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97/001 Recent studies on *Meloidogyne chitwoodi* and *M. fallax* n. sp.

In 1992, field experiments were conducted near Baexem (south east of the Netherlands) on host suitability of *Meloidogyne chitwoodi* (EPPO A2 quarantine pest). It appeared that *Zea mays*, which is a good host for *M. chitwoodi*, was found there as a poor or even non-host plant. Further studies conducted on several populations of *M. chitwoodi* and *M. hapla* using isoenzyme polymorphism showed that five populations of *M. chitwoodi* from localities in the south-eastern part of the country presented different patterns from other populations of *M. chitwoodi* and *M. hapla* (Van Meggelen *et al.*, 1994). The possible occurrence of a new race of *M. chitwoodi* was then suggested (B-type). By re-examining carefully the nematodes and especially the second stage juveniles, morphological and biological differences could also be found between these B-type populations and *M. chitwoodi* paratypes. It was also demonstrated that *M. chitwoodi* B-type was different from other *Meloidogyne* species. Therefore, it was proposed to consider it as a new species, called *Meloidogyne fallax* n. sp. (Karssen, 1996). In addition, molecular studies using PCR (with primers amplifying ribosomal intergenic spacer) confirmed these results by differentiating between *M. fallax*, *M. chitwoodi* and *M. hapla* (Petersen & Vrain, 1996). These techniques also provide a useful tool for species identification.

So far, the known distribution of *M. fallax* is restricted to the south-eastern part of the Netherlands, near the Belgian and German borders, and, in this region is adjacent to that of *M. chitwoodi*. In this region, the two species are of economic importance on potatoes, black salsify (*Scorzonera hispanica*) and carrots. Concerning potato cultivars, it has previously been observed that on 20 cvs of potatoes tested, the percentage of tubers showing symptoms ranged from 3 to 21 %, and that the cv. Hansa and Bintje were the most susceptible. Studies on host suitability, in greenhouse and field conditions, have been conducted to identify possible rotation alternatives and to reduce nematode populations (Brinkman *et al.*, 1996). It appeared that *Phaseolus vulgaris* (except the cv. Masai) supported high populations of *M. chitwoodi* but was not a good host for *M. fallax*. Chicory cultivars (*Cichorium intybus*), dahlia (cv. Vuurvogel) and borage (*Borago officinalis*) supported low

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populations of both *M. chitwoodi* and *M. fallax*, and can offer alternative in crop rotations. However, further studies are necessary to collect more information on crops to be used in rotation to reduce nematode populations.

- Source:** Brinkman, H.; Goossens, J.J.M.; Van Riel, H.R. (1996) Comparative host suitability of selected crop plants to *Meloidogyne chitwoodi* Golden *et al.* 1980 and *M. fallax* Karssen 1996. **Anzeiger für Schädlingkunde Pflanzenschutz Umweltschutz, 69(6), 127-129.**
- Karssen, G. (1996) Description of *Meloidogyne fallax* n.sp. (Nematode: Heteroderidae), a root-knot nematode from The Netherlands. **Fundamental and Applied Nematology, 19(6), 593-599.**
- Petersen, D. J.; Vrain, T.C. (1996) Rapid identification of *Meloidogyne chitwoodi*, *M. hapla* and *M. fallax* using PCR primers to amplify their ribosomal intergenic spacer. **Fundamental and Applied Nematology, 19(6), 601-605.**
- Van Meggelen, J.C.; Karssen, G.; Janssen, G.J.W.; Verkerk-Bakker, B.; Janssen, R.; (1994) A new race of *Meloidogyne chitwoodi* Golden, O'Bannon, Santo & Finley, 1980 ? **Fundamental and Applied Nematology, 17(1), 93-96.**

Additional key words: new pest

Computer codes: MELGCH, NL

97/002 Report of the Dutch variant of *Meloidogyne chitwoodi* in a glasshouse in France

In the Western part of France, a *Meloidogyne* species was found on tomatoes grown in one glasshouse. It was found that the host range included cereals (such as wheat but not maize), potatoes, tomatoes, beet, lucerne, artichoke, lettuce etc. The host range characteristics, together with isoenzyme patterns and the use of digestion enzymes, showed that the nematode species found is different from *Meloidogyne chitwoodi* (EPPO A2 quarantine pest) and from other *Meloidogyne* species (*M. arenaria*, *M. hapla*, *M. incognita*, *M. javanica*, *M. naasi*), but is closely related or identical to the variant of *M. chitwoodi* discovered in the Netherlands. The later has now been described as *M. fallax* (see EPPO RS 97/001). This appears to be the first report of *M. fallax* in France, and so far *M. chitwoodi* has not been reported in this country.

- Source:** Daher, S.; Gillet, S.; Mugniéry, D.; Marzin, H. (1996) Discovery in France and characteristics of the Dutch variant of *Meloidogyne chitwoodi*. (Abst. C-85, p 188). **Abstract of a poster presented at the 3rd International Nematology Congress, Gosier (GP), 1996-07-07/12.**

Additional key words: new record

Computer codes: MELGCH, FR

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97/003 Tentative geographical distribution lists for *Meloidogyne chitwoodi* and *M. fallax*

Meloidogyne chitwoodi (EPPO A2 quarantine pest) was first described in USA in 1980. In USA, it is widespread in the western states, and there is one report from the eastern part in Virginia. In Europe, it was first found in the Netherlands in the 1980s, but after re-examining old collections, it was felt that it may have been present there since the 1930s. Information from other European countries is scarce, and its distribution may be larger than previously thought. In addition, a new species *M. fallax* has recently been described in the Netherlands, which was previously thought to be a new race of *M. chitwoodi*. The EPPO Secretariat has tried to work out tentative geographical distribution lists for the two species; although further information is needed, especially concerning the situation in Europe.

Meloidogyne chitwoodi

Europe: Belgium, Germany (EPPO RS 96/205, but *M. chitwoodi* sensu lato), Netherlands (EPPO RS 514/15, 1991)

Africa: South Africa (Kleynhans, 1991)

North America: Mexico (Eisenback *et al.*, 1986), USA (California, Colorado, Idaho, Nevada, Utah, Oregon, Virginia, Washington - Walters & Barker, 1994; Eisenback *et al.*, 1986)

South America: Argentina (Tiilikkala *et al.*, 1995)

Meloidogyne fallax

Europe: Netherlands (EPPO RS 97/001), France (in one glasshouse, EPPO RS 97/002). In Germany, no conclusion can be given yet on whether *M. chitwoodi* sensu stricto or *M. fallax* is present.

