EPPO

Reporting

Service

Paris, 1996-09-01 **Reporting Service 1996, No. 9**

CONTENTS

EPPO *Reporting Service*

96/163 Information on pests and diseases of quarantine importance in Croatia

The EPPO Secretariat has received information on the phytosanitary situation for some pests of quarantine importance in Croatia. Many of them were previously recorded in former Yugoslavia. The EPPO Secretariat has extracted new, or more detailed, records for Croatia, compared to what is currently mentioned in the EPPO data base PQR.

- **Present and widespread in Croatia**

Anarsia lineatella (EPPO A2 quarantine pest)
Cochliobolus carbonum (EPPO A2)
Cryphonectria parasitica (EPPO A2)
Cydia molesta (EPPO A2)
Puccinia horiana (EPPO A2)
Quadraspidiotus perniciosus (EPPO A2)

- **Present with a restricted distribution in Croatia**

Apple proliferation phytoplasma (EPPO A2)
Cacoecimorpha pronubana (in some glasshouses in Dalmatia - EPPO A2)
Ceratitis capitata (Dalmatian coast - EPPO A2)
Citrus tristeza closterovirus (southern Croatia - EPPO A2)
Dendroctonus micans (EU Annex II/B)
Epichoristodes acerbella (in some glasshouses in Dalmatia - EPPO A2)
Ips typographus (EPPO A2)
Liriomyza trifolii (EPPO A2)
Mycosphaerella dearnesii (EPPO A2)
Mycosphaerella linicola (EPPO A2)
Pear decline phytoplasma (Dalmatian coast - EPPO A2)
Phaeoisariopsis griseola (EPPO A2)
Phialophora cinerescens (EPPO A2)
Phoma exigua var. *foveata* (glasshouses - EPPO A2)
Plasmopara halstedii (EU Annex II/A2)
Potato stolbur phytoplasma (EPPO A2)
Pseudomonas syringae pv. *persicae* (Dalmatian coast - EPPO A2)
Pseudomonas syringae pv. *pisi* (EPPO A2)
Puccinia pelargonii-zonalis (Dalmatian coast; only in glasshouses in northern Croatia - EPPO A2)
Tilletia controversa (EPPO A2)

- **Present, no details**

Arabis mosaic nepovirus (EU Annex II/A2)
Ips cembrae (EU Annex II/B)
Ips duplicatus (EU Annex II/B)
Ips sexdentatus (EU Annex II/B)
Pissodes castaneus (EU Annex II/B)
Tomato ringspot nepovirus (EPPO A2)
Tomato spotted wilt tospovirus (potential EPPO A2)

- **Absent, found in the past but did not establish**

Helicoverpa armigera (EPPO A2)

Source: **Plant Protection Service of Croatia, 1996-07.**

96/164 Quarantine lists for Slovenia

Slovenia has published its new 'Regulation on plant health control of consignments of plants in international trade and on domestic market' in the Official Journal of the Republic of Slovenia in 1996-08-19. It came into force on 1996-09-03. An English version is expected in a near future. This new regulation includes the A1 and A2 quarantine lists for Slovenia which now replace the draft lists published in EPPO RS 95/115.

- **A1 quarantine list**

Fungi
Alternaria mali
Apiosporina morbosa
Atropellis pinicola
Atropellis piniphila
Botryosphaeria laricina
Ceratocystis fagacearum
Ceratocystis fimbriata f.sp. *platani*
Chrysomyxa arctostaphyli
Cochliobolus carbonum
Colletotrichum acutatum
Cronartium spp. (non-European)
Diaporthe vaccinii
Gymnosporangium spp. (non-European)
Inonotus weirii
Melampsora farlowii
Melampsora medusae
Monilinia fructicola
Mycosphaerella dearnessii
Mycosphaerella gibsonii
Mycosphaerella laricis-leptolepidis
Mycosphaerella pini
Mycosphaerella populorum
Ophiostoma wageneri
Phialophora cinerescens

Didymella ligulicola

Phoma andina

Fungi (cont.)

