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96/086 Name changes for bacteria

Recent taxonomic revisions of phytopathogenic bacteria have led to several name changes. The new names for bacteria of quarantine importance are given below (previous names are indicated in brackets):

Burkholderia caryophylli (*Pseudomonas caryophylli*)
Burkholderia solanacearum (*Pseudomonas solanacearum*)
Pantoea stewartii* subsp. *stewartii (*Erwinia stewartii*)
Xanthomonas arboricola* pv. *corylina (*Xanthomonas campestris* pv. *corylina*)
Xanthomonas arboricola* pv. *pruni (*Xanthomonas campestris* pv. *pruni*)
Xanthomonas axonopodis* pv. *citri (*Xanthomonas campestris* pv. *citri*)
Xanthomonas axonopodis* pv. *dieffenbachiae (*Xanthomonas campestris* pv. *dieffenbachiae*)
Xanthomonas axonopodis* pv. *phaseoli (*Xanthomonas campestris* pv. *phaseoli*)
Xanthomonas translucens* pv. *translucens (*Xanthomonas campestris* pv. *translucens*)
Xanthomonas vesicatoria (*Xanthomonas campestris* pv. *vesicatoria*)

Sources: Yabuuchi, E.; Kosako, Y.; Oyaizu, H.; Yano, I.; Hotta, H.; Hashimoto, Y.; Ezaki, T.; Arakawa, M. (1992) Proposal of *Burkholderia* gen. nov. and transfer of seven species of the genus *Pseudomonas* homology group II to the new genus, with the type species *Burkholderia cepacia* (Palleroni and Holmes 1981) com. nov. **Microbiology and Immunology, 36(12), 1251-1275.**

Mergaert, J.; Verdonck, L.; Kersters, K. (1993) Transfer of *Erwinia ananas* (synonym, *Erwinia uredovora*) and *Erwinia stewartii* to the genus *Pantoea* emend. as *Pantoea ananas* (Serrano 1928) comb. nov. and *Pantoea stewartii* (Smith 1898) comb. nov., respectively, and description of *Pantoea stewartii* subsp. *indologenes* subsp. nov. **International Journal of Systematic Bacteriology, 43(1), 162-173.**

Vauterin, L.; Hoste, B.; Kersters, K.; Swings, J. (1995) Reclassification of *Xanthomonas*. **International Journal of Systematic Bacteriology, 45(3), 472-489.**

Additional key words: taxonomy

Computer codes: ERWICH, PSDMCA, PSDMSO, XANTCI, XANTCY, XANTPR, XANTPH, XANTDF, XANTTR

96/087 New data on pests of quarantine importance

By browsing through the literature, the EPPO Secretariat has noted the following items of interest concerning several insect pests of quarantine importance.

New distribution records

During surveys carried out in fruit orchards in Côte d'Ivoire, *Ceratitis cosyra* (EPPO A1 quarantine pest - new record) and *C. annonae* were described as the main pests of guava. Review of Agricultural Entomology, 84(4), p 436 (3764).

Helicoverpa armigera (EPPO A2 quarantine pest) is reported in western Mecklenburg, Germany. Review of Agricultural Entomology, 83(11), p 1196 (10305).

Liriomyza huidobrensis (EPPO A2 quarantine pest) is recorded for the first time from Asia. It was found on tomatoes at Kampur, in India in April 1994, and on cotton in Thailand in June 1994. Review of Agricultural Entomology, 84(3), p 257 (2266).

Detailed records

Surveys on *Bactrocera* species were carried out in Nauru, in December 1993. The main species trapped were *Bactrocera dorsalis* (EPPO A1 quarantine pest) and *B. frauenfeldi*. Smaller numbers of *B. cucurbitae* (EPPO A1 quarantine pest) and *B. xanthodes* were caught. This confirms earlier reports (EPPO RS 93/037) of these species in Nauru. Review of Agricultural Entomology, 83(11), p 1217 (10490).

