EUROPEAN AND MEDITERRANEAN PLANT PROTECTION ORGANIZATION

### **EPPO**

## Reporting

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#### 2001/171 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

In 1997/1998; a survey was carried out in hazel (*Corylus avellana* cv. Negret) orchards in Cataluña, Spain, for the presence of *Apple mosaic ilarvirus* (EPPO A2 quarantine pest on *Rubus*). It was detected in all tested hazel orchards (160 orchards). The EPPO Secretariat had previously no data on the presence of *Apple mosaic ilarvirus* in Spain (Aramburu & Rovira, 2000). **Present, at least in Cataluña.** 

In New Zealand, *Meloidogyne fallax* (EPPO A2 quarantine pest) occurs on potato in several sites on North Island (Anonymous, 2001a). **Present, in North Island**.

Peach latent mosaic pelamoviroid (formerly on the EPPO lists) is reported for the first time from Syria (Ismaeil et al., 2001). **Present, in southern and central regions of Syria**. Its presence is confirmed in Lebanon (Choueiri et al., 2001). **Present, no details.** 

The daisy rust (caused by *Puccinia distincta* or *P. lagenophorae* (taxonomy not resolved) - formerly on the EPPO Alert List) is reported for the first time from North America. It was observed in December 2000 in California, in USA (Koike & Scholler, 2001). **Present, in California**.

#### • Detailed records

In 2000, the presence of *Aleurocanthus woglumi* (Homoptera: Aleyrodidae – EPPO A1 pest) was reported in Kwazulu-Natal (South Africa) and in Swaziland. *A. spiniferus* (EPPO A1 pest) was found in Mpumalanga and Northern Province (South Africa) and in Swaziland. Effective biological control with parasitoids (*Encarsia smithi*, *Eretmocerus serius*) was usually achieved in citrus orchards, but *A. woglumi* and *A. spiniferus* remain serious pests in areas where they spread without their parasitoids (Van den Berg & Greenland, 2001).

In autumn 2000, foliar symptoms of stunting, curling and yellowing of the margins, and marked fruit size reduction were observed in some glasshouses of tomatoes in the Province of Bari, Puglia (south of Italy). The presence of *Tomato yellow leaf curl Sardinia begomovirus* was demonstrated by molecular assays. In mainland Italy, the virus had already been found in Calabria, but according to the authors this is now the first report in Puglia (Finetti Sialer *et al.*, 2001).



It is reported that *Ceratitis capitata* (Diptera: Tephritidae - EPPO A2 quarantine pest) causes serious economic damage to apricot, citrus, fig, guava, mango and peach crops in Egypt, and that it is present in all Governorates (Saafan, 2000).

Tomato yellow leaf curl begomovirus (EPPO A2 quarantine pest) is reported for the first time from Mississippi (US). The virus was first found in Florida in 1997, and later in Louisiana in 2000. In January 2001, symptoms were observed in glasshouse tomatoes in east-central Mississippi and molecular assays confirmed the presence of the virus (Ingram & Henn, 2001).

#### New host plants

In Spain, *Colletotrichum acutatum* (EU Annexes) was observed for the first time on blueberry (*Vaccinium corymbosum* cv. Sharpblue) in 2 production fields in Huelva Province of Andalucía (Barrau *et al.*, 2001)

Frankliniella occidentalis (Thysanoptera: Thripidae - EPPO A2 quarantine pest) is reported for the first time on barley (Hordeum vulgare) in New Zealand (Anonymous, 2001b).

Tomato spotted wilt tospovirus (EPPO A2 quarantine pest) was observed for the first time in 2000/2001 on Cichorium endivia crops in Basilicata, Italy (Grieco et al., 2001).

**Source:** 

Anonymous (2001a) New organism records: 2001-03-31 to 2001-05-11. **Biosecurity no. 28, MAF New Zealand, 18-19.** 

Anonymous (2001b) New organism records: 2001-09-15 to 2001-10-26. **Biosecurity no. 32, MAF New Zealand, p 22.** 

Aramburu, J.; Rovra, M; (2000) Incidence and natural spread of apple mosaic ilarvirus in hazel in north-east Spain. **Plant Pathology**, **19**(**4**), **423-427**.