Phoma exigua var. *foveata*

Phyllosticta solitaria

Phymatotrichopsis omnivora

Puccinia pittieriana

Septoria lycopersici var. *malagutii*

Stenocarpella macrospora

Stenocarpella maydis

Thecaphora solani

Tilletia indica

Uromyces transversalis

Venturia nashicola

Phytoplasma

Apricot chlorotic leafroll phytoplasma

Elm phloem necrosis phytoplasma

Grapevine flavescence dorée phytoplasma

Peach rosette phytoplasma

Peach X disease phytoplasma

Peach yellows phytoplasma

Potato purple-top wilt phytoplasma

Potato stolbur phytoplasma

Strawberry witches broom phytoplasma

Bacteria

Burkholderia (*Pseudomonas*) *caryophylli*

Burkholderia (*Pseudomonas*) *solanacearum*

Clavibacter michiganensis subsp. *insidiosus*

Clavibacter michiganensis subsp. *sepedonicus*

Curtobacterium flaccumfaciens pv. *flaccumfaciens*

Erwinia amylovora

Erwinia chrysanthemi

Pantoea stewartii subsp. *stewartii* (*Erwinia stewartii*)

Pseudomonas syringae pv. *persicae*

Pseudomonas syringae pv. *pisi*

Xanthomonas arboricola pv. *corylina* (*X. campestris* pv. *corylina*)

Xanthomonas axonopodis pv. *phaseoli* (*X. campestris* pv. *phaseoli*)

Xanthomonas fragariae

Xanthomonas populi

Xylella fastidiosa

Xylophilus ampelinus

Viruses, viroids and virus-like organisms

American plum line pattern ilarvirus

Apple mosaic ilarvirus in *Rubus*

Beet curly top geminivirus (non-European isolates)

Beet leaf curl rhabdovirus

Beet necrotic yellow vein furovirus

Black raspberry latent ilarvirus

Blueberry leaf mottle nepovirus

Cherry leaf roll nepovirus in *Rubus*

Cherry little cherry disease

Cherry necrotic rusty mottle disease

Viruses, viroids and virus-like organisms (cont.)

Cherry rasp leaf nepovirus
Chrysanthemum stunt viroid
Peach latent mosaic viroid
Peach rosette mosaic nepovirus
Potato spindle tuber viroid
Potato viruses (non-European)
Raspberry leaf curl virus
Strawberry crinkle rhabdovirus
Strawberry latent C disease
Strawberry latent ringspot nepovirus
Strawberry mild yellow edge luteovirus
Strawberry vein banding caulimovirus
Tobacco ringspot nepovirus
Tomato black ring nepovirus
Tomato spotted wilt tospovirus

Insects

Acleris gloverana
Acleris variana
Acrobasis pirivorella
Amauromyza maculosa
Anastrepha spp. (non-European)
Anthonomus bisignifer
Anthonomus quadrigibbus
Anthonomus signatus
Aschistonyx eppoi
Bactrocera spp. (non-European)
Bemisia tabaci
Blitopertha orientalis
Cacoecimorpha pronubana
Carposina niponensis
Ceratitis quinaria
Ceratitis rosa
Choristoneura spp. (non-European)
Conotrachelus nenuphar
Cydia inopinata
Cydia packardi
Cydia prunivora
Dacus ciliatus
Diabrotica barberi
Diabrotica virgifera virgifera
Epichoristodes acerbella
Epitrix cucumeris
Epitrix tuberis
Epochra canadensis
Euphranta japonica
Helicoverpa armigera
Helicoverpa zea
Liriomyza bryoniae
Liriomyza huidobrensis
Liriomyza sativae
Listronotus bonariensis
Margarodes spp. (non-European)
Monochamus spp. (non-European)
Oligonychus perditus
Parasaissetia nigra
Pissodes spp. (non-European)
Popillia japonica
Premnotrypes spp. (Andean)
Rhagoletis spp. (non-European)
Scaphoideus luteolus
Scirtothrips dorsalis
Scolytidae spp. (non-European)
Spodoptera eridania
Spodoptera frugiperda
Spodoptera littoralis
Spodoptera litura
Thrips palmi
Trogoderma granarium

