ORGANISATION EUROPEENNE
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POUR LA PROTECTION DES PLANTES

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# EPPO

# *Reporting*

# *Service*

**Paris, 2005-07-01** **Reporting Service 2005, No. 7**

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**EPPO** *Reporting Service*

**2005/097** First record of *Gibberella circinata* (pine pitch canker) in Spain

In Asturias (northern Spain) during winter 2003/2004, dieback symptoms were observed on *Pinus radiata* and *P. pinaster* in pine nurseries. Small groups of affected seedlings appeared randomly distributed throughout the nurseries. Affected seedlings died rapidly, showing basal needle dieback, stem lesions, resin exudations, and wilting. A fungus identified as *Fusarium circinatum* (anamorph of *Gibberella circinata* – EPPO Action List/A1) was isolated and shown by reinoculation to be pathogenic to pine. The pathogen was only isolated from *P. radiata* and *P. pinaster*. Other species such as *P. nigra*, *P. sylvestris* and *Pseudotsuga menziesii* which were also grown in these nurseries did not show any symptoms. Later in 2004, symptoms of pitch canker were also observed on 20 year-old *P. radiata* in one forest plantation in Cantabria (northern Spain). Infected branches and shoots exuded abundant resin, resulting in resinous cankers. Needles wilted and fell from the trees. Affected trees showed noticeable crown dieback. *G. circinata* was also isolated from cankers. Although there has been one unconfirmed report in the past, it is considered that this is the first report of *G. circinata* on *P. radiata* and *P. pinaster* in Spain, and in Europe.

The situation of *G. circinata* in Spain can be described as follows: **Present, few cases found in 2003/2004 on *P. radiata* and *P. pinaster* in nurseries and 1 forest plantation, in northern Spain (Asturias, Cantrabria).**

**Source:** Landeras E, García P, Fernández Y, Braña M, Fernández-Alonso O, Méndez-Lodos S, Pérez-Sierra A, León M, Abad-Campos P, Berbegal M, Beltrán R, García-Jiménez J, Armengol J (2005) Outbreak of pitch canker caused by *Fusarium circinatum* on *Pinus* spp. in northern Spain.
**Plant Disease 89(9), p 1015.**

**Additional key words:** new record **Computer codes:** GIBBCI, ES

**2005/098** Surveys on pine nematodes in Slovenia: absence of *Bursaphelenchus xylophilus*

In Slovenia, during summers 2002–2004, approximately 100 ha of conifer forests were surveyed for the presence of *Bursaphelenchus xylophilus* (EPPO A1 list). In total, 170 wood samples from dead and dying pines (*Pinus sylvestris, P. nigra*), spruces (*Picea abies*) and firs (*Abies alba*) were analysed. As in previous surveys (EPPO RS 2003/170), *B. xylophilus* was not found. These surveys showed that three different species of *Bursaphelenchus* were present: *B mucronatus* (East-Asian type found in 3 samples collected near Ljubljana airport), *B. homanni* and an unspecified *Bursaphelenchus* species.
The situation of *B. xylophilus* in Slovenia can be described as follows: **Absent, confirmed by surveys.**

**Source:** Urek G, Širca S (2005) First report of the East-Asian type of *Bursaphelenchus mucronatus* in *Pinus sylvestris* in Slovenia.
**Plant Disease 89(9), p 1015.**

**Additional key words:** absence **Computer codes:** BURSXY, SI

**2005/099** Occurrence of *Opogogna sacchari* in Germany

The NPPO of Germany recently informed the EPPO Secretariat of two occurrences of *Opogona sacchari* (A2 list) in Brandenburg and Baden-Württemberg.

- **Brandenburg**

In April 2005, larvae and adults of *O. sacchari* were detected on *Alocasia* and *Strelitzia* in a tropical glasshouse forming part of a recreation resort. Larvae were found in rotten leaves and shoots, as well as within the stems of these plants. After adult emergence, the species was identified in the laboratory as *O. sacchari*. Since October 2004, this tropical glasshouse had been continuously supplied with plants from two companies located in the Netherlands.