Barrau, C.; de los Santos, B.; Romero, F. (2001) First report of *Colletotrichum acutatum* in blueberry plants in Spain. **Plant Disease**, **85(12)**, **p 1285**.

Choueiri, E.; Abou Ghanem-Sabanadzovic, N.; Khazzaka, K.; Sabanadzovic, S.; Di Terlizzi, B.; Jreijiri, F.; Savino, V. (2001) Identification of *Peach latent mosaic viroid* in Lebanon. **Journal of Plant Pathology**, **83**(2), **225-227**.

Finetti Sialer, M.M.; Di Franco, A.; Volvas, C.; Gallitelli, D. (2001) First report of *Tomato yellow leaf curl virus* in Apulia (Southern Italy). **Journal of Plant Pathology, 83(2), p 148.** 

Grieco, P.D.; Morano, M.G.; Petrozza, A.; Nuzzaci, M.; De Stradis, A. (2001) Detection of *Tomato spotted wilt virus* infecting *Cichorium endivia* L. in Basilicata. **Journal of Plant Pathology, 83(3), p 234.** 

Ingram, D.M.; Henn, A. (2001) First report of *Tomato yellow leaf curl virus* in Mississippi. **Plant Disease**, **85(12)**, **p 1287**.



Ismaeil, F.; Abou Ghanem-Sabanadzovic, N.; Myrta, A.; Di Terlizzi, B.; Savino, V. (2001) First record of *Peach latent mosaic viroid* and *Hop stunt viroid* in Syria. **Journal of Plant Pathology**, 83(3), 225-227.

Koike, S.T.; Scholler, M. (2001) First occurrence of a rust fungus on English daisy (*Bellis perennis*) in North America. **Plant Disease**, **85(5)**, **p 562**.

Saafan, M.H. (2000) Integrated control of the Mediterranean fruit fly, *Ceratitis capitata* (Wied.) in apricot orchards in Egypt. **Egyptian Journal of Agricultural Research**, **78(1)**, **109-120**.

Van den Berg, M.A.; Greenland, J. (2001) Pest status of two blackfly species on citrus in South Africa and Swaziland. **African Plant Protection**, **7(1)**, **53-57**.

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

Computer codes: ALECWO, APMV00, CERTCA, FRANOC, MELGFA, PLPVD0, PUCCDI, TSWV00, TYLCV0, EG, ES, IT, NZ, SY, US, ZA

#### 2001/172 First report of *Liriomyza sativae* in Japan

In Japan, *Liriomyza trifolii* (Diptera: Agromyzidae – EPPO A2 quarantine pest) was first found in 1990 and then spread throughout the country. However, the indigeneous species *L. bryoniae* still predominates in tomato glasshouses and sometimes coexists with *L. trifolii* (e.g. in Kyoto Prefecture). During 1999, studies were done on the relative abundance of these two species, in two commercial tomato glasshouses in Muko city, Kyoto Prefecture. Surprisingly, a third leafminer species was discovered during these studies: *L. sativae* (EPPO A1 quarantine pest). It was observed that *L. sativae* coexisted with *L. trifolii* and *L. bryoniae* in one glasshouse and with *L. bryoniae* in the other. It was also observed that the relative abundance of the three species varied throughout the growing-season with different peaks for each species. This was the first record of *L. sativae* in Japan. Later, *L. sativae* was also found in Yamaguchi, Nara, Osaka, Hyogo, Nagasaki, Oita, Kumamoto and Okinawa Prefectures. The situation of *L. sativae* in Japan can be described as follows: **Present in Honshu** (**Hyogo, Kyoto, Nara, Osaka and Yamaguchi Prefectures), Kyushu (Kumamoto, Nagasaki and Oita Prefectures) and Ryukyu archipelago (Okinawa Prefecture).** 

**Source:** 

Abe, Y.; Kawahara, T. (2001) Coexistence of the vegetable leafminer, *Liriomyza sativae* (Diptera: Agromyzidae), with *L. trifolii* and *L. bryoniae* on commercially grown tomato plants.