Nematodes

Aphelenchoides besseyi
Bursaphelenchus xylophilus
Ditylenchus destructor
Globodera pallida
Globodera rostochiensis
Heterodera glycines
Meloidogyne chitwoodi
Naccobus aberrans
Xiphinema californicum
Xiphinema rivesi
Xiphinema americanum

Parasitic plants

Arceuthobium spp. (non-European)

- **A2 quarantine list**

Fungi

Cryphonectria parasitica
Mycosphaerella linicola
Phaeoisariopsis griseola
Phytophthora fragariae var . *fragariae*
Phytophthora fragariae var . *rubi*
Puccinia horiana
Puccinia pelargonii-zonalis
Synchytrium endobioticum
Tilletia controversa
Verticillium albo-atrum (hop strains)
Verticillium dahliae (hop strains)

Phytoplasma

Apple proliferation phytoplasma
Grapevine yellows
Pear decline phytoplasma

Bacteria

Clavibacter michiganensis subsp. *michiganensis*
Xanthomonas arboricola pv. *pruni* (*X. campestris* pv. *pruni*)
Xanthomonas vesicatoria (*X. campestris* pv. *vesicatoria*)

Viruses, viroids and virus-like organisms

Arabis mosaic nepovirus
Barley stripe mosaic hordeivirus
Plum pox potyvirus
Rapsberry ringspot nepovirus
Tomato ringspot nepovirus

Insects

Ceratitis capitata
Frankliniella occidentalis
Liriomyza trifolii
Viteus vitifoliae

Nematodes

Radopholus similis
Ditylenchus dipsaci
Xiphinema index

Source: Plant Protection Service of Slovenia, 1996-08.

96/165 First report of *Diabrotica virgifera* in Romania

The EPPO Secretariat has recently been informed by the Plant Protection Service of Romania that *Diabrotica virgifera* (EPPO A2 quarantine pest) was found for the first time in Romania. On the 1996-07-15, 3 adults of *D. virgifera* were caught in one yellow sticky trap, in Nadlac (Arad district) at 300 m from the Hungarian border. So far, no other corn rootworm has been trapped. The monitoring programme on this pest will continue.

Source: Plant Protection Service of Romania, 1996-07.

Additional key words: new record **Computer codes:** DIABVI, RO

96/166 *Ceratitis capitata* is not present in Suriname

The EPPO Secretariat has recently been informed by the Ministry of Agriculture, Animal Husbandry and Fisheries of Suriname that *Ceratitis capitata* (EPPO A2 quarantine pest) is not present in Suriname and has never been found in this country. The EPPO record of *C. capitata* in Suriname appearing in PQR was based on the CABI map where a foot-note stated that 'Foote, B.A. 1980 USDA Tech. Bull. 1600 p 23 records specimen from Suriname'. This record appears to be false. Since August 1986, surveys have been carried out on another fruit fly, *Bactrocera carambolae* (EPPO A1 quarantine pest - see also EPPO RS 96/063). Many fruits have been collected over the years in various locations, and in addition Jackson traps baited with trimedlure (which specifically attracts *C. capitata*) have been located in and around Paramaribo. *Ceratitis capitata* has never been found in the few traps used, or recovered from the extensive number of fruits examined. The official authorities of Suriname conclude that *C. capitata* should be considered as absent from the country.

Source: **Ministry of Agriculture, Animal Husbandry and Fisheries of Suriname, 1996-07.**

Additional key words: denied record **Computer codes:** CERTCA, SR

96/167 *Ips typographus* reported in Canada

Ips typographus (EU Annex II/B) has recently been detected at the port of Montréal, Canada, during a regular survey. Three beetles have been found in traps since 1996-05-07. Action was taken to eliminate any possible infested material in the vicinity of the traps, and several containers and piles of used dunnage were burned. A more intensive programme of survey is being applied. This is the first report of *I. typographus* in Canada.

