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2005/066 First report of *Tomato chlorosis crinivirus* in Réunion

In 2004/2005, pronounced leaf yellowing symptoms were observed on tomato plants growing under protected conditions on the island of Réunion. Symptoms were characterized by irregular chlorotic mottling of the leaves, with red or brown necrotic flecks on the interveinal areas. In most affected glasshouses, reduction of fruit size and yield was observed. High populations of whiteflies were also observed. In March 2005, 20 symptomatic leaf samples were collected and tested by RT-PCR for the presence of *Tomato chlorosis crinivirus* (ToCV - EPPO A2 list) and *Tomato infectious chlorosis crinivirus* (TICV - EPPO Alert List). Results showed that these tomato plants were affected by ToCV. TICV was not detected. This is the first report of ToCV in Réunion. The situation of *Tomato chlorosis crinivirus* in Réunion can be described as follows: **Present, first found in 2004/2005 on glasshouse tomatoes.**

Source: Delatte H, Naze F, Cottineau JS, Lefeuvre P, Hostachy B, Reynaud B, Lett JM (2005) Occurrence of *Tomato chlorosis virus* on tomato in Réunion Island. New Disease Reports, vol. 11.
http://www.bspp.org.uk/ndr/july2005/2005-51.asp

Additional key words: new record **Computer codes:** TOCV00, RE

2005/067 Viroids detected on tomato samples in the Netherlands

So far, the 5 following viroid species had been isolated from naturally infected tomatoes:
- *Citrus exocortis pospiviroid* (CEVd)
- *Potato spindle tuber pospiviroid* (PSTVd - EPPO A2 list)
- *Tomato apical stunt pospiviroid* (TASVd)
- *Tomato chlorotic dwarf pospiviroid* (TCDVd)
- *Tomato planta macho pospiviroid* (TPMVd)

Since 1988, the Dutch NPPO has occasionally detected viroids in tomato samples from the Netherlands or from other countries. Infected tomato plants showed chlorosis, bronzing, leaf distortion and growth reduction. It is stressed that all viroid infections found on tomato grown in the Netherlands were subsequently eradicated. Initial diagnosis of tomato viroids was done by r-PAGE which did not allow further identification. Further work was then done to identify 13 viroid isolates collected from tomatoes (from 1988 to 2002) by RT-PCR and sequence analysis. 4 viroid isolates were identified as CEVd, PSTVd and TCDVd. 6 isolates were identified as *Columnea latent pospiviroid* (CLVd), a viroid which was previously isolated from ornamental species only (*Columnea undulata, Brunfelsia erythrophae, Nematanthus wettsteinii*). During these studies, all viroid isolates were inoculated to tomato plants and potato plants under glasshouse conditions. All tomato plants showed growth reduction, leaf distortion and chlorosis. Potato plants did not show leaf symptoms but tubers were smaller and malformed. Potato plants

grown from these infected tubers were severely stunted and also produced malformed tubers. During a trial period of 4 consecutive years, infected tubers were found to produce infected progeny. It is concluded that, considering the biological characteristics of all 4 viroids (CLVd, CEVd, PSTVd, TCDVd) especially their potential effects on both potato and tomato, their phytosanitary risks should be reconsidered.

Source: Verhoeven JTJ, Jansen CCC, Willemen TM, Kox LFF, Owens RA, Roenhorst JW (2004) Natural infections of tomato by *Citrus exocortis viroid, Columnea latent viroid, Potato spindle tuber viroid* and *Tomato chlorotic dwarf viroid*. **European Journal of Plant Pathology, 110(8), 823-831.**

Additional key words: host plants **Computer codes:** PSTVD0, NL

2005/068 Recent studies on *Thecaphora solani*

Potato smut caused by *Thecaphora solani* (EPPO A1 list) is a serious disease of potato, only present in the Andean region of South America, in Panama, and Mexico. It affects various cultivated species of *Solanum* (*S. tuberosum, S. andigenum, S. stoloniferum*) and other Solanaceae (e.g. *Lycopersicon, Datura stramonium*). Up till now, the fungus has not been cultured or characterized *in vitro*. In Chile, *T. solani* was first reported in 1974 in region IV (region of Coquimbo) where it has established in many soils causing significant yield losses (more than 90 %) in potato crops. The disease was then reported in region VIII (region del Bío-Bío). In 1996, potato smut was discovered more than 1000 km further south from its initial finding, in region IX (region de la Araucanía) near Carahue. As this represented a very serious threat to seed-potato production areas, efforts were made to try to eradicate the disease and to study the basic biological aspects of the pathogen and the disease. Therefore, studies were done in Chile to culture *T. solani in vitro*, and to characterize the fungus by molecular methods. For the first time, *T. solani* was cultured on solid and liquid growing media. But this remained a laborious and difficult task, as only 7 of the 26 isolates studied could be cultured. This was mainly due to the low germination capacity of *T. solani* teliospores. The sexual cycle of the pathogen was completed under laboratory conditions. First attempts to reproduce the disease under controlled conditions were also successful. Artificial inoculation of mycelia to potato explants grown *in vitro* (*S. tuberosum* cv. 'Désirée') induced a gall. Molecular analysis also confirmed the initial classification of *T. solani* in the genus *Thecaphora* (it had been suggested at one point that it belonged to the genus *Angiosorus*).