Applied Entomology and Zoology, 36(3), 277-281.

Additional key words: new record Computer codes: LIRISA, JP



#### **2001/173** *Liriomyza trifolii* found in Norway

In Norway, *Liriomyza trifolii* (Diptera: Agromyzidae - EPPO A2 quarantine pest) was detected in one glasshouse nursery in Lier, near Drammen. This is the first reported attack of this pest in 20 years. Eradication measures have been applied to eliminate *L. trifolii* from the glasshouse concerned. Additional investigations are also being conducted to trace the source of infestation and to determine whether other nurseries have been infested. The situation of *L. trifolii* in Norway can be described as follows: **Present, found only in one glasshouse near Drammen, under eradication.** 

Source: NPPO of Norway, 2001-11.

Press release of 2001-11-21. Norwegian Agricultural Inspection Service web

site. http://www.landbrukstilsynet.no/

Additional key words: detailed record Computer codes: LIRITR, NO

### **2001/174** Survey on glasshouse pests in Estonia

In 2001 systematic surveys on glasshouse pests were conducted in Estonia. 78 samples were collected from 45 glasshouses to detect the presence of thrips, leafminers (*Liriomyza* species) and whiteflies.

- *Liriomyza bryoniae* (Diptera: Agromyzidae EU Annexes) was observed on 9 samples. Its presence was confirmed in 7 glasshouses on the following crops: cucumber, tomato and capsicum. The EPPO Secretariat had previously no data on the presence of this pest in Estonia.
- Frankliniella occidentalis (Thysanoptera: Thripidae EPPO A2 quarantine pest) was found on 3 samples of propagating material. Its presence was confirmed in 1 glasshouse producing propagation material of tomato, capsicum, and pot plants.

Phytosanitary measures were applied to eradicate the pests. The glasshouses concerned will remain under strict supervision during the next growing season. During this survey, *Bemisia tabaci* (EPPO A2 quarantine pest) and *Thrips palmi* (EPPO A1 quarantine pest) were not found. The situation of *L. bryoniae* in Estonia can be described as follows: **Present, found only in 7 vegetable glasshouses, under eradication.** The situation of *F. occidentalis* in Estonia can be described as follows: **Present, found only in 1 glasshouse, under eradication.** 

Source: NPPO of Estonia, 2001-12.

**Additional key words:** new record, detailed record, absence Computer codes: BEMITA, THRIPL, FRANOC, LIRIBO, EE



#### **2001/175** Survey on *Erwinia amylovora* in Estonia

In Estonia, a survey on *Erwinia amylovora* (EPPO A2 quarantine pest) was initiated in 2000 and continued in 2001. Samples were taken from host plants (mainly *Amelanchier*, *Chaenomeles*, *Cotoneaster*, *Crataegus*, *Cydonia*, *Malus*, *Pyrus*, *Sorbus*) in parks, orchards, and nurseries. In total, 260 samples in 2000 and 345 samples in 2001 were respectively collected from all Estonian districts. During 2000 and 2001, *E. amylovora* was not found. Surveys will continue. The situation of *E. amylovora* in Estonia can be described as follows: **Absent, confirmed by surveys**.

Source: NPPO of Estonia, 2001-12.

Additional key words: absence Computer codes: ERWIAM, EE

#### 2001/176 Pitch canker is present in Chile

In Chile, recent surveys carried out in nurseries of the area of Concepcíon revealed the presence of dying *Pinus radiata* grown in containers or in clonal hedges. Affected plants show resin exudates from collar and exposed roots, and pitch-soaked wood associated with these lesions. Affected plants appear to die rapidly. The presence of *Fusarium circinatum* (EPPO Alert List – anamorph *Gibberella circinata*) in affected *P. radiata* was confirmed by morphological traits, mating compatibility and molecular tests. So far, *F. circinatum* has only been found in Chile on *P. radiata* plants in nurseries, and not in tree plantations. The authors noted that this situation is similar to that in South Africa, where the fungus causes serious damage to seedlings in nurseries but not in natural stands or plantations as in USA. This confirms an earlier report of *F. circinatum* in Chile also on *P. radiata* seedlings (Kunstmann *et al*, 1986). The situation of *F. circinatum* in Chile can be described as follows: **Present, found in** *Pinus radiata* **grown in nurseries in the area of Concepcíon**.