Source: Hollebone, J. (1996) Spruce bark beetle reported in Canada. **NAPPO Newsletter, 16(3), p 11.**

Additional key words: new record **Computer codes:** IPSXTY, CA

<u>**96/168**</u> <u>First report of *Bursaphelenchus xylophilus* in Oregon (US)</u>

In August and September 1992, wood samples were collected from 7 sawmills in Oregon and California (USA), and tested for <u>*Bursaphelenchus xylophilus*</u> (EPPO A1 quarantine pest). The nematode was not found in any of the <u>*Pseudotsuga menziesii*</u>, <u>*Sequoia*</u> <u>*sempervirens*</u> or <u>*Abies concolor*</u> samples, but was recovered from 8 of the 105 samples of <u>*Pinus ponderosa*</u> from a mill in Oregon. Samples contained an average of 54 nematodes per gram of dry weight. The author noted that this is the first report of <u>*B. xylophilus*</u> in Oregon.

Source: Dwinell, L.D. (1993) Incidence of the pine wood nematode in green coniferous sawn wood in Oregon and California.
Service Research Note - Southeastern Forest Experiment Station, USDA Forest Service, 4 pp.

Additional key words: detailed record **Computer codes:** BURSXY, US

<u>**96/169**</u> <u>First report of *Xylella fastidiosa* in coffee</u>

In Brazil, symptoms characterized by slight stunting, dieback and leaf scorch were observed on coffee (<u>*Coffea arabica*</u> cv. Mundo Novo). Serological tests carried out on extracts of affected plants revealed the presence of <u>*Xylella fastidiosa*</u> (EPPO A1 quarantine pest). Analyses of the cultured bacterium by PCR with primers designed for the general detection of <u>*X. fastidiosa*</u> and specific detection of the <u>*X. fastidiosa*</u> that causes citrus variegated chlorosis gave positive results. This is the first report of <u>*X. fastidiosa*</u> on coffee. In addition, the possibility that the bacterium which causes citrus variegated chlorosis is similar to the one found in coffee is of some concern to citrus growers, as coffee is often planted near citrus in Brazil.

Source: Beretta, M.J.G.; Harakava, R.; Chagas, C.M.; Derrick, K.S.; Barthe, G.A.; Ceccardi, T.L.; Lee, R.F.; Paradela, O.; Sugimori, M.; Ribeiro, I.A. (1996) First report of <u>*Xylella fastidiosa*</u> in coffee.
Plant Disease, 80(7), p 821.

Additional key words: new host plant **Computer codes:** XYLEFA

96/170 Chlorotic streak of *Capsicum annuum*: new disorder induced by *Bemisia tabaci* biotype B

In summer 1994 in California (US), chlorotic streaking on fruit harvested from *Capsicum annuum* plants heavily infested with nymphs of *Bemisia tabaci* biotype B (also referred to *as B. argentifolii*, EPPO A2 quarantine pest) were observed. It has previously been reported that feeding by *Bemisia tabaci* biotype B causes toxicogenic disorders such as irregular ripening of tomato, stem blanching of *Brassica* spp. and silverleaf of squash. The authors have demonstrated that nymphs of *B. tabaci* biotype B were responsible for that disorder, but the number of whitefly nymphs per unit area or the length of feeding time necessary to induce this disorder have not yet been determined.

Source: Summers, C.G.; Estrada, D. (1996) Chlorotic streak of bell pepper: a new toxicogenic disorder induced by feeding of the silverleaf whitefly, *Bemisia argentifolii*.
Plant Disease, 80(7), p 822.