Source: Eisenback; J.D.; Stomberg, E.L.; McCoy, M.S. (1985) First report of the Columbia root-knot-nematode (*Meloidogyne chitwoodi*) in Virginia.
Plant Disease, 70(8), p 801.

Kleynhans, K.P.N. (1991) The root-knot nematodes of South Africa.
Technical Communication, Department of Agricultural Development, South Africa, no. 231, 61 pp.

Tiilikkala, K.; Carter, T.; Heikinheimo, M.; Venäläinen, A. (1995) Pest risk analysis of *Meloidogyne chitwoodi* for Finland.
Bulletin OEPP/EPPO Bulletin, 25(3), 419-435.

Walters, S.A. Barker, K.R. (1994) Current distribution of five major *Meloidogyne* species in the United States.
Plant Disease, 78(8), 772-774.

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97/004 *Globodera rostochiensis* is present in Romania

Globodera rostochiensis (EPPO A2 quarantine pest) was found for the first time in Romania in 1986. The nematode was observed in the district of Harghita. The EPPO Secretariat had previously no data on the occurrence of the nematode in Romania.

Source: Rojancovchi, E.; Deheleanu, A. (1986) [Potato cyst-nematode, *Globodera rostochiensis* (Woll.) Mulvey & Stone, a new pest detected in our country.]
Buletin de Protectia Plantelor, No. 2, 43-50.

Additional key words: new record

Computer codes: HETDRO, RO

97/005 Situation of *Heterodera glycines* in Brazil

Heterodera glycines (EPPO A1 quarantine pest) was found in Brazil during the soybean growing season of 1991/92 (EPPO RS 93/121). It was initially found in four states (Mato Grosso, Mato Grosso do Sul, Goiás, Minas Gerais) and was later found in the states of São Paulo (EPPO RS 96/197), Rio Grande do Sul* and Paraná*. It is estimated that more than one million ha are infested and losses could reach more than 150 million dollars.

* new detailed records

Source: Ferraz, S.; do Valle, L.A.C. (1996) Current status of *Heterodera glycines* Ichinohe on soybean in Brazil. (Abst. B-84, p 150)

Wain, A.L.; Silva, J.F.V. (1996) Survey of *Heterodera glycines* races in Brazil. (Abst. C-22, p 165)

Abstracts of posters presented at the 3rd International Nematology Congress, Gosier (GP), 1996-07-07/12.

Additional key words: detailed records

Computer codes: HETDGL, BR

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97/006 Details on the geographical distribution of *Nacobbus aberrans* in USA

In United States, *Nacobbus aberrans* (EPPO A1 quarantine pest) is reported on sugarbeet (*Beta vulgaris*) in the following states: Colorado, Kansas*, Nebraska*, Montana*, South Dakota*, Utah* and Wyoming. In Nebraska, crop losses of 10-20 % occur in sugar beet fields infested by *N. aberrans*. In Arkansas*, *N. aberrans* was found on tomato (*Lycopersicon esculentum*) and rose (*Rosa* sp.). Another species of minor economic importance, *Nacobbus dorsalis*, has been found only in California on weeds and sugar beet.

* new detailed records

Source: Inserra, R.N.;, Griffin, G.D.; Kerr, E.D. (1996) Geographical distribution and economic importance of *Nacobbus* spp. in the United States. (Abst. S-42, p 55).

Abstract of a paper presented at the 3rd International Nematology Congress, Gosier (GP), 1996-07-07/12.

Additional key words: detailed records

Computer codes: NACOBA, US

97/007 Possible presence of *Ralstonia (Pseudomonas) solanacearum* in the Turkish part of Cyprus.

The Plant Protection Service of Cyprus has informed the EPPO Secretariat that several reports appearing in Turkish Cypriot newspapers indicated that serious plant health problems are affecting potatoes and citrus in the northern part of the island. Concerning potato crops, symptoms described could well indicate that there has been an outbreak of *Ralstonia (Pseudomonas) solanacearum* (EPPO A2 quarantine pest) in this area. It must be recalled that in the southern part of the island, the bacterium is absent (EPPO RS 96/090).

Source: **Plant Protection Service of Cyprus, 1996-09.**

Computer codes: PSDMSO, CY

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97/008 Further reports of *Tilletia indica* in USA

In spring 1996, *Tilletia indica* (EPPO A1 quarantine pest) was detected for the first time in USA in Arizona, Texas and New Mexico (EPPO RS 96/062). In November 1996, USDA reported that during its national survey programme for *T. indica*, the fungus was also found in wheat samples from Alabama and Tennessee (US). In Tennessee, the positive samples were taken from the following counties: Giles, Coffee, DeKalb, Greene, Hamblen, Marion, Overton and Warren. In Alabama, positive samples came from wheat in grain storage facilities in Mobil and Perry counties and from a farm storage facility in Geneva County. It is also mentioned that in June a positive sample was found in California, but that all additional surveys were negative in that state. However, USDA pointed out that current results of the national survey demonstrate that the vast majority of the US, including the wheat belt, is still free from *T. indica*.

Source: USDA-APHIS server on INTERNET
 <http://www.aphis.usda.gov>

Additional key words: detailed record

Computer codes: NEOVIN, US

97/009 Fireblight in Central Europe

At the 7th EPPO Workshop for phytosanitary inspectors, 1996-10-15/18 which took place in Nitra, Slovakia, several presentations were made on the present situation of *Erwinia amylovora* (EPPO A2 quarantine pest) in Central Europe.

Czech Republic

Erwinia amylovora was first found in parks in Prague in 1986 (EPPO RS 499/06) on *Crataegus*. Since then and despite eradication measures taken, the disease spread gradually in western, central and eastern Bohemia during the last ten years. The easternmost point of the outbreak is the Svitavy district. *Crataegus* plants are the most commonly infected hosts before pear, apple and *Sorbus*. *Cydonia*, *Pyracantha*, *Cotoneaster* and *Chaenomeles* are sporadically found infected. Any focus of the disease has to be notified to the Czech authorities and strict phytosanitary and eradication measures still continued to be applied.

Slovakia

E. amylovora is absent from Slovakia. The record appearing in PQR (absent, unconfirmed) based on the CABI map should therefore be corrected.