In 1987, serious damage of *Carposina niponensis* (EPPO A1 quarantine pest) on plums was reported for the first time in the Province of Fujian, China. Review of Agricultural Entomology, 84(2), p 206 (1789).

Frankliniella occidentalis (EPPO A2 quarantine pest) was found on chrysanthemums in Piendamo (Cauca district), Columbia. Review of Agricultural Entomology, 84(4), p 455 (3912).

Leptinotarsa decemlineata (EPPO A2 quarantine pest) is present in Croatia. Review of Agricultural Entomology, 84(3), p 308 (2686).

Leptinotarsa decemlineata (EPPO A2 quarantine pest) is present in Serbia. Review of Agricultural Entomology, 84(3), p 308 (2687).

Phoracantha semipunctata (EPPO A2 quarantine pest) is reported for the first time from the São Paulo State in Brazil. The pest was found in November 1994 in Córrego Rico on *Eucalyptus citriodora*. Review of Agricultural Entomology, 84(2), p 218 (1899).

Quadraspidiotus perniciosus (EPPO A2 quarantine pest) is present in Tennessee (US). Review of Agricultural Entomology, 83(9), p 1011 (8751).

Scirtothrips dorsalis (EPPO A1 quarantine pest) is recorded as a common pest in tea gardens in Guangdong, China. Review of Agricultural Entomology, 83(8), p 908 (7883).

In Baleares, *Thaumetopoea pityocampa* (EU Annex II/B) is present in Mallorca (new detailed record) and Menorca. Review of Agricultural Entomology, 84(4), p 383 (3357).

New host records

Anastrepha fraterculus (EPPO A1 quarantine pest) was found for the first time in kiwi fruit (*Actinidia chinensis*) orchards in Santa Catarina, Brazil. Review of Agricultural Entomology, 83(8), p 905 (7856).

Source: **EPPO Secretariat, 1996-04**

Additional key words: new records, detailed records

96/088 Information of pests and diseases of quarantine importance in Slovakia

The EPPO Secretariat has received information on the phytosanitary status of some pests and diseases of quarantine importance in Slovakia for 1994 and 1995. Many of these pests were previously recorded in the former Czechoslovakia, but details were lacking on their occurrence in Slovakia, the EPPO Secretariat have extracted new and detailed records, compared to what was mentioned in the EPPO data base (PQR):

- **Present and widespread in Slovakia**

Frankliniella occidentalis (EPPO A2)
Gremmeniella abietina (EU Annex II/B)
Hyphantria cunea (EPPO A2)
Puccinia pelargonii-zonalis (EPPO A2)
Xanthomonas vesicatoria [*Xanthomonas campestris* pv. *vesicatoria*] (EPPO A2)

- **Present with a restricted distribution**

Clavibacter michiganensis subsp. *insidiosus* (EPPO A2)
Didymella ligulicola (EPPO A2)
Ditylenchus destructor (EU Annex II/A2)
Globodera pallida (EPPO A2)
Globodera rostochiensis (EPPO A2)
Helicoverpa armigera (EPPO A2)
Hypoxylon mammatum (EPPO A2)
Ips sexdentatus (EU Annex II/B)
Liriomyza trifolii (EPPO A2)
Pear decline phytoplasma (EPPO A2)
Phytophthora fragariae var. *fragariae* (EPPO A2)
Plasmopara halstedii (EPPO A2)
Potato stolbur phytoplasma (EPPO A2)
Pseudomonas syringae pv. *pisi* (EPPO A2)
Puccinia horiana (EPPO A2)
Quadraspidiotus perniciosus (EPPO A2)
Synchytrium endobioticum (EPPO A2)
Tomato ringspot nepovirus (EPPO A2)
Xanthomonas axonopodis pv. *phaseoli* [*Xanthomonas campestris* pv. *phaseoli*] (EPPO A2)
Xanthomonas populi (EPPO A2)

- **Present few reports**

Ceratocystis fimbriata f. sp. *platani* (EPPO A2)
Cherry leaf roll nepovirus (EPPO A2)
Phoma exigua var. *foveata* (EPPO A2)
Strawberry vein banding caulimovirus (EPPO A2)