Additional key words: biology **Computer codes:** BEMITA

96/171 Comparison of PCR, ELISA and DNA hybridization for the detection of *Clavibacter michiganensis* subsp. *sepedonicus*

Comparison studies were carried out in USA on the use of PCR, ELISA and DNA hybridization to detect *Clavibacter michiganensis* subsp. *sepedonicus* (EPPO A2 quarantine pest) in crude extracts of field-grown potatoes. The PCR method applied uses a synthetic oligomer which amplifies a fragment of the bacterial plasmid pCS1. In pure bacterial cultures, this PCR method can detect all strains of *C. m*. subsp. *sepedonicus* and has a sensitivity of < 10 CFU. The field material tested corresponded to sections of potato stems that were grown in New York and North Dakota from seed pieces of potato cultivars BelRus (tolerant) and Russet Burbank (susceptible) inoculated with 0, 10^2 or 10^9 CFU of the bacterium and destructively sampled at 35 and 90 days after planting. As overall results, 36.2, 35.8 and 29.1 % of inoculated samples tested positive by PCR, ELISA and DNA hybridization, respectively. The experimental design in the field allow for the evaluation of these tests over a wide range of conditions which can be faced in practice, including a 'best case scenario' (high inoculum, susceptible cultivar, late sampling date) and a 'worse case scenario' (low inoculum, tolerant cultivar, early sampling date). In this study, each test was significantly affected by these three factors (inoculum level, cultivar susceptibility and sampling date). When these factors were taken into account, the general trend for greater frequency of detection with PCR than with the other tests remained. In the best case scenario, *C. m*. subsp. *sepedonicus* was detected in samples to a level approaching 100 %. However, in the worst case scenario, detection was low and, in many cases, the bacterium was not detected at all. The authors pointed out that these low rates of detection are of concern but that it is unclear whether the negative results represented an inability to detect low levels of bacteria or they resulted from a lack of infection following inoculation. None of the control plants (inoculated with buffer only) gave positive result with either PCR or DNA hybridization, whereas ELISA results were highly dependant upon the positive-negative threshold used.

Source: Slack, S.A.; Drennan, J.L.; Westra, A.A.G.; Gudmestad, N.C.; Oleson, A.E. (1996) Comparison of PCR, ELISA, and DNA hybridization for the detection of *Clavibacter michiganensis* subsp. *sepedonicus* in field-grown potatoes.
Plant Disease, 80(5), 519-524.

Additional key words: detection methods **Computer codes:** CORBSE

96/172 Situation of cherry little cherry disease in Germany

In the north of Germany and during the last few years, cherry little cherry disease (EU Annex II/A1 for non-European isolates) has spread and caused increasing yield losses in sweet cherry (*Prunus avium*) orchards. In 1994, diseased cherry trees were observed in 30 orchards, 1200 trees were infected and 760 trees were cut down.

Source: Harms, M.; Büttner, C.; Graf, H.; Schickedanz, F. (1996) [Investigations on the spread of little cherry disease in sweet cherries of north German orchards.]. **Erwerbsobstbau, 38(1), 2-7.**

Additional key words: detailed record **Computer codes:** CRLCXX, DE

96/173 New virus disease of barley in Switzerland

A new virus disease of barley has recently been observed in Switzerland. Unusual symptoms of a yellow disease were seen in 1991 in winter barley in three localities near Friburg, and more recently in two other places near Burgdorf (Canton of Bern). The disease appears in patches and differs from barley yellow dwarf by the absence of dead or severely stunted plants and by a very bright and homogeneous yellows on all organs of the diseased plants. It is not yet possible to evaluate the incidence of this disease on quality and yield of barley crops.
By using electronic microscopy, virus particles were constantly observed in samples from symptomatic plants. Immunological and biological tests were also carried out. The causal agent has been characterized as a nepovirus. Up till now, nepoviruses were not reported as pathogens of Gramineae. This new virus appears to be related to arabis mosaic nepovirus (EU Annex II/A2). Concerns about the virus transmission by nematodes and seeds are raised, but further studies are needed to clarify the issue. The author has proposed to call the disease 'jaunisse de l'orge' (barley yellows).

Source: Gugerli, P. (1996) Identification d'une nouvelle virose de l'orge. Communiqué de presse. Station fédérale de recherches en production végétale de Changins, 1260 Nyon, CH.

Plant Protection Service of Switzerland, 1996-08.