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Hungary

Fireblight was first detected in spring 1996 (EPPO RS 96/106) in 2 orchards near Kecskemét (Bács-Kiskun county) and plantations were destroyed. Further surveys were conducted in the whole country and other foci were discovered, mainly in the south of the country (Bács-Kiskun, Békés, Csongrád and Baranya counties). Phytosanitary measures will continue to be applied to try to eradicate the disease and limit its spread within the country.

Poland

E. amylovora was observed for the first time in 1966 in the experimental orchard (apple and pear) of the Research Institute of Pomology and Floriculture at Milobadz (25 km south of Gdansk). Trees were destroyed. Two years later, it was found in pear trees in the Pomological orchard of Skierniewice (central Poland). At the same time, it was discovered again near the Baltic coast (Koszalin Province) in two apple nurseries which were destroyed. Until 1975, it occurred irregularly in isolated foci, mainly along the northern coast. Since 1976, it became established in numerous places across northern Poland, and since 1985 it spread towards the centre of the country. Since the beginning of the 1990s, it has been recorded in a number of places in western, south-western and south-central parts of Poland. However, it was never found in the eastern part of the country. *Crataegus* is the most frequently infected host plant. Pear and apple are also affected. Other species like *Cydonia*, *Sorbus*, *Photinia*, *Pyracantha* and *Cotoneaster* are found infected only sporadically. See also Sobiczewski & Suski, 1988.

Romania

E. amylovora was found for the first time in 1992 (EPPO RS 93/170 and 93/203) and is now present in 16 south-eastern districts and central-northern districts in the country. The main host plants are quince, pear and apple. Phytosanitary measures are applied, such as restrictions imposed on trade and movement of host plants, and destruction of infected plants.

Source: Oral presentations made at the 7th EPPO Workshop for phytosanitary inspectors, Nitra, SK, 1996-10-15/18.

Sobiczewski, P.; Suski, Z.W. (1988), Fireblight in Poland.
Bulletin OEPP/EPPO Bulletin, 18(3), 375-379.

Additional key words: detailed records

Computer codes: ERWIAM, CZ, HU, PL, SK

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97/010 Further information on the occurrence of *Rhynchophorus ferrugineus* in Spain

As stated in the EPPO RS 96/096, an Asiatic palm weevil, *Rhynchophorus ferrugineus* was observed for the first time in Spain, in the coastal region of Granada on *Phoenix canariensis*. At present, it has been found in an area of 50 km along the coast from Motril (Granada) to Nerja (Málaga); and this is the first report of this pest in Europe.

This insect originates from south-east Asia and Oceania and can attack various palm trees (mainly coconut but also other palms). In the Near East (Cox, 1991), *R. ferrugineus* is recorded as an important pest of date palm. It occurred for the first time in the United Arab Emirates in 1986, in Saudi Arabia in 1987 and in Iran in 1992. Its establishment in Egypt (first record for Africa) was confirmed in 1992. The pest is also reported from Qatar (Abdou, 1996). Its geographical distribution is the following:

EPPO region: Egypt, Spain

Asia: Bangladesh, Cambodia, China, India, Indonesia, Iran, Laos, Malaysia, Myanmar, Pakistan, Philippines, Qatar, Saudi Arabia, Sri Lanka, Thailand, United Arab Emirates, Vietnam.

Africa: Egypt

Oceania: Australia, Papua New Guinea, Solomon Islands.

In Spain, to eradicate the pest and to prevent any further spread, the following measures have been taken: 1) surveys in the areas where the pest is present and in their vicinity, with emphasis given to nurseries; 2) destruction of all infested palm trees; 3) establishment of a network of traps for adults (pheromone and kairomone) in parks and gardens; 4) inventory of all nurseries producing and/or selling any palm species; 5) extension and information of growers, official institutes and also the general public; 6) studies on the biology of the pest, efficacy of chemical treatments; 7) project of phytosanitary measures to be taken to prevent the movement of infested plants.

Source: **Plant Protection Service of Spain, 1996-11.**

Cox, M.L. (1993) Red palm weevil, *Rhynchophorus ferrugineus* in Egypt.

FAO Plant Protection Bulletin, 41(1), 30-31.

Abdou, R.M. (1996) Date palm trees damaged by some insects in the State of Qatar. **Abstract of a paper presented at the XX International Congress of Entomology, Firenze (IT), 1996-08-25/31 (Abst. 17-048, p 545).**

Additional key words: detailed record

Computer codes: ES, RHYCFE

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97/011 *Gonipterus scutellatus* is present in California (US)

The eucalyptus snout beetle *Gonipterus scutellatus* (EPPO A2 quarantine pest) was first detected in California (US) in spring 1994, and, as in other countries, it spread quickly from the original site of infestation. This is the first record of *G. scutellatus* in USA. A biological control programme was applied in autumn 1994, using the egg parasitoid *Anaphes nitens*. This parasitoid was shown to be very efficient as, within a year, beetle populations decreased drastically and defoliation levels diminished from more than 82 % to less than 10 %.

Source: Millar, J.G.; Hanks, L.M.; Paine, T.D. (1996) Control of the eucalyptus snout beetle *Gonipterus scutellatus* Gyllenhal in California by the egg parasitoid *Anaphes nitens* (Girault) (Coleoptera: Curculionidae - Hymenoptera: Mymaridae).
Abstract of a paper presented at the XX International Congress of Entomology, Firenze (IT), 1996-08-25/31 (Abst. 16-017, p 508).

Additional key words: new record, biological control

Computer codes: GONPSC, US

97/012 *Gonipterus scutellatus* found in Portugal

A paper presented at the XX International Congress of Entomology confirms that *Gonipterus scutellatus* (EPPO A2 quarantine pest) has recently been found in Portugal (see also EPPO RS 96/213).

Source: Paiva, M.R. (1996) Management of forest insects in Portugal.
Abstract of a paper presented at the XX International Congress of Entomology, Firenze (IT), 1996-08-25/31 (Abst. 16-026, p 510).

Additional key words: new record

Computer codes: GONPSC, PT

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97/013 First report of *Parabemisia myricae* in Portugal

Parabemisia myricae (EPPO A2 quarantine pest) was found for the first time in Portugal in August 1993. It was observed in a sweet orange (*Citrus sinensis*) orchard, in the region of Tavira (Algarve). Preliminary results showed that the pest spread on citrus within the Algarve region. The authors expect that it will rapidly be widespread in Algarve and probably also in other regions of the country. So far, it has been observed on citrus and avocado. Although, the pest can still be considered as a secondary pest in Portugal, it may cause problems in integrated pest management programmes together with the newly introduced citrus leafminer, *Phyllocnistis citrella*.

