EPPO

Reporting

Service

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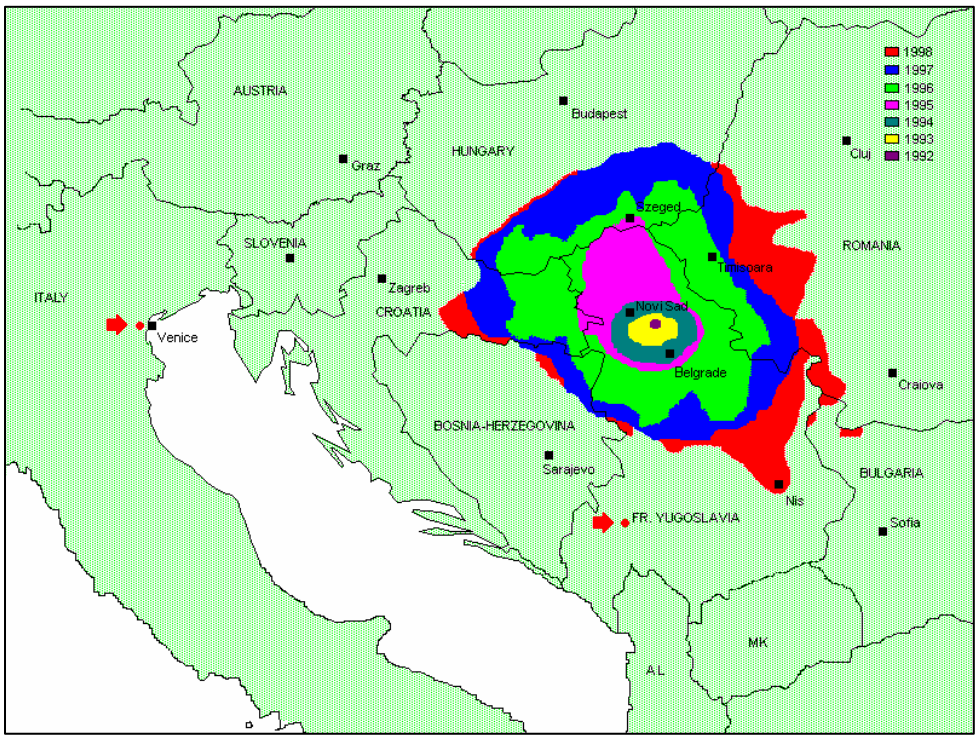
EPPO *Reporting Service*

99/020 Spread of *Diabrotica virgifera* in Europe

The situation of *Diabrotica virgifera* (EPPO A2 quarantine pest) in Europe was presented in detail in EPPO RS 98/198, after the meeting of the ad hoc Panel on *D. virgifera* held jointly with the IWGO International Workshop (Roga✶ka Slatina, SI, 1998-11-27/28). The spread of *D. virgifera* is illustrated in the map below. It can be recalled that, *D. virgifera* continues to spread in Central Europe, but at a slower pace than what was observed in previous years. The numbers of insects trapped in infested countries indicated that populations densities were increasing, however no economic damage on maize has yet been seen (except in the parts of Serbia where the pest was originally found). New features in the spread of *D. virgifera* are its first records in Bulgaria and Montenegro, and indeed the capture of 7 adults in Italy, near Venice airport (see EPPO RS 98/161) which represents a 'major jump' of the insect towards western European countries. The map below will soon be presented on the EPPO Web page (www.eppo.org) on *Diabrotica virgifera* which is currently being prepared.

Spread of *Diabrotica virgifera* in Europe from 1992 to 1998 (by GY BARNA and C.R. EDWARDS, based on data from Igrc-Barci◈, Festi◈, Furlan, Ilovai, Ivanova, Maceljski, Princzinger, Siv◈ev, and Vonica).



Source: **EPPO Secretariat, 1999-01.**

Additional key words: geographical distribution , map **Computer codes:** DIABVI

99/021 *Globodera pallida* and *Helicoverpa armigera* are absent from Slovakia

The NPPO of Slovakia has recently informed the EPPO Secretariat of the absence of *Helicoverpa armigera* and *Globodera pallida*.

In PQR (the EPPO database on quarantine pests), *Globodera rostochiensis* and *G. pallida* (EPPO A2 quarantine pests) were considered as having a restricted distribution in Slovakia. Recent analysis of samples of nematode cysts have showed that only *G. rostochiensis* occurs in Slovakia (with a limited distribution). The Plant Protection Service concluded that *G. pallida* should be considered as absent (the record in PQR will be modified accordingly).

Some adults of *Helicoverpa armigera* (EPPO A2 quarantine pest) were caught in August 1996 into a light trap in Nová Trstená (district of Komárno, region of Nitra). A survey was carried out and damage was found on tomatoes and maize ears in some districts of western Slovakia. However since 1996, *H. armigera* has not been seen again. The Plant Protection Service noted that it should be considered 'as absent, not established'.

Source: **NPPO of Slovakia, 1998-12.**

Additional key words: absence **Computer codes:** HELIAR, HETDPA, HETDRO, SK

99/022 First report of impatiens necrotic spot tospovirus under glasshouse in UK

In United Kingdom, a survey has been made in commercial protected crops and samples suspected of being infected by tomato spotted wilt or impatiens necrotic spot tospoviruses (both EPPO A2 quarantine pests) were tested. A suspect sample was taken from a *Senecio cruentus* plant showing necrotic lesions, vein-clearing and stunting. This plant was grown in a nursery in East Sussex (England), where *Frankliniella occidentalis* (EPPO A2 quarantine pest) also occurred. ELISA and molecular tests (RT-PCR, comparison of nucleotide sequences) confirmed the presence of impatiens necrotic spot tospovirus (INSV) in this sample. This is the first report of INSV in UK.

Source: Weekes, R.J.; Barker, I.; Spence, N.J.; O'Neill, T.; Wood, K.R. (1998) A UK isolate of *Impatiens* necrotic spot virus from glasshouse-grown *Cineraria*.
Journal of Phytopathology, 146(4), 201-203.

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

99/023 Tentative geographical distribution list for impatiens necrotic spot tospovirus

As impatiens necrotic spot tospovirus (EPPO A2 quarantine pest) has only recently been distinguished from tomato spotted wilt tospovirus (Avila *et al*., 1992), its geographical distribution remains to be further studied. The EPPO Secretariat has tried to collect recent geographical records which specifically concern impatiens necrotic spot tospovirus and appear reasonably confirmed, but it is likely that this virus is more widespread. A Distribution Map has recently been published by CABI in association with EPPO, and all references for these records can be found there, unless specified otherwise.

EPPO Distribution List: Impatiens necrotic spot tospovirus

EPPO region: Belgium (VIDE database), France (EPPO RS 93/089), Germany (VIDE database), Italy (EPPO RS 97/136, in several regions: Emilia-Romagna, Liguria (Vaira *et al*., 1992), Piemonte, Puglia, Sicily, Toscana (Vicchi & Bellardi, 1996)), Netherlands, Poland (found in 1994/95, see EPPO RS 97/170), Portugal (found on imported material), Spain, UK (see EPPO RS 99/022).

