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2000/148 New data on quarantine pests and pests of the EPPO Alert List

By browsing through the literature, the EPPO Secretariat has extracted the following new data concerning quarantine pests and pests included on the EPPO Alert List. The status of the pest in the areas concerned is indicated in bold and according to the terms of ISPM no. 8.

- **New geographical records**

Anthonomus eugenii (EPPO A1 quarantine pest) is present in Nicaragua. **Present: no details.** Review of Agricultural Entomology, 88(7), p 860 (6203).

During surveys carried out in 1993-96 in the western highlands of Cameroon, it was noted that *Bactrocera cucurbitae* (EPPO A1 quarantine pest) is the most prevalent insect pest on tomato crops. **Present: no details.** Review of Agricultural Entomology, 88(7), p 860 (6206).

Colletotrichum acutatum (EU Annexes) is reported for the first time on strawberry in Argentina. It was found at several locations near Tucumán (northwestern Argentina). **Present: only in some areas (north-west).** Review of Plant Pathology, 79(9), p 924 (6690).

Glomerella gossypii (EPPO A2 quarantine pest) is widely present in Benin. **Present: widespread** (Web page of the Plant Protection Service of Benin).

Grapevine bois noir phytoplasma occurs in inland vineyards in Croatia. It was not detected in Dalmatia or Istria. No other phytoplasmas infecting grapevine were found. **Present: only in some areas.** Review of Plant Pathology, 79(9), p 925 (6700).

Liriomyza trifolii (EPPO A2 quarantine pest) occurs in Azuay Province, Ecuador. It is considered as one of the main pest of tomato crops. **Present: no details.** Review of Agricultural Entomology, 88(7), p 861 (6212).

Radopholus similis (EPPO A2 quarantine pest) is widely present in Benin. **Present: widespread** (Web page of the Plant Protection Service of Benin).

Rhynchophorus ferrugineus (EPPO Alert List) occurs in Bahrain and Kuwait (Anon., 2000). In both countries, its status can be described as: **Present: no details.**

Scirtothrips citri (EPPO A1 quarantine pest) is reported as present on citrus in Jammu, India, without any further details or remark. As so far this species had not been reported in India (nor elsewhere in Asia, it only occurs in America), this unusual record may need some confirmation. **Absent: doubtful record.** Review of Agricultural Entomology, 88(7), p 854 (6149).

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- **Detailed records**

Bemisia tabaci (EPPO A2 quarantine pest) biotype B is reported for the first time in India. It was found near Bangalore, Karnataka. **Present, no details** (New Agriculturist on-line).

Eutetranychus orientalis (EPPO A2 quarantine pest) occurs on citrus in Jammu, India. **Present: no details.** Review of Agricultural Entomology, 88(7), p 854 (6149).

Liriomyza sativae (EPPO A1 quarantine pest) is present in Yunnan, China. **Present: no details.** Review of Agricultural Entomology, 88(9), p 1128 (1128).

Mycosphaerella pini (EU Annexes) is reported for the first time from Vermont, US. Symptoms were observed on *Pinus nigra*, *P. mugo* and *P. ponderosa*. **Present: no details.** Review of Plant Pathology, 79(9), p 952 (6887).

- **New host plants**

Agapanthus praecox subsp. *orientalis* is reported as a new host plant of tomato spotted wilt tospovirus (EPPO A2 quarantine pest) in Australia (Wilson *et al.*, 2000).

Pittosporum tobira is reported as a new host plant of tomato spotted wilt tospovirus (EPPO A2 quarantine pest) in Israel (Gera *et al.*, 2000).

The following weed species are reported as new host plants of tomato spotted wilt tospovirus (EPPO A2 quarantine pest) in Spain: *Diploaxis eruroides*, *Beta maritima*, *Phragmites communis*, *Malva sylvestris*, *Sonchus arvensis*, *Sorghum halepense*, *Panicum repens*, *Atriplex patula*, *Coronopus squamatus*, *Cuscuta* sp., *Xanthium spinosum*, *Suaeda vera* and *Echallium elaterium* (Jordá *et al.*, 2000).