Additional key words: new pest **Computer codes:** CH

96/174 Further studies on the non-transmission of plum pox potyvirus by pollen and seed

Seed and pollen transmission of plum pox potyvirus (EPPO A2 quarantine pest) has been reexamined in Italy, on two highly susceptible apricot cultivars (cvs. Tonda di Costigliole and Bulida). It must be noted that contrasting results have been obtained in this field, as Németh and Kölber (1982) found seed transmission of the virus in some apricot, peach and plum cultivars and other researchers did not find such transmission. ELISA and immunosorbent electron microscopy plus decoration (ISEM-D) were used to detect plum pox potyvirus (PPV) in various apricot tissues. Results of pollen transmission studies showed that pollen collected from infected flowers did not carry the virus, and that it was not able to transmit PPV to seeds and leaves of cross-pollinated plants. In seed transmission studies, it was found that the virus could be detected in mature seeds showing typical symptoms on the stone. In these mature seeds, the virus was observed as short particle fragments and could be detected mainly in the seed coat (the virus was detected only in 1% of cotyledons from cv. Bulida and was not detected in cotyledons from cv. Tonda di Cotigliole). It was nevertheless observed that immature seeds contained intact particles. During seed germination, further degradation of the virus occurred, and in the germinated seeds PPV could no longer be detected. All seedlings grown from infected seeds gave negative results when tested by ELISA over three consecutive years and showed no symptoms on the leaves. The authors felt that there may be two mechanisms of exclusion of PPV from apricot seedlings. Firstly, in almost all cotyledons of infected seeds, PPV could not be detected, and secondly, intact virus particles present in immature seeds are then degraded during germination. In conclusion, these recent studies show that PPV is neither seed nor pollen-transmitted.

Source: Eynard, A.; Roggero, P.; Lenzi, R.; Conti, M., Milne, R.G. (1991) Test for pollen and seed transmission of plum pox virus (Sharka) in two apricot cultivars.
Advances in Horticultural Science, 5(3), 104-106.

Németh, M.; Kölber, M. (1982) Additional evidence on seed transmission of plum pox virus in apricot, peach and plum proved by ELISA.
Acta Horticulturae, 130, 293-300.

Additional key words: epidemiology **Computer codes:** PLPXXX

96/175 Recent studies on peach latent mosaic viroid and American peach mosaic

The EPPO A1 list originally had the entry 'peach mosaic (American)' which remains in Annex IV of EU Directive 77/93. This disease has never been well characterized and its pathogen has never been identified. In the 1980s, several cases of mosaic were intercepted in peach plants imported into France from North America. The pathogen was identified and named as peach latent mosaic viroid. It was noted that the pathogen was originally found only in American peach material and it was proposed that American peach mosaic could be caused by this viroid. In any case, EPPO chose to focus attention on the identified pathogen. The EPPO Secretariat now reviews recent advances concerning peach latent mosaic viroid (EPPO A1 quarantine pest) and American peach mosaic which are summarized below.

1) New detection methods are now available to detect peach latent mosaic viroid in peach material: polyacrylamide gel electrophoresis (Flores *et al*., 1990), PCR (Shamloul *et al*., 1995) and molecular hybridization (Ambrós *et al*., 1995).

2) The geographical distribution is wider than previously thought. By using RT-PCR, Shamloul *et al*. (1995) were able to show that the geographical distribution of peach latent viroid (PLMVd) appears to be much wider than previously reported. The viroid could be detected in germplasm material of peach from the following countries: Austria*, Brazil*, Italy, Japan, Nepal*, Pakistan*, Romania*, USA and former Yugoslavia*.

3) Relationships between peach latent mosaic, and diseases called peach mosaic disease in USA and Mexico, and peach yellow mosaic in Japan have been clarified. It must be recalled that the agents responsible for these similar diseases have been thought by European virologists to be the same. Shamloul *et al*. (1995) demonstrated however, that the agent of peach mosaic disease is not related to peach latent mosaic viroid. In addition, James and Howell (1993) found that the agent of peach mosaic disease reacted with monoclonal antibodies specific to cherry mottle leaf closterovirus, which suggested that these pathogens could be related, although they differ in some aspects of their biology. For example, cherry is a primary host of cherry mottle leaf closterovirus but is not a host for peach mosaic disease, and mite vectors although related are different (*Eriophyes insidiosus* is a vector of peach mosaic disease and *E. inaequalis* is a vector of cherry mottle leaf closterovirus (Oldfield *et al*., 1995)). Concerning the other disease, Ambrós *et al*. (1995) confirmed that the agent causing peach yellow mosaic disease in Japan is indeed peach latent mosaic viroid.

