, 88(5), p 573.**

Danzig E.M., Pellizzari G. (1998) Diaspididae. In: Catalogue of Palearctic Coccoidea (F. Kozár Editor), Plant Protection Institute, Hungarian Academy of Sciences, Budapest: 172-370.

Fadamiro, H.Y. (2004) Pest phenology and evaluation of traps and pheromone lures for monitoring flight activity of obliquebanded leafroller (Lepidoptera: Tortricidae) in Minnesota apple orchards. **Journal of Economic Entomology, 97(2), 530-538.**

Font, I.M.; Juárez, M.; Martínez, O.; Jordá, C.; (2004) Current status and newly discovered hosts of *Tomato infectious chlorosis virus* and *Tomato chlorosis virus* in Spain. **Plant Disease, 88(1), p 82.**

Martínez-Ochoa, N.; Mullis, S.W.; Csinos, A.S.; Webster, T.M. (2004) First report of yellow nutsedge (*Cyperus esculentus*) and purple nutsedge (*C. rotundus*) in Georgia naturally infected with *Impatiens necrotic spot virus*. **Plant Disease, 88(7), p 771.**

Martinez Zubiaur, Y.; Fonseca, D.; Quiñones, M.; Palenzuela, I. (2004) Presence of *Tomato yellow leaf curl virus* infecting squash (*Cucurbita pepo*) in Cuba. **Plant Disease, 88(5), p 572.**

Ovruski, S.; Schliserman, P.; Aluja, M. (2003) Native and introduced host plants of *Anastrepha fraterculus* and *Ceratitis capitata* (Diptera: Tephritidae) in Northwestern Argentina. **Journal of Economic Entomology, 96(4), 1108-1118.**

Ploetz, R.C. (2004) First report of Black Sigatoka of banana caused by *Mycospherella fijiensis* on Grand Bahama Island. **Plant Disease, 88(7), p 772.**

Rebenstorf, K.; Büttner, C. (2004) [A short investigation of the distribution of Sharka virus in plum orchards in the periurban area of Berlin.]. **Gesunde Pflanzen, 56(1), 27-31.**

INTERNET

Junta Nacional de la Granja (JUNAGRA), Ministerio de Ganadería, Agricultura y Pesca (MGAP) – Problemas Sanitarios. Principales problemas sanitarios de algunas hortalizas del

Uruguay. http://www.mgap.gub.uy/Junagra/ElSector/sanidad.htm
NAPPO Pest Alert. News Stories (2004-03-08). Detection of Pink Hibiscus Mealybug (*Maconellicoccus hirsutus* Green), in the municipality of Bahia de Banderas in the State of Nayarit, Mexico. http://www.pestalert.org
University of Florida Pest Alert. Pink hibiscus mealybug found on Florida's west coast (2004-02-19). http://extlab7.entnem.ufl.edu/PestAlert/

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

Computer codes: ANSTFR, BGMV00, CHONRO, CORBMI, CORBSE, ERWIAM, INONWE, INSV00, LIRIHU, PHENHI, PSDMSO, TYLCV0, UNASCI, AR, BG, CN, CN, CU, EG, ID, LB, MX, SY, US, US

2004/084 Eradication of an outbreak of *Ralstonia solanacearum* on *Pelargonium* in France

In 2003, an outbreak of *Ralstonia solanacearum* biovar 2 (EPPO A2 list) was found on *Pelargonium* in France, in the region Poitou-Charentes. Control measures were immediately applied to the firm concerned. All infected plant material was destroyed, as well as material which might have been infected by contact or via the irrigation system. Premises, tools and the irrigation system were disinfected. Surveys done at premises of the clients of the infected nursery revealed another outbreak in a garden centre. The same control measures were applied there. Since then, no other case has been detected. Investigations made to trace back the origin of the infection showed that the plant material came from 4 different origins: Portugal (Madeira), Israel, South Africa and Costa Rica (via the Netherlands for the last two). The Portuguese NPPO was informed of the situation. A survey was done in Portugal but the variety concerned was no longer present. All tests made to detect *R. solanacearum* on the Portuguese firm were negative.
The status of *R. solanacearum* on *Pelargonium* in France is declared as follows: **Absent, eradicated.**