North America: Canada (British Columbia (reported in 1996 as a new minor disease on *Kalanchoe* and *Stephanotis*, INTERNET), Manitoba (reported as TSWV-I)), Mexico, USA (Arkansas, California, Colorado (INTERNET), Connecticut, Delaware, Florida, Georgia, Idaho (Hall *et al*., 1993), Iowa, Kansas, Kentucky, Maine, Maryland, Massachusetts, Mississippi, Missouri, New Hampshire, New Jersey, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, South Carolina, Texas, Vermont, Virginia). All these state records for USA came from EPPO RS 98/181 or CABI map, unless specified otherwise.

Central America and Carribean: Costa Rica (reported as TSWV-I).

Sources:

de Avila, A.C.; de Haan, P.; Kitajima, E.W.; Kormelink, R.; Resende, R. de O.; Goldbach, R.; Peters, D. (1992) Characterization of a distinct isolate of tomato spotted wilt virus (TSWV) from impatiens sp. in the Netherlands. **Journal of Phytopathology, 134(2), 133-151.**

CABI/EPPO (1998) Distribution Maps of Plant diseases, no. 755. CABI, Wallingford, UK.

Hall, J.M.; Mohan, K.; Knott, E.A.; Moyer, J.W. (1993) Tospoviruses associated with scape blight of onion (*Allium cepa*) seed crops in Idaho. **Plant Disease, 77(9), p 952.**

Vaira, A.M.; Gallo, S.; Lisa, V. (1992) New infections by two tospoviruses (tomato spotted wilt and impatiens necrotic spot) in Liguria. **Informatore Fitopatologico, 42(10), 37-42**.

Vicchi, V.; Bellardi, M.G. (1996) Evaluation of the ELISA technique in the diagnosis of tospoviruses in ornamental plants. **Informatore Fitopatologico, 46(4), 60-63**.

INTERNET

- Crop Protection Newsletter, Vol. 19, no.1 of March 1997 of British Columbia Ministry of Agriculture and Food - http://www.agf.gov.bc.ca/croplive/cropprot/cpn191.htm
- VIDE database - http://biology.anu.au/research-groups/MES/vide/descr413.htm
- Colorado State university Cooperative Extension Tri River Area - http://www.colostate.edu/Depts/CoopExt/TRA/PLANTS/invs.html

99/024 *Ralstonia solanacearum* was not detected in the Turkish part of Cyprus

On the basis of visual observations reported in Turkish Cypriot newspapers, it had been suspected that *Ralstonia solanacearum* (EPPO A2 quarantine pest) might be present on potatoes in the northern part of Cyprus (EPPO RS 97/007). A survey has been carried out by an independent consultant on potatoes grown in northern Cyprus for the possible presence of *R. solanacearum*. From late May to early June 1998, samples were taken from 100 crops or fields, in 16 villages. The sampling rate was of 200 tubers per 25-50 t. In total 4003 t were collected from 264.35 ha. These samples were then tested by the Central Science Laboratory in UK. The method used followed the diagnostic protocol (Interim test scheme for the diagnosis, detection and identification of *Pseudomonas solanacearum* in potatoes) proposed by the European Union: 1) primary screening by culture on semi-selective medium, ELISA and IF; 2) confirmation tests by PCR and fatty acid profiling. All tested samples gave negative results (culture on semi-selective medium and ELISA testing). The author concluded that it is most likely that *R. solanacearum* is not present in the Turkish part of Cyprus.

Source: Report on a survey of potatoes grown in the Turkish Republic of Northern Cyprus for the presence of the brown rot pathogen (*Ralstonia solanacearum*) written by M.C.M. Pérombelon, Scottish Crop Research Institute, Dundee, UK, 1998.

EC Commission, 1997. Commission Decision 97/647/EC.
Official journal of the European communities. L. 273, 1-25.

Additional key words: absence **Computer codes:** PSDMSO, CY

99/025 Error in Distribution Maps of Quarantine Pests for Europe: citrus tristeza closterovirus is **not** present in Yugoslavia

The geographical distribution of citrus tristeza closterovirus (CTV- EPPO A2 quarantine pest) given in the book 'Distribution Maps of Quarantine Pests for Europe' includes a record 'widespread in Yugoslavia'. This is an error carried over from data on former Yugoslavia. CTV does not occur in the Federal Republic of Yugoslavia.

Source: **EPPO Secretariat, 1999-01.**

Additional key words: absence **Computer codes:** CTVXXX, YU

99/026 7th ICPP: new or detailed geographical records concerning quarantine pests

A very large number of papers were presented at the 7th International Congress of Plant Pathology (Edinburgh, GB, 1998-08-09/16) and the EPPO Secretariat has tried to extract new data concerning quarantine pests or information relevant to plant quarantine. This information is presented in several articles of the EPPO Reporting Service to facilitate reading and further retrieval. References only mention the names of the authors and the number of the abstract in the proceedings.

New geographical records

Colletotrichum acutatum (EU Annex II/A2) occurs in Belize (first found in 1979) and causes post bloom fruit drop of citrus (Timmer, L.W.; Zitko, S.E. - 2.1.6S).

High Plains virus was first identified in maize in 1993, in the western plains of USA (see EPPO RS 97/070, 98/215). It is suggested that it could be a member of a possibly new group of pathogens transmitted by eriophyid mites and which produce large double membrane-bound bodies in infected cells. This group of pathogens could include fig mosaic, rose rosette, thistle mosaic, redbud yellow ringspot and wheat spot mosaic virus. High Plains virus is transmitted by *Aceria tosichella* and occurs on maize, wheat, barley and other grasses. In USA, this virus has been identified in over 100 counties in 10 states throughout the High Plains and Rocky mountains region, and in Florida (on sweet corn samples). It has also been found on samples of sweet corn from Brazil and Chile (new records). Preliminary results of tests tend to suggest that the High Plains virus occurs in other countries from other parts of the world, but this awaits confirmation (Jensen, S.G.; Fithian, W.A.; Berry, J.A.; Ball, E.M.; Hall, J.S. - 6.160).

In China, it is reported that *Radopholus similis* (EPPO A2 quarantine pest) was found in Nanjing, Fujiang province in 1988 and eradicated in 1993 (Wang, Y.; Wang, C. - 4.6.7).

Tomato yellow leaf curl geminivirus (EPPO A2 quarantine pest) has recently been found in several parts of Japan (no more details given) on tomatoes (Onuki, M.; Sakai, J.; Hanada, K. - 1.11.64).

Detailed records

Rhizomania is the major problem in sugar beet production in Turkey. The disease was first observed in 1987, and its causal agent (beet necrotic yellow vein furovirus - EPPO A2 quarantine pest) was identified in 1992. It is reported to be present mainly on the Black Sea Coast and Marmara region (Ertunc, F. - 1.13.15).