4) Micro-grafting can be a tool to eliminate peach latent mosaic viroid from peach material: Barba *et al*. (1995) found that *in vitro* micro-grafting can eliminate the viroid from infected peach plants. Apex (of 0.3-0.8 mm long) are taken from mother plants and grafted onto healthy seedlings grown *in vitro*. However, the method is not always successful and seems to be influenced by the peach cultivar. The authors felt that a combination of *in vitro* micrografting and temperature treatments could improve the results.

---

*   New records according to the EPPO Secretariat.

Sources:

Ambrós, S.; Desvignes, J.C.; Llácer, G.; Flores, R. (1995) Peach latent mosaic and pear blister canker viroids: detection by molecular hybridization and relationships with specific maladies affecting peach and pear trees.
Acta Horticulturae, 386, 515-521.

Barba, M.; Cupidi, A.; Loreti, S. Faggioli, F.; Martino, L. (1995) *In vitro* micrografting: a technique to eliminate peach latent mosaic viroid from peach.
Acta Horticulturae, 386, 531-535.

Flores, R.; Hernández, C.; Desvignes, J.C.; Llácer, G. (1990) Some properties of the viroid inducing peach latent mosaic disease.
Research in Virology, 141, 109-118.

James, D.; Howell, W.E. (1993) Comparison of cherry mottle leaf virus and a virus associated with peach mosaic disease.
6th International Congress of Plant Pathology, Montréal, Quebec, Canada, p 304.

Oldfield, G.N.; Creamer, R.; Gispert, C.; Osorio, F.; Rodriguez, R.; Perrings, T.M. (1995) Incidence and distribution of peach mosaic and its vector, *Eriophyes insidiosus* (Acari: Eriophyidae) in Mexico.
Plant Disease, 79(2), 186-189.

Shamloul, A.M.; Minafra, A.; Hadidi, A.; Giunchedi, L.; Waterworth, H.E; Allam, E.K. (1995) Peach latent mosaic viroid: nucleotide sequence of an Italian isolate, sensitive detection using RT-PCR and geographic distribution.
Acta Horticulturae, 386, 522-530.

96/176 Peach latent mosaic viroid in commercial peach and nectarine cultivars in USA

Peach latent mosaic viroid (EPPO A1 quarantine pest), originally described in Spain has recently been reported to be present in many parts of the world (see EPPO RS 96/175 which also proposes that this viroid can no longer be considered as the agent of American peach mosaic). In USA, this has prompted a survey of peach and nectarine cultivars collected from California, Colorado, Oregon, Virginia, and Washington. A total of more than 1000 trees from the field, and 291 trees grown in screen houses were tested (dot-blot hybridization method). Over 50 % of the trees were found infected with peach latent mosaic viroid in both peach and nectarine from all states. The authors noted that this is the first report of the viroid in commercial cultivars of peach and nectarine in United States.

Source: Skrzeczkowski, L.E.; Howell, W.E., Mink, G.I. (1996) Occurrence of peach latent mosaic viroid in commercial peach and nectarine cultivars in the U.S.
Plant Disease, 80(7), p 823.

Additional key words: detailed records **Computer codes:** PCLMXX, US

96/177 Tentative EPPO Distribution List for peach latent mosaic viroid

Due to the new records of peach latent mosaic viroid in several countries (see EPPO RS/175 & 176): the following distribution list can be proposed. As further studies are needed on this pathogen to clarify its quarantine status, this list is only an interim one which tries to take into account the fact that peach yellow mosaic disease is due to peach latent mosaic viroid and that peach mosaic disease is due to another pathogen.