Source: **NPPO of France, 2004-07.**

Additional key words: eradication

Computer codes: PSDMSO, FR

2004/085 First report of *Diaporthe vaccinii* in Lithuania

Diaporthe vaccinii (anamorph *Phomopsis vaccinii* – EPPO A1 list) was detected inadvertently in Lithuania in 2000/2002. The fungus was found on shoots and leaves of *Vaccinium macrocarpon* (American cranberry) in the botanical garden of Kaunas. Later in 2003, scientists from the Institute of Botany detected *D. vaccinii* in a plantation of *V. corymbosum* (highbush blueberries) in the central part of Lithuania. All infested plants were destroyed. In 2003, the NPPO started a monitoring programme on cultivated *Vaccinium*. 33 samples (*V. corymbosum, V. macrocarpon, V. vitis-idaea*) were collected from 11 locations and tested in the laboratory. *D. vaccinii* was identified on 4 samples from 2 locations. In 2004, *D. vaccinii* was identified on wild cranberries (*Vaccinium oxycoccos*, syn: *Oxycoccus palustris*) in a collection of European species which grew near infected American cranberries. *D. vaccinii* was identified by the Phytosanitary Research Laboratory of the Lithuanian NPPO on the basis of morphological characters. The identification was confirmed by CSL, York (GB) and by the Systematic Botany and Mycology Laboratory, Beltsville (US) using PCR. Monitoring will continue in 2004 and will also include local species of *Vaccinium*. This is the first report of *D. vaccinii* in Lithuania. In Europe, an earlier incursion was recorded in the early 1980s in Romania in experimental plots of introduced American cultivars, but the fungus was then no longer found.
The situation of *D. vaccinii* in Lithuania can be described as follows: **Present, found for the first time in 2000/2002 in a few places, under eradication.**

Source: **NPPO of Lithuania, 2004-05 and 2004-06.**

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

2004/086 *Phytophthora ramorum* found in Poland

The NPPO of Poland informed the EPPO Secretariat that *Phytophthora ramorum* (EPPO Alert List) was found in 3 nurseries on the following plants: *Pieris japonica* cv. Prehole, *Calluna vulgaris* cv. Peter Sparkes and *Photinia* sp. (one host plant in one nursery, respectively). Detection and identification were carried out using both morphological and molecular methods. All isolates of *P. ramorum* were determined as the A1 mating type. The sources of these infections are being investigated. *P. ramorum* had previously been intercepted in Poland on imported *Rhododendron* growing in containers (see EPPO RS 2002/040).
Appropriate phytosanitary measures were taken according to EU Commission Decision 2002/757/EC, of which the most important are:
- destruction of infected plants and all host plants within 2 m;
- permanent and intensive observation of all other host plants in the nurseries concerned, especially during active growth;
- treatment of soil where the infected plants were found;
- disinfection of containers and surfaces on which the containers were standing.

The situation of *Phytophthora ramorum* in Poland can be described as follows: **Present, found in 3 nurseries (3 plants), under official control.**

Source: **NPPO of Poland, 2004-06.**

Additional key words: detailed record **Computer codes:** PHYTRA, PL

2004/087 *Rhagoletis cingulata* occurs in the Netherlands, but not *R. indifferens*

In 2001, an amateur entomologist published the occurrence of *Rhagoletis indifferens* (Diptera: Tephritidae – EPPO A1 list) in the Netherlands on *Prunus serotina*, a naturalized *Prunus* species in the coastal area in the southwest of the Netherlands (van Aartsen, 2001). Verification of the captured flies by an American expert on Tephritidae made it clear that the insect concerned was not *R. indifferens* but the closely related species, *R. cingulata* (EPPO A1 list). As non-European Tephritidae are regulated as quarantine pests by the EU, the Dutch NPPO started a survey in 2003 to check the status of *R. cingulata* in the Netherlands. The survey was conducted in the natural environment by placing 181 sticky traps in wild *P. serotina, P. avium* and *P. padus* plants and 90 traps in cherry orchards (*P. avium*). A total of 3204 flies of *R. cingulata* were trapped. Most fruit flies were trapped in the coastal dune area, at some locations with high densities. In cherry orchards, the insect was only found at 3 distant locations, in the central part of the Netherlands, and at low densities. The widespread occurrence of *R. cingulata* in the natural environment indicates that eradication of this insect is not feasible. *R. cingulata* should be considered as established in the natural environment in the Netherlands. The origin of the introduction of *R. cingulata* into the Netherlands remains unknown.
The status of *R. cingulata* in the Netherlands is declared as follows: **Present, widespread in the coastal area.**
The status of *R. indifferens* in the Netherlands is declared as follows: **Absent**.