In Japan, peach latent mosaic viroid (EPPO A2 quarantine pest) has been detected by RT-PCR in several stone fruit species: *Prunus persica* (peach), *P. salicina* (Japanese plum), *P. mume*, *P. avium* (sweet cherry). It has not been found in *P. domestica* (European plum) and *P. armeniaca* (apricot) samples. This confirms earlier reports of peach latent mosaic viroid in Japan (Osaki, H.; Sato, Y.; Tomita, Y.; Kawai, Y.; Miyamoto, Y.; Ohtsu, Y. - 3.7.15).

Phytophthora sojae (EPPO A2 quarantine pest) was first found in Argentina in the 1990s in the region of Buenos Aires (see EPPO 93/162). Recent surveys have been carried out in the main soybean-producing regions and have shown that the disease has increased both in terms of severity and extent. *Phytophthora sojae* is now found in the following provinces: Cordoba, Santa Fé, Entre Rios and Buenos Aires (Barreto, D.; Anderson, T.R.; Gally, M.; Grijalba, P. - 6.72).

Ralstonia solanacearum (EPPO A2 quarantine pest) biovar 2 (race 3) occurs in potato fields in Rio Grande do Sul, Brazil. Studies made in a naturally infested potato field showed that both biovars 1 and 2 could be found in a single field, and that biovar 2 was predominant in the conditions of Rio Grande do Sul (Maciel, J.L.N.; Silveira, J.R.P.; Van der Sand, S.T.; Duarte, V. - 2.2.15).

In Argentina, *Xanthomonas axonopodis* pv. *citri* (EPPO A1 quarantine pest) occurs only in the north-east, in the provinces of Corrientes, Entre Rios and Misiones. The disease is absent from the citrus-growing areas in the north-west (provinces of Tucumán, Catamarca, Salta and Jujuy). Since 1991 and in order to maintain these areas free from the disease: 1) checks are made at all points of entry to restrict the introduction of propagating material, fruit and used containers; 2) regular surveys are done to verify the absence of the bacterium by visual inspections and laboratory analysis. Results of the surveys have shown that *X. axonopodis* pv. *citri* is still absent from these north-western provinces of Argentina (Ramallo, N.V.; Ramallo, C.J.; Ploper, L.D.; Vera, M.L.; Gonzalez, V.; Muslera, G.; Fonalleras, M.L.; Figueroa, H.M. - 3.7.59).

Source: **Abstracts of papers presented at the 7th International Congress of Plant Pathology, Edinburgh, GB, 1998-08-09/16.**

Additional key words: new records, detailed records, eradication

Computer codes: BTNYVX, COLLAC, PCLMXX, PHYTMS, PSDMSO, RADOSI, TMYLCV, XANTCI, AR, BR, BZ, CN, JP, TR, US

99/027 7th ICPP: reports on new pests

During the 7th International Congress of Plant Pathology (Edinburgh, GB, 1998-08-09/16) several papers were presented on 'new pests', a selection of these is presented below. References only mention the names of the authors and the number of the abstract in the proceedings.

Abutilon yellows virus. Abutilon yellows virus had been found for the first time in *Abutilon theophrasti* (weed) in Illinois (US) in 1977 and has recently been characterized as a closterovirus. This virus is transmitted by *Trialeurodes abutilonea* in a semi-persistent manner and is retained by the vector for 4 days. It has apparently a narrow host range (*Abutilon theophrasti*). No indication is given on the damage this virus may cause (Liu, H.Y.; Wisler, G.C.; Duffus, J.E. - 1.11.8).

Bacterial apical necrosis of mango. A new bacterial disease of mango (*Mangifera indica*) causing necrosis of buds, leaves and stems was observed in Southern Europe (no details given), with a high incidence during winter dormancy. The causal agent of this bacterial apical necrosis of mango has been identified as *Pseudomonas syringae* pv. *syringae* (Cazorla, F.M.; Duran, V.E.; Arrebola, E.; Hermoso, J.M.; Tores, J.A.; de Vincente, D.E. - 3.7.58).

Bacterial shoot blight of oak. Dieback of evergreen oaks was observed in nurseries in Japan in Kagoshima and Miyazaki prefectures, 10 years ago. In recent years, similar diseases occurred in other Japanese oaks (including deciduous oaks) in nurseries, artificial and natural forests. Symptoms are characterized by brown to black necrotic lesions on young shoots and petioles which may develop into cankers. At the beginning of the disease, discoloration or bacterial ooze often appear on the young shoot. The causal agent was identified as a *Xanthomonas campestris*, and the disease has been called bacterial shoot blight (Ishihara, M.; Kawabe, Y.; Akiba, M. - 3.7.77).

Citrus seed-borne virus. In the mid-80s, soon after the establishment of satsumas (*Citrus unshiu*) orchards in New Zealand, symptoms of a virus-like disease were observed. Affected plants showed boat and spoon-shaped leaves, dwarfing and small fruit size. Electron microscopy of purified preparations showed the presence of two different types of filamentous particles, one virus was identified as being citrus tristeza closterovirus (EPPO A2 quarantine pest). The other virus was also found in a range of other citrus species, and in citrus seedlings growing in an insect-free glasshouse. It was provisionally called citrus seed-borne virus. So far, citrus seed-borne virus does not appear to be related to citrus tristeza closterovirus, citrus tatter leaf capillovirus, or to US strains of citrus ringspot virus but it is serologically related to an Indian virus isolate also referred to as citrus ringspot virus (Pearson, M.N.; Aftab, M.; Mooney, P. - 3.7.8).

Lettuce necrotic spot nepovirus. A new virus tentatively called lettuce necrotic spot nepovirus has recently been found in glasshouse lettuce crops, in the north of Portugal. Affected plants showed necrotic spots. This virus appears to be related to arabis mosaic nepovirus (Cortes, I.; Moura, L.; Peters, D.; Pereira, A.M. - 1.11.30).

Oak disease. High mortality of *Quercus serrata* and *Q. crispula* has been observed during summer months in Japan. Prior to wilting, massive attacks by *Platypus quercivorus* and xylem discoloration are observed. An unidentified fungus has been detected on the beetle and also in wilting oak xylem. Healthy oaks were killed when inoculated with this unknown fungus (Kuroda, K. - 3.7.16).

Potato latent carlavirus. A new potato virus tentatively called potato latent carlavirus has been found in asymptomatic potatoes (*Solanum tuberosum* cv. Red La Soda) imported from USA as *in vitro* plants. It is also noted that two more carlaviruses have been recently discovered: potato rough dwarf carlavirus from Argentina and potato virus P from Brazil. More studies are needed on the possible relationships between these carlaviruses (Brattey, C.; George, E.; Burns, R.; Goodfellow, H.A.; Jeffries, C.J.; McDonald, J.G.; Badge, J;L.; Foster, G.D. - 1.11.33).

Soybean severe stunt virus. A new soilborne virus disease affecting soybean (*Glycine max*) has been found in Delaware, USA. At present, approximately 60 ha are affected by this viral disease called soybean severe stunt. Affected plants show shortened internodes resulting in severe stunting, thickened, dark-green mottled leaves and a reduced number of flowers, pods and seeds. Plants may be killed. Soybean severe stunt virus is transmitted through soil, and *Xiphinema americanum* is consistently associated with infected plants in the field (Evans, T.A.; Mulrooney, R.P.; Carroll, R.B. - 1.11.37).