**Source:** 

Wingfield, M.J.; Jacobs, A.; Coutinho, T.A.; Ahumada, R.; Wingfield, B.D. (2002) First report of the pitch canker fungus, *Fusarium circinatum*, on pines in Chile.

New Disease Reports, volume 4, August 2001- January 2002.

http://www.bspp.org.uk/ndr/

Kunstmann, E; Osorio, M; Peredo, H (1986) Mycological identifications in forest nurseries in Region X of Chile.

Bosque, 7(1), 51-56.

Additional key words: detailed record Computer codes: GIBBFS, CL



<u>2001/177</u> Fumigation treatments against *Bursaphelenchus xylophilus* in wood packing material

The efficacy of fumigation treatments against *Bursaphelenchus xylophilus* (EPPO A1 quarantine pest) in wood packing material was studied in Japan, as possible alternatives to hot air treatment (at 56°C for more than 30 min). Boards (2 cm thick x 15 cm wide x 30 cm long) and lumber (15 cm thick x 15 cm wide x 30 cm long) were made from *Pinus densiflora* wood collected in Ibaraki and Fukuoka prefectures and infested by *B. xylophilus* (more than 10,000 nematodes per 100 g). They were fumigated at 15 °C with several doses (20, 30, 40, 60, 80 g/m³) of methyl bromide, sulfuryl fluoride and methyl isothiocyanate during 24 or 48 hours. Results showed that to achieve complete mortality of *B. xylophilus* in boards and lumber, the following treatments (all at 15 °C) could be used:

- methyl bromide at 60 g/m<sup>3</sup> for 24 hours
- methyl bromide at 40 g/m<sup>3</sup> for 48 hours
- methyl isothiocyanate at 40 g/m<sup>3</sup> for 24 hours
- methyl isothiocyanate at 20 g/m<sup>3</sup> for 48 hours

The efficacy of sulfuryl fluoride was not sufficient as survivors were observed.

**Source:** 

Soma, Y.; Naito, H.; Misumi, T.; Mizobuchi, M.; Tsuchiya, Y.; Matsuoka, I.; Kawakami, F. (2001) Effects of some fumigants on pine wood nematode, *Bursaphelenchus xylophilus* infecting wooden packages. 1. Susceptibility of pine wood nematodes to methyl bromide, sulfuryl fluoride and methyl isothiocyanate.

Research Bulletin of the Plant Protection Service Japan, no. 37, 19-26.

Additional key words: quarantine treatments Computer codes: BURSXY



#### <u>2001/178</u> Japanese studies on quarantine treatments against forest pests

The effect of methyl isothiocyanate was studied against forest pests in Japan. 10 species were fumigated (at the doses of 10, 20, 40 g/m³) for 24 hours at 15°C. At 10 g/m³, complete mortality was obtained on *Monochamus alternatus* (pupa – EPPO A1 quarantine pest), *Cryphalus fulvus* (all stages), *Phloesinus perlatus* (larva, pupa and adult) and *Pissodes nitidus* (larva); but larvae of *M. alternatus*, and pupae and adults of *P. nitidus* were not completely killed. At 20 g/m³, complete mortality was obtained on *Semanotus japonicus* (egg), *Callidiellum rufipenne* (all stages – EPPO Alert List), *M. alternatus* (egg), *Ips cembrae* (all stages – EU Annexes) and *P. nitidus* (egg and pupa). *M. alternatus* larvae were completely killed at 40 g/m³. However, at this dose, *Xyleborus validus*, *X. pfeili* and *Xylosandrus germanus* were not completely killed (Naito *et al.*, 1999).