Source: **NPPO of the Netherlands, 2004-07.**

van Aartsen, B. (2001) *Rhagoletis indifferens*, een nieuwe boorvlieg voor de Nederlande fauna (Diptera: Tephritidae). Nederlandse Faunistische Mededelingen, 14, 19-22.

Additional key words: new record, absence **Computer codes:** RHAGCI, RHAGIN, NL

2004/088 Situation of several quarantine pests in Croatia in 2003

The NPPO of Croatia recently informed the EPPO Secretariat of the situation of the following quarantine pests in 2003:

***Clavibacter michiganensis* subsp. *sepedonicus* and *Ralstonia solanacearum* (A1 quarantine list in Croatia, EPPO A2 list)**
During the 2003 growing-season, surveys were carried out for these two potato bacteria. They were performed in 13 Croatian counties and covered 990 ha of potato fields. Visual

inspections were done in potato crops, including also seed potato production and potato stores. In addition, tuber samples were collected for testing. From May to December 2003, samples (each of 200 tubers) were collected and tested by IF. 172 IF tests were performed (86 for *C. michiganensis* subsp. *sepedonicus* and 86 for *R. solanacearum*) and all gave negative results.
The status of *Clavibacter michiganensis* subsp. *sepedonicus* and *Ralstonia solanacearum* in Croatia is declared as follows: **Absent, confirmed by survey.**

***Diabrotica virgifera* (A2 quarantine list in Croatia, EPPO A2 list)**
The 2003 situation of this pest has already been presented in EPPO RS 2004/058.
The status of *Diabrotica virgifera* in Croatia is declared as follows: **Present, in the eastern region of Croatia, spreading towards the west.**

***Globodera rostochiensis* (A2 quarantine list in Croatia, EPPO A2 list)**
During the 2003 growing-season, visual inspections were carried out in potato fields and soil samples were collected in 17 Croatian counties (204 locations). 3200 soil samples were analysed and *Globodera rostochiensis* was found in 33 samples originating from 4 counties: Zagrebačka (Pećno, 8 infested samples), Varaždinska (Nova Ves, 9 samples), Primorsko-goranska (Ravna Gora, 4 samples) and Međimurska (Gardinovec and Pribislavec, 12 samples). As the pest was found for the first time in Nova Ves and Ravna Gora, both morphological characters and molecular testing were used to identify cysts in these newly infested areas. Pathotypes were identified by using bioassays. Ro1, Ro2 and Ro3 were found (Ro2 and Ro3 were found only at Ivanovec).
The status of *Globodera rostochiensis* in Croatia is declared as follows: **Present in limited areas, under surveillance.**

***Globodera pallida* (A1 quarantine list in Croatia, EPPO A2 list)**
Globodera pallida was found for the first time in Croatia during the 2003 growing season. Systematic surveys on potato cyst nematodes were performed and included: visual inspections of potato fields, collection of soil samples (from 17 Croatian counties - 204 locations) and analysis of 3200 samples. 33 soil samples were found infested by potato cyst nematodes. Cysts from 3 counties (Međimurska županija, Varaždinska županija, Primorsko-goranska županija) were analysed using bioassays to determine pathotypes present. These tests confirmed the presence of *G. pallida* pathotypes Pa2 and Pa3. The first determination of *G. pallida* was confirmed in soil samples collected from 3 locations, all situated in the northwestern part of Croatia: Sivice and Ivanovec (county Međimurska županija) and Vidovec (Varaždinska županija).
The status of *Globodera pallida* in Croatia is declared as follows: **Present, first found in 2003, only in the northwest region.**