Source: **Abstracts of papers presented at the 7th International Congress of Plant Pathology, Edinburgh, GB, 1998-08-09/16.**

Additional key words: new pests **Computer codes:** JP, NZ, PT, US

99/028 7th ICPP: new detection and identification methods

During the 7th International Congress of Plant Pathology (Edinburgh, GB, 1998-08-09/16) several papers were presented on new detection and identification methods, a selection of these is presented below. References only mention the names of the authors and the number of the abstract in the proceedings.

Clavibacter michiganensis* subsp. *sepedonicus. Several methods have been developed to improve the detection of *Clavibacter michiganensis* subsp. *sepedonicus* (EPPO A2 quarantine pest) in potato tubers: 1) Bio-PCR combined with an automated fluorescence detection system (Schaad, N.W.; Berthier-Schaad, Y.; Sechler, A.; Knorr, D. - 3.3.40); 2) Multiplex PCR-based immunodetection system (Mills, D.; Russell, B.W. - 3.3.42);3) another PCR method has been found suitable for routine analysis of *C. michiganensis* subsp. *sepedonicus* in seed potatoes (Karjalainen, R.; Kangasniemi, A.; Heith, M.; Tegel, J.; Kervinen, T. - 6.117).

Colletotrichum acutatum. A rapid and reliable method (PCR with specific primers) has been developed to detect latent infections of *Colletotrichum acutatum* (EU Annex II/A2) in strawberry plants. With this method, isolation of the pathogen in pure culture is no longer needed (Grondona, I.; Suarez, M.B.; Martinez-Culebras, P.; Querol, A; Garcia, M.D.; Monte, E. - 3.3.22).

Monilinia laxa, M. fructigena* and *M. fructicola. A method using total protein profiles has been developed to distinguish between *Monilinia laxa*, *M. fructigena* and *M. fructicola* (EPPO A1 quarantine pest) (Belisario, A.; Corazza, L.; Luongo, L. - 3.3.71).
Another study has shown that simple and unambiguously defined quantitative characters, such as colony growth rate and mean length of the germ tube can help in differentiating *Monilinia laxa*, *M. fructigena* and *M. fructicola* (van Leeuwen, G.C.M.; van Kesteren, H.A. - 3.7.56).
Preliminary studies have also demonstrated a good potential of ELISA testing with monoclonal antibodies to detect specifically *Monilina fructicola* (Hughes, K.J.D.; Banks, J.N.; Rizvi, R.H.; McNaughton, J.; Lane, C.R.; Stevenson, L.; Cook R.T.A. - 6.70).

Phytophthora sojae. A sensitive and reliable detection method for *Phytophthora sojae* (EPPO A2 quarantine pest) has been developed. This method uses soybean leaf-disc baiting and can be applied routinely for quarantine purposes (Peng, J.; Anderson, T. - 3.3.5).

Tilletia indica. A diagnostic test using improved PCR primers has been developed and can now differentiate between *Tilletia indica* (EPPO A1 quarantine pest) and the smut isolated from ryegrass in USA. This also supports the view that *T. indica* and the ryegrass smut are two genetically distinct pathogens (Frederick, R.D.; Tooley, P.W.; Berthier-Schaad, Y.; Peterson, G.L.; Bonde, M.R.; Schaad, N.W. - 3.3.28).

Source: **Abstracts of papers presented at the 7th International Congress of Plant Pathology, Edinburgh, GB, 1998-08-09/16.**

Additional key words: detection and identification methods

Computer codes: COLLAC, CORBSE, MONIFC, NEOVIN, PHYTMS

99/029 7th ICPP: new data on taxonomy, biology and control of several quarantine pests

At the 7th International Congress of Plant Pathology (Edinburgh, GB, 1998-08-09/16) several papers presented new data on taxonomy, biology and control of quarantine pests (or pests of quarantine interest), and the EPPO Secretariat has selected the following items. References only mention the names of the authors and the number of the abstract in the proceedings.

Small-spored Alternaria species. The taxonomy of small-spored *Alternaria* species and species groups is being revised based upon three-dimensional patterns of sporulation (observable at x50). RAPD analysis is also being used to evaluate the results obtained with morphological segregation. It is felt that these morphological characters can be used to differentiate small-spored *Alternaria* (*A. alternata*, *A. gaisen*, *A. longipes*, *A. infectoria*, *A. tenuissima* and an arborescent group which has not yet been formally described). The authors stressed that the 'pathotype' system for naming small-spored *Alternaria* species should not be used (Serdani, M.; Crous, P.W.; Andersen, B.; Holz, G.; Mchau, G. - 2.2.5 & Roberts, R.G.; Reymond, S.T. - 2.2.54).

Apple fruit crinkle viroid. Apple fruit crinkle viroid causes a graft-transmissible disease affecting apple fruit and bark. So far, this disease has only been recorded in Japan. The nucleotide sequence of apple fruit crinkle viroid has been studied, and preliminary comparisons have shown similarities with Australian grapevine viroid (which is only latent in grapevine) (Ito, T.; Sano, T.; Yoshida, K. - 3.7.6).

Bursaphelenchus xylophilus.
1) The genetic variability of *Bursaphelenchus xylophilus* (EPPO A1 quarantine pest) was studied in Japan, using RAPD. Intraspecific genetic variation exists among *B. xylophilus* isolated from *Monochamus alternatus* or from different stands of wilted Japanese black pine (*Pinus thunbergii*). In addition, *B. xylophilus* could be differentiated from *B. mucronatus* by using this technique (Akiba, M.; Kawabe, Y. - 3.7.78).
2) Control measures applied in Japan against pine wilt disease (caused by *B. xylophilus*) include: aerial spraying of insecticides against the vector *Monochamus alternatus*, insecticide treatments of timber already infested to prevent further spread, and trunk injection of chemicals active against the nematode. However, despite all these efforts, losses in pine timber have not decreased (Suzuki, K. - 3.7.6S).
3) Experiments have been made in Japan on the possible use of avirulent *B. xylophilus* to control pine wilt disease. Preliminary results showed that symptom development was delayed, although tree mortality was observed in the end (Kosaka, H.; Kiyohara, T.; Aikawa, T.; Ogura, N.; Tabata, K. - 3.7.68).

Ceratocystis fagacearum. The susceptibility of European oaks to *Ceratocystis fagacearum* (EPPO A1 quarantine pest) has been studied in USA. Results showed that European white oak species (*Quercus robur*, *Q. petraea*, *Q. pubescens*) could be seriously threatened by *C. fagacearum* if introduced into Europe, as significant mortality was observed (McDonald, W.L.; Tainter, F.H.; Pinon, J.; Double, M. - 4.6.3).