Similar studies were done with different mixtures of sulfuryl fluoride (doses of 30 and 50 g/m³) and methyl bromide (doses of 10 and 20 g/m³) for 24 hours at 5°C and 15°C. Complete mortality was obtained on *Semanotus japonicus* (egg), *Callidiellum rufipenne* (all stages), *Monochamus alternatus* (egg, larva, pupa), *Cryphalus fulvus* (all stages), *Phloeosinus perlatus* (larva, pupa, adult), *Ips cembrae* (all stages), *Xylosandrus germanus* (larva, adult) and *Pissodes nitidus* (egg, larva, pupa) with the following treatment: sulfuryl fluoride (30 g/m³) and methyl bromide (10 g/m³) for 24 hours at 15°C. With this treatment, larval and pupal stages of *Xyleborus pfeili* were not completely killed, but this was achieved with sulfuryl fluoride (50 g/m³) and methyl bromide (15 g/m³) for 24 hours at 15°C. A treatment at a lower temperature with higher doses: 24 hours at 5°C with sulfuryl fluoride (50 g/m³) and methyl bromide (20 g/m³) did not succeed to completely kill *C. rufipenne* (larva, pupa, adult), *M. alternatus* (larva, pupa), *C. fulvus* (pupa, adult), *X. pfeili* (larva, pupa) and *X. germanus* (adult) (Soma *et al*, 1999).

**Source:** 

Naito, H.; Soma, Y.; Matsuoka, I.; Misumi, T.; Akagawa, T.; Mizobuchi, M.; Kawakami, F. (1999) Effects of methyl isothiocyanate on forest insect pests. **Research Bulletin of the Plant Protection Service Japan, no. 35, 1-4.** 

Soma, Y.; Naito, H.; Misumi, T.; Kawakami, F. (1999) Effects of gas mixtures of sulfuryl fluoride and methyl bromide on forest insect pests.

Research Bulletin of the Plant Protection Service Japan, no. 35, 15-19.

Additional key words: quarantine treatments Computer codes: CLLLRY, IPSXCE, MONCAL



#### 2001/179 Meeting between Russia, Finland, Sweden and Estonia on forest quarantine issues

A meeting between the NPPOs of Russia, Finland, Sweden and Estonia on forest quarantine issues took place in Moscow (RU) on the 2001-12-17/21. The main decisions taken were the following:

- use of internal quarantine certificates within Russia during transportation of wood and 1) wood products to know their exact origin and phytosanitary condition;
- the period of validity of the phytosanitary certificate will be in accordance with EU 2) Directive 2000/29;
- 3) surveys of forest plantations to reveal the possible presence of Bursaphelenchus xylophilus will be carried out in the four countries;
- 4) a special group of experts will be created to develop methods for the identification of Bursaphelenchus species: B. xylophilus, B. mucronatus, B. fraudulentus ...
- surveys on Dendrolimus sibiricus in the European part of Russia and in territories of the 5) other countries concerned were felt necessary to determine the western limit of pest spread.

**Source:** EPPO Secretariat, 2001-12.

#### 2001/180 Ciborinia camelliae occurs in Italy

Severe attacks of Ciborinia camelliae (EPPO A2 quarantine pest) have been reported in northern Italy, near lake Maggiore, in 2000 and 2001 on camellia plants. This is the first confirmed report of the fungus in Italy. The authors noted that it most probably occurs in other regions of Italy (Lazio, Toscana).

**Source:** Garibaldi, A.; Gilardi, G.; Bertetti, D.; Gullino, M.L. (2001) Sulla presenza in

Italia del marciume dei fiori di camellia causata da Ciborinia camelliae.

Informatore Fitopatologico, no. 10, 55-56.

Garibaldi, A.; Gilardi, G.; Bertetti, D.; Gullino, M.L. (2001) Proof for the occurrence of flower blight caused by Ciborinia camelliae in Italy.

Plant Disease, 85(8), p 924.

Additional key words: new record Computer codes: SCLECA, IT



2001/181

Biological control against *Rhynchophorus ferrugineus* and details on its distribution in Egypt

Laboratory and field studies were done in Egypt to assess the pathogenicity of nematodes (10 species of *Steinernema* and *Heterorhabditis*) against *Rhynchophorus ferrugineus* (Coleoptera: Curculionidae – EPPO Alert List). In laboratory trials, all tested nematodes (except *S. glaseri* and *S. anomali*) were found pathogenic to all developmental stages of *R. ferrugineus*. However, most nematodes when injected as suspensions to the trees in field conditions failed to control the pest. The highest larval mortality was obtained with *H. bacteriophora* (66.7% mortality). It is felt that this failure could be due to hot weather, tunnelling behaviour of the pest, and large amounts of sap flowing from the affected sites in the trunk.