***Liriomyza huidobrensis* (A2 quarantine list in Croatia, EPPO A2 list) and *L. sativae* (A1 quarantine list in Croatia, EPPO A2 list)**

From April to December 2003, surveys on quarantine pests of glasshouses were carried out in 18 counties. Visual inspections of plants growing under glasshouse (*Lycopersicon esculentum, Capsicum annuum, Cucumis sativus, Chrysanthemum, Dianthus* and *Dahlia*) were performed at 59 locations (72 glasshouses). In addition, 150 yellow sticky traps were placed in 28 glasshouses. *Liriomyza huidobrensis* was found for the first time in Croatia in 2002*, at 3 locations in Dalmatia (Duilovo, Turanj and Trogir). In 2003, the pest was found at the same locations and for the first time in 3 new other places: Dubrovnik (county Dubrovačko-neretvanska županija), Lučko (Zagrebačka županija), and Knežine (Splitsko-dalmatinska županija). It is assumed that the pest was spread with planting material. *L. sativae* was not found.

The status of *Liriomyza huidobrensis* in Croatia is declared as follows: **Present in a few glasshouses.**

The status of *Liriomyza sativae* in Croatia is declared as follows: **Absent, confirmed by survey.**

***Synchytrium endobioticum* (A1 quarantine list in Croatia, EPPO A2 list)**

Samples of potato tubers were collected during the 2003 growing-season. These samples were tested (206 mycological tests were performed) for the presence of *Synchytrium endobioticum*. The fungus was not detected.

The status of *Synchytrium endobioticum* in Croatia is declared as follows: **Absent, confirmed by survey.**

***Thrips palmi* (A1 quarantine pest in Croatia, EPPO A1 list)**

From April to December 2003, surveys on quarantine pests of glasshouses were carried out in 18 counties. Visual inspections of plants growing under glasshouse (*Capsicum annuum, Cucumis sativus, Chrysanthemum, Cyclamen, Ficus* and *Orchidaceae*) were performed at 59 locations (72 glasshouses). In addition, 33 blue sticky traps were placed in 8 glasshouses. During visual inspection, 34 samples of adult thrips were collected and determined under the microscope. *Thrips palmi* was not found.

The status of *Thrips palmi* in Croatia is declared as follows: **Absent, confirmed by survey.**

Source: **NPPO of Croatia, 2004-06.**

Additional key words: absence, detailed records, new records

Computer codes: CORBSE, HETDPA, HETDRO, LIRIHU, LIRISA, PSDMSO, SYNCEN, THRIPL, HR

* New record according to the EPPO Secretariat.

2004/089 Update on the situation of potato bacteria in United Kingdom

The NPPO of United Kingdom has informed the EPPO Secretariat about recent phytosanitary incidents concerning potato bacteria.

Clavibacter michiganensis subsp. *sepedonicus* (EPPO A2 list)
As reported in EPPO RS 2003/159, the presence of potato ring rot was discovered in November 2003 in a sample of seed potatoes (*Solanum tuberosum* cv. Provento) grown in one farm in Wales. In 2004, tracing and testing studies confirmed that the outbreak has been contained and that no other farms have grown or received infected stocks. In total, more than 165,000 potato tubers have been tested. On the outbreak farm, one stock of cv. Provento and one stock of a Provento/Almera admixture were found to be infected. Apart from these two stocks, all tests were negative, including for the remaining twenty other seed potato stocks on the outbreak farm. The testing programme included: all potato stocks on the outbreak farm; other stocks of cvs. Provento and Almera from the UK 2003 harvest; seed potatoes from the UK 2003 harvest grown from 2002 stock from the outbreak farm; seed potatoes from stocks with a clonal link to stocks grown on the outbreak farm in previous years; seed potatoes on farms with a machinery link to the outbreak farm. A substantial testing programme was also carried out in the Netherlands, where the Provento seed potatoes grown on the outbreak farm originated. The NPPO of UK considers that the outbreak has now been contained. However, some restrictions will remain in place (e.g. disposal of infected or possibly infected stocks, cropping restrictions on the land where the infected potatoes where grown).
The situation of *C. michiganensis* subsp. *sepedonicus* in United Kingdom can be described as follows: **Transient, one isolated outbreak was detected in 2003 in one farm but was contained in 2004, still under official control.**