Cowpea golden mosaic and lima bean golden mosaic geminiviruses. Cowpea golden mosaic and lima bean golden mosaic geminiviruses are reported to infect respectively, *Vigna* spp. and lima beans (*Phaseolus lunatus*), in Nigeria. A golden mosaic disease is also found in wild relatives of cowpea, *Vigna unguiculata* subsp. *dekindtiana* (common perennial weed in Nigeria and West Africa). Molecular comparisons showed that the geminivirus infecting this weed is a strain of cowpea golden mosaic geminivirus, and that lima bean golden mosaic geminivirus is clearly a distinct virus. However, its possible relationships with viruses causing a similar disease in lima bean in South America remain to be studied (Thottappilly, G.; Winter, S.; Maxwell, D.P. - 1.11.7S).

Cryphonectria parasitica. Studies are being carried out on the potential use of dsRNA fungal viruses to control Dutch elm disease (*Ophiostoma novo-ulmi*) and *Cryphonectria parasitica* (EPPO A2 quarantine pest) (Brasier, C.M.; Milgroom, M.G. - 4.4.6S).

Leptographium genus. The anamorph genus *Leptographium* has been re-evaluated and an identification key proposed. The authors have also compiled a complete list of host plants and insects associated with *Leptographium* spp. (Jacobs, K.; Wingfield, M.J.; Crous, P.W.; Wingfield, B.D. - 3.7.53).

Radopholus similis. *Radopholus similis* (EPPO A2 quarantine pest) occurs in clusters in roots and stems of *Anthurium*. For quarantine detection purposes, it is recommended to take root samples from middle-aged roots, as the oldest roots are often too decomposed to support nematodes and in younger roots sufficient levels of populations may have not been reached. In addition, its is also appropriate to test stem tissue (Sipes, B. - 2.4.8).

Ralstonia solanacearum. Bacterial wilt of eucalyptus caused by *Ralstonia solanacearum* (EPPO A2 quarantine pest) was reported for the first time in 1997 in the Kwazulu Natal province, South Africa. *R. solanacearum* was found for the first time on eucalyptus in Brazil (race 1 biovar 2) in the early 1980s and later on this host in Australia (race 1 biovar 3), China (race 1 biovar 3), Taiwan and Venezuela. In Kwazulu Natal province, *R. solanacearum* biovar 3 has been identified (Coutinho, T.A.; Wingfield, M.J.; Roux, J.; de Beer, Z.W.; Riedel, K.H.; Esler, C. - 3.7.69).

Xanthomonas oryzae* pv. *oryzae* and *X. oryzae* pv. *oryzicola. Genetic differences between *Xanthomonas oryzae* pv. *oryzae* and *X. oryzae* pv. *oryzicola* (both A1 quarantine pests) were studied by using PCR-RFLP, sequencing and southern hybridization. Results showed that although they are two distinct bacterium, *X. oryzae* pv. *oryzae* and *X. oryzae* pv. *oryzicola* are closely related in genetic features as well as phenotypic ones, except for slight differences in the analysis of certain genes (Ochiai, H.; Kaku, H. - 2.2.50).

Xylella fastidiosa. Studies were done in southeastern USA to identify the causes of dieback or decline of American sycamore (*Platanus occidentalis*) which has been observed for many years. Several pathogens were detected: *Xylella fastidiosa* (EPPO A1 quarantine pest), *Ceratocystis fimbriata* f.sp. *platani* and *Botryosphaeria rhodina*. Further research is needed to determine whether these pathogens act alone or in combination, and which are the most important in disease etiology (Britton, K.O.; Leininger, T.; Chang, C.J.; Harrington, T.C. - 3.7.50).

Source: **Abstracts of papers presented at the 7th International Congress of Plant Pathology, Edinburgh, GB, 1998-08-09/16.**

Additional key words: taxonomy, biology, control

Computer codes: ALTESP, BURSXY, CERAFA, ENDOPA, LEPGSP, PSDMSO, RADOSI, XANTOR, XANTTO, XYLEFA, JP, NG, US, ZA

99/030 New bacterial disease of broccoli raab in California (US)

Broccoli raab (*Brassica rapa* subsp. *rapa*) is a leafy vegetable which is cultivated for its tender leaves and immature inflorescence (e.g. a picture can be viewed on Internet, http://www.neseed.com/veggie/broccoli.htm). During the last 3 years, a new bacterial blight disease has been observed in commercial crops in the Salinas Valley, California (US). Diseased plants show small, angular, water soaked flecks on lower leaves which expand and become surrounded by bright yellow borders. These flecks coalesce and result in large, irregular necrotic areas, leaf yellowing and eventually leaf death. If symptoms develop on the upper leaves attached to the inflorescence, shoots lose their market quality and are not harvested. *Pseudomonas syringae* was consistently isolated from symptomatic plants and the isolated strains caused similar symptoms when inoculated onto broccoli raab plants. These strains also caused leaf spots symptoms when artificially inoculated to other Cruciferaceae (rocket (*Eruca sativa*), bok choy (*Brassica campestris* subsp. *sinensis* cv. Joi Choi), broccoli (*B. oleracea* subsp *botrytis* cv. Greenbelt), cabbage (*B. oleracea* subsp. *capitata* cv. Grenedere), cauliflower (*B. oleracea* subsp. *botrytis* cv. White Rock), Chinese cabbage (*B. campestris* subsp. *pekinensis* cv. Cha-Cha), Japanese mustard (*B. campestris* subsp. *nipposinica* cv. Mizuna), red mustard (*B. juncea* subsp. *rugosa* cv. Red Giant), tah tsai (*B. campestris* subsp. *narinosa* cv. Tokita).
According to morphological, biochemical and physiological studies the authors felt that this disease could be due to a new pathovar of *Pseudomonas syringae*. In addition, field observations tend to suggest that it could be seed-borne but this has not been demonstrated.

Source: Koike, S.T.; Henderson, D.M.; Azad, H.R.; Cooksey, D.A.; Little, E.L. (1998) Bacterial blight of broccoli raab: a new disease caused by a pathovar of *Pseudomonas syringae*.
Plant Disease, 82(7), 727-731.

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

99/031 Research Project on *Xiphinema americanum* funded by the European Union

A research project has recently been approved by the EU Commission, under the 4th Framework Programme, to establish diagnostic protocols enabling rapid and reliable identification of the quarantine *Xiphinema americanum* group species. Several of these species have the potential to transmit quarantine nepoviruses, e.g. tomato ringspot nepovirus. As part of the project it will be necessary to examine intra and interspecific relationships between the approximately 40 putative species comprising the group. This work will involve combining molecular taxonomic data with morphological data to establish a definitive list of species. The virus-vector ability of the most important, i.e., most widespread, of the species identified will be ascertained. Finally, genetic probes and poly- and monoclonal antibodies will be generated with which to identify the species which present an actual quarantine risk.
The project is being co-ordinated by Prof. Maurice Moens at the Agricultural Research Centre in Merelbeke, Belgium, and the other partners are Prof. Derek Brown (Scotland, UK), Prof. Franco Lamberti (Italy) and Dr Christine Henry (England, UK). The co-ordinator urgently requires assistance with obtaining samples containing live *Xiphinema* nematodes, particularly those belonging to the *Xiphinema americanum* group. These nematodes are required from all parts of world. If you can assist with this request please contact the co-ordinator Prof. Maurice Moens, Centrum voor Landbouwkundig Onderzoek, Burg. Van Gansberghelaan 96, 9820 Merelbeke, Belgium; tel: +32-9-2720271; fax: +32-9-2720215; email: m.moens@clo.fgov.be

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Source: **EPPO Secretariat, 1999-01.**

99/032 EPPO report on selected intercepted consignments

The EPPO Secretariat has gathered the intercepted consignment reports for **1998** received since the previous report (EPPO RS 98/196) from the following countries: Austria, Denmark, Estonia, Finland, France, Germany, Ireland, Israel, Italy, Luxembourg, Netherlands, Norway, Portugal, Switzerland, Slovenia, 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 interceptions made because of the presence of pests. Other interceptions 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 interception reports.