EPPO Distribution List: Peach latent mosaic viroid

EPPO region: Algeria (potential EPPO country), Austria, France, Greece, Italy, Morocco (unconfirmed), Romania, Spain, former Yugoslavia.

Asia: China, Japan, Nepal, Pakistan.

Africa: Algeria, Morocco (unconfirmed).

North America: USA (California, Colorado, Oregon, Virginia, Washington).

South America: Brazil.

This distribution list replaces all previous published EPPO Distribution Lists on peach latent mosaic viroid !

Source: **EPPO Secretariat, 1996-09.**

96/178 Tentative distribution list for peach mosaic disease

According to Oldfield et al. (1995), peach mosaic disease has been observed in several States in Mexico (Aguascalientes, Baja California, Chihuahua, Coahuila, Guanajuato, Hidalgo, Michoacan, San Luis Potosi, Sonora, Zacatecas) and in USA. There are apparently no records outside North America.

North America: Mexico (Chihuahua and central highlands), USA (Arizona, Arkansas, California, Colorado, New Mexico, Oklahoma, Texas, Utah).

Source: Oldfield, G.N.; Creamer, R.; Gispert, C.; Osorio, F.; Rodriguez, R.; Perrings, T.M. (1995) Incidence and distribution of peach mosaic and its vector, *Eriophyes insidiosus* (Acari: Eriophyidae) in Mexico. **Plant Disease, 79(2), 186-189.**

96/179 Recommendations of the American Phytopathological Society concerning *Tilletia indica*

In August 1996, the American Phytopathological Society (APS) sent an E-mail message through INTERNET which contained its position statement on the use of quarantines for *Tilletia indica* (EPPO A1 quarantine pest). After reviewing the current knowledge on the biology of the disease, APS made the following recommendations.

'...the APS recommends that the U.S. Department of Agriculture a) sponsor an international meeting of scientists to evaluate the status and strategies for management of the smut and bunt diseases of cereals world-wide, with particular attention to Karnal bunt, b) take a leading role in reevaluation of international policies on the use of quarantines to prevent the movement of cereal smut and bunt fungi, and c) maintain a research effort at some level on smut and bunt diseases of cereals, including Karnal bunt.
For its role, APS will work through the International Society for Plant Pathology to enlist the international community of plant pathologists to a) assess the current and future threat of cereal smut and bunt diseases to cereal-based agriculture world-wide, b) examine the scientific basis for plant quarantines to limit, retard, or prevent the international spread of cereal smut and bunt fungi, and c) examine the scientific basis of plant quarantines for the 21st century.'

Source: **American Phytopathological Society, 1996-08**.

Additional key words: APS recommendations **Computer codes:** NEOVIN, US

96/180 Fourth International Conference on Pests in Agriculture

The fourth international Conference on Pests in Agriculture organized by ANPP (Association Nationale de Protection des Plantes) will take place in 1997-01-06/08, in Montpellier (FR). This conference will include plenary sessions on integrated pest management, and new developments in plant protection and new compounds, and also 21 different specialized sessions (e.g. biological control, resistance, environmental concerns in pest control, nematodes, sucking insects and vectors of plant diseases, lepidoptera, mites, soil pests, stored products, perennial crops, forestry, vegetable and ornamental crops, vertebrates, etc.). A simultaneous French/English translation will be available during the Conference.

For further information, please contact: ANPP
6 Boulevard de la Bastille
75012 Paris - France

Tel: 33 1 43 44 89 64
Fax: 33 1 43 44 29 19

Source: **ANPP, 1996-08**

Additional key words: conference

96/181 Changes in telephone numbers in France

As of 1996-10-18 (at 21.00), France will modify its telephone numbering system. You will have to dial the access code for France (33), followed by a 9-digit number. However, there will be no fundamental change for numbers in Paris and the Paris region. For other regions in France, an extra number will have to be added before the previous 8-digit number: 2 for the North West, 3 for the North East, 4 for the South East and Corsica, 5 for the South West.

To call EPPO, you will still have to dial:

Phone: (33) 1 45 20 77 94
Fax: (33) 1 42 24 89 43

Source: **France Telecom, 1996-07.**