Ralstonia solanacearum (EPPO A2 list)
In 2004, during routine annual survey, a consignment of seed potatoes was found to be infected with brown rot (caused by *R. solanacearum*). These potatoes (cv. Premiere) were located at one farm in Lancashire (northwest England) and were due to be planted for ware potato production. They had been imported from the Netherlands in 2003. Tracing studies showed that 3 other consignments of cv. Premiere had been delivered to 3 farms in England and Wales, as well as consignments of cv. Wilja originating from the same Dutch supplier. However, all potatoes cv. Wilja tested negative. Phytosanitary measures are being taken on the farms concerned (for cv. Premiere which is considered as contaminated and also on cv. Wilja

as a precautionary measure). These measures include: holding and disposal of seed potatoes in a manner to eliminate any risk of spread, disinfection of premises and equipment. In UK, surveys on solanaceous crops and weeds, and on watercourses are continuing.
The situation of *R. solanacearum* in United Kingdom can be described as follows: **Present, the bacterium has been eradicated from solanaceous crops, but can still be detected in a few watercourses.**

Source: **NPPO of United Kingdom, 2004-03.**

Additional key words: phytosanitary incident, containment **Computer codes:** CORBSE, PSDMSO, GB

2004/090 Survey for *Monilinia fructicola* in United Kingdom in 2003

In 2002, a survey was conducted in United Kingdom for *Monilinia fructicola* (EPPO A1 list) and the pathogen was not found (see EPPO RS 2003/130). In 2003, the survey continued, albeit on a smaller scale. 21 samples of stone and pome fruit (produced in United Kingdom or imported) were tested for *M. fructicola*. Visual examination was performed to select any samples with possible symptoms of *M. fructicola* for immediate testing. Final identification was based on species-specific primers designed by CSL and on methods described in the EPPO diagnostic protocol (PM7-18). *M. fructicola* was not detected on any material from United Kingdom (11 samples) or on the 5 tested samples from EU countries (Belgium, Netherlands, Spain). On some of these European samples, the indigenous species *M. fructigena* and *M. laxa* were detected. *M. fructicola* was intercepted on 4 occasions on plums from South Africa, Argentina and China, and phytosanitary action was taken on each occasion.
The situation of *M. fructicola* in United Kingdom can be described as follows: **Absent, confirmed by surveys.**

Source: **NPPO of United Kingdom, 2004-03.**

Additional key words: absence **Computer codes:** MONIFC, GB

2004/091 Survey on *Stemphylium vesicarium* in United Kingdom

Pear brown spot caused by *Stemphylium vesicarium* is a damaging disease of pears (*Pyrus communis*). So far, it has not been found in the United Kingdom, but concerns have been raised as a result of reports of the disease in other European countries (e.g. Italy, France, Netherlands, Spain). In United Kingdom, a limited survey was carried out in pear orchards and on pears moving in trade. Between June and December 2003, 122 samples of fruit and planting material were tested for *S. vesicarium*. The fungus was not detected. Survey will continue in 2004.

Source: **NPPO of United Kingdom, 2004-03.**

Additional key words: absence **Computer codes:** PLEOAL, GB

2004/092 *Sicyos angulatus* (Cucurbitaceae) is a new weed in maize crops in France: Addition to the EPPO Alert List

In France, *Sicyos angulatus*, a cucurbit of North American origin, was recorded as a weed in 1983 in three maize fields in the Pays Basque (south-west of France). However, its introduction is probably older as it was described in Floras published in the 1970s as a flowering plant which could be used to cover rapidly walls and palisades, or infertile soils. Today, *S. angulatus* is present in coastal areas from Pyrénées-Atlantiques to Gironde (south-west of France), and along the Rhône valley (south). *S. angulatus* is mainly found in irrigated maize crops, although a few marginal infestations have been seen in vineyards. Very rapid growth is reported. *S. angulatus* can cover maize plants entirely and break their stems, thus leading to yield losses (Larché, 2004) . Considering the very rapid development of *S. angulatus* and the damage it can cause to maize crops, the EPPO Secretariat felt that it could be added to the EPPO Alert List.