- **Eradicated**

Beet leaf curl rhabdovirus (EPPO A2)

- **Present, without details**

Aphelenchoides besseyi (EPPO A2)
Barley stripe mosaic hordeivirus (EPPO A2)

Bemisia tabaci (EPPO A2)
Ips duplicatus (EU Annex II/B)
Strawberry mild yellow edge luteovirus (EU Annex II/A2)
Verticillium albo-atrum (hop & lucerne strains) (EPPO A2)
Verticillium dahliae (hop strains) (EPPO A2)

Source: Plant Protection Service of Slovakia

96/089 Czech Republic: occurrence of *Liriomyza huidobrensis* and eradication of *Helicoverpa armigera*

1) *Liriomyza huidobrensis* (EPPO A2 quarantine pest) was found in Czech Republic for the first time in 1993 in some glasshouses.

2) *Helicoverpa armigera* (EPPO A2 quarantine pest) was reported in glasshouses in southern Moravia, Czech Republic, in late summer 1994. Larvae were first found on carnation and then on tomatoes in mid-September. The outbreak was then eradicated.

Source: Marek, J.; Navratilova (1995) [A new glasshouse pest, *Helicoverpa armigera* (Noctuidae, Lepidoptera).]
Ochrana Rostlin, 31(2), 143-147.

Plant Protection Service of Czech Republic.

Additional key words: new record **Computer codes:** HELIAR, LIRIHU

96/090 Situation of *Burkholderia* (*Pseudomonas*) *solanacearum* in Cyprus and Morocco

The EPPO Secretariat has recently been informed of the situation of *Burkholderia* (*Pseudomonas*) *solanacearum* (EPPO A2 quarantine pest) in Cyprus and Morocco, by the Plant Protection Services of the two countries. These data have to be added to the answers given by the EPPO member governments on the situation of brown rot in Europe (EPPO RS 96/002 and RS 96/022).

- **Cyprus**: the southern part of the island can be considered as free from *B. solanacearum* as mentioned already in EPPO RS 96/002, but the official

authorities stress that they can only speak for the southern part of the island and not for the northern part.

- **Morocco**: Although there have been some old records of *B. solanacearum* on tomato and *Capsicum* made in the 1940s, since then the bacterium has never been found on these crops or on potatoes. Therefore, *B. solanacearum* should be considered as absent from Morocco.

Source: **Plant Protection Service of Cyprus, 1996-04.**
Plant Protection Service of Morocco, 1996-04.

Additional key words: detailed record, denied record **Computer codes:** PSDMSO, CY, MO

96/091 First report of *Thrips palmi* in Brazil

Thrips palmi (EPPO A1 quarantine pest) is reported for the first time in São Paulo, Brazil. It was found in several places causing damage to aubergines, *Capsicum,* chrysanthemums, potatoes and tomatoes.

Source: Monteiro, R.C.; Zucchi, R.A.; Mound, L.A. (1995) Record of *Thrips palmi* Karny, 1925 (Thysanoptera, Thripidae) in the state of São Paulo, Brazil.
Revista de Agricultura (Piracicaba), 70(1), 53-55.

Additional key words: new record **Computer codes:** THRIPL, BR

96/092 *Anastrepha* species trapped in tropical orchards in Mexico

Studies on *Anastrepha* species were carried out in five orchards of different fruit species in the Soconusco region in Chiapas, Mexico. The main host plants were orange (*Citrus sinensis*), guava (*Psidium guajava*; lowland and highland guavas), sapodilla (*Achras zapota*), chalum (*Inga micheliana*). Adult population fluctuations were studied by using McPhail traps. Ten *Anastrepha* species were trapped in the five orchards during approximately a four year period: *Anastrepha bezzi*, *A. chiclayae*, *A. distincta*, *A. fraterculus* (EPPO A1 quarantine pest), *A. leptozona*, *A. ludens* (EPPO A1 quarantine pest), *A. obliqua* (EPPO A1 quarantine pest), *A. serpentina*, *A. striata* and an *Anastrepha* sp. Species predominance varied markedly