Note: EPPO RS 98/155 mentioned a Czech interception of a seed lot (lucerne) contaminated by *Clavibacter michiganensis* subsp. *insidiosus* originating from Italy (the PC was issued by the Plant Protection Service of the Veneto region). The EPPO Secretariat has recently been informed by Plant Protection Service of the Veneto region, that this bacterium has not been found during surveys carried out in the Veneto region on lucerne crops.

Pest	Consignment	Type of commodity	Country of origin	C. of destination	nb
Anoplophora chinensis	*Acer palmatum*	Plants for planting	China	Netherlands	1
Aphids	*Hypericum*	Cuttings	Netherlands	Israel	1
Bemisia tabaci	*Alternanthera sessilis*	Plants for planting	Morocco	France	1
	Alternanthera	Plants for planting	Singapore	France	1
	Aster	Cut flowers	Israel	United Kingdom	1
	Aster	Cut flowers	Netherlands	Ireland	2
	Brachychiton	Pot plants	Israel	United Kingdom	1
	Dendranthema	Cut flowers	Turkey	United Kingdom	1
	Eructa sativa	Vegetables	Cyprus	United Kingdom	1
	Eryngium foetidum	Vegetables	Thailand	France	4
	Euphorbia pulcherrima	Cuttings	Germany	Denmark	2
	Euphorbia pulcherrima	Pot plants	Netherlands	Portugal	1
	Euphorbia pulcherrima	Pot plants	Netherlands	United Kingdom	1
	Euphorbia pulcherrima	Pot plants	Spain	Portugal	1
	Fuchsia	Cuttings	Israel	United Kingdom	1
	Fuchsia	Cuttings	Israel	United Kingdom	3
	Gerbera	Pot plants	Netherlands	United Kingdom	1
	Gypsophila	Cut flowers	Israel	France	1
	Gypsophila	Cut flowers	Israel	United Kingdom	1
	Gypsophila	Cut flowers	Netherlands	Ireland	1
	Gypsophila	Cut flowers	Netherlands	United Kingdom	1
	Helichrysum	Cuttings	Israel	United Kingdom	1
	Hibiscus sabdariffa	Cut flowers	Togo	France	1
	Hygrophila corymbosa	Aquarium plants	Singapore	France	1
	Hygrophila costata	Aquarium plants	Singapore	France	1
	Hygrophila polysperma	Aquarium plants	Malaysia	France	1

Pest	Consignment	Type of commodity	Country of origin	C. of destination	nb
B. tabaci	*Hygrophila polysperma*	Aquarium plants	Singapore	France	5
	Hygrophila salicifolia	Aquarium plants	Singapore	Denmark	1
	Hygrophila salicifolia	Aquarium plants	Singapore	France	1
	Hypericum	Cut flowers	Israel	United Kingdom	3
	Hypericum androsaemum	Cut flowers	Israel	United Kingdom	1
	Hypericum xylosteifolium	Cut flowers	Netherlands	United Kingdom	1
	Impatiens x Novae-Guinea	Cuttings	Israel	France	1
	Lamium	Cuttings	Israel	United Kingdom	1
	Lantana, Solanum	Plants for planting	Israel	Italy	2
	Lavandula	Plants for planting	Israel	France	1
	Leaves	Vegetables	Ghana	United Kingdom	1
	Liatris spicata, Trachelium caeruleum, Hypericum xylosteifolium, Solidago	Cut flowers	Israel	United Kingdom	1
	Lisianthus	Cut flowers	Israel	France	3
	Ludwigia palustris	Aquarium plants	Morocco	France	1
	Manihot	Vegetables	Congo	France	1
	Manihot	Vegetables	Ghana	United Kingdom	1
	Myrtus	Pot plants	Israel	United Kingdom	1
	Ocimum basilicum	Vegetables	Cyprus	Denmark	1
	Ocimum basilicum	Vegetables	Israel	France	9
	Piper sarmentosum	Vegetables	Thailand	France	14
	Piper sarmentosum	Vegetables	Vietnam	France	1
	Rosa	Cut flowers	Israel	France	4
	Solanum melongena	Vegetables	Jordan	Denmark	2
	Solidago	Cut flowers	Israel	France	2
	Solidago	Cut flowers	Israel	Ireland	14
	Solidago	Cut flowers	Israel	United Kingdom	5
	Solidago	Cut flowers	Netherlands	Ireland	17
	Solidago	Cut flowers	Netherlands	United Kingdom	5
	Solidago	Cut flowers	Turkey	United Kingdom	2
	Solidago	Cut flowers	Zimbabwe	United Kingdom	1
	Solidaster	Cut flowers	Turkey	United Kingdom	1
	Solidaster	Cut flowers	Zimbabwe	United Kingdom	1
	Thymus vulgaris	Vegetables	Cyprus	Denmark	1
	Trachelium	Cut flowers	Israel	United Kingdom	3
	Unspecified plant	Cut flowers	Lebanon	France	1
	Verbena	Cuttings	Israel	United Kingdom	1
Bemisia tabaci **(biotype B)**	*Reinwardtia*	Plants for planting	Israel	Netherlands	3
Bemisia tabaci, Liriomyza (probably huidobrensis)	*Gypsophila*	Cut flowers	Israel	United Kingdom	1
Bemisia tabaci, Liriomyza	*Dendranthema*	Cut flowers	Spain	United Kingdom	1
	Gypsophila	Cut flowers	Netherlands	United Kingdom	1
	Gypsophila	Cut flowers	Netherlands	United Kingdom	1
	Ocimum basilicum	Vegetables	Thailand	Denmark	1
	Solidago	Cut flowers	Turkey	United Kingdom	1
Botryodiplodia	*Phoenix dactylifera*	Plants for planting	Egypt	France	1
Botryodiplodia, **Anthocoridae**	*Phoenix dactylifera*	Plants for planting	Egypt	France	1
Botryosphaeria rhodina	*Phoenix dactylifera*	Plants for planting	Egypt	France	1