Sicyos angulatus (Cucurbitaceae – bur cucumber)

Why	A paper from Larché (2004) attracted our attention to the presence of *Sicyos angulatus*, a North American cucurbit, in France and other European countries, and to the damage it can cause to crops (maize in particular).
Description	*S. angulatus* is an annual vine. The plant climbs with long and branched tendrils. Leaves are alternate, hairy, broadly heart-shaped with 5 pointed lobes (22 mm long – 22-30 mm large) and a toothed margin. Monoic species. Small whitish to green flowers (2 mm) with 5 sepals and 5 petals. Small, spiny fruits are produced in clusters (3-20). Pictures can be viewed on INTERNET: http://www.ct-botanical-society.org/galleries/sicyosangu.html http://www.missouriplants.com/Whitealt/Sicyos_angulatus_page.html http://www.comune.ferrara.it/lipu/isola/flora/sicyos.html (infestation in Italy)

Growth can be very rapid, up to 2 m in 3 weeks. Plants can measure up to 7 m long or even more. In Indiana conditions (US), plants established in early spring (May) attained a fresh weight of up to 86 kg and produced almost 80.000 seeds. With later establishment, less biomass and a smaller number of seeds were produced. *S. angulatus* showed rapid development with periodic germination throughout the growing season.

Where

EPPO region: *S. angulatus* has been introduced into several European countries as a decorative plant from America. In some places, it has escaped and become a weed. In the literature, there are a few references to its use as a rootstock for cucumbers grown under glass in Europe, but more data is needed on its actual use in practice. *S. angulatus* is reported from: Croatia (first observed in 1995), Czech Republic, France (South-West), Germany, Hungary, Italy (considered as an invasive weed), Moldova, Norway (thought to have been introduced with imports of soybean seeds), Slovenia, Spain (its presence has been reported, but so far not as an invasive alien), Sweden (first found in 2003), Turkey, United Kingdom.

North America: Canada (Québec, Ontario), Mexico, USA (recorded in 37 states, absent in the west – for more details see USDA plant profile).

Caribbean: Guadeloupe, Martinique.

Asia: China, Japan, Korea Republic.

Habitat

Wet soils, fencerows, shores, swamps, thickets, roadsides and disturbed areas. In France, it was observed that *S. angulatus* is favoured by floodable loamy clay soils.

Damage

S. angulatus winds around the stems of crops (e.g. maize, soybean) and covers the plants. It is a strong competitor for light and nutrients, which directly leads to yield reduction. In addition, it is a very aggressive climbing plant which pulls maize and soybean plants to the ground creating a harvest loss (fields can be rendered unharvestable). In USA, *S. angulatus* is listed as a noxious weed in Delaware and Indiana. In Japan, it is considered as a major introduced weed species. It occurs in cultivated and uncultivated fields and it is also invading native vegetation. Observations made in Japanese maize fields showed that yield was decreased by 80% by a population of 15-20 plants/10 m² and by 90-98% with 28-50 plants/10 m².

Dispersal

Plant dissemination is mainly ensured by dispersal of seeds. These seeds, which are produced in large numbers, are readily scattered by mechanical harvesters and animals. Fruits with prickly hairs may also help dissemination. Over long distances, trade of seeds contaminated with *S. angulatus* seeds can ensure plant spread.

Pathway

Seeds of crops (e.g. maize, soybean) contaminated with *S. angulatus* seeds, soil or machinery with viable *S. angulatus* seeds.

Possible risks

S. angulatus is reported as a weed in arable crops such as maize and soybean which are major crops in the EPPO region. Significant losses are occasionally reported. In addition, it is also observed in non-cultivated areas competing with native species. Herbicides can be used against *S. angulatus* but this is difficult in cases of heavy infestations or near water courses. Cultural control (tillage, crop rotation) can help to reduce weed populations. Although, *S. angulatus* is reported from several EPPO countries, more data is needed on its impact on crops and native vegetation in the areas where it occurs.