in each orchard, with 1 or 2 predominant species representing 43 to 86 % of the *Anastrepha* individuals. In the sapodilla orchard, 86.61 % of all individuals captured were *A. serpentina*, whereas in the orange and the *Inga* orchards, 76.23 and 66.23 % of all individuals captured were *A. ludens* and *A. distincta*, respectively. In the case of the guava orchards, the pattern was more balanced. In the lowland orchard, 2 species were mainly found: *A. fraterculus** (44.31 %) and *A. obliqua* (43.59 %). In the highland orchard, there were 3 species: *A. fraterculus* (48.50 %), *A. distincta* (20.32 %), and *A. ludens* (19.36 %). Adult populations varied strongly between and within orchards. In all cases, peak population numbers were recorded shortly after the period of maximum host fruit availability. The authors felt that fruit fly populations in tropical orchards are more influenced by the fruiting phenology and availability of host fruit than weather conditions. The authors also noted that without large availability of the preferred host fruit, populations can remain at very low or undetectable numbers for long periods (in some cases up to 7 months). They stressed that this may have significant implications for pest management or eradication. In particular, they pointed out that to declare eradication of a given species, one should wait for the next fruiting season during which the species concerned should not be detected.

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*** These trapping results confirm earlier reports of *A. fraterculus* in Mexico. However, it must be recalled that in 1992, the Mexican Plant Protection Service had declared that *A. fraterculus* records were erroneous arising from confusion with *A. obliqua*.**

Source: Celedonio-Hurtado, H.; Aluja, M.; Liedo, P. (1995) Adult population fluctuations of *Anastrepha* species (Diptera: Tephritidae) in tropical orchard habitats of Chiapas, Mexico.
Environmental Entomology, 24(4), 861-869.

Additional key words: new record **Computer codes:** ANSTFR, ANSTLU, ANSTOB, MX

96/093 *Xanthomonas arboricola* pv. *pruni* (*X. campestris* pv. *pruni*) found in peach orchards in Lazio (IT)

Xanthomonas arboricola pv. *pruni* (*Xanthomonas campestris* pv. *pruni* - EPPO A2 quarantine pest) is reported for the first time from peach orchards in Lazio, Italy. Symptoms were first noticed in July 1993, and the causal agent was identified by means of biochemical and pathogenicity tests. Peach cultivars Elegant Lady and Lizbeth were found particularly susceptible to *X. arboricola* pv. *pruni*.

Source: Scortichini, M. (1994) [Appearance of *Xanthomonas campestris* pv. *pruni* in peach orchards in Latium].
Rivista di Frutticoltura e di Ortofloricoltura, 56(10), 67-68

Additional key words: detailed record **Computer codes:** XANTPR, IT

96/094 Detection of arabis mosaic nepovirus in Austria

In Austria, in 1993, a survey was carried out in the Burgenland wine-growing region on the occurrence of grapevine fanleaf nepovirus, arabis mosaic nepovirus (EU Annex II/A2), grapevine leafroll-associated closterovirus type I and type III. Samples were tested by DAS ELISA. In Central Burgenland, only grapevine leafroll-associated closterovirus type I and type III were found. They were also predominant in other parts of Burgenland. Grapevine leafroll-associated closterovirus, arabis mosaic nepovirus and grapevine fanleaf were found in the south of Burgenland, at levels of approximately 2 to 3.5 %. The EPPO Secretariat had previously no information on the occurrence of arabis mosaic nepovirus in Austria.

Source: Flak, W.; Gangl, H. (1994) [Rough mapping of grape virosis infection in the Burgenland wine growing region by means of ELISA].
Mitteilungen Klosterneuburg, Rebe und Wein, Obstbau und Früchteverwertung, 44(5), 163-167.