Source: Anonymous (2000) Regional Symposium for the control of the red date palm weevil (*Rhynchophorus ferrugineus*), 19-20 February 2000, Muscat, Oman.
Arab and Near East Plant Protection Newsletter, no. 30, June 2000, FAO, 26-25.

Gera, A.; Kritzman, A.; Cohen, J. (2000) *Pittosporum tobira*: a new host for tomato spotted wilt virus.
Plant Disease 84(4), p 491.

Jordá; C.; Font, I.; Lázaro, A.; Juárez, M.; Ortega, A.; Lacasa, A. (2000) New natural hosts of tomato spotted wilt virus.
Plant Disease 84(4), p 489.

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Wilson, C.R.; Wilson, A.J., Pethybridge, S.J. (2000) First report of tomato spotted wilt virus in common Agapanthus.

Plant Disease 84(4), p 491.

EPPO Secretariat, 2000-09.

Review of Agricultural Entomology, 88(7 & 9). July & September 2000.

Review of Plant Pathology, 79(9). September 2000.

INTERNET

New Agriculturist on-line.

<http://www.new-agri.co.uk/00-5/newsbr.html>

Harmful organisms of which the presence has been noted in Benin. Republic of Benin, Ministry of Rural Development, Direction of Agriculture, Plant Protection Service. October 1995.

<http://www.isysphyt.ci.refer.org/english/admin/ofserv/cnp/eorgben.htm>

Additional key words: new records, detailed records,
new host plants

Computer codes: ANTHEU, BEMJAR, COLLAC,
DACUCU, EUTEOR, GLOMGO, GVBXXX,
LIRISA, LIRITR, RADOSI, RHYCFE, SCIRPI,
SCITCI, TMSWXX, AR, BH, BJ, CM, CN, EC, HR,
IN, KW, NI, US

2000/149 First report of *Diabrotica virgifera virgifera* in Slovakia

The EPPO Secretariat has recently been informed by the RPPO of Slovakia, that *Diabrotica virgifera virgifera* (EPPO A2 quarantine pest) was found for the first time in Slovakia in August 2000. The pest has been reported from three districts bordering Hungary: Lučenec (2 sites), Komárno (1 site) and Vel'ký Krtíš (2 sites). The situation of *D. virgifera virgifera* in Slovakia can be described as: **Present, only in 3 districts (Lučenec, Komárno, Vel'ký Krtíš).**

Source: **RPPO of Slovakia, 2000-10.**

Additional key words: new record

Computer codes: DIABVI, SK

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2000/150 First report of plum pox potyvirus in Jordan

In Jordan, a survey for virus diseases of stone fruits was carried out in 51 commercial orchards, 7 private gardens and 4 varietal collections. In total, 1312 *Prunus* trees (almond, apricot, cherry, peach, plum) were tested for the presence of plum pox potyvirus (PPV – EPPO A2 quarantine pest). PPV was detected in 7 trees (3 peaches, 2 plums and 2 apricots). All strains found in Jordan belonged to PPV-M. No evidence of active spread of the virus in the field was noted. Although infected trees were few and scattered, it is stressed that they constituted highly dangerous inoculum sources which should be rapidly eliminated. This is the first report of plum pox potyvirus in Jordan. The situation of this virus in Jordan can be described as: **Present, at low prevalence.**

Source: Al Rwahnih, M.; Myrta, A.; Di Terlizzi, B.; Boscia, D. (2000) First record of plum pox virus in Jordan.

Abstract of a paper presented of the 18th International Symposium on Virus and Virus-like Diseases of Temperate Fruit Crops, 2000-07-09/15, ISHS, Canterbury, UK

Additional key words: new record

Computer codes: PLPXXX, JO

2000/151 Potato stolbur phytoplasma occurs in Poland

In Poland, potato stolbur phytoplasma (EPPO A2 quarantine pest) is subject to official control. Each year, the Plant Protection Inspection Service inspects more than 20,000 ha of potato crops. In 1997, the first 3 foci of potato stolbur phytoplasma were detected. In 1998, 8 additional foci were found. Measures have been taken to eradicate the disease and prevent any further spread. The situation of potato stolbur phytoplasma in Poland can be described as follows: **Present, only in some areas, under eradication.**

Source: Żandarski, J. (1999) Potato stolbur MLO – the threat for potato crops in Poland.