Source: Andrade O, Muñoz G, Galdames R, Durán P, Honorato R (2004) Characterization, in vitro culture, and molecular analysis of *Thecaphora solani*, the causal agent of potato smut. **Phytopathology, 94(8), 875-882.**

Additional key words: etiology **Computer codes:** THPHSO

2005/069 Studies on *Bursaphelenchus* species associated with *Pinus pinaster* in Portugal

In March 1999 in Portugal, during a survey on nematode species associated with pines, *Bursaphelenchus xylophilus* (EPPO A1 list) was detected on *Pinus pinaster* (maritime pine) for the first time in Europe (see EPPO RS 99/152). Further surveys confirmed that the pest was restricted within an area in the Setúbal peninsula. This infested area has since been precisely delimited every year and is submitted, as well as a surrounding buffer zone, to strict phytosanitary measures (demarcated zone). In addition, a survey programme is being carried out in the rest of the country. Research was recently done on *Bursaphelenchus* species associated with *P. pinaster* using morphological and molecular analysis (PCR RFLP). In total, 4810 samples of *P. pinaster* wood material were collected from all Portuguese regions including the infested area. The following *Bursaphelenchus* species were found: *B. hellenicus, B. hylobianum, B. leoni, B. pinophilus, B. sexdentati, B. tusciae, B. teratospicularis, B. xylophilus* and a species *Bursaphelenchus* sp. 1 (initially thought to be *B. hofmanni*, but this was later questioned). Population levels found in tested samples were usually low. The greater number of *Bursaphelenchus* species was found in northern and central Portugal which reflects the higher density of *P. pinaster* in these regions. The large number of infested samples found in the demarcated zone simply reflects a higher intensity of sampling. In the demarcated zone, *B. xylophilus* was the most frequently found species, followed by *Bursaphelenchus* sp. 1 (*B. mucronatus* was only found in 1 sample). In addition, 62 specimens of *Hylobius* sp. (Coleoptera: Curculionidae) were studied for the possible presence of *Bursaphelenchus* dauer juveniles. *B. hylobianum* was found under the elytra of 9 *Hylobius* sp.

Source: Penas AC, Correia P, Bravo MA, Mota M, Tenreiro R (2004) Species of *Bursaphelenchus* Fuchs, 1937 (Nematoda: Parasitaphelenchidae) associated with maritime pine in Portugal.
Nematology, 6(3), 437-453.

Additional key words: detailed record **Computer codes:** BURSXY, BURSSP, PT

2005/070 Survey on nematodes associated with *Pinus* trees in Spain: absence of *Bursaphelenchus xylophilus*

As a consequence of the introduction of *Bursaphelenchus xylophilus* (EPPO A1 list) in the Setúbal peninsula in Portugal, official surveys are being done in Spain on nematode species associated with pine trees. From 1999 to 2003, more than 6.000 wood samples were collected from sawmills and wood processing industries (47% of the samples), custom inspection points (6%) and pine forests (47 %). Samples of *Pinus* were collected from all Comunidades Autónomas and corresponded to wood of Spanish origin or from other countries. Nematodes were found only in 15% of the examined samples. Among Aphelenchoididae, 7 nematode genera were identified including 8 species belonging to the genus *Bursaphelenchus*: *B. eggersi, B. fungivorus, B. hylobianum, B. leoni, B. mucronatus, B. pinasteri, B. sexdentati* and *B. teratoespicularis. B. xylophilus* was not detected. In *Pinus* forests, all 8 species were found. *B. hylobianum* (on *Pinus radiata*), *B. leoni, B. pinasteri* and *B. teratospicularis* (on *P. halepensis, P. pinaster* and *P. pinea*) were detected only in forests and not in sawmills or border points. *B. mucronatus* was mainly found in sawmills on imported wood, but also in Navarra on *P. halepensis, P. nigra* and *P. sylvestris*. *B. eggersi* was localized in Galicia on *P. pinaster* and *P. radiata*. *B. fungivorus* was found in Andalucía on *P. pinaster*. *B. sexdendati* was the most commonly found species, associated with *Abies alba, P. pinea, P. pinaster and P. sylvestris*.
The situation of *B. xylophilus* in Spain can be described as follows: **Absent, confirmed by survey.**

Source: Arias M, Escuer M, Bello A (2004) Nematodos asociados a madera y árboles de coníferas en pinares españoles.
Boletín de Sanidad Vegetal – Plagas, 30(3), 581-593.

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

2005/071 Studies on *Bursaphelenchus* species in Lithuania

Following the recent introduction of *Bursaphelenchus xylophilus* (EPPO A1 list) in a limited area in Portugal, studies were done in Lithuania on *Bursaphelenchus* species possibly present. Conifer samples were collected from all regions of Lithuania in 2003/2004 and analysed at the laboratory. Out of a total of 370 samples, 2 samples collected from the region of Utena contained nematodes which were identified as *Bursaphelenchus mucronatus*. *B. xylophilus* was not found. This is the first report of *B. mucronatus* in Lithuania.
The situation of *Bursaphelenchus xylophilus* in Lithuania can be described as follows: **Absent, confirmed by surveys.**

Source: Stanelis A (2005) The occurrence of *Bursaphelenchus mucronatus* Mamya & Enda, 1979 in Lithuania.
Acta Zoologica Lithuanica, 15(1), 62-63.