- **Baden-Württemberg**

In June 2005, *O. sacchari* was detected in a nursery on *Ficus retusa compacta* (bonsai plants). The infestation was noticed when feeding damage in roots and bark became apparent with mortality of some plants. Infested plants had originally been supplied by a Dutch company.
The pest status of *O. sacchari* in Germany is officially declared as: **Present, single cases; under eradication.**

**Source:** **NPPO of Germany, 2005-07.**

**Additional key words:** phytosanitary incident **Computer codes:** OPOGSC, DE

**EPPO** *Reporting Service*

**2005/100** First report of *Heterobostrychus hamatipennis* in Belgium

In Belgium, the presence of unknown xylophagous beetles was observed in a sample of osier willow (unspecified *Salix* sp.) in July 2005. The insect was identified as *Heterobostrychus hamatipennis* (Coleoptera: Bostrychidae). Braided objects made with the infested osier willow had been imported from China (Qingdao) in October 2004, and then stored. It was only in July 2005, that the owner of this consignment noticed sawdust and presence of boring insects inside the osier stems. This is the first record of *H. hamatipennis* in Europe and this discovery was notified to the Belgian authorities (i.e. to AFSCA 'Agence Fédérale pour la Sécurité de la Chaîne Alimentaire').

Both adults and larvae of *H. hamatipennis* are xylophagous. *H. hamatipennis* is considered as a polyphagous species which feeds on dry wood (dunnage, packing wood, plywood and other wood products including furniture), and probably on dead trees. It is also recorded as a minor pest of bamboos. *H. hamatipennis* is an Asian species recorded in China, India, Japan, Philippines, Malaysia, Madagascar, and Mauritius. It has been intercepted on logs in Korea Republic. In other parts of the world, specimens of *H. hamatipennis* were collected in 2003 from a dead branch of a mango tree on Oahu, Hawaii (US). In insect collections, it is mentioned in North Carolina and Florida before 1988, but has probably not established there. Canada intercepted *H. hamatipennis* on wood and furniture from Asia in 1997/98. Apart from these records, there is very little information on this species in the literature. The EPPO Secretariat has contacted scientists in China, but *H. hamatipennis* is apparently there a minor pest not deserving particular studies. A related species *H. aequalis* is better documented.

**Source:** Note by Dr C. Fassotte, 2005-07. 'Première observation en Belgique et en Europe de l'espèce exotique *Heterobostrychus hamatipennis* (Lesne, 1895) (Coleoptera Bostrychidae) sur de l'osier'.
**Département Lutte biologique et Ressources phytogénétiques du Centre wallon de Recherches Agronomiques, Gembloux, Belgique.**

Other sources :

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International network for bamboo and rattan. Insect pests of bamboos by H. Wang, RV Varma, T. Xu. http://www.inbar.int/publication/txt/tr13/POSTright.htm
Museum of Entomology. Florida State Collection of arthropods Gainesville. Beetles of Florida
http://www.fsca-dpi.org/Coleoptera/Mike/bostrich.htm

**Additional key words:** new record **Computer codes:** HETBSP, BE

**EPPO** *Reporting Service*

**2005/101** First report of *Blueberry scorch carlavirus* in Europe: addition to the EPPO Alert List

In northern Italy, *Vaccinium corymbosum* (highbush blueberry) has been planted during the last thirty years and has gained some economic importance for the fresh fruit market. During summer 2004, several plants from a field in the south of Piemonte showed symptoms of *Blueberry scorch carlavirus* (BlScV). Electron microscopy, ELISA and RT-PCR confirmed the presence of this virus. This is the first record of *Blueberry scorch carlavirus* in Europe. Considering the damage that this virus can cause to *V. corymbosum*, the EPPO Secretariat decided to add *Blueberry scorch carlavirus* to the EPPO Alert List.