Progress in Plant Protection, 39(2), 868-871.

Additional key words: new record

Computer codes: POSBXX, PL

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2000/152 Details on the occurrence of beet necrotic yellow vein benyvirus in Sweden

As reported in EPPO RS 2000/058, beet necrotic yellow vein benyvirus (BNYVV- EPPO A2 quarantine pest) now occurs in Sweden. Details are given on the first findings. In Sweden, surveys on rhizomania and *Polymyxa*-transmitted sugar beet viruses have been carried out since 1986 by testing soil and sugarbeet root samples. These surveys showed that both *Polymyxa betae* and beet soil-borne furovirus are widespread in sugarbeet-growing areas. The occurrence of BNYVV in Sweden was confirmed in 1997. The virus was detected in 2 small areas, one on the island of Öland and one in the Southeastern part of Scania. Molecular studies have revealed the existence of two major strain groups of BNYVV in Europe (A and B types). The A type is widespread in southern Europe and also in the Netherlands, whereas the B type is prevalent in Germany and France. In UK, both A and B types have been found, and cases of mixed infections have been reported. In Sweden, the A type BNYVV was found in Öland and the B type BNYVV was found in Scania. This could suggest that BNYVV has been introduced into Sweden at least from two different sources.

Source: Lennefors, B.-L.; Lindsten, K.; Koenig, R. (2000) First record of A and B type *Beet necrotic yellow vein virus* in sugar beets in Sweden.
European Journal of Plant Pathology, 106(2), 199-201.

Additional key words: detailed record

Computer codes: BTNYVX, SE

2000/153 Absence of *Meloidogyne chitwoodi* in England and Wales, UK

Since 1997, the NPPO of the United Kingdom has undertaken a survey in England and Wales to detect the species of *Meloidogyne* present in potatoes, making use of samples taken during the survey for potato ring rot and brown rot. 511 samples have been examined from home-produced seed and ware, as well as seed and ware potatoes imported from other EU countries and ware potatoes from non-EU countries. In England and Wales, no infestations of *M. chitwoodi* (EPPO A2 quarantine pest) were found. The pest was found on imported ware potatoes from the Netherlands during 1996-1998, but no interceptions have been made since. A few samples of carrots, another host, have also been examined when found exhibiting symptoms of root-knot nematode infestation, but only *M. hapla* has been detected. The status of *M. chitwoodi* in England and Wales can be described as: **Absent, confirmed by survey.**

Source: **Personal communication from Sue Hockland, CSL, York, UK, 2000-10**

Additional key words: absence

Computer codes: MELGCH, GB

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2000/154 First report of tomato chlorosis crinivirus in Portugal

In autumn 1998, unusual symptoms were observed in a protected tomato crop of the Experimental Station at Patação, in Algarve (south of Portugal). Affected plants showed chlorotic mottle and interveinal chlorosis. High populations of *Bemisia tabaci* (EPPO A2 quarantine pest) were also present. In 1999, similar symptoms were seen in commercial tomato crops in Algarve. PCR analysis revealed the presence of tomato chlorosis crinivirus (EPPO Alert List). It was noted that most samples collected in Algarve in June 1999 were only infected by tomato chlorosis crinivirus, whereas those collected in October in the same areas were infected by both tomato chlorosis crinivirus and tomato yellow leaf curl begomovirus (EPPO A2 quarantine pest). Tomato samples with yellowing symptoms from central and north Portugal were not infected by tomato chlorosis crinivirus. This is the first report of tomato chlorosis crinivirus in Portugal. The status of this virus in Portugal can be described as: **Present, only in one area (Algarve).**

Source: Louro, D.; Accotto, G.P.; Vaira, A.M. (2000) Occurrence and diagnosis of tomato chlorosis virus in Portugal.
European Journal of Plant Pathology, 106(6), 589-592.