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

2005/072 Surveys on *Bursaphelenchus xylophilus*, *Monilinia fructicola*, *Phytophthora ramorum* and *Pepino mosaic potexvirus* in Emilia-Romagna, Italy

Official surveys were carried out in 2003/2004 in Emilia-Romagna (Italy) on the following pests, in compliance with EU regulations.

***Bursaphelenchus xylophilus* (EPPO A1 list)**
Surveys were initiated in 2000. They focused on forest and ornamental plants, imported wood packaging material, and also included inspections of wood importing companies. Wood or sawdust samples were collected from wood packaging material Canada, China, USA; dunnage left on Ravenna seaport docks; logs and sawn wood imported from Eastern European countries; imported fuel wood. All samples gave negative results. In Emilia-Romagna, pine forests are located along the Adriatic Sea and in the Appennini mountain range. Pine trees showing suspect symptoms (wilting or recently dying) were sampled, but no *B. xylophilus* was found (in 2002, a few samples contained *Aphelenchoides* sp., *Laimaphelenchus* sp. as well as some saprophytic nematodes). Conifers planted in parks and gardens showing suspect symptoms were also sampled and tested. All results were negative.
The Regional PPO of Emilia-Romagna officially declares that the status of *Bursaphelenchus xylophilus* is: **Absent, confirmed by surveys**.

***Monilinia fructicola* (EPPO A2 list)**

Samples of fruits or plant material showing symptoms of *Monilinia* infections were collected throughout the region, mainly from stonefruit-growing areas. In 2003 and 2004, 50 and 53 samples were tested respectively, following the EPPO diagnostic protocol. In 2003, all samples were infected by *M. laxa*. In 2004, 51 were infected by *M. laxa* and 2 by *M. fructigena*.

The Regional PPO of Emilia-Romagna officially declares that the status of *Monilinia fructicola* is: **Absent, confirmed by surveys**.

***Pepino mosaic potexvirus* (PepMV - EPPO Alert List)**

A survey was done in all provinces of the region on tomato propagation material, commercial fields and imported seeds. More than 120 nurseries were inspected and no suspect symptoms were observed. In Emilia-Romagna, approximately 20.000 ha of tomato for processing are grown. Crops were regularly inspected and in case of suspect symptoms, samples were taken and tested. Suspect samples were collected from the province of Forlí-Cesena. Results were negative for PepMV but positive for *Tomato spotted wilt tospovirus* (TSWV - EPPO A2 list). Surveys on tomato fruits collected from the wholesale market of Bologna gave negative results. Few consignments of tomato seeds were imported via the Bologna airport (3 to 4 per year). 2 consignments (one from India and the other from China) were tested for PepMV and gave negative results. The Regional PPO of Emilia-Romagna officially declares that the status of PepMV is: **Absent, confirmed by surveys**.

In addition, the Regional PPO of Emilia-Romagna officially declares that the status of TSWV is: **Present, occasional outbreaks, mainly in protected conditions; few cases in tomato fields. Subject to official control**.

***Phytophthora ramorum* (EPPO Alert List)**

In 2003/2004, surveys mainly focused on nursery production (mainly *Viburnum*, but also *Rhododendron, Camellia* and *Quercus*). Checks were also made in parks and gardens. Forests were not included in the surveys. Visual inspections were made and in case of suspect symptoms, samples were collected and tested. All results were negative.

The Regional PPO of Emilia-Romagna officially declares that the status of *Phytophthora ramorum* is: **Absent, confirmed by surveys**.

Source: **Direzione Generale Agricoltura, Servizio Fitosanitario, Osservatorio per le Malattie delle Piante. Regione Emilia-Romagna, 2005-03.**

Additional key words: absence, detailed record **Computer codes:** BURSXY, MONIFC, PEPMV0, PHYTRA TSWV00, IT

2005/073 *Aphelenchoides besseyi* does not occur in Slovakia

In the 2nd edition of *Quarantine Pests for Europe*, *Aphelenchoides besseyi* (EPPO A2 list) was considered as present in Slovakia. The NPPO of Slovakia looked for the source of this information and found that it dated from the period before 1993 (former Czechoslovakia) without any reference to hosts or detailed distribution. In Slovakia, the last attempts to grow rice were done in 1950s-1960s, so rice is now no longer cultivated. Regarding strawberry, the presence of *A. besseyi* has not been reported in Slovakia. Therefore, the NPPO of Slovakia considered that, so far, *A. besseyi* is not known to occur on its territory. However, surveys will be made in 2005 on strawberry crops to verify the present situation.
The situation of *A. besseyi* in Slovakia can be described as follows: **Absent, no pest records.**

Source: **NPPO of Slovakia, 2005-03.**

Additional key words: absence **Computer codes:** APLOBE, SK

2005/074 Pests absent in Slovakia

The NPPO of Slovakia considered that the following EU-regulated pests are not known to occur on its territory. Unless specified otherwise, their situation can be described as: **Absent, no pest records.**