Additional key words: new record **Computer codes:** ARMXXX, AT

96/095 Survey on grapevine viruses in Canada

A survey has recently been carried out in Canada on the following grapevine viruses : arabis mosaic nepovirus (EU Annex II/A2), grapevine fanleaf nepovirus and grapevine leafroll associated closteroviruses I and III. More than 12,000 acres were surveyed, accounting for over 82 % of the total grapevine acreage in Canada. The results showed that all these viruses were detected in the grape-producing regions in British Columbia, Ontario, Quebec and Nova Scotia. These viruses will no longer be considered as quarantine pests, and the industry now supports a certification program.

Source: Anonymous (1996) Canadian grapevine survey.
NAPPO Newsletter, 16(2), p 10.

Additional key words: detailed record **Computer codes:** ARMXXX, CA

96/096 Introduction of the Asiatic palm weevil, *Rhynchophorus ferrugineus* into Spain

The Asiatic palm weevil, *Rhynchophorus ferrugineus* was found for the first time in Spain, in the coastal region of Granada, on *Phoenix canariensis* material collected between July 1994 and December 1995. The first damage were in fact seen in 1993, in Motril and Almuñecar. Severely attacked palm trees showed a total loss of the palms and rotting of the trunk which lead to the death of the tree. *R. ferrugineus* occurs in Asia and Oceania. Adults are big reddish-brown weevils (2.5 to 5 cm long). Females lay eggs in the crown of palm trees (200-800 eggs/female), larvae then penetrate the crown and later to most parts of the upper trunk, making tunnels of up to 1 m long. Damaged tissues become necrotic and decay rapidly. Pupation takes place in a cocoon under the bark. The life cycle can last 3-6 months. The main host plants are *Cocos nucifera* and *Elais guineensis*. The insect can also attack other Arecaceae such as *Phoenix dactylifera*, *Metroxylon sagu*, *Phoenix sylvestris*.
The authors stressed that, in Spain, palm trees are important especially for ornamental purposes. In addition, there is a 537 ha production of date palm trees, essentially in the Province of Alicante (98 % of it) and also in Andalucia. They felt that *R. ferrugineus* could present a serious threat for Spain and chemical treatments are applied to prevent any further spread.

Source: Barranco, P.; de la Peña, J.; Cabello, T. (1996) El picudo rojo de las palmeras, *Rhynchophorus ferrugineus* (Olivier), nueva plaga en Europa. (Coleoptera, Curculionidae).
Phytoma España, no. 67, 36-40.

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

96/097 First report of *Arceuthobium americanum* on *Abies lasiocarpa*

Arceuthobium americanum (EPPO A1 quarantine pest) was observed for the first time on subalpine firs (*Abies lasiocarpa*) which were growing near heavily infected lodgepole pines (*Pinus contorta*), in Washington State (USA). Infected branches were usually distinctly swollen, formed dense witches' brooms, and produced few or no mistletoe shoots. Mistletoe shoots produced on subalpine fir are similar to those produced on lodgepole pine. This is the first report of *A. americanum* on *Abies lasiocarpa* which should however be considered as a rare host.

Source: Mathiasen, R.L.; Beatty, J.S.; Hildebrand, D.M. (1996) First report of lodgepole pine dwarf mistletoe on subalpine fir.
Plant Disease, 80(3), p 342.

Additional key words: new host plant **Computer codes:** ABILA, AREAMX, US

96/098 First report of Andean potato latent tymovirus in *Ullucus tuberosus*

Ulluco (*Ullucus tuberosus*) is an Andean tuber crop often cultivated in close association with native potato cultivars. An isolate of Andean potato latent tymovirus (EPPO A1 quarantine pest) has been detected in several ulluco accessions, originating from Peru, Bolivia, Colombia and Argentine and maintained in *in vitro* conditions at the International Potato Center. This is the first report of Andean potato latent tymovirus in *Ullucus tuberosus*. The authors felt that this gives support to the proposition that plant viruses can adapt to new hosts subsequent to long-term associations.