Additional key words: new record

Computer codes: TMCXXX, PT

2000/155 Survey on tomato spotted wilt tospovirus on ornamentals in Greece

In Greece, tomato spotted wilt tospovirus (EPPO A2 quarantine pest) was first found in 1972 in tobacco and remained for a long period limited to this crop. But soon after the introduction of *Frankliniella occidentalis* (EPPO A2 quarantine pest) infections were reported on vegetable and ornamental crops (see EPPO RS 97/140). At present, tomato spotted wilt tospovirus is widespread in many areas in Greece, and it infects economically important crops such as tomato, capsicum, lettuce and tobacco. A recent survey was carried out on ornamental crops. Samples were collected both in outdoor and protected crops, from the following areas: Drama, Thessaloniki, Katerini, Xanthi, Chalkidiki, Kilkis and Crete. Plant samples were tested by DAS-ELISA for the presence of tomato spotted wilt and impatiens necrotic spot tospoviruses and positive results were confirmed by mechanical inoculation to indicator plants. During this survey, no infection of impatiens necrotic spot tospovirus was found. Tomato spotted wilt tospovirus was detected in 42 plant species (40 genera in 27 families). The highest infection levels were found in *Dendranthema*. The following species are reported for the first time as host plants of the virus: *Beloperone guttata*, *Coleus barbatus*, *Impatiens petersiana* and *Lilium auratum*. *Begonia*, *Catharanthus roseus*, *Celosia cristata*, *Dianthus chinensis*, *Fuchsia* and *Stephanotis floribunda* are found a new hosts in Greece. Thrips

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collected from infected plants were in most cases *Frankliniella occidentalis*, although *Thrips tabaci* was identified from infected *Dendranthema* and *Dianthus caryophyllus* plants.

Source: Chatzivassiliou, E.K.; Livieratos, I.; Jenser, G.; Katis, N.I. (2000) Ornamental plants and thrips populations associated with tomato spotted wilt tospovirus in Greece.
Phytoparasitica, 28(3), 257-264.

Additional key words: detailed record, host plants

Computer codes: FRANOC, TMSWXX, GR

2000/156 First report of cucurbit yellow stunting disorder closterovirus in Morocco

In Morocco, in October 1999, severe yellowing symptoms were observed in a melon crop (*Cucumis melo*) grown under plastic tunnels near Agadir. Cucurbit yellow stunting disorder closterovirus (EPPO Alert List) was detected in symptomatic plants. This is the first report of this virus in Morocco. The situation of cucurbit yellow stunting disorder closterovirus in Morocco can be described as: **Present, only in some areas (near Agadir).**

Source: Desbiez, C.; Lecoq, H.; Aboulama, S.; Peterschmitt, P. (2000) First report of cucurbit yellow stunting disorder closterovirus in Morocco.
Plant Disease, 84(5), p 596.

Additional key words: new record

Computer codes: KUYSXX, MA

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2000/157 Survey on viruses of cucurbits in São Paulo State, Brazil

In May 1997 and June 1999, in the São Paulo State, Brazil, a survey was done on five viruses infecting cucurbits: cucumber mosaic cucumovirus, papaya ringspot potyvirus type W, watermelon mosaic potyvirus 2, zucchini lethal chlorosis tospovirus (EPPO Alert List), zucchini yellow mosaic potyvirus. Samples from 621 plants were tested (PTA-ELISA). The most frequently found viruses were papaya ringspot potyvirus type W (49.1%) and zucchini yellow mosaic potyvirus (24.8%). Zucchini lethal chlorosis tospovirus, cucumber mosaic cucumovirus and watermelon mosaic potyvirus 2 were found in 7.8, 6.0 and 4.5 % of the tested samples, respectively. Zucchini lethal chlorosis tospovirus was detected in the following plant species: *Cucurbita moschata*, *C. moschata* x *C. maxima*, *C. pepo*, *Cucumis anguria*, *C. sativus*, *Citrullus lanatus*, *Sechium edule* and *Cayaponia tibiricae* (a wild species).