Source: Franco, J.C.; Cavaco, M.; Carvalho, J.P.; Fernandes, J.E. (1996) Sobre a presença de *Parabemisia myricae* (Kuwana) (Homoptera; Aleyrodidae) em Portugal.
Boletín de Sanidad Vegetal, Plagas, 22(3), 521-536.

Additional key words: new record

Computer codes: PRABMY, PT

97/014 Further studies on the citrus chlorotic dwarf disease found in Turkey

In the late 1980s, a new disease of citrus, called citrus chlorotic dwarf, was observed in the Eastern Mediterranean region of Turkey (EPPO RS 94/209). Symptoms observed are characterized by leaf deformation, chlorotic flecking of interveinal tissues and oak leaf patterns. Although these symptoms resemble those caused by citrus leaf rugose ilarvirus or citrus variegation ilarvirus, it was found that these viruses are not associated with citrus chlorotic dwarf. On citrus hosts, the disease seems to be transmitted by *Parabemisia myricae*, grafting and cutting tools, but not by sap inoculation. However, from leaf samples of citrus affected by chlorotic dwarf, a virus was consistently transmitted by sap inoculation to herbaceous hosts. Serological studies showed that this virus was similar, if not identical, to olive latent virus 1. The authors have considered it as a citrus isolate of olive latent virus 1, which was found 10 years ago in Southern Italy on symptomless olive trees. At that time, it was thought to be a sobemovirus. Further studies on the properties (biological, morphological, physio-chemical etc.) of this citrus isolate of olive latent virus 1 (OLV-1/Tk), showed that it could be regarded as a new necrovirus species.

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But when assessing the occurrence of the virus in citrus grown in the field (showing symptoms or not), OLV-1/Tk was identified in 59 % of the citrus plants affected by citrus chlorotic dwarf and in 28 % of symptomless plants. The authors concluded that their results did not support the hypothesis that citrus chlorotic dwarf disease is due to OLV-1/Tk, but the frequent association of this virus with diseased plants remains intriguing.

Source: Martelli, G.P.; Yilmaz, M.A.; Savino, V.; Baloglu, S.; Grieco, F.; Güldür, M.E. (1996) Properties of a citrus isolate of olive latent virus 1, a new necrovirus.
European Journal of Plant Pathology, 102(6), 527-536.

97/015 *Xanthomonas axonopodis* pv. *citri* found in Zanzibar (Tanzania)

Xanthomonas axonopodis pv. *citri* (*X. campestris* pv. *citri* - EPPO A1 quarantine pest) was found in the island of Zanzibar (Tanzania) in 1991 on lime, and subsequently on sweet orange and lime in one orchard in 1992. The identity of the bacterium was confirmed at the Central Science Laboratory (UK) in September 1992. The Ministry of Agriculture, Livestock and Natural Resources in Zanzibar notified FAO in 1994 and announced the finding in the local newspapers. The status of citrus canker in mainland Tanzania is unknown but will be investigated in a current project on bacterial plant pathogens.

Source: Daily News (Daar es Salaam), 1994-09-01.
Personal communication from Dr R. Black, Natural Resources Institute, Chatham Maritime, UK.

Additional key words: new record

Computer codes: XANTCI, TZ

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97/016 *Phyllocnistis citrella* is present in Mexico

A paper present at the XX International Congress of Entomology reported that *Phyllocnistis citrella* arrived in Mexico in 1994. Programmes of integrated pest management are being developed against this serious citrus pest. The EPPO Secretariat had previously no information on the status of this pest in Mexico.

Source: Ruíz Cancino, E. (1996) Integrated pest management in Mexican citrus. **Abstract of a paper presented at the XX International Congress of Entomology, Firenze (IT), 1996-08-25/31 (Abst. 22-045, p 710).**

Additional key words: new record

Computer codes: PHYNCI, MX

97/017 Only first instar larvae of *Frankliniella occidentalis* can acquire tomato spotted wilt tospovirus

It is generally admitted that only thrips larvae can acquire tomato spotted wilt tospovirus (EU annexes I/B and II/A2). Studies have been carried out in the Netherlands to define more precisely the developmental stages at which *Frankliniella occidentalis* (EPPO A2 quarantine pest) can acquire and transmit the virus. Results showed that only first instar larvae of *F. occidentalis* can acquire the virus after ingestion. Second instar larvae failed to acquire and maintain the virus, and did not become transmitters. After acquisition by first instar larvae followed by a latent period and virus replication, tomato spotted wilt tospovirus can be transmitted by second instar larvae and adults. The authors concluded that the current control measures against tomato spotted wilt tospovirus, which are mainly targeted against stages transmitting the virus, might be more effective if they were directed at the beginning of the transmission cycle (i.e. against the first instar larvae).

Source: van de Wetering, F.; Goldbach, R.; Peters, D. (1996) Tomato spotted wilt tospovirus infection by first instar larvae of *Frankliniella occidentalis* is a prerequisite for transmission.
Phytopathology, 96(9), 900-905

Additional key words: epidemiology

Computer codes: FRANOC, TMSWXX

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97/018 A new closterovirus transmitted by *Bemisia tabaci*: lettuce chlorosis closterovirus

In the southwest desert regions of USA, a new virus disease was observed on lettuce, sugarbeet, several other crops and weeds (but not on Cucurbitaceae). On lettuce and sugarbeet, symptoms are characterized by interveinal yellowing, stunting, rolling and brittleness of affected leaves. A new closterovirus, different from lettuce infectious yellows closterovirus (EPPO A1 quarantine pest), has been isolated from diseased plants and called lettuce chlorosis closterovirus. It is transmitted by both A and B biotypes of *Bemisia tabaci* (EPPO A2 quarantine pest). The authors noted that since 1990, yellowing symptoms observed on lettuce and sugarbeet have been shown to be induced by a mixture of lettuce infectious yellows and lettuce chlorosis closteroviruses.

Source: Duffus, J.E.; Liu, H.Y.; Wisler, G.C.; Li, R. (1996) Lettuce chlorosis virus - A new whitefly-transmitted closterovirus.
European Journal of Plant Pathology, 102(6), 591-596.