*Blueberry scorch carlavirus*

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| Why | *Blueberry scorch carlavirus* (BlScV) is causing damage to *Vaccinium* crops in North America, and it has recently been found in Europe (in the north of Italy in 2004). |
| Where | **EPPO region:** Italy (Piemonte).<br>**North America:** Canada (British Columbia), USA (Connecticut, New Jersey, Massachusetts, Oregon, Washington). In late 1970s, the Sheep Pen Hill disease was observed in New Jersey and later considered as being caused by a particular strain of *Blueberry scorch carlavirus*. The virus was first characterized in highbush blueberries (*V. corymbosum*) in Washington in 1980. In 2000, an outbreak was reported in British Columbia (Canada), as well as in two new US states in 2001 (Connecticut and Massachusetts). |
| On which plants | *Vaccinium corymbosum* (highbush blueberry). The virus was detected in samples of *V. macrocarpon* (cranberry) and *V. ashei* (rabbiteye blueberry) but apparently no symptoms were observed. The potential for infection of other American *Vaccinium* species needs to be investigated (e.g. *V. angustifolium, V. membranaceum, V. ovatum, V. parvifolium* and ornamental *Vaccinium*). Data is also lacking on the susceptibility of species naturally occurring in Europe (e.g. *V. myrtillus, V. uliginosum, V. vitis-idaea*). |
| Damage | Symptoms vary largely according to virus strains and cultivars. Some cultivars may show complete necrosis of flowers, partial necrosis of leaves, twig dieback, leading eventually to plant death. Others may show a total absence of symptoms. Marginal chlorosis of leaves is also observed on some cultivars. On cultivars expressing symptoms, there is often a latent period of up to two years between infection and symptom expression. Symptoms may be confused with other causes (bacterial or fungal diseases, frost injury or nutrition deficiency) and therefore testing is required to identify the virus. |
| Transmission | *Blueberry scorch carlavirus* is transmitted by aphids in a non-persistent mode and a known vector is *Ericaphis* (*Fimbriaphis*) *fimbriata*. Aphid transmission is considered as the most important means of transmission in the field. Within a field, some infected plants may not express symptoms and therefore act as reservoirs for further transmission. Over long distances, the virus is essentially moved by the use of infected plants for planting. So far, mechanical transmission of the virus between *Vaccinium* plants has never been observed. |
| Pathway | Plants for planting of *Vaccinium*. |
| Possible risks | *Vaccinium* (including species from North America, such as *V. corymbosum*) are increasingly grown in Europe for fruit production. A negative impact of such a virus on naturally growing *Vaccinium* in Europe, especially in fragile environments, could be envisaged but is very difficult to estimate. The aphid vector, *E. fimbriata*, is not known to occur in Europe, but it cannot be excluded that other aphid species occurring in Europe might transmit the virus. Some control methods are recommended in North America (e.g. roguing of infected plants, aphid control, use of virus-free planting material). Heat therapy and meristem tip culture are reported to eliminate the virus, and could be used in certification schemes. As in North America recent outbreaks and crop losses are reported, it seems desirable to limit the spread of this disease in |

Europe and to consider the pathogen in European certification schemes for the production of healthy planting material of *Vaccinium*.

Source(s)

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Martin RR, Bristow PR (1988) A carlavirus associated with blueberry scorch disease. Phytopathology; 78(12), 1636-1640.
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University of Massachusetts – Extension. Blueberry scorch virus factsheet by N.J. Catlin and S.G. Schloemann. http://www.umass.edu/fruitadvisor/factsheets/blueberryscorch.pdf

EPPO RS 2005/101
Panel review date - Entry date 2005-07

## **2005/102** First record of *Beet necrotic yellow vein benyvirus* in Morocco

In 2004/2005, during routine surveys done by the regional services of the NPPO of Morocco on sugarbeet crops, rhizomania-like symptoms were observed on a plot of approximately 30 ha near Tadla (province of Beni Mellal, centre of Morocco). Symptoms were characterized by vein yellowing, wilting of leaves and proliferation of roots. Sample analysis confirmed the presence of *Beet necrotic yellow vein benyvirus* (causing rhizomania – EPPO A2 list). It is suspected that the import of second-hand agricultural machinery from Italy was the source of this infestation. According to the EPPO Secretariat, this is the first report of rhizomania in Morocco. Official control measures are being taken and include the use of tolerant cultivars, information of growers, delimitation of the field concerned as a quarantine area. Surveys are continuing in the vicinity of the infected field.