Source: Yuki, V.A.; Rezende, J.A.M.; Kitajima, E.W.; Barroso, P.A.V.; Kuniyuki, H.; Groppo, G.A.; Pavan, M.A. (2000) Occurrence, distribution, and relative incidence of five viruses infecting cucurbits in the State of São Paulo, Brazil. **Plant Disease, 84(5), 516-520.**

Additional key words: host plants

Computer codes: ZULCXX

2000/158 Melon yellow spot is a new tospovirus

A tospovirus-like virus was isolated from diseased melons (*Cucumis melo*) in Japan. This virus was transmitted by *Thrips palmi* (EPPO A1 quarantine pest) in a persistent manner, but presented different cytopathological features from tospoviruses previously reported. Cytopathological, serological and molecular studies showed that it is a distinct tospovirus and the name melon yellow spot tospovirus was proposed. However, no information is given on the disease which is caused by this new tospovirus.

Source: Kato, K.; Hanada, K.; Kameya-Iwaki, M. (2000) Melon yellow spot virus: a distinct species of the genus *Tospovirus* isolated from melon. **Phytopathology, 90(4), 422-426.**

Additional key words: new pest

Computer codes: JP

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2000/159 Watermelon chlorotic stunt begomovirus: addition to the EPPO Alert List

Watermelon chlorotic stunt begomovirus was first reported in 1986 from Yemen on watermelon (*Citrullus lanatus*) crops. Symptoms are characterized by yellow veins, chlorotic mottling, severe stunting of young leaves, and drastically reduced fruit yield. The disease occurred wherever watermelon was grown and incidence of up to 90-100 % was reported. It was shown that *Bemisia tabaci* (EPPO A2 quarantine pest) biotype B can transmit the virus. Between 1993 and 1996, severe outbreaks caused by watermelon chlorotic stunt begomovirus were reported in the cucurbit-growing regions of Central and Eastern Sudan on watermelons and melons (*Cucumis melo*). Additional field observations carried out in Sudan from 1995 to 1997 confirmed that watermelon chlorotic stunt begomovirus causes considerable losses in commercial melon crops. A similar situation was observed in southern provinces of Iran (Bushehr, Hormouzgan, Sistan-Balouchistan). The genomes of two isolates of watermelon chlorotic stunt begomovirus from Sudan and Iran were cloned and sequenced. These geographically distant isolates from Africa and the Near East shared a very high overall sequence similarity and their capsid proteins were identical. It is felt that considering the wide distribution of watermelon chlorotic stunt begomovirus throughout the Near East and the established populations of *B. tabaci* in the Mediterranean Basin, particular attention should be given to this virus.

Watermelon chlorotic stunt begomovirus

Why	This virus came to our attention because it causes a serious disease of cucurbits in Iran, Sudan and Yemen.
Where	Africa: Sudan. Asia: Iran, Yemen.
On which plants	Watermelons (<i>Citrullus lanatus</i>), melons (<i>Cucumis melo</i>). It can also be found on: snake cucumber (<i>Cucumis melo</i> var. <i>flexuosus</i>), <i>Cucurbita moschata</i> , wild cucurbits: <i>Citrullus colocynthis</i> and <i>Cucumis melo</i> var. <i>agrestis</i> .
Damage	Symptoms are characterized by yellow veins, chlorotic mottling, severe stunting of young leaves, and drastically reduced fruit yield. High disease incidence (up to 100%) and severe losses are reported in countries where the disease is present.
Transmission	<i>Bemisia tabaci</i> biotype B.
Pathway	Infected cucurbit plants for planting, fruits?, viruliferous <i>B. tabaci</i> from countries where watermelon chlorotic stunt begomovirus occurs.
Possible risks	Cucurbits are important crops in the EPPO region. Melons and watermelons are particularly important for southern Europe. The insect vector <i>B. tabaci</i> is widespread.
Source(s)	Bedford, I.D.; Briddon, R.W.; Jones, P.; Alkaff, N.; Markham, P.G. (1994) Differentiation of three whitefly-transmitted geminiviruses from the Republic of Yemen. <i>European Journal of Plant Pathology</i> , 100(3-4), 243-257. Dafalla, G.A.; Lecoq, H.; Kheyr-Pour, A.; Gronenborn, B. (1994) Disease and pest outbreaks. Sudan. A whitefly-transmitted geminivirus associated with yellowing disease of watermelons in Sudan. <i>Arab and Near East Plant Protection Newsletter</i> , no. 19, p 39. Kheyr-Pour, A.; Bananej, K.; Dafalla, G.A.; Caciagli, P.; Noris, E.; Ahoonmanesh, A.; Lecoq, H.; Gronenborn, B. (2000) Watermelon chlorotic stunt virus from the Sudan and Iran: sequence comparisons and identification of a whitefly-transmission determinant. <i>Phytopathology</i> , 90(6), 629-635.