Nematodes
Meloidogyne chitwoodi (EPPO A2 list)
Meloidogyne fallax (EPPO A2 list)
Radopholus similis (EPPO A2 list)

Insects
Circulifer tenellus (EU Annexes)
Eutetranychus orientalis (EPPO A2 list)
Liriomyza huidobrensis (EPPO A2 list)
Neoaliturus haematoceps (EU Annexes)
Opogona sacchari (EPPO A2 list)
Popillia japonica (EPPO A2 list)
Rhizoecus hibisci (EPPO A1 list)
Spodoptera littoralis (EPPO A2 list)

Fungi
Ceratocystis fimbriata f.sp. *platani* '(EPPO A2 list) – **Absent, confirmed by survey**.
Melampsora medusae (EPPO A2 list)
Mycosphaerella pini (EU Annexes)

Bacteria and phytoplasmas
European stone fruit yellows ('*Candidatus* Phytoplasma prunorum') (EU Annexes)
Grapevine flavescence dorée phytoplasma (EPPO A2 list)
Spiroplasma citri (EU Annexes)
Xanthomonas axonopodis pv. *phaseoli* (EPPO A2 list)
Xanthomonas fragariae (EPPO A2 list)
Xanthomonas vesicatoria (EPPO A2 list)
Xylophilus ampelinus (EPPO A2 list)

Viruses
Arabis mosaic nepovirus (EPPO A2 list)
Chrysanthemum stunt pospiviroid (EPPO A2 list)
Citrus tristeza closterovirus (EPPO A2 list)
Raspberry ringspot nepovirus (EPPO A2 list)
Strawberry crinkle cytorhabdovirus (EU Annexes)
Strawberry latent ringspot sadwavirus (EU Annexes)
Tomato black ring nepovirus (EU Annexes)
Tomato yellow leaf curl begomovirus (EPPO A2 list)

Source: **NPPO of Slovakia, 2005-03 and 2005-06.**

Additional key words: absence

Computer codes: ARMV00, CERAFP, CIRCTE, CSVD00, CTV000, EUTEOR, LIRIHU, MELGCH, MELGFR, MELMME, NEOAHA, OPOGSC, PHYP64, PHYPPR, POPIJA, RADOSI, RHIOHI, RPRSV0, SCIRPI, SCRV00, SLRSV0, SPIRCI, SPODLI, TBRV00, TLCV00, XANTAM, XANTFR, XANTPH, XANTVE, SK

2005/075 Situation of several quarantine pests in Lithuania in 2004: first report of rhizomania

The NPPO of Lithuania has informed the EPPO Secretariat of the results of national surveys conducted in 2004 on several quarantine pests. Results of earlier surveys were presented in EPPO RS 2004/078.

Beet necrotic yellow vein benyvirus **(rhizomania - EPPO A2 list)**
In October 2004, the presence of rhizomania was identified in the district of Šakiai. A sugarbeet field of 84 ha was found infected. The EPPO Secretariat had previously no data on the occurrence of rhizomania in Lithuania. After harvest, the agricultural machinery used on the infected field was thoroughly cleaned. Sugarbeets were processed only at the end of the factory work. The factory installations were then also disinfected. Plant wastes were buried and used waters treated. Washed soil will not be used for agricultural purposes. For 2005, the grower concerned was advised to grow resistant sugarbeet cultivars, to choose fields isolated as much as possible from the infected field, and not to use the infected field for any root vegetable. **Present, first found in 2004 in the district of Šakiai (1 field), under official control**.

Clavibacter michiganensis **subsp.** ***sepedonicus*** **(EPPO A2 list)**
In 2004, 31 samples of ware potatoes (corresponding to 525.80 tons and 15 farms) were found infected by *C. michiganensis* subsp. *sepedonicus*. Out of these 15 farms, 5 had been found infected previously. Infected potatoes were used for animal feed or processing. Potato cultivation was prohibited for at least 3 years in infected fields. **Present, found in a few areas (15 farms), under official control.**

Ditylenchus destructor **(EU Annexes)**
The nematode was detected in 33 samples of seed potatoes (corresponding to 942.4 tons and 8 farms) and in 48 samples of ware potatoes (894.5 tons, 26 farms). Part of the infected potatoes was used for animal feed or processing, and the other part was destroyed. A crop rotation will be made. **Present, found in a few areas (34 farms), under official control.**

Globodera rostochiensis **(EPPO A2 list)**
101 farms were found infested by *G. rostochiensis*, covering an area of approximately 261 ha. 168 ha were intended for ware potatoes (corresponding to 25 farms), 54 ha for seed potatoes (3 farms), and 39 ha for fruit tree orchards and ornamental nurseries (73 farms). Cultivation of potatoes and other plants for planting was prohibited in all infested plots. **Present, found in a few areas (101 outbreaks), under official control.**

***Plum pox potyvirus* (PPV - EPPO A2 list)**
In August/September 2004, 3 outbreaks of PPV were detected in the districts of Kaunas and Telsiai. 1 was found in a breeding station and 2 in orchards. All infected trees will be destroyed. **Present, found in a few areas (3 outbreaks), under eradication.**