Additional key words: new pest

Computer codes: LCV, US

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97/019 New virus disease of rice in Colombia

Until recently, the only virus of rice present in Latin America was rice hoja blanca tenuivirus (RHBV), which is transmitted by a planthopper *Sogatodes oryziicola*. However, in 1991, a new disease of rice was observed in the eastern plains of Colombia. Infected plants showed striking symptoms. Emerging central leaves are highly deformed, showing a 'zigzag' growth (hence the common name 'entorchamiento': crinkling). Affected leaves show chlorotic or yellow stripes and later become necrotic. Plant growth is severely reduced, and when affected at an early stage, seedlings may die. The incidence of this disease increased from an average of 6 % in 1993 to 18 % in 1994, in areas where it first appeared. Yield losses associated with the presence this disease in Colombia have been estimated at 20-40 %, and some rice fields in the Eastern plains have even been abandoned. Morales *et al.* (1995) identified the causal agent of this new disease as being the rice stripe necrosis furovirus (RSNV). This virus had previously been reported from West Africa only and is probably transmitted by a fungus, *Polymyxa graminis*. It was first reported in 1977 in Côte d'Ivoire, and then in Liberia, Nigeria, Sierra Leone (Hibino, 1996). The virus and its fungal vector have now been identified in all the major rice-producing regions of Colombia. It is suspected that this new virus disease may have been introduced into the country on rice germplasm material from Africa.

Source: Hibino, H. (1996) Biology and epidemiology of rice viruses.
Annual Review of Phytopathology, 34, 249-274.

Morales, F.J. (1996) Rice virus emerges in Latin America.
CARAPHIN News, no. 14, p 4 & 8.

Morales, F.J.; Arroyave, J.A.; Velasco, A.C.; Castano, M. (1995)
[Partial characterization of crinkling or necrotic stripe virus on rice in
Colombia.]
Fitopatologia Colombiana, 19(1), 48-54.

Additional key words: new record

Computer codes: CO

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97/020 New Journal of Plant Pathology

From 1997-03, the Italian National Society of Plant Pathology (SIPaV) will publish a new 'Journal of Plant Pathology'. A. Matta (University of Torino) will be the editor-in-chief, R. Locci (University of Udine), P. Martelli (University of Bari) and U. Mazzuchi (University of Bologna) will be the senior editors. The journal will publish original contributions in English on mycology, bacteriology, virology and on subjects such as plant pathogen interactions, post-harvest diseases, abiotic agents and crop protection under the supervision of an International Editorial Board. For further information, contact: Dr G. Vannacci, DCDSL-Sez. Patologia Vegetale, Via del Borghetto 80, 56124 Pisa (Italy).

Fax 39-50-544420 ; e-mail: gvann@agr.unipi.it.

Source: **EPPO Secretariat, 1996-12.**

97/021 New or unusual records in Bulletin OEPP/EPPO Bulletin

EPPO is interested in new or unusual records of plant pests, especially those which are quarantine pests for Europe or for other regions of the world. The Reporting Service collects records appearing in other publications. However, the EPPO journal (Bulletin OEPP/EPPO Bulletin) also offers the possibility of first publishing such records. Reports should be presented according to the same instructions for authors as for the journal except that the total length should not exceed four pages of the journal (about 2000 words) including abstracts, figures, etc. and the text should not be divided into sections. Such reports may concern any plant pest (animal, microbial, virus, weed) recorded in any part of the world, but the editor reserves the right to give priority to those of greatest plant quarantine interest. It may be noted that such 'New or unusual records' used to be published in Plant Pathology, but that journal has ceased to accept them since 1995.

Source: **EPPO Secretariat, 1996-12.**

EPPO *Reporting Service*

97/022

GIFAP is now the Global Crop Protection Federation (GCPF)

GIFAP (International Group of National Associations of Manufacturers of Agrochemical Products) has changed its name into the Global Crop Protection Federation (GCPF). This worldwide Federation includes regional and national associations in Africa/Middle East, Asia-Pacific, Europe, Japan, Latin America and North America.

GCPF Secretariat

Global Crop Protection Federation
143 Avenue Louise
1050 Brussels - Belgium
tel: (32) 2 542 04 10
fax: (32) 2 542 04 19
<http://www.gcpf.org>

Director General: K.P. Vlahodimos
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e-mail: monique@gcpf.org
Communication Coordinator: Norma Deasy
e-mail: norma@gcpf.org

Regional Association Groups

ACPA (American Crop Protection Association)

1156 Fifteenth Street, N.W.
Suite 400
Washington, D.C. 20005
USA
tel: (1) 202 296 15 85
fax: (1) 202 463 04 74
<http://www.acpa.org>
President: M. J.J. Vroom

AMEWG (Africa/Middle-East Working Group)

P.O.Box 79083
Nairobi
Kenya
tel: (254) 2 43 276
fax: (254) 2 43 135
Coordinator: Dr B.V. Ouayogodé

ECPA (European Crop Protection Association)

Avenue de Beaulieu 25, Box 25
1160 Brussels
Belgium
tel: (32) 2 663 15 50
fax: (32) 2 663 15 60
Director General: Dr P.A. Urech

LCPA (Latin America Crop Protection Association)

Apartado 94-2020
Centro Postal Zapote
San José
Costa Rica
tel: (506) 257 32 76
fax: (506) 233 50 78
Coordinator: M. F. Fernández

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Regional Association Groups (cont.)

APCPA	(Asia-Pacific Protection Association)	Crop	JCPA (Japanese Crop Protection Association)
1405, Rasa Tower Building			Nihonbashi Clb Bldg.
55 Pahonyothin Road			5-8, 1-Chome
Chatuchak			Nihonbashi Muromachi,
Bangkok 10900			Chuo-ku
Thailand			Tokyo
tel: (662) 937 0487 90			103 Japan
fax: (662) 937 04 91			tel: (81) 3 3241 02 30
http://www.apcpa.org			fax: (81) 3 3241 31 49
Coordinator: M. W.W. Ellis			Senior Managing Director: M. T. Sasaki

Source: EPPO Secretariat, 1996-12.

97/023 EPPO report on selected intercepted consignments

The EPPO Secretariat has gathered the intercepted consignments received since the publication of the previous report in June 1996 (EPPO RS 96/122), from the following countries: Austria, Belgium, Czech Republic, Cyprus, Finland, France, Germany, Ireland, Italy, Netherlands, Malta, Poland, Portugal, Switzerland, 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 (*).

In addition, 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 here. It must be pointed out that the report is only partial, as many EPPO countries have not yet sent their interceptions for 1996; 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.