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Panel review date

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Entry date 2000-10

Additional key words: new pest

Computer codes: IR, SD, YE

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2000/160 Potential vectors of coconut lethal disease phytoplasma

Studies were done in Tanzania to identify potential insect vectors of the coconut lethal disease. It has been shown in Florida (US) that *Myndus crudus* (EU Annexes) transmits palm lethal yellowing phytoplasma (EPPO A1 quarantine pest). In Tanzania, *M. crudus* has not been observed. 15000 insects were collected from 2 areas (Chambezi: moderate disease incidence, and Kifumangao: high disease incidence) between August 1995 and July 1996. More than 5000 insects were tested by PCR. The phytoplasma was detected in 8 individuals of *Diastrombus mkurangai* (Homoptera: Derbidae) and 4 of *Meenoplus* spp (Homoptera: Meenoplidae). No correlation could be found between disease incidence and numbers of insects collected from the field, possibly reflecting the unknown incubation period for the disease. These studies showed that *Diastrombus mkurangai* and *Meenoplus* spp. can acquire the phytoplasma but experiments are still needed to verify whether they can transmit the disease to healthy palms.

Note: So far within EPPO, lethal diseases of coconut palms from different parts of the world have been gathered under a single entry: palm lethal yellowing phytoplasma (EPPO A1 quarantine pest), although differences in epidemiology and susceptibility of host plants were observed. Recent genetic studies have shown the phytoplasmas causing lethal palm diseases in the Caribbean, East and West Africa are distinct (but related) (see EPPO RS 99/109) and should henceforth be considered separately. In addition, other diseases have been reported from Sudan on date palms (EPPO RS 2000/122) and the phytoplasmas found were related to Bermuda grass white leaf phytoplasma. In the EPPO Reporting Service, the name palm lethal yellowing phytoplasma will be used only for the pathogen associated with the disease found in the Americas. In East and West Africa, the pathogens will be referred to as East Africa and West Africa coconut lethal disease phytoplasmas.

Source: Mpunami, A.; Tymon, A.; Jones, P.; Dickinson, M.J. (2000) Identification of potential vectors of the coconut lethal disease phytoplasma.
Plant Pathology, 49(3), 355-361.

Additional key words: epidemiology

Computer codes: PALYXX

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2000/161 Relations among sorghum ergot isolates from the Americas, Africa, India and Australia

Sorghum ergot (or sugary disease of sorghum) was initially restricted to Asia and Africa but it recently spread to the Americas and Australia. Three species of fungi are associated with the disease: *Claviceps sorghi* in India, *C. sorghicola* in Japan and *C. africana* (EPPO Alert List) in all countries where the disease is observed. *C. africana* is the species that is currently spreading. The relations existing among sorghum ergot isolates from the Americas, Africa, India and Australia were studied to determine the possible origin of the *C. africana* clones introduced into the Americas and Australia. Comparison of nucleotide sequences (of internal transcribed spacer 1 and 5.8S rDNA regions) confirmed that *C. sorghi*, *C. sorghicola* and *C. africana* are three distinct species. The intraspecific variation within *C. africana* was studied (RAPD patterns) on 28 isolates from USA, Mexico, Puerto Rico, Bolivia, Australia, India and South Africa. It was further confirmed that *C. africana* occurs in India (see EPPO RS 99/097). Results showed that all American isolates were identical, and because 3 isolates of the same type came from South Africa, Africa was suggested as a possible origin for the invasive clones in the Americas. RAPD patterns of Australian and Indian isolates were distinguished only by a single band, suggesting an Asian origin for the clones introduced into Australia.