Source: **NPPO of Lithuania, 2005-03.**

Additional key words: new record, detailed records **Computer codes:** BNYVV0, CORBSE, DITYDE, HETDRO, PPV000, LT

2005/076 Further spread of *Aulacaspis yasumatsui*, a scale pest of Cycads

Concerns have recently been raised by IUCN (International Union for Conservation of Nature and Natural Resources) about the spread of *Aulacaspis yasumatsui* (Homoptera: Diaspididae – EPPO Alert List) which threatens cycad collections in Europe and Florida (US). Cycads are internationally protected plants in the framework of CITES Convention. It is reported that the pest is spreading to wild cycad populations. In addition to countries already mentioned in the EPPO Alert List, *A. yasumatsui* is reported to occur in the following countries in Asia (Singapore, Vietnam), Caribbean (Puerto Rico, US Virgin Islands) and Oceania (Guam).

Source:

Hodgson, C. & Martin, J.H. (2001) Three noteworthy scale insects (Hemiptera: Coccoidea) from Hong Kong and Singapore, including *Cribropulvinaria tailungensis*, new genus and species (Coccidae), and the status of the cycad-feeding *Aulacaspis yasumatsui* (Diaspididae). *Raffles Bulletin of Zoology* 49: 227-250.

International Union for Conservation of Nature and Natural Resources (IUCN) Species Survival Commission (SSC) E-Bulletin of February 2005.
http://www.iucn.org./themes/ssc/

CABI (2000) Distribution maps of plant pests. *Aulacaspis yasumatsui*, no. 610, Wallingford, United Kingdom.

Additional key words: new records **Computer codes:** AULSYA, GU, PR, SG, VI, VN

EPPO *Reporting Service*

2005/077 *Ctenarytaina spatulata* is a new psyllid pest of *Eucalyptus*: addition to the EPPO Alert List

Over the years, several eucalyptus pests have been introduced into Europe, such as *Gonipterus scutellatus, Phoracantha semipunctata, P. recurva, Ctenarytaina eucalypti*. More recently, a new psyllid, *Ctenarytaina spatulata*, has been found in Italy, France, Portugal, Spain, and can be added to this growing list of introduced eucalyptus pests. Although, its economic impact has not been evaluated, the EPPO Secretariat decided it could usefully be added to the EPPO Alert List.

Ctenarytaina spatulata (Homoptera: Psyllidae – Eucalyptus psyllid)

Why	The Eucalyptus psyllid, *Ctenarytaina spatulata*, came to our attention because it was recently introduced into several European countries.
Where	*C. spatulata* originates from Australia but it has then spread to other parts of the world. In Europe, it was first found in Portugal and later in other Mediterranean countries. **EPPO region:** France (Var in 2003), Italy (Liguria in 2003), Portugal (central part in 2002, widespread in 2003), Spain (Galicia in 2003, Extremadura and Andalucía in 2004). **North America:** USA (California in 1991). **South America:** Brazil (1992), Uruguay (1994). **Oceania:** Australia, New Zealand (1990).
On which plants	*C. spatulata* has been observed on many different species of *Eucalyptus* (e.g. *E. camaldulensis, E. globulus, E. grandis, E. parvifolia, E. viminalis*). In France and Italy, it was only seen on *E. parvifolia* which is cultivated for cut foliage. In Spain it was found on *E. globulus*.
Damage	Adults and nymphs feed on plant sap. They are mainly found on mature shoots, especially in the apical part of the tree, in contrast with *C. eucalypti* which prefers young shoots. Attacked shoots show small necrotic lesions, proliferation of lateral shoots, leaf distortions. *C. spatulata* produces large amounts of honeydew on which sooty moulds can develop. In Brazil, it is suspected that *C. spatulata* could be involved in a growth disorder of *E. grandis* called 'seca dos ponteiros' (lateral sprouting, foliar spots, cankers at petiole insertion, tip dieback). This psyllid has several overlapping generations per year. First observations showed that *C. spatulata* is mainly present during winter and beginning of spring. For the moment, economic impact is difficult to assess, but in Liguria some producers had part of their production of cut foliage refused for selling or exporting because of the presence of honeydew and sooty mould. In Brazil and Uruguay, it is reported that severe damage is caused by both *C. spatulata* and *C. eucalypti*. *C. spatulata* is similar to *C. eucalypti*, but using a binocular several morphological characteristics can distinguish them. Pictures of *C. spatulata* can be viewed on Internet: http://www.nzffa.org.nz/Eucalypt_pest_control/psyllids_text.html
Dissemination	Although data is lacking on the biology of *C. spatulata*, it can be assumed that winged adults can fly from plant to plant and that psyllids can also be dispersed by the wind. Over long distances, trade of infested plants and cut foliage can ensure *C. spatulata* dissemination.
Pathway	Plants for planting, cut foliage of *Eucalyptus*.
Possible risks	*Eucalyptus* are widely planted for forestry and ornamental purposes around the Mediterranean Basin. No data is available on chemical control for *C. spatulata*. In southern France and northern Italy, it is noted that *C. eucalypti* is usually well controlled by an introduced hymenopteran parasitoid *Psyllaephagus pilosus*. But no data on the efficacy of this parasitoid against *C. spatulata* is available. Although, the economic impact of *C. spatulata* has not been assessed yet, it seems desirable to avoid whenever possible any further spread of this type of pest. It can also be added that other Eucalyptus psyllids are currently reported as invasive species (e.g. *Glycaspis brimblecombei* (EPPO Alert List), *Blastopsylla occidentalis*).