The situation of *Beet necrotic yellow vein benyvirus* in Morocco is officially declared as follows: **Present, localized focus in the region of Tadla, under official control.**

**Source: NPPO of Morocco, 2005-07.**

**Additional key words:** new record **Computer codes:** BNYVV0, MA

**2005/103** Detection methods for *Cucumber vein yellowing ipomovirus*

Two detection methods for *Cucumber vein yellowing ipomovirus* (CVYV - EPPO A2 list) have been developed in Spain. The first detection method used an RNA-specific probe for hybridization with nucleic acids extracted from infected plants. The second method used polyclonal antisera raised against recombinant viral coat protein expressed in bacteria. These specific antibodies were able to detect CVYV particles in plant extracts. For both methods, no cross-reactions were observed with other cucurbit-infecting viruses (*Cucumber mosaic cucumovirus, Cucurbit yellow stunting disorder crinivirus, Papaya ringspot potyvirus, Watermelon mosaic potyvirus, Zucchini yellow mosaic potyvirus*) and their sensitivities were considered sufficient for routine diagnosis of CVYV in plants.

Source: Martínez-García B, Marco CF, Goytia E, López-Abella D, Serra MT, Aranda MA, López-Moya JJ (2004) Development and use of detection methods specific for *Cucumber vein yellowing virus* (CVYV).
**European Journal of Plant Pathology, 110(8), 811-821.**

**Additional key words:** diagnostics **Computer codes:** CVYV00

**2005/104** Studies on marginal chlorosis of strawberry

Marginal chlorosis has been observed in France since 1988, in all strawberry-growing regions. A similar decline had also been observed in strawberry nurseries in Spain as early as 1984. In nurseries, affected plants showed a red discoloration of the leaves starting from the leaf margins. In fruit production fields, the characteristic symptom was leaf marginal chlorosis. New leaves were also smaller and cup-shaped. Affected plants produced smaller and deformed fruits, and showed root necrosis. Studies done in France showed that an uncultivated phloem-restricted bacterium (γ 3-proteobacterium) was associated with the disease and the name '*Candidatus* Phlomobacter fragariae' was proposed. A putative planthopper vector, *Cixius wagneri* (Homoptera: Cixiidae) was then identified. It was also found that field symptoms of strawberry marginal chlorosis were not always associated with '*Ca.* P. fragariae' but in some cases with stolbur phytoplasma. Using PCR assays, surveys were done in France from 1996 to 2001 on the presence of these two pathogens in strawberry fields and nurseries. Results showed that '*Ca.* P. fragariae' was predominant in strawberry production fields but that stolbur phytoplasma was predominant in nurseries. In 2001/2002, studies were also carried out on the putative vector. In infected fields, *C. wagneri* was captured and a high proportion of insects was infected by '*Ca.* P. fragariae'. In cage experiments, naturally infected *C. wagneri* adults were placed on healthy *in vitro* grown strawberry plants and were able to transmit '*Ca.* P. fragariae'. The presence of '*Ca.*

P. fragariae' could be detected in these infected plants and some of them showed typical symptoms of marginal chlorosis.

**Source:** Foissac X, Danet JL, Zreik L, Salar P, Verdin E, Nourrisseau JG, Garnier M (2004) '*Candidatus* Phlomobacter fragariae' is the prevalent agent of marginal chlorosis of strawberry in French production fields and is transmitted by the planthopper *Cixius wagneri* (China).
**Acta Horticulturae no. 656, 93-97.**

**Additional key words:** etiology, epidemiology **Computer codes:** FR

**2005/105** Multiplex RT-PCR method to detect four aphid-borne strawberry viruses

A multiplex RT-PCR method has been developed in Germany to detect the main aphid-borne viruses infecting strawberry: *Strawberry crinkle cytorhabdovirus* (EU Annexes), *Strawberry mild yellow edge potexvirus* (EU Annexes), Strawberry mottle virus and *Strawberry vein banding caulimovirus* (EPPO A2 list). This method with a combination of virus-specific primers allowed to test plant material, simultaneously and in the same day, for the presence of the 4 viruses. This method is obviously less time-consuming than the traditional grafting onto *Fragaria* indicators.