Source(s)

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EPPO RS 2004/092
Panel review date - Entry date 2004-06

2004/093 First records of *Citrus leprosis virus* in Costa Rica and Guatemala, and development of a PCR detection method

Leprosis, caused by *Citrus leprosis virus* (CiLV - EPPO A1 list), is considered as one of the most important citrus diseases in Brazil. So far, three mite species have been demonstrated to transmit the disease, *Brevipalpus phoenicis*, *B. californicus*, and *B. obovatus* (Acari: Tenuipalpidae). In addition to Brazil, the disease occurs in other South American countries and it was recently identified in Central America in Panama, Costa Rica* and Guatemala*. In Brazil, studies were made on the diagnosis of CiLV. A specific RT-PCR method using two pairs of primers was developed and was found accurate, rapid and reliable.

* New geographical records according to the EPPO Secretariat.

Source: Locali, E.C.; Freitas-Astua, J.; de Souza, A.A.; Takita, M.A.; Astua-Monge, G.; Antonioli, R.; Kitajima, E.W.; Machado, M.A. (2003) Development of a molecular tool for the diagnosis of leprosis a major threat to citrus production in the Americas.
Plant Disease, 87(11), 1317-1321.

Additional key words: new records, diagnostics **Computer codes:** CILV00, CR, GT

2004/094 Further details about the presence of *Chrysanthemum stem necrosis tospovirus*

The NPPO of Slovenia recently informed the EPPO Secretariat about the current situation of *Chrysanthemum stem necrosis tospovirus* (CSNV – EPPO A1 list). In 2001, CSNV was detected in 23 samples of *Chrysanthemum* and in 2002 in 1 sample of *Gerbera* (see EPPO RS 2003/041). The identity of CSNV was confirmed by ELISA, different test plants and PCR. Infected plants were destroyed by incineration. In 2003, CSNV was not detected.
The status of CSNV in Slovenia is declared as follows: **Present, found in 2001 and 2002 on *Chrysanthemum* and *Gerbera* plants, under official control.**

Source: **NPPO of Slovenia, 2004-06.**
Ravnikar, M.; Vozelj, N.; Mavrič, I.; Švigelj, S.D.; Zupančič, M.; Petrovič, N. (2003) Detection of Chyrsanthemum stem necrosis virus and Tomato spotted wilt virus in chrysanthemum. Abstract of a paper presented at the 8th International Congress of Plant Pathology, Christchurch, NZ, 2003-02-02/07.

Ravnikar, M.; Boben, J.; Zupančič, M.; Vozelj, N.; Mavrič, I.; Petrovič, N. (2003) Combination of different detection methods for reliable CSNV diagnosis. Abstract of a paper presented at the EPPO Conference on Quality of Diagnosis and New Diagnostic Methods for Plant Pests, Noordwijkerhout, NL, 2004-04-19/22.

Additional key words: detailed record **Computer codes:** CSNV00, SI

2004/095 First report of *Phyllonorycter issikii* in Hungary

The presence of *Phyllonorycter issikii* (Lepidoptera: Gracillariidae – EPPO Alert List) is reported from Hungary. The pest was found mainly on *Tilia cordata*, but also on *T. platyphyllos* and *T. argentea*. A map showed that it spread from 2002 to 2003 to many different sites in the country (mainly in the North and West). The EPPO Secretariat had previously no data on the occurrence of *P. issikii* in Hungary. The situation of *P. issikii* in Hungary can be described as follows: **Present, found in the North and West of the country.**

Source: Szabóky, C. (2004) [The spread of the leaf miner *Phyllonorycter issikii* Kumata 1963 (Lep. Gracillariidae) in Hungary.] (in Hungarian).
Növényvédelem, 40(6), 301-302.