EPPO *Reporting Service*

Source(s)

Burckhardt D, Santana DLQ, Terra A L, de Andrade FM, Penteado SRC, Iede ET, Morey CS (1999) Psyllid pests (Hemiptera, Psylloidea) in South American eucalypt plantations. Mitteilungen der Schweizerischen Entomologischen Gesellschaft, 72(1/2), 1-10 (abst.).

Costanzi M, Malausa JC, Cocquempot C (2003) Un nouveau psylle sur les Eucalyptus de la Riviera Ligure et de la Côte d'Azur. Premières observations de *Ctenarytaina spatulata* Taylor dans le Bassin Méditerranéen occidental. Phytoma – La Défense des Végétaux, no. 566, 48-51.

Mansilla JP, Pérez R, Del Estal P, Blond A (2004) Deteccíon en España de *Ctenarytaina spatulata* Taylor sobre *Eucalyptus globulus* Labill. Boletín de Sanidad Vegetal – Plagas, 30 (1), 57-63.

Taylor KL (1997) A new Australian species of *Ctenarytaina* Ferris and Klyver (Hemiptera: Psyllidae: Spondyliaspidinae) established in three other countries. Australian Journal of Entomology; 36(2), 113-115 (abst.).

Valente C, Manta A, Vaz A (2004) First record of the Australian psyllid *Ctenarytaina spatulata* Taylor (Homoptera: Psyllidae) in Europe. Journal of Applied Entomology, 128(5), 369-370 (abst.).

EPPO RS 2005/077

Panel review date - Entry date 2005-05

2005/078 First report of *Brenneria quercina* causing bark canker on oaks in Spain: addition to the EPPO Alert List

In 1967, a new bacterium *Erwinia quercina* (later reclassified as *Brenneria quercina*) was identified on oaks in California (US). The disease was found on *Quercus agrifolia* and *Q. wislizenii* causing exudates and rotting on acorns. Since then, this disease has hardly been reported again in California, or elsewhere. But in forests of central Spain, during the last 10 years, symptoms of bark cankers and decay have been observed. In recent studies, *Brenneria quercina* has been identified as the causal agent of bark cankers on *Q. ilex* and *Q. pyrenaica*, characterized by bark cankers, bud and nut dripping. Fatty acid profiles of the Spanish isolates were similar to the strain of *B. quercina* from California, but in serological tests some differences were found. Pathogenicity tests showed that the Spanish isolates were able to reproduce internal symptoms of necrosis and acorn exudation in *Q. ilex* and *Q. pyrenaica.* It was suggested that *B. quercina* may be associated, among other causes, with the oak decline syndrome which affects Spanish oak forests. The EPPO Secretariat considered that it was useful to attract countries' attention to this new pathogen of oak trees, although much data is lacking on its host range, geographical distribution, biology, epidemiology, and economic/environmental impact.

Brenneria (Erwinia) quercina (bark canker and drippy nut of *Quercus*)

Why	In 1967, a new bacterial disease of oak caused by *Erwinia quercina* (later reclassified as *Brenneria quercina*) was reported in California (US) and called drippy nut, due to significant bacterial ooze observed on acorns. Apparently, this disease was no longer observed in USA nor reported from other countries until 1992, when the bacterium was found on forest oaks in Spain, causing slightly different types of damage (ie. bark cankers and bacterial ooze on leaf buds).
Where	**EPPO region**: Spain (near Madrid and Segovia; first isolated in 1992 on *Q. ilex*; in 2001, also reported in Comunidad Valenciana). **North America**: USA (California, first description made in 1967 and apparently no further reports were made since then).
On which plants	*Quercus* spp. (*Q. agrifolia* and *Q. wislizenii* in California, *Q. ilex* and *Q. pyrenaica* in Spain). More data is needed on the susceptibility of other European *Quercus* species.

Damage — In California, the disease was described as 'drippy nut'. The first visible symptoms were darkening and oozing at insect punctures in the acorns. Bacterial ooze was observed at the base of the nut. Rotting of the nuts was also observed. After the nut had fallen, in some cases the acorn cup produced bacterial ooze. The disease occurred in later summer when day temperatures were hot (average around 29°C).

In Spain the disease presented some additional symptoms. The first symptoms were bark cankers, although the 'drippy nut' symptom was observed in later surveys. A frequent symptom was the presence of irregular, longitudinal cankers of a few centimetres in size on the trunk and branches (reaching in some cases up to 20 cm). These cankers, variable in depth, showing necrosis of the affected tissues and copious exudations, usually appeared on the bark surface of the lower trunk. Necrotic lesions extended to inner bark. Oak trees seriously affected by bark cankers were usually mature (more than 20 years old), showing a progressive loss of vigour, foliage reduction and early leaf senescence. Exudates were frequently observed in growing acorns. Copious, sticky, honey-like sap appeared under the acorn cup and caused severe fruit drop. In many cases, acorns rotted. Exudates from leaf buds were also observed in some *Q. pyrenaica* trees, which were not described in California. Surveys done in forests near Madrid since 1996 have shown that symptoms were very widespread and that approximately 30 to 40 % of the acorns were affected. Acorns are a valuable source for wildlife, as well as for feeding pigs.