EPPO *Reporting Service*

Pest	Consignment	Type of commodity	Country of origin	C. of destination	nb
Carnation mottle carmovirus	*Dianthus*	Cuttings	Netherlands	Israel	1
Ceratitis capitata	*Citrus clementina*	Fruits	Italy	Slovenia	1
Clavibacter michiganensis* subsp. *sepedonicus	*Solanum tuberosum*	Ware potatoes	Denmark	Finland	1
	Solanum tuberosum	Ware potatoes	Germany	Netherlands	9
Cochliobolus carbonum, Diplodia zea	*Zea mays*	Seeds	USA	Israel	1
Ditylenchus dipsaci	*Allium sativum*	Bulbs	Spain	Israel	1
Frankliniella intonsa	*Dendrobium*	Cut flowers	Thailand	Germany	1
Frankliniella schultzei	*Pelargonium zonale*	Cuttings	Israel	United Kingdom	1
Fusarium subglutinans	*Dianthus caryophyllus*	Cuttings	Israel	United Kingdom	1
Gliocladium vermoeseni	*Phoenix dactylifera*	Plants for planting	Egypt	France	1
***Gliocladium, Penicillium, Pestalotia,* Nematodes**	*Copernicia alba*	Plants for planting	Argentina	France	1
Globodera rostochiensis	*Solanum tuberosum*	Ware potatoes	Belarus	Estonia	1
Globodera	*Solanum tuberosum*	Ware potatoes	Sweden	Finland	5
Gynaikothrips, Lepidosaphes piperis, Planococcus, Pinnaspis aspidistrae, Hemiberlesia rapax	*Piper nigrum*	Cuttings	India	United Kingdom	1
Helicoverpa armigera	*Dianthus*	Cut flowers	Israel	Netherlands	18
	Dianthus	Cut flowers	Kenya	Netherlands	5
	Dianthus	Cut flowers	Spain	United Kingdom	1
	Dianthus	Cut flowers	Turkey	Netherlands	2
	Dianthus	Cut flowers	Turkey	United Kingdom	2
	Dianthus caryophyllus	Cut flowers	Israel	Germany	1
	Dianthus caryophyllus	Cut flowers	Morocco	France	1
	Pelargonium	Cuttings	Spain (Canary isl.)	United Kingdom	1
	Phaseolus	Vegetables	Egypt	Netherlands	1
	Phaseolus	Vegetables	Morocco	Netherlands	1
	Pisum	Vegetables	Zimbabwe	United Kingdom	2
Helicoverpa armigera, Liriomyza huidobrensis	*Pisum sativum*	Vegetables	Zimbabwe	United Kingdom	1
Helicoverpa armigera, Spodoptera	*Dianthus*	Cut flowers	Israel	Netherlands	1
Insecta	*Dendrobium*	Cut flowers	Thailand	Germany	1
Leptinotarsa decemlineata	*Cichorium*	Vegetables	France	United Kingdom	1
Liriomyza huidobrensis	*Apium*	Vegetables	Spain	United Kingdom	1
	Apium graveolens	Vegetables	Spain	United Kingdom	1
	Carthamus tinctorius	Cut flowers	Kenya	United Kingdom	1
Pest	**Consignment**	**Type of commodity**	**Country of origin**	**C. of destination**	**nb**
L. huidobrensis	*Dendranthema*	Cut flowers	Netherlands	Ireland	1

	Dendranthema	Cut flowers	Netherlands	United Kingdom	1
	Dendranthema	Plants for planting	Netherlands	United Kingdom	2
	Dendrenthema	Cut flowers	Netherlands	United Kingdom	1
	Eustoma	Cut flowers	Kenya	United Kingdom	1
	Eustoma	Cut flowers	Netherlands	United Kingdom	1
	Gypsophila	Cut flowers	Israel	Ireland	1
	Gypsophila	Cut flowers	Israel	United Kingdom	1
	Gypsophila	Cut flowers	Kenya	United Kingdom	1
	Gypsophila	Cut flowers	Netherlands	Ireland	1
	Gypsophila	Cut flowers	Netherlands	United Kingdom	1
	Ocimum basilicum	Vegetables	Colombia	United Kingdom	1
	Pisum	Vegetables	Kenya	United Kingdom	1
	Spinacia oleracea	Vegetables	Cyprus	Denmark	2
Liriomyza huidobrensis, Bemisia tabaci	*Aster*	Cut flowers	Netherlands	Ireland	1
Liriomyza huidobrensis, Liriomyza	*Bupleurum rotundifolium*	Cut flowers	Netherlands	United Kingdom	1
Liriomyza (probably huidobrensis)	*Lisianthus*	Cut flowers	Netherlands	United Kingdom	1
Liriomyza sativae	*Ocimum basilicum*	Vegetables	Thailand	France	7
	Ocimum basilicum	Vegetables	Thailand	United Kingdom	1
***Liriomyza* sp.**	*Allium*	Vegetables	Zimbabwe	United Kingdom	1
	Anethum	Vegetables	(Netherlands)	United Kingdom	1
	Brassica pekinensis	Vegetables	Thailand	Denmark	1
	Carthamus	Cut flowers	Netherlands	United Kingdom	1
	Coriandrum, Mentha	Vegetables	Egypt	Denmark	1
	Dendranthema	Cuttings	USA	Denmark	1
	Gypsophila	Cut flowers	Israel	France	2
	Gypsophila	Cut flowers	Israel	United Kingdom	2
	Gypsophila	Cut flowers	Netherlands	United Kingdom	1
	Gypsophila	Cut flowers	Spain	United Kingdom	1
	Ocimum basilicum	Vegetables	Israel	France	16
	Ocimum basilicum	Vegetables	South Africa	France	1
	Ocimum basilicum	Vegetables	Thailand	France	1
	Spinacia oleracea	Vegetables	Cyprus	Denmark	2
	Verbena	Cuttings	Israel	United Kingdom	1
Liriomyza trifolii	*Carthamus*	Cut flowers	Kenya	Luxembourg	1
	Gerbera	Plants for planting	Netherlands	United Kingdom	1
	Gypsophila	Cut flowers	Israel	United Kingdom	1
Liriomyza (probably trifolii)	*Aster thomsonii*	Cut flowers	Israel	United Kingdom	1
	Gypsophila	Cut flowers	Netherlands	United Kingdom	2
	Gerbera	Plants for planting	Netherlands	United Kingdom	1
***Meloidogyne* sp.**	*Livistona*	Plants for planting	Dominican Rep.	Germany	1
Mites	*Malus domestica*	Fruits	USA	Israel	1
Nematodes	*Chamaedorea*	Plants for planting	USA	Germany	1
	Chrysalidocarpus lutescens	Plants for planting	Dominican Rep.	Germany	1
Nematodes *(Criconematidae)*	*Phoenix dactylifera*	Plants for planting	Egypt	France	1