**Source:** Thompson JR, Wetzel S, Jelkmann W (2004) Pentaplex RT-PCR for the simultaneous detection of four aphid-borne viruses in combination with a plant mRNA specific internal control in *Fragaria* spp.
**Acta Horticulturae no. 656, 51-56.**

**Additional key words:** diagnostics **Computer codes:** SCRV00, SMOV00,SMYEV0, SVBV00

**2005/106** A new downy mildew of Impatiens (*Plasmopara obducens*) found in Germany

The NPPO of Germany recently informed the EPPO Secretariat of the occurrence of *Plasmopara obducens*, a downy mildew of *Impatiens*, at two locations (Baden-Württemberg and Saarland).

- **Baden-Württemberg**

In September 2004, *P. obducens* was detected on *Impatiens* sp. in a cemetery. There was no information about the origin of the infection.

- **Saarland**

A circular request was sent to regional plant protection services and as a result a notification was received on the occurrence of *P. obducens* in a cemetery in Saarland during summer 2003. The disease was widespread on *Impatiens walleriana*. Again, there was no information on the origin of the infection. Since then, no further occurrence has been observed in the cemetery concerned.

The pest status of *P. obducens* in Germany is officially declared as follows: **Present, two single occurrences; under survey.**

**Source:** **NPPO of Germany, 2005-08.**

**Additional key words:** new pest **Computer codes:** PLASSP, DE

**2005/107** First record of *Plasmopara obducens* (Impatiens downy mildew) in United Kingdom

In June 2003, a sample of *Impatiens walleriana* from southern England showing symptoms of downy mildew was examined. Infected leaves appeared paler green than normal, with a white, downy growth developing on lower surfaces. Symptoms were initially inconspicuous but lower leaf surfaces quickly became covered with mycelial growth and premature leaf fall was common. Stunting of plants and poor flowering were also observed. Plant collapse could be very rapid, especially under humid conditions, resulting in up to 80% losses. The pathogen was identified (morphology, DNA sequencing) as *Plasmopara obducens*. Following this initial discovery, the NPPO of UK carried out a survey of growers. Further findings of *P. obducens* were made on a range of *Impatiens* cultivars. However, no infection was found on wild impatiens growing around nurseries.
This is the first report of *P. obducens* in UK. It is reported that this pathogen has been found in other parts of Europe (without further details) and in Canada, USA, Guatemala, Central Asia (without further details), China, India, Korea and Russia. It is also pointed out that statutory action is being taken in UK against this disease.

**Source:** Lane CR, Beales PA, O'Neill TM, McPherson GM, Finlay AR, David J, Constantinescu O, Henricot B (2005) First record of Impatiens downy mildew (*Plasmopara obducens*) in the UK.
New Disease Reports Volume 10 (August 2004 - January 2005)
http://www.bspp.org.uk/ndr/jan2005/2004-61.asp

**Additional key words:** new record **Computer codes:** PLASSP, GB

**2005/108** Addition of *Plasmopara obducens* to the EPPO Alert List

Considering the fact that new outbreaks of Impatiens downy mildew caused by *Plasmopara obducens* were reported at least in two EPPO countries, and in other parts of the world (e.g. Québec, California, Michigan), the EPPO Secretariat decided that to add this pathogen to the EPPO Alert List.

*Plasmopara obducens* (a downy mildew of *Impatiens*)