Dissemination — It is suspected that the bacteria enter through wounds, but it is not known whether the lesions observed in natural conditions are produced by or just used by the bacterium to enter into the plant. In California, it has been suggested that the bacterium entered the acorns through holes made by insects, especially by Cynipidae. Water most probably plays a role in disseminating the bacterium.

Pathway — Plants for planting of *Quercus*, seeds ?

Possible risks — Oaks are important forest and amenity trees. No control methods are available against *B. quercina*. Although more details are needed on the host range, biology, geographical distribution, epidemiology, the observations made in Spain suggested that *B. quercina* could be damaging to other oak species elsewhere in the EPPO region. The possible role of *B. quercina* in the oak decline symptom has to be further studied.

Source(s)

Biosca EG, González R, López- López M, Soria S, Montón C, Pérez-Laorga E, López MM (2003) Isolation and characterization of *Brenneria quercina* causal agent for bark canker and drippy nut of *Quercus* spp. in Spain. Phytopathology 93(4), 485-492.

CMI (1981) Descriptions of pathogenic fungi and bacteria: *Erwinia quercina*, no. 693, CABI, Wallingford, United Kingdom, 2 pp.

Hildebrand DC, Schroth MN (1967) A new species of *Erwinia* causing the drippy nut disease of live oaks. Phytopathology 57, 384-397.

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Centre d'Informació i Documentació Ambiental dela Comunitat Valenciana. Resultadoes de la prospección año 2001. http://www.cma.gva.es/cidam/emedio/biodiversidad/Insectos/Enfermedades/Brenneria%20quercina.htm

EPPO RS 2005/078

Panel review date - Entry date 2005-05

EPPO *Reporting Service*

2005/079 EPPO report on notifications of non-compliance (detection of regulated pests)

The EPPO Secretariat has gathered the notifications of non-compliance for 2004 received since the previous report (EPPO RS 2005/030) from the following countries: Belgium, Cyprus, France, Greece, Israel, Lithuania, Netherlands, Portugal, Spain, United Kingdom. When a consignment has been re-exported and the country of origin is unknown, the re-exporting country is indicated in brackets. When the occurrence of a pest in a given country is not known to the EPPO Secretariat, this is indicated by an asterisk (*).

The EPPO Secretariat has selected notifications of non-compliance made because of the detection of regulated pests. Other notifications of non-compliance due to prohibited commodities, missing or invalid certificates are not indicated. It must be pointed out that the report is only partial, as many EPPO countries have not yet sent their notifications.

Note: in the previous report (RS2005/030), it is not *Clavibacter michiganensis* subsp. *michiganensis* which was found on several consignments of potatoes but of course *C. michiganensis* subsp. *sepedonicus*.

Pest	Consignment	Type of commodity	Country of origin	C. of destination	nb
Abgrallaspis	*Citrus reticulata*	Fruits	Argentina	Portugal	1
Abgrallaspis, Parlatoria pergandii	*Citrus reticulata*	Fruits	Argentina	Portugal	1
Agromyzidae	*Venidium*	Cuttings	Tunisia	France	1
Ambrosia	*Glycine max*	Stored products	USA	Israel	1
	Sorghum	Stored products	Ukraine	Israel	1
	Zea mays	Stored products	USA	Israel	1
Ambrosia artemisiifolia	*Fagopyrum esculentum*	Stored products	Ukraine	Lithuania	2
	Helianthus annuus	Seeds	Ukraine	Lithuania	1
Ambrosia, Geranium pusillum, Silene	*Allium schoenoprasum*	Seeds	France	Israel	1
Bemisia tabaci	*Hypericum*	Cut flowers	Israel	Belgium	1
	Rosa	Cut flowers	Morocco	France	1
	Solidago	Cut flowers	Israel	Netherlands	1
Gracillaria azaleella, Deroceras laeve, Laelapidae, Pieridae	*Rhododendron (Azalea)*	Pot plants	Belgium	Israel	1
Clavibacter michiganensis* subsp. *sepedonicus	*Solanum tuberosum*	Ware potatoes	Germany	Lithuania	1
	Solanum tuberosum	Ware potatoes	Poland	Lithuania	1
Clover yellow mosaic potexvirus	*Verbena*	Cuttings	Costa Rica	United Kingdom	1