Source: Lizzárraga, C.; Santa Cruz, M.; Jayasinghe, U. (1996) Detection of an isolate of Andean potato latent virus in Ulluco (*Ullucus tuberosus*). **Plant Disease, 80(3), p 344.**

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

96/099 *Puccinia horiana* in North America

A NAPPO - Agriculture and Agri-Food Canada workshop on *Puccinia horiana* (EPPO A2 quarantine pest) took place in Ottawa, Ontario (CA), on 1994-09-15/16. This disease raises much concern in this region of the world as over the last years there have been several incidents reported from Canada, Mexico and USA.

- Canada: *P. horiana* was observed in 1990 in one glasshouse in Ontario (Niagara Falls region) and was successfully eradicated. In 1993-94, the disease was reported from hobbyist gardens in British Columbia and an eradication programme was immediately set up.

- Mexico: *P. horiana* was detected in 1993 in the State of Mexico and later in Distrito Federal and Morelos. The disease was eradicated from Distrito Federal and Morelos, but the eradication programme continued in 1994 in the State of Mexico.

- USA: most of the incidents reported were in fact small and limited to private gardens, and the disease was successfully eradicated (e.g. in New Jersey, Oregon, Pennsylvania, and Washington). But in 1991, intrusion of *P. horiana* into commercial production was reported in California in Santa Barbara County. In 1992, it was reported from Santa Clara and Santa Cruz Counties. *P. horiana* was successfully eradicated from Southern California in 1993 but this is counterbalanced by repeated incidents in some commercial nurseries in Santa Clara valley and the threat of establishment in central coast areas. In California, *P. horiana* is submitted to an eradication programme. In its 1995 Annual Report, NAPPO mentions that approximately 750 chrysanthemum plants were found infected in an Oregon nursery, in September 1995 and two additional detections were made in Washington nurseries.

Source: Chrysanthemum White Rust. Proceedings of the NAPPO - Agriculture and Agri-Food Canada Chrysanthemum White Rust Workshop. Ottawa, Ontario (CA), 1994-09-15/16.
NAPPO Bulletin no. 14, December 1995, 82 pp.

NAPPO Annual Report 1995, 40 pp.

Additional key words: detailed records **Computer codes:** PUCCHN, CA, MX, US

96/100 Genetic studies of *Erwinia amylovora* strains isolated from fruit trees and *Rubus* spp.

As mentioned in the EPPO RS 95/056, *Erwinia amylovora* (EPPO A2 quarantine pest) has been isolated from diseased *Rubus* in USA (Illinois, Maine, North Carolina, Ohio, Wisconsin). It appeared that strains of the bacterium isolated from *Rubus* can only infect *Rubus*, and that strains from other rosaceous plants are not pathogenic to *Rubus*. However, some doubts have been expressed as the pathogen has not been reported elsewhere on this genus. Nevertheless, genetic studies have been carried out in United States on 189 strains of *E. amylovora* isolated from different hosts (fruit trees and *Rubus*), from North America and New Zealand. Two polymerase chain reaction (PCR)-based techniques have been used. Results showed that strains of *E. amylovora* isolated from fruit trees are genetically homogeneous (strains from *Rubus* are more heterogeneous) and can be distinguished from strains isolated from *Rubus* species. The authors felt that these results corroborate previous conclusions based on pathogenicity tests that *E. amylovora* consists of at least two distinct subgroups.

Source: McManus, P.S.; Jones, A.L. (1995) Genetic fingerprinting of *Erwinia amylovora* strains isolated from tree-fruit crops and *Rubus* spp. **Phytopathology, 85(12), 1547-1553**.