EPPO Reporting Service

	Consignment	Type of commodity	Country of Origin	Country of destination	nb	
<i>Aphelenchoides</i> sp.	<i>Chrysalidocarpus lutescens</i>	Pot plants	St Lucia	Germany	1	
	<i>Cycas revoluta</i>	Pot plants	Canary Isl. (ES)	Germany	1	
	<i>Dracaena fragrans</i>	Pot plants	Brazil	Germany	1	
<i>Aphelenchus</i> sp.	<i>Cycas revoluta</i>	Pot plants	Canary Isl. (ES)	Germany	1	
<i>Bemisia tabaci</i>	<i>Ajuga</i> sp.	Cuttings	Israel	United Kingdom	1	
	<i>Chrysanthemum</i>	Cut flowers	Netherlands	Ireland	10	
	<i>Chrysanthemum</i>	Cut flowers	Italy	United Kingdom	1	
	<i>Crossandra infundibuliformis</i>	Pot plants	(Denmark)	United Kingdom	1	
	<i>Dipladenia</i>	Cuttings	Israel	Netherlands	1	
	<i>Eucalyptus grandis</i>	Cuttings	USA	United Kingdom	1	
	<i>Euphorbia pulcherrima</i>	Plants for planting	Netherlands	United Kingdom	2	
	<i>Euphorbia pulcherrima</i>	Pot plants	Netherlands	United Kingdom	3	
	<i>Gypsophyla</i>	Cut flowers	Turkey	United Kingdom	1	
	<i>Gypsophyla perforata</i>	Cut flowers	Israel	United Kingdom	1	
	<i>Hibiscus rosa-sinensis</i>	Plants for planting	Côte d'Ivoire	France	1	
	<i>Hibiscus rosa-sinensis</i>	Plants for planting	Israel	Netherlands	1	
	<i>Lysimachia</i>	Cuttings	Israel	Italy	1	
	<i>Mandevilla</i>	Pot plants	Israel	Netherlands	1	
	<i>Manihot esculenta</i>	Vegetables	Ghana	United Kingdom	7	
	<i>Manihot esculenta</i>	Vegetables	Nigeria	United Kingdom	6	
	<i>Phlox drummondii</i>	Cut flowers	Israel	United Kingdom	1	
	<i>Solidago caesia</i>	Cut flowers	Israel	United Kingdom	5	
	<i>Solidaster hybrida</i>	Cut flowers	Israel	United Kingdom	2	
	<i>Tolmiea menziesii</i>	Pot plants	Netherlands	Finland	1	
	<i>Tradescantia</i>	Pot plants	Netherlands	Finland	1	
	<i>Atropo leaves?</i>	Vegetables	Ghana	United Kingdom	1	
	Leaves (unkown sp.)	Vegetables	Cameroon	United Kingdom	1	
	<i>Sawasawa (leaves)?</i>	Vegetables	Ghana	United Kingdom	1	
	<i>Burkholderia (Pseudomonas) solanacearum</i>	<i>Solanum tuberosum</i>	Ware potatoes	Egypt	Italy	1
		<i>Solanum tuberosum</i>	Ware potatoes	Egypt	Germany	7
		<i>Solanum tuberosum</i>	Ware potatoes	Turkey	Greece	3
<i>Bephratelloides</i> sp.	<i>Annona muricata</i>	Fruits	Venezuela	Portugal	1	
<i>Cephalenchus</i> sp.	<i>Chrysalidocarpus lutescens</i>	Pot plants	St Lucia	Germany	1	
<i>Cerconota anonella</i>	<i>Annona muricata</i>	Fruits	Venezuela	Portugal	1	
<i>Chrysodeixis chalcites</i>	<i>Chrysanthemum</i>	Cuttings	Kenya	United Kingdom	1	
<i>Chrysomphalus ficus</i>	<i>Ptychosperma elegans</i>	Plants for planting	USA	United Kingdom	1	
<i>Clavibacter michiganensis</i> subsp. <i>sepedonicus</i>	<i>Solanum tuberosum</i>	Seed potatoes	Czech Republic	Poland	1	

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	Consignment	Type of commodity	Country of Origin	Country of destination	nb
<i>Colletotrichum acutatum</i>	<i>Fragaria ananassa</i>	Plants for planting	Australia	United Kingdom	1
	<i>Fragaria ananassa</i>	Plants for planting	France	United Kingdom	2
	<i>Fragaria ananassa</i>	Plants for planting	USA	United Kingdom	1
<i>Criconemoides</i> sp.	<i>Dracaena deremensis</i> + <i>Ficus benjamina</i> + <i>Phoenix roebelenii</i>	Pot plants	Costa Rica	Germany	1
<i>Diplodia</i> sp.	<i>Cactaceae</i>	Plants for planting	Germany	Portugal	1
<i>Ditylenchus</i> sp.	<i>Dracaena fragrans</i>	Pot plants	Côte d'Ivoire	Germany	1
<i>Erwinia cypripedii</i>	<i>Dracaena reflexa</i>	Plants for planting	Sri Lanka	United Kingdom	2
<i>Erwinia</i> spp. (soft rot)	<i>Solanum tuberosum</i>	Ware potatoes	Ireland	Cyprus	2
<i>Fusarium</i> sp.	<i>Solanum tuberosum</i>	Ware potatoes	Netherlands	Cyprus	1
<i>Globodera pallida</i>	<i>Solanum tuberosum</i>	Ware potatoes	Malta	Netherlands	1
<i>Globodera</i> sp.	<i>Solanum tuberosum</i>	Ware potatoes	Sweden	Finland	3
<i>Helicotylenchus</i> sp.	<i>Cycas revoluta</i>	Pot plants	Canary Isl. (ES)	Germany	2
	<i>Dracaena deremensis</i> + <i>Ficus benjamina</i> + <i>Phoenix roebelenii</i>	Pot plants	Costa Rica	Germany	1
<i>Helicoverpa armigera</i>	<i>Dianthus caryophyllus</i>	Cut flowers	Morocco	France	3
	<i>Dianthus caryophyllus</i>	Cut flowers	Morocco	Netherlands	1
	<i>Dianthus</i>	Cut flowers	Kenya	Netherlands	1
	<i>Dianthus</i>	Cut flowers	Turkey	Netherlands	1
	<i>Pelargonium</i>	Cuttings	XB (unknown ISO code)	United Kingdom	1
	<i>Pisum sativum</i>	Vegetables	Zimbabwe	United Kingdom	1
<i>Hirschmaniella</i> sp.	<i>Chrysalidocarpus lutescens</i>	Pot plants	St Lucia	Germany	1
<i>Hymenia recurvalis</i>	Mixed leaves	Vegetables	Nigeria	United Kingdom	1
<i>Leptinotarsa decemlineata</i>	<i>Solanum tuberosum</i>	Ware potatoes	Italy	Ireland	1
	<i>Solanum tuberosum</i>	Ware potatoes	Italy	United Kingdom	4
	<i>Solanum tuberosum</i>	Ware potatoes	Spain	United Kingdom	3
<i>Liriomyza bryoniae</i>	<i>Gypsophila</i>	Cut flowers	Netherlands	United Kingdom	1
<i>Liriomyza huidobrensis</i>	<i>Amaranthus</i> sp.	Cut flowers	Mauritius	France	2
	<i>Anethum graveolens</i>	Vegetables	Cyprus	United Kingdom	1
	<i>Apium graveolens</i>	Vegetables	Italy	United Kingdom	1
	<i>Apium graveolens</i>	Vegetables	Spain	United Kingdom	1
	<i>Apium graveolens</i>	Vegetables	USA	United Kingdom	1
	<i>Aster</i>	Cut flowers	Netherlands	United Kingdom	1