Pest	Consignment	Type of commodity	Country of origin	C. of destination	nb
Cuscuta	*Rumex acetosa*	Seeds	France	Israel	1
Guignardia citricarpa	*Citrus*	Fruits	China	Netherlands	1
Helicoverpa armigera	*Eryngium*	Cut flowers	Zimbabwe	Netherlands	1
	Phaseolus	Vegetables	Egypt	Netherlands	2
	Pisum sativum	Vegetables	Kenya	Netherlands	3
	Pisum sativum	Vegetables	Tanzania	Netherlands	1
	Solidago	Cut flowers	Zimbabwe	Netherlands	1
Hemiberlesia rapax	*Jubaea*	Plants for planting	Chile	United Kingdom	1
Hirschmaniella	*Vallisneria*	Aquarium plants	Singapore	France	7
	Vallisneria gigantea	Aquarium plants	Thailand	France	1
Leucinodes orbonalis	*Solanum melongena*	Vegetables	Thailand	Netherlands	2
Liriomyza sativae, L. trifolii	*Gypsophila*	Cut flowers	Tanzania	Netherlands	1
Longidorus	*Phoenix dactylifera*	Plants for planting	Egypt	Greece	1
Longidorus, Xiphinema, Tylenchorhynchus, Helicotylenchus, Pratylenchus	*Ficus benjamina, F. religiosa, F. lyrata, F. sycomorus, Spathodea campanulata, Kigelia pinnata, Yucca*	Plants for planting	Egypt	Greece	1
Niphona	*Bambusa*	Unspecified	China	United Kingdom	1
Phytophthora ramorum	*Rhododendron ponticum*	Plants for planting	France	United Kingdom	1
Polygonum convolvulus	*Hordeum vulgare*	Stored products	Bulgaria	Israel	1
	Hordeum vulgare	Stored products	Russia	Israel	2
	Hordeum vulgare	Stored products	Ukraine	Israel	2
	Triticum aestivum	Stored products	Bulgaria	Israel	1
	Triticum aestivum	Stored products	Russia	Israel	1
	Triticum aestivum	Stored products	Ukraine	Israel	6
Polygonum persicaria, Chenopodium, Sclerotinia sclerotiorum	*Petroselinum crispum*	Seeds	Denmark	Israel	1
Sclerotinia sclerotiorum	*Anthriscus*	Seeds	Netherlands	Israel	1
Spodoptera littoralis	*Solidago*	Cut flowers	Zimbabwe	Netherlands	1
Thrips palmi	*Dendrobium*	Cut flowers	Thailand	Netherlands	1
	Dendrobium	Cut flowers	Thailand	Netherlands	1
	Momordica	Vegetables	Thailand	Netherlands	1
	Solanum melongena	Vegetables	Suriname	Netherlands	1
	Solanum melongena	Vegetables	Suriname	Netherlands	1
	Solanum melongena	Vegetables	Thailand	Netherlands	1
	Unspecified	Aquarium plants	Singapore	Belgium	1

Pest	Consignment	Type of commodity	Country of origin	C. of destination	nb
Thysanoptera	*Dendrobium*	Cut flowers	Thailand	France	1
	Ornamentals	Cut flowers	Thailand	France	1
	Solanum aculeatissimum	Vegetables	Thailand	France	1
Weed seeds	*Cocos nucifera*	Growing media	Sri Lanka	Israel	3

- **Fruit flies**

Pest	Consignment	Country of origin	C. of destination	nb
Ceratitis capitata	*Prunus armeniaca*	Tunisia	France	1
Non-European Tephritidae	*Various fruits*	Thailand	France	1
	Ziziphus	Thailand	France	1

- **Wood**

Pest	Consignment	Type of commodity	Country of origin	C. of destination	nb
Formica, Myriapoda, Gasteropoda	Unspecified	Packing wood	Costa Rica	Spain	1
Scolytidae	*Abies*	Wood	Romania	Cyprus	1
	Pinus	Wood and bark	Romania	Cyprus	1

- **Bonsais**

Pest	Consignment	Country of origin	Country of destination	nb
Cnidocampa flavescens	*Acer*	China	Netherlands	1
Helicotylenchus	*Ligustrum*	China	France	1
	Ligustrum	China	France	1
Nematoda	*Buxus*	China	France	2
	Ehretia	China	France	3
Rhizoecus hibisci	*Ficus, Serissa*	China	Netherlands	1

Source: EPPO Secretariat, 2005-05.

2005/080 PQR version 4.4 has now been released

A new version of PQR (4.4 – March 2005) has now 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 preliminary data on some invasive plants. PQR 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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For more information, consult our web page:
http://www.eppo.org/PUBLICATIONS/pqr/pqr.htm

Source: EPPO Secretariat, 2005-05.

2005/081 EPPO Conference on *Phytophthora ramorum* and other forest pests (Cornwall, GB, 2005-10-05/07)

EPPO is organizing in October 2005 a Conference on *Phytophthora ramorum* and other forest pests, in cooperation with the NPPO of the United Kingdom.
Key themes for the Conference will be:

- Situation of *Phytophthora ramorum* and related species in Europe and possible phytosanitary measures
- Current phytosanitary alerts concerning forest pests and in particular introduced Cerambycidae in European countries
- Current situation of *Bursaphelenchus xylophilus* in Europe
- Review of the EPPO forest quarantine project and its outcomes

It is still possible to pre-register to this conference and propose a paper (deadline has been extended to 2005-07-31).

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On-line registration: http://www.eppo.org/MEETINGS/conferences/ramorum_preregisform.htm

Source: **EPPO Secretariat, 2005-07.**