Additional key words: new record **Computer codes:** PRYCIS, HU

2004/096 Karnal Bunt Risks Conference

An international multidisciplinary research project was conducted on *Tilletia indica* (EPPO A1 list) within the EU Vth Framework Programme in order to revise the Pest Risk Analysis for this disease in Europe. Concerning the survival of teliospores, the project showed that they may survive significantly longer than 3 years (3-4 year period is considered as a maximum in areas where Karnal Bunt occurs naturally) in European soils/climates, with no evidence of rapid decline. It was shown also that infective inoculum had the potential to be available at the critical period of susceptibility of the wheat crop in the EU. Growth stages from GS 45 (boots swollen) to GS 69 (end of flowering) were identified as being potentially the susceptible stages for European wheat cultivars. Almost all European wheat (winter, spring, durum) cultivars were shown to be susceptible to *T. indica*, with large variability. Maps were drawn combining crop and pathogen models with climatic data, showing that conditions are suitable for bread wheat infection in arable areas of western and central Europe, and that the Northern Italian plain was most suitable for durum wheat infection. It was concluded that the risk of establishment of *T. indica* in EU wheat was significant. Socioeconomic impact was evaluated on the basis of several scenarios and appeared to be very large, which justified considerable efforts to exclude *T. indica* from the EU. Some management options were studied and aerial sprays of fungicides demonstrate a potential crop management use, should Karnal Bunt establish in the EU. A revised PRA for *T. indica* is being finalized on the basis of the EPPO PRA scheme and should be available soon.

Details can be seen on the project website:
http://www.planteforsk.no/prosjekter/karnalpublic/index.htm

Source: Papers presented at the Karnal bunt risks, End of Project Conference held at York, GB, 2004-06-18

Additional key words: pest risk analysis **Computer codes:** NEOVIN

2004/097 Plant Health training from CSL, York (GB)

The Central Science Laboratory (CSL) in York (GB) is organizing training courses for scientists, technicians, inspectors and diagnosticians. These courses are run by internationally recognized experts and combine lectures with laboratory sessions. In November 2004, two specialist courses will take place at CSL, York:

* *Phytophthora ramorum* (2004-11-15/17)
For those involved in diagnosing and managing this disease, the course will focus on: detection and identification, latest news and information, lecture and laboratory sessions.

* Applied virology (2004-11-22/26)
The course will focus on: detection, diagnosis, characterization, epidemiology, control and viral infection risk management. Practical sessions and lectures will be complemented by open forums to allow thorough discussion of the information with CSL's virology specialists.

For more information: www.csl.gov.uk/plhtraining

Source: Personal communication with Dr. D. Walker, CSL, 2004-06.

Additional key words: training courses **Computer codes:** PHYTRA, GB

2004/098 New book: Introduction to plant pathology

A new book "Introduction to Plant Pathology" written by Dr R.N. Strange has recently been published. It provides a comprehensive coverage of plant pathology (etiology, epidemiology, diagnostic, pathogenicity and plant defence, disease control etc.) and is illustrated by many examples of pathogens and the diseases they cause. This new book contains the following chapters:

1. The causal agents of plant disease: identity and impact
2. The detection and diagnosis of plant pathogens and the diseases they cause
3. Epidemiology
4. The measurement of inoculum and disease severity and their effects on crop yields
5. Inoculum control
6. Locating, penetrating and colonizing the host
7. Subverting the metabolism of the host
8. Killing the host – the role of toxins
9. The plant fights back – 1. Constitutive defence mechanisms
10. The genetics of compatibility and incompatibility
11. The plant fights back – 2. Active defence mechanisms
12. Control of the disease process

Strange, R.N. (2003) Introduction to plant pathology. Wiley, London, 464 pp. can be ordered at a price of 32.50 GBP from:

John Wiley & Sons limited
The Atrium, Southern Gate
Chichester, West Sussex
PO19 8SQ, UK
Tel: +44 (0) 1243 779777
Tel: +44 (0) 1243 775878
E-mail: cs-books@wiley.co.uk
WWW: http://www.wiley.com

Source: **EPPO Secretariat, 2004-06.**

Additional key words: publications

2004/099 New version of PQR (4.3 – June 2004)

A new version of PQR (4.3 – June 2004) has just been released and can be ordered from the EPPO Secretariat. PQR is a database on geographical distribution and hosts plants of pests listed by EPPO and the European Union. It also contains data on many other quarantine pests of interest to other regions of the world, and information about NPPOs. This new version contains updated information on quarantine pests and is provided on CD-Rom. NPPOs of EPPO member countries are currently receiving free copies of PQR, other users can obtain it at the price of 100 EUR.

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Source: EPPO Secretariat, 2004-06.