96/101 PCR method to identify *Xanthomonas axonopodis* pv. *citri* (*X. campestris* pv. *citri*)

A PCR method was developed to identify *Xanthomonas axonopodis* pv. *citri* (*X. campestris* pv. *citri* - EPPO A1 quarantine pest). This method is based on the amplification by nested-PCR of a region within plasmid DNA which is highly conserved in *X. axonopodis* pv. *citri*. A colorimetric procedure (DIANA: detection of immobilized amplified nucleic acids) is applied to detect amplification products in a microtiter plate. With this method, amplification was obtained with all strains of *X. axonopodis* pv. *citri* and four out of six strains of *X. axonopodis* pv. *aurantifolii*, but not with other Xanthomonads (except *X. axonopodis* pv. *vignicola* and one strain isolated from *Feronia elephantiacum*). No amplification products were obtained with *X. axonopodis* pv. *citrumelo*. Extracts from citrus tissues initially inhibited PCR reaction, as well as copper oxychloride (used as a chemical treatment), but the use of immunocapture reduces these negative effects and improves the sensitivity of the test by 100 fold. The authors concluded that considering the sensitivity, specificity and speed of this test, it could be widely used both for quarantine and certification purposes.

Source: Hartung, J.S.; Pruvost, O.P.; Villemot, I.; Alvarez, A. (1996) Rapid and sensitive colorimetric detection of *Xanthomonas axonopodis* pv. *citri* by immunocapture and a nested-polymerase chain reaction assay.
Phytopathology, 86(1), 95-101.

Additional key words: new detection method **Computer codes:** XANTCI

96/102 PCR method to identify *Tilletia indica*

A PCR method has been developed in USA to identify *Tilletia indica* (EPPO A1 quarantine pest), the causal agent of Karnal bunt of wheat. The authors pointed out that a major problem encountered with the identification of *T. indica* in wheat shipment is the possible confusion with other *Tilletia* species, and in particular with *T. barclayana* (kernel smut of rice) which produces very similar teliospores. A set a *T. indica*-specific primers were used in this study, and their specificity was evaluated by testing 78 isolates of *T. indica* and 79 isolates of other *Tilletia* species (*T. barclayana*, *T. controversa*, *T. tritici*, *T. laevis*, *T. fusca*). By using teliospores germinated from a seed wash extraction method of infested grain, the authors demonstrated that *T. indica* can be reliably detected at an infestation level of 5 teliospores per 50 g of grain sample. The authors concluded that their method could be very useful in international trade to detect infected seed lots.

Source: Smith, O.P.; Peterson, G.L.; Beck, R.J.; Schaad, N.W.; Bonde, M.R. (1996) Development of a PCR-based method for identification of *Tilletia indica*, causal agent of Karnal bunt of wheat.
Phytopathology, 86(1), 115-122.

Additional key words: new detection method **Computer codes:** NEOVIN

96/103 Workshop on *Diabrotica virgifera*, Hódmezövásárhely (HU), 1996-03-19

A Workshop on *Diabrotica virgifera* (EPPO A2 quarantine pest) took place in Hódmezövásárhely (HU), in 1996-03-19. Participants from Yugoslavia, Croatia and Hungary agreed that the monitoring of *D. virgifera* should continue in 1996 in the countries concerned by using the same method. In 1996, sex-pheromone traps (produced by the Research Institute for Plant Protection in Budapest, HU) and cucurbitacin traps will be used in parallel. Trapping will start at the beginning of July in Yugoslavia, Croatia, Hungary and probably also in Romania and will go on for 3 months. In addition to trapping, visual observations will be made in maize fields.

Source: **Hungarian Plant Protection Service, 1996-04.**

96/104 EPPO Distribution List for *Erwinia chrysanthemi*

Due to the modifications made by several countries during the validation of geographical data, the geographical distribution of *Erwinia chrysanthemi* (EPPO A2 quarantine pest) can be modified as follows.

EPPO Distribution List: *Erwinia chrysanthemi*

E. chrysanthemi has a world-wide distribution. Any kind of strain may occur in temperate countries, where outdoor and glasshouse plants are produced.

EPPO region: Algeria (potential EPPO country), Austria (locally), Belarus, Belgium (locally), Denmark, Egypt (potential EPPO country), Finland (found in the past but did not establish), France (locally), Germany (locally), Greece (locally), Hungary (locally), Israel, Italy (locally), Netherlands (locally), Norway (found in the past but did not establish), Poland (locally), Portugal (locally), Romania (locally), Russia (European part), Spain (locally), Sweden (locally), Switzerland (locally), UK (locally), Yugoslavia.