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	Consignment	Type of commodity	Country of Origin	Country of destination	nb
<i>L. huidobrensis (cont.)</i>	<i>Carthamus</i>	Cut flowers	Kenya*	United Kingdom	1
	<i>Carthamus</i>	Cut flowers	Netherlands	United Kingdom	1
	<i>Chrysanthemum</i>	Cut flowers	Israel	United Kingdom	1
	<i>Chrysanthemum</i>	Cut flowers	Kenya*	United Kingdom	1
	<i>Chrysanthemum</i>	Cut flowers	Netherlands	Ireland	7
	<i>Chrysanthemum</i>	Cut flowers	Netherlands	United Kingdom	7
	<i>Chrysanthemum</i>	Pot plants	Netherlands	United Kingdom	1
	<i>Coriandrum sativum</i>	Vegetables	Israel	United Kingdom	1
	<i>Coriandrum sativum</i>	Vegetables	Cyprus	United Kingdom	1
	<i>Cucumis sativus</i>	Plants for planting	Netherlands	United Kingdom	2
	<i>Dianthus</i>	Cut flowers	Netherlands	United Kingdom	2
	<i>Dianthus</i>	Pot plants	Netherlands	United Kingdom	1
	<i>Eustoma (Lisianthus)</i>	Cut flowers	Netherlands	United Kingdom	1
	<i>Eustoma (Lisianthus)</i>	Cut flowers	Spain	United Kingdom	1
	<i>Exacum</i>	Pot plants	Netherlands	United Kingdom	2
	<i>Gypsophila</i>	Cut flowers	Israel	France	1
	<i>Gypsophila</i>	Cut flowers	Israel	United Kingdom	1
	<i>Gypsophila</i>	Cut flowers	Netherlands	Czech Republic	1
	<i>Gypsophila</i>	Cut flowers	Netherlands	Ireland	7
	<i>Gypsophila</i>	Cut flowers	Spain	Ireland	1
	<i>Gypsophila</i>	Cut flowers	Netherlands	Portugal	1
	<i>Gypsophila</i>	Cut flowers	Israel	United Kingdom	1
	<i>Gypsophila</i>	Cut flowers	UK (Jersey ?)	United Kingdom	1
	<i>Gypsophila</i>	Cut flowers	Netherlands	United Kingdom	12
	<i>Gypsophila</i>	Cut flowers	Spain	United Kingdom	1
	<i>Lisianthus</i>	Cut flowers	Italy	United Kingdom	1
	<i>Lisianthus</i>	Cut flowers	Netherlands	United Kingdom	1
	<i>Lychnis</i>	Plants for planting	Netherlands	United Kingdom	1
	<i>Nicotiana</i>	Pot plants	Denmark*	United Kingdom	1
	<i>Pisum sativum</i>	Vegetables	Guatemala	United Kingdom	1
	<i>Primula</i>	Plants for planting	Netherlands	United Kingdom	1
	<i>Spinacia oleracea</i>	Vegetables	Cyprus	United Kingdom	1
	<i>Liriomyza trifolii</i>	<i>Apium graveolens</i>	Vegetables	Spain	United Kingdom
<i>Bellis</i>		Plants for planting	Netherlands	United Kingdom	1
<i>Beta vulgaris subsp. cicla</i>		Vegetables	Lebanon	France	1
<i>Cucumis sativus</i>		Plants for planting	Netherlands	United Kingdom	3
<i>Gypsophyla</i>		Cut flowers	Israel	France	2
<i>Gypsophyla</i>		Cut flowers	Israel	United Kingdom	1
<i>Oscimum basilicum</i>		Vegetables	Côte d'Ivoire*	France	2
<i>Liriomyza sp.</i>		<i>Eruca sativa</i>	Fruits & vegetables	Bulgaria	Italy
	<i>Carthamus</i>	Cut flowers	Netherlands	Portugal	1
	<i>Gypsophila</i>	Cut flowers	Ghana	Germany	1
	<i>Gypsophila</i>	Cut flowers	Israel	France	1
	<i>Gypsophila</i>	Cut flowers	Netherlands	Ireland	5
	<i>Gypsophila</i>	Cut flowers	Netherlands	Portugal	5
	<i>Gypsophila</i>	Cut flowers	Spain	United Kingdom	1
	<i>Silene+ Dianthus deltooides + Gypsophila elegans</i>	Plants for planting	Netherlands	United Kingdom	1