It is recalled that the red palm weevil was first recorded in Egypt in 1992 from Al-Kassaseine Province, in Ismaelyia Governorate. So far, the infestation is still limited to Ismaelyia and Sharkyia Governorates. Since its appearance in Egypt, several measures have been taken by the Ministry of Agriculture to limit its spread: removing and burning of infested trees, insecticide injections or sprays, and phytosanitary regulations. The situation of *R. ferrugineus* in Egypt can be described as follows: **Present, only in Ismaelyia and Sharkyia Governorates.** 

Source: Abbas, M.S.T.; Saleh, M.M.E.; Akil, A.M. (2001) Laboratory and field

evaluation of the pathogenicity of entomopathogenic nematodes to the red palm weevil, *Rhynchophorus ferrugineus* (Oliv.) (Col.: Curculionidae).

**Journal of Pest Science**, 74(6), 145-168.

Additional key words: biocontrol, detailed record Computer codes: RHYNCFE, EG



<u>2001/182</u> <u>Interception in Israel of *Chrysodeixis eriosoma* on orchids from the Netherlands</u>

The NPPO of Israel has recently informed the EPPO Secretariat of the following interception. In August 2001, a single live lepidopteran larva was intercepted during official phytosanitary inspection at Ben Gurion International Airport on cut flowers of orchids (*Cymbidium* spp.) originating from the Netherlands. After being reared to maturity at the Entomological Identification Center of PPIS (NPPO of Israel), the adult male moth was positively identified by the senior taxonomist as the Asian species *Chrysodeixis eriosoma* (Lepidoptera: Noctuidae - EPPO Alert List; RS 2000/061). This species can be distinguished by its typical "silver Y" wing markings from that of the closely related Palaearctic species *Chrysodeixis chalcites* found in Israel, the Netherlands and other EPPO member countries.

Source: NPPO of Israel, 2001-12

Additional key words: interception Computer codes: CHRXER; IL

#### 2001/183 First finding of cucurbit yellow vine disease in Massachusetts (US)

In 1999, commercial fields of summer squash (*Cucurbita pepo*) were severely damaged in Franklin county, Massachusetts (US) by a disease with symptoms resembling those of cucurbit yellow vine (EPPO Alert List). In these fields, the disease incidence reached 100 %. Affected plants showed foliar chlorosis and plant stunting. Cross sections of below-ground stems and primary roots usually showed honey-brown discoloration of phloem. Diseased plant samples were tested by PCR assays specific of the cucurbit yellow vine bacterium (which is closely related to *Serratia marcescens*) and gave positive results. In the affected fields, high infestations of squash bug (*Anasa tristis*, Heteroptera: Coreidae) were observed. This insect is currently considered as a putative vector of cucurbit yellow vine disease. In 2000, the disease was also observed in pumpkin fields in Franklin county. This is the first report of cucurbit yellow vine disease in Massachusetts. So far, the disease occurred only in Oklahoma and Texas.

Source: Wick, R.L.; Lerner, J.; Pair, S.D.; Fletcher, J.; Melcher, U.; Mitchell, F.;

Bruton, B.D. (2001) Detection of cucurbit yellow vine disease in squash and

pumpkin in Massachusetts. Plant Disease, 85(9), p 1031.