Pest	Consignment	Type of commodity	Country of origin	C. of destination	nb
Nematodes *(Criconematidae, Meloidogyne), Penicillium, Aspergillus)*	*Phoenix dactylifera*	Plants for planting	Egypt	France	1
Nematodes *(Criconematidae, Meloidogyne, Helicotylenchus)*	*Phoenix dactylifera*	Plants for planting	Egypt	France	1
Nematodes *(Helicotylenchus, Criconematidae)*	*Butia capitata*	Plants for planting	Argentina	France	1
Nematodes *(Helicotylenchus, Paratylenchus, Rotylenchus, Pratylenchus, Criconematidae)*	*Rosa*	Plants for planting	Poland	France	1
Nematodes *(Helicotylenchus, Tylenchorhynchus, Meloidogyne*	*Rosa*	Plants for planting	Poland	France	1
Nematodes *(Helicotylenchus, Tylenchorhynchus, Paratylenchus, Rotylenchus, Meloidogyne, Heterodera)*	*Rosa*	Plants for planting	Poland	France	1
Nematodes *(Hemicycliophora)*	*Phoenix dactylifera*	Plants for planting	Egypt	France	1
Nematodes *(Meloidogyne)*	*Phoenix dactylifera*	Plants for planting	Egypt	France	1
Nematodes *(Meloidogyne)*, saprophytic fungi, rust	*Phoenix dactylifera*	Plants for planting	Egypt	France	1
Nematodes *(Pratylenchus, Meloidogyne), Botryodiplodia*	*Phoenix dactylifera*	Plants for planting	Egypt	France	1
Nematodes *(Tylenchorhynchus)*	*Phoenix dactylifera*	Plants for planting	Egypt	France	1
Nematodes *(Tylenchorhynchus, Meloidogyne), Aspergillus*	*Phoenix dactylifera*	Plants for planting	Egypt	France	1
Oryzaephilus, Cryptolestes	*Triticale*	Stored products	Hungary	Slovenia	2
Pratylenchus penetrans, Pratylenchus	*Magnolia*	Plants for planting	New Zealand	France	1
Pseudococcidae	*Hemigraphis colorata*	Aquarium plants	Singapore	Denmark	1
Puccinia horiana	*Dendranthema*	Pot plants	Belgium	Finland	1
Quadraspidiotus perniciosus	*Cydonia oblonga*	Fruits	Spain	Israel	1
Radopholus similis	*Zingiber*	Vegetables	USA	Israel	1
Scales	*Dracaena marginata*	Plants for planting	Netherlands	Israel	2
Sclerotinia sclerotiorum	*Brassica*	Seeds	Japan	Israel	1
	Petroselinum	Seeds	Italy	Israel	1
	Raphanus sativus	Vegetables	Netherlands	Israel	1

Pest	Consignment	Type of commodity	Country of origin	C. of destination	nb
Sclerotinia sclerotiorum, Alternaria brassica, A. brassicicola, Leptosphaeria maculans	*Brassica*	Seeds	Germany	Israel	1
***Sitophilus* sp.**	*Triticale*	Stored products	Hungary	Slovenia	3
	Triticum aestivum	Stored products	Hungary	Slovenia	1
Spodoptera littoralis	*Fuchsia*	Cuttings	Israel	United Kingdom	1
	Ludwigia palustris	Aquarium plants	Morocco	France	2
	Solidago	Cut flowers	Turkey	United Kingdom	1
***Spodoptera* sp.**	*Dianthus*	Cut flowers	Israel	Netherlands	1
Synchytrium endobioticum	*Solanum tuberosum*	Ware potatoes	Germany	France	1
Tenebrio obscurus	*Allium cepa*	Bulbs	France	Israel	1
Thrips palmi	*Dendrobium*	Cut flowers	Thailand	Netherlands	2
	Dendrobium	Cut flowers	Thailand	Netherlands	2
	Dendrobium	Cut flowers	Thailand	United Kingdom	3
	Momordica	Vegetables	Thailand	United Kingdom	1
	Orchidaceae	Cut flowers	Thailand	Denmark	2
	Orchidaceae	Cut flowers	Thailand	Finland	4
	Solanum melongena	Vegetables	Thailand	France	1
Thysanoptera (probably Thrips palmi)	*Orchidaceae*	Cut flowers	Singapore	France	2
***Thrips* sp.**	*Dendrobium*	Cut flowers	Thailand	Germany	1
	Dendrobium, Aranda, Oncidium	Cut flowers	Thailand	Germany	1
Thysanoptera	*Dendrobium*	Cut flowers	Thailand	Germany	10
	Dendrobium, Aranda	Cut flowers	Thailand	Germany	1
Tilletia indica	*Triticum durum*	Stored products	Mexico	Italy	1
Tomato yellow leaf curl geminivirus	*Lisianthus*	Cut flowers	Israel	France	1
Tribolium confusum	*Bambusa*	Stored products	Singapore	Israel	1
***Tribolium* sp.**	*Triticale*	Stored products	Hungary	Slovenia	6
Tribolium, Cryptolestes ferrugineus	*Avena sativa*	Stored products	Hungary	Slovenia	1
Tribolium, Cryptolestes ferrugineus	*Triticale*	Stored products	Hungary	Slovenia	1
Tribolium, Sitophilus	*Hordeum vulgare*	Stored products	Hungary	Slovenia	1
Tribolium, Sitophilus	*Triticale*	Stored products	Hungary	Slovenia	4
Xiphinema americanum	*Feronia*	Plants for planting	Indonesia	Netherlands	1

- **Fruit flies**

Pest	Consignment	Country of origin	C. of destination	nb
Bactrocera dorsalis	*Mangifera indica*	Thailand	France	1
***Bactrocera* sp.**	*Annona muricata*	Vietnam	France	1
	Psidium guajava	Thailand	France	2
	Syzygium jambos	Vietnam	France	1
***Ceratitis* sp.**	*Mangifera indica*	Cameroon	France	1
	Mangifera indica	Senegal	France	1
Tephritidae	*Passiflora quadrangularis*	Indonesia	France	1
	Psidium guajava	Thailand	France	1

- **Wood**

Pest	Consignment	Type of commodity	Country of origin	C. of destination	nb
Ips mexicanus	Conifers	Dunnage	Mexico	United Kingdom	1
***Monochamus* sp.**	Conifers	Packing material (Pallets)	China	France	1
Nematodes	*Pinus* spp.	Wood and bark	Madagascar	France	2
	Pinus spp.	Wood and bark	USA	France	1
Sphaeropsis sapinea	*Pinus spp.*	Wood and bark	Madagascar	France	1

- **Bonsais**

Two bonsais consignments from China of *Ficus, Ulmus* and unspecified plant species were intercepted by Germany and UK because of the presence of nematodes (unspecified species and *Helicotylenchus dihystera)*.

Source: EPPO Secretariat, 1999-02.
RPPO of Italy, 1999-02.

99/033 Conference on 'International plant protection policy and market development: on the threshold of a new WTO round'

To celebrate the 100 years of the PD (RPPO of the Netherlands), a conference on 'International plant protection policy and market development: on the threshold of a new WTO round' will be organized on 1999-11-04/05. The conference will be held in Wageningen, at the convention and theatre centre 'Junushoff'. The official language of the conference will be English, and interpretation in French will be provided.

The provisional programme includes the following topics:
- One hundred years of plant protection, a stable approach?
- Trends in agriculture and agribusiness: about consumers, agro-industry, trade and primary production
- Changing the (safe)guards
- Role of governments

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Source: **RPPO of the Netherlands, 1999-02.**

Additional key words: conference