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	Consignment	Type of commodity	Country of Origin	Country of destination	nb
<i>Meloidogyne</i> sp.	<i>Chrysalidocarpus lutescens</i>	Pot plants	Dominican Rep.	Germany	1
	<i>Chrysalidocarpus lutescens</i>	Pot plants	St Lucia	Germany	2
<i>Meloidogyne</i> , <i>Helicotylenchus</i> , <i>Criconeematidae</i>	<i>Caryota arens</i> + <i>Elaeis guineensis</i> + <i>Borassus aethiopi</i> +, <i>Chrysalidocarpus lutescens</i> + <i>Palmae pacifica</i>	Plants for planting	Senegal	France	1
<i>Opogona sacchari</i>	<i>Areca</i> sp.	Pot plants	South Africa	Netherlands	4
<i>Paratylenchus</i> sp.	<i>Chrysalidocarpus lutescens</i>	Pot plants	St Lucia	Germany	2
	<i>Cycas revoluta</i>	Pot plants	Canary Isl. (ES)	Germany	2
<i>Peronophythora litchii</i>	<i>Litchi sinensis</i>	Fruits	Thailand	United Kingdom	1
<i>Phaedon</i> sp.	<i>Cactaceae</i>	Plants for planting	Germany	Portugal	1
<i>Phaedon</i> sp. + <i>Diplodia</i>	<i>Cactaceae</i>	Plants for planting	Peru	Portugal	1
<i>Pratylenchus coffeae</i>	<i>Areca</i> sp.	Pot plants	Malaysia	Germany	1
<i>Pratylenchus</i> sp.	<i>Cycas revoluta</i>	Pot plants	Canary Isl. (ES)	Germany	1
<i>Phyllocnistis citrella</i>	Citrus spp.	Plants for planting	Italy	Malta	2
<i>Puccinia horiana</i>	<i>Chrysanthemum</i>	Cuttings	Germany	Portugal	1
<i>Spodoptera littoralis</i>	<i>Corchorus acutangulus</i>	Vegetables	Nigeria	United Kingdom	1
	<i>Psidium guajava</i>	Fruits	Egypt	France	1
<i>Tilletia indica</i>	<i>Triticum</i> sp.	Grain	India	Poland	1
<i>Thrips palmi</i>	<i>Amaranthus</i> sp.	Cut flowers	Mauritius	France	1
	<i>Capsicum</i> sp.	Fruits & vegetables	Mauritius	France	1
	<i>Cucurbita maxima</i>	Fruits & vegetables	Mauritius	France	2
	<i>Dendrobium</i>	Cut flowers	Malaysia	Netherlands	1
	<i>Dendrobium</i>	Cut flowers	Singapore	Netherlands	1
	<i>Dendrobium</i>	Cut flowers	Thailand	Netherlands	1
	<i>Dendrobium</i>	Cut flowers	Thailand	France	1
	<i>Dendrobium</i>	Cut flowers	Singapore	France	1
	<i>Momordica</i>	Fruits & vegetables	Dominican Rep.	France	2
	<i>Orchidaceae</i>	Cut flowers	Singapore	France	3
	<i>Orchidaceae</i>	Cut flowers	Thailand	France	8
	<i>Orchidaceae</i>	Cut flowers	Thailand	Finland	1
	<i>Solanum macrocarpon</i>	Fruits & vegetables	Mauritius	France	1
	<i>Solanum melongena</i>	Fruits & vegetables	Dominican Rep.	France	3
	<i>Solanum melongena</i>	Fruits & vegetables	Mauritius	France	7

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	Consignment	Type of commodity	Country of Origin	Country of destination	nb
Tomato spotted wilt tospovirus	<i>Chrysanthemum</i>	Cuttings	Kenya*	France	1
<i>Tylenchorhynchus</i> sp.	<i>Chrysalidocarpus lutescens</i>	Pot plants	Honduras	Germany	1
<i>Tylenchus</i> sp.	<i>Dracaena fragrans</i>	Pot plants	Côte d'Ivoire	Germany	1
<i>Xanthomonas fragariae</i>	<i>Fragaria ananassa</i>	plants for planting	Switzerland	Germany	2
	<i>Fragaria ananassa</i>	plants for planting	USA	Portugal	1
	<i>Fragaria ananassa</i>	plants for planting	United Kingdom*	Portugal	1
<i>Xiphinema</i> sp.	<i>Bambusa</i> sp.	Pot plants	Malaysia	Germany	1

• Fruit flies intercepted

	Consignment	Type of commodity	Country of Origin	Country of destination	nb
<i>Bactrocera dorsalis</i>	<i>Mangifera indica</i>	Fruits	Thailand	France	1
<i>Bactrocera</i> sp.	<i>Psidium guajava</i>	Fruits	Thailand	France	2
<i>Ceratitis cosyra</i>	<i>Mangifera indica</i>	Fruits	Côte d'Ivoire	France	1
<i>Ceratitis</i> sp.	<i>Mangifera indica</i>	Fruits	Côte d'Ivoire	France	1
	<i>Mangifera indica</i>	Fruits	Guinea	France	1
	<i>Mangifera indica</i>	Fruits	Mali	France	2
	<i>Mangifera indica</i>	Fruits	Senegal	France	1
Non-European Tephritidae	<i>Annona squamosa</i>	Fruits	Thailand	France	1
	<i>Mangifera indica</i>	Fruits	Côte d'Ivoire	France	1
	<i>Mangifera indica</i>	Fruits	Mali	France	2
	<i>Mangifera indica</i>	Fruits	Thailand	France	1
	<i>Mangifera indica</i>	Fruits	Venezuela	France	1

• Wood and wood products intercepted

	Consignment	Country of Origin	Country of destination	nb
<i>Ips typographus</i>	Conifer (dunnage)	Czech Republic	United Kingdom	1
	<i>Pinus/Picea</i> (wood)	Latvia	United Kingdom	1
	Conifer (dunnage)	Cuba	United Kingdom	1
<i>Ips</i> sp.	<i>Abies</i> (wood + bark)	Romania	Greece	1
	<i>Pinus</i> (wood)	Bulgaria	Greece	1
<i>Tomicus piniperda</i>	Conifer wood	Spain	United Kingdom	1
Bark beetle activity	Conifer	Cuba	United Kingdom	1
	<i>Pinus/Picea</i> (wood)	Slovenia	United Kingdom	1

EPPO *Reporting Service*

- Bonsai

24 consignments of various bonsai plants (*Acer palmatum*, *Acer buergerianum*, *Cryptomeria japonica*, *Carmona*, *Carpinus laxiflora*, *Celtis*, *Ficus*, *Larix*, *Ligustrum*, *Murraya*, *Nandina*, *Podocarpus*, *Potentilla fruticosa*, *Pyracantha angustifolia*, *Rhododendron*, *Serissa*, *Ulmus parvifolia*, *Zelkova*) from China have been intercepted by France, Germany and United Kingdom, because of nematode infestations. The following species and genus have been found: *Aphelenchoides* sp., *Aphelenchus* sp., *Brachyurus* sp., *Criconematidae* sp., *Helicotylenchus* sp., *Helicotylenchus dihystra*, *Meloidogyne* sp., *Pratylenchus* sp., *Paratylenchus*, sp., *Tylenchorhyncus leviterminalis*, *Tylenchorhyncus annulatus*, *Tylenchorhyncus* sp., *Tylenchus* sp., *Xiphinema* sp. Thrips have also been observed in a few cases.

Source: EPPO Secretariat 1996-12.