Additional key words: detailed record Computer codes: KUYV00, US



### <u>2001/184</u> Citrus strains of *Xylella fastidiosa* can cause coffee leaf scorch

Artificial inoculation studies carried out in Brazil showed that *Xylella fastidiosa* (EPPO A1 quarantine pest) strains isolated from citrus plants (causing citrus variegated chlorosis) are pathogenic to coffee plants (causing coffee leaf scorch). Previously, it had been observed that isolates from citrus and coffee were morphologically, serologically and genetically closely related. In Sao Paulo state, Brazil, as citrus and coffee are usually growing in adjacent plots, it is thought that citrus strains originated as selections from a pre-existing population in coffee. Although *X. fastidiosa* was identified on citrus before coffee, symptoms of coffee leaf scorch had been observed even earlier but were attributed to other causes (in particular to nematodes). In addition, coffee leaf scorch occurs in other Brazilian states where citrus has never been grown and the incidence of coffee leaf scorch is higher than citrus variegated chlorosis. In insect transmission studies, preliminary results showed that *Oncometopia facialis* and *Dilobopterus costalimai* can transmit *X. fastidiosa* strains isolated from diseased citrus plants to coffee plants. Further studies will be made to see whether coffee strains are pathogenic to citrus plants.

Source: Li, W.B.; Pria, W.D. Jr; Teixeira, D.C.; Miranda, V.S. Ayres, A.J.; Franco,

C.F.; Costa, M.G.; He, C.X.; Costa, P.I.; Hartung, J.S. (2001) Coffee leaf

scorch caused by a strain of Xylella fastidiosa from citrus.

Plant Disease, 85(5), 501-505.

Additional key words: biology Computer codes: XYLEFA



#### <u>2001/185</u> First report of *Xylella fastidiosa* on coffee in Costa Rica

In Costa Rica, severe symptoms were observed on coffee (*Coffea arabica* cvs. Caturra and Catuaí). They were characterized by reduced leaf size, leaf malformation and curling of the edges, shortening of internodes, severe leaf chlorotic mosaic becoming necrotic in some cases. Flower and young berry abortion was also observed. Affected plants presented irregular growth with an atypical curling appearance (hence the Spanish name 'crespera'). Samples were collected and tested by ELISA, and revealed the presence of *Xylella fastidiosa* (EPPO A1 quarantine pest). It is noted that symptoms observed in Costa Rica were different from those reported in Brazil. This could be due to very different climatic and soil conditions. Preliminary studies showed that the bacterium could be detected in leafhoppers (*Graphocephala permagna* and *Erythrogonia sonora*) but their vector status has to be confirmed. The authors noted that this is the first time that *X. fastidiosa* is reported from coffee in Costa Rica.

**Source:** Rodríguez, C.M.; Obando, J.J.; Villalobos, W.; Moreira, L.; Rivera, C. (2001)

First report of *Xylella fastidiosa* infecting coffee in Costa Rica.

Plant Disease, 85(9), p 1027.

Additional key words: new host record Computer codes: XYLEFA, CR

#### <u>2001/186</u> PCR assay to detect *Xylophilus ampelinus* in grapevine cuttings

A PCR assay has been developed in South Africa to detect specifically *Xylophilus ampelinus* (EPPO A2 quarantine pest) in grapevine cuttings. 16S-23S rDNA intergenic spacer region of *X. ampelinus* was sequenced and specific primers were designed to target a part of this sequence. A nested-PCR assay was then developed using these primers for routine detection of *X. ampelinus* in the sap of grapevine cuttings. The authors noted that their method can detect low numbers of bacteria, even in the presence of saprophytic bacteria commonly associated with grapevine sap (e.g. less than 10 CFU  $\mu$ L<sup>-1</sup> even in the presence of 1.5 x10<sup>5</sup> CFU  $\mu$ L<sup>-1</sup> of *Erwinia herbicola* cells). They concluded that their method is quick and reliable in comparison with the time-consuming and unreliable conventional method of plating samples on growing media followed by purification of bacterial colonies.

Source: Botha, W.J.; Serfontein, S.; Greyling, M.M.; Berger, D.K. (2001) Detection of

Xylophilus ampelinus in grapevine cuttings using a nested polymerase chain

reaction.

Plant Pathology, 50(4), 515-526.

Additional key words: diagnostic techniques Computer codes: XANTAM



### 2001/187 54<sup>th</sup> International Symposium on Crop Protection in Gent

The 54<sup>th</sup> International Symposium on Crop Protection will be held on 2002-05-07 at the Faculty of Agricultural and Applied Biological Sciences, University in Gent, Belgium. The full programme will be available in March 2002.

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