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| Why | New outbreaks of Impatiens downy mildew caused by *Plasmopara obducens* have been reported almost simultaneously (2003/2004) in European countries (Germany and United Kingdom) as well as in North America (e.g. Québec, California, Michigan). |
| Where | **EPPO region:** Germany, United Kingdom. In UK, it is suspected that the origin of the outbreak observed in 2004 was a nursery in Guatemala. According to records of specimens conserved at the US National Fungus Collection (BPI), *P. obducens* had been found in the past on wild balsam (*I. noli-tangere*) in Bulgaria, Czech Republic, Denmark, Finland, Germany, Romania, Russia. Its presence on *I. noli-tangere* was confirmed recently in Lithuania. So far in UK, *P. obducens* has not been found on wild *I. noli-tangere.*<br>**Asia:** China, India, Korea Republic.<br>**North America:** Canada (Manitoba, Québec), USA (California, Indiana, Michigan, Minnesota, Mississippi, Missouri, Montana, West Virginia, Wisconsin). In USA, the disease was first reported in 1942, and since then it has occurred sporadically. In 2004, it was detected for the first time in California and Michigan. In Canada, it is mentioned that *P. obducens* was found for the first time in Québec in April 2004 on *I. walleriana*.<br>**South and Central America:** Costa Rica, Guatemala. |
| On which plants | Cultivated and wild species of *Impatiens* (e.g. *I. balsamina, I. noli-tangere, I. walleriana*). There are unconfirmed reports of New Guinea hybrids being hosts of *P. obducens*. |
| Damage | The upper surface of affected leaves becomes pale green to yellow with no distinct lesions. White to greyish 'fungal' growth is observed on the underside of leaves. Premature leaf fall is commonly observed. Affected plants become stunted with distorted leaves. Number of flower buds can be reduced. When young plants and seedlings are infected they generally do not survive. Another downy mildew has been described on *Impatiens* (*Bremiella sphaerosperma*) but it causes slightly different symptoms. With *P. obducens*, leaves are mottled with no distinct leaf lesions whereas *Bremiella sphaerosperma* causes distinct leaf spots. The pathogens also present morphological differences. Impatiens downy mildew is favoured by cool and humid conditions. Pictures can be viewed on Internet<br>http://www.plantpathology.msu.edu/labs/hausbeck/hausbeckDownyMildew.htm<br>http://www.defra.gov.uk/planth/pestpics/downy2.pdf |
| Dissemination | Spores can be disseminated by air and water splash. It is reported that *P. obducens* can survive for a long time in the soil and infected plant debris (but without any further details). Data is lacking on possible seed transmission. Over long distances, trade of infested plants can spread the disease. |
| Pathway | Plants for planting (including cuttings), soil. |
| Possible risks | *Impatiens* are commonly grown in the EPPO region for ornamental purposes (indoors and outdoors). Control measures can be applied (chemicals, hygiene measures), but may not be fully effective (in particular, chemical treatments may mask symptoms for a while). In UK, as serious damage was observed during the 2003/2004 outbreaks, emergency phytosanitary measures were taken ('notifiable pest') and a cost-benefit analysis was conducted. Trade of cuttings and young plants is important in Europe, and there is an obvious risk of moving infected plants. However, data is lacking on biology, epidemiology and economic impact of the disease. The situation of *P. obducens* on wild *I. noli-tangere* would also need to be clarified in Europe, as these plants may act as reservoirs for the disease. |

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Source(s) Wegulo SN, Koike ST, Vilchez M, Santos P (2004) First report of downy mildew caused by *Plasmopara obducens* on impatiens in California. Plant Disease 88(8) p 909.
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http://www.protecnet.go.cr/plagas/LISTA%20ENFERMEDADES%20ACTUALIZADA.htm
USDA-ARS. Systematic Botany and Mycology Laboratory
Invasive Fungi. *Plasmopara obducens* by ME Palm.
http://nt.ars-grin.gov/sbmlweb/OnlineResources/FungiOnline.cfm

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Panel review date - Entry date 2005-07


## **2005/109** First report of *Xylella fastidiosa* on *Citrus* in Costa Rica

Citrus variegated chlorosis caused by *Xylella fastidiosa* (EPPO A1 list) was first described in Brazil in the state of São Paulo in 1987. It then spread to all citrus-growing states in Brazil, and it is estimated that it affects now more than one third of Brazilian orange trees. In Costa Rica, during the last 4 years, symptoms resembling those of citrus variegated chlorosis were observed in sweet oranges (*Citrus sinensis*) grown as shade plants in coffee plantations or edges. Affected trees showed leaf interveinal chlorosis, stunting, canopy dieback, hard and undersized fruits. Analysis (DAS-ELISA, electron microscopy) confirmed the presence of *X. fastidiosa*. It is noted that this is the first report of *X. fastidiosa* on citrus in Costa Rica. The bacterium had previously been reported on coffee (see EPPO RS 2001/185).

**Source:** Aguilar E, Villalobos W, Moreira L, Rodríguez CM, Kitajima EW, Rivera C (2005) First report of *Xylella fastidiosa* infecting Citrus in Costa Rica.
**Plant Disease, 89(6), p 687.**

**Additional key words:** detailed record **Computer codes:** XYLEFA, CR