Asia: Bangladesh (unconfirmed), China, India, Iran, Israel, Japan (few reports), Korea Democratic People's Republic, Korea Republic, Malaysia (unconfirmed), Nepal, Philippines, Sri Lanka, Taiwan (locally).

Africa: Algeria, Comoros, Côte d'Ivoire, Congo, Egypt, Réunion, Sudan, South Africa, Zimbabwe (unconfirmed).

North America: USA.

Central America and Caribbean: Aruba, Costa Rica, Cuba, Guadeloupe, Guatemala, Haiti, Honduras, Jamaica, Martinique, Panama, Puerto Rico, St. Lucia.

South America: Brazil, Colombia, Ecuador (few reports), French Guiana, Guyana, Peru, Venezuela.

Oceania: Australia, Cook Islands, New Zealand (locally), Papua New Guinea, Solomon Islands.

This distribution list replaces all previous published EPPO Distribution Lists on *Erwinia chrysanthemi*!

Source: EPPO Secretariat, 1996-03.

95/105 EPPO report on selected intercepted consignments: last two months of 1995

The EPPO Secretariat has gathered the intercepted consignments received at the beginning of 1996 but which concerned the last two months of 1995, from the following countries: Austria, Cyprus, France, Germany, Italy, United Kingdom. When a consignment has been re-exported and the country of origin is unknown, the re-exporting country is indicated in brackets. In addition, the EPPO Secretariat has selected interceptions made because of the presence of harmful organisms, other interceptions due to prohibited commodities, missing or invalid certificates are not indicated here. It must be pointed out that these data are only partial, as many EPPO countries have not yet sent their interceptions for 1995; therefore no statistics can be made out of this ! EPPO will continue to publish yearly reports containing all intercepted consignments received at the headquarters of the Organization.

	Consignment	**Type of commodity**	**Country of Origin**	**Country of destination**	**nb***
Bemisia tabaci	*Gypsophila*	Cut flowers	Israel	France	1
	Leafy vegetables	Cut flo. & branches	Côte d"Ivoire	France	2
Helicoverpa armigera	*Dianthus*	Cut flowers	Morocco	France	1
***Liriomyza* sp.**	*Gypsophila*	Cut flowers	Israel	France	1
Plum pox potyvirus	*Prunus cerasifera*	Plant for planting	Hungary	France	1
Thrips palmi	*Cucurbita maxima*	Fruits & Vegetables	Mauritius	France	3
	Solanum melongena	Fruits & Vegetables	Mauritius	France	1

- **Fruit flies intercepted**

	Consignment	**Type of commodity**	**Country of Origin**	**Country of destination**	**nb***
***Anastrepha* sp.**	*Psidium guajava*	Fruits	Brazil	France	2
Bactrocera cucurbitae	Cucurbitaceae	Vegetables	Mauritius	France	1
	Trichosanthes cucumerina	Vegetables	Mauritius	France	2
***Bactrocera* sp.**	*Citrus nobilis*	Fruits	Australia	France	2
***Ceratitis* sp.**	*Mangifera indica*	Fruits	Kenya	France	1

- **Wood and wood products intercepted**

	Consignment	Country of Origin	Country of destination	nb*
Ips typographus	Conifer dunnage	Poland	United Kingdom	1
	Conifer dunnage	Sweden	United Kingdom	1
	Picea dunnage	Netherlands	United Kingdom	1
	Picea dunnage	Latvia	United Kingdom	4
	Pinus/Picea dunnage	Germany	United Kingdom	2
	Pinus/Picea dunnage	Romania	United Kingdom	1
Insect activity	Pinus/Picea (Wood with bark)	Latvia	United Kingdom	1

* number of consignments.

Source: EPPO Secretariat, 1996-04.