Source: Pažoutová, S.; Badyopadhyay, R.; Frederickson, D.E.; Mantle, P.G.; Frederiksen, R.A. (2000) Relations among sorghum ergot isolates from the Americas, Africa, India and Australia. **Plant Disease**, 84(4), 437-442.

Additional key words: genetics

Computer codes: CLAVAF

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2000/162 Strawberry green petal and lethal yellows diseases are associated with *Phytoplasma australiense*

Strawberry lethal yellows phytoplasma (EPPO Alert List) is associated with a severe decline of strawberry (see EPPO RS 98/171). This disease is reported in New Zealand and Australia. In New Zealand, it has been found that the strawberry lethal yellows phytoplasma was related to, or identical with, phytoplasmas associated with phormium yellow leaf disease, Australian grapevine yellows (the phytoplasma associated with this disease has been designated *Candidatus* *Phytoplasma australiense*) and papaya dieback. Strawberries can be affected by a number of phytoplasma diseases, including green petal. Green petal disease occurs sporadically in Europe, North America and Australia, and symptoms (green petals) are usually less severe than those of strawberry lethal yellows. A recent Australian study was carried out on strawberry plants showing symptoms of green petal (3 plants) and lethal yellows diseases (8 plants) using molecular techniques (RFLP analysis of 16S rRNA gene and adjacent spacer region, and sequence comparison). Results showed that the phytoplasmas detected in strawberry plants with green petal and lethal yellows diseases were indistinguishable and were most closely related to *P. australiense*. The authors noted that this also supports the view that strawberry lethal yellows diseases are caused by the same phytoplasma in New Zealand and in Australia.

Many questions are raised by this study. As green petal disease occurs in other parts of the world, the geographical distribution of *P. australiense* which was previously considered as endemic to New Zealand and Australia, may need to be revised. The fact that the same phytoplasma was associated with two distinct diseases in strawberry cannot yet be explained (cultivar susceptibility, environmental conditions, disease progression?). The authors thought that mixed infections with other phytoplasmas could perhaps explain differences in symptomatology, but this hypothesis could not be verified. In particular, another lethal yellows in Australia has been associated with rickettsia-like bacteria [EPPO note: this disease was described in 1979 and nothing has been published on it since; its status is distinctly doubtful]. But in the present study, no rickettsia-like bacteria were found in diseased strawberry plants testing positive for *P. australiense*. More studies on a larger number of plants are needed to try to better understand the etiology and the epidemiology of these strawberry diseases.

Source: Padovan, A.; Gibb, K.; Persley, D. (2000) Association of '*Candidatus* *Phytoplasma australiense*' with green petal and lethal yellows diseases in strawberry.
Plant Pathology, 49(3), 362-369.

Additional key words: etiology

Computer codes: SYLYXX, AU, NZ

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2000/163 Report of an interspecific hybrid of *Melampsora medusae* and *M. occidentalis* in USA

Until 1991, in the maritime Pacific Northwest region in USA, no leaf rust was observed on hybrid poplars (*Populus trichocarpa* x *P. deltoides*), as *Melampsora occidentalis* (poplar leaf rust present in this region) is non-pathogenic on these hybrids. In 1991, *Melampsora medusae* (EPPO A2 quarantine pest) appeared on *P. trichocarpa* x *P. deltoides*. Leaf rust populations were then studied more closely, and in 1994 morphological and pathogenic variation was observed in leaf rust populations affecting hybrid poplars. Studies on morphology, DNA sequences and pathogenicity revealed the occurrence of a natural hybrid of *Melampsora medusae* and *M. occidentalis* which was described and called *Melampsora* x *columbiana*. This hybrid taxon is characterized by isolates which usually show morphological intermediacy in uredinial and telial traits and mixed virulence/avirulence on *P. trichocarpa* and *P. deltoides* (natural hosts of *M. occidentalis* and *M. medusae*, respectively). A survey done in 1997 on hybrid poplars (*P. trichocarpa* x *P. deltoides*) showed that *M. x columbiana* was the only poplar rust found in the Pacific Northwest region.

It can be recalled that another interspecific hybrid, between *M. medusae* and *M. larici-populina*, had been reported in New Zealand (see EPPO RS 98/188 and 94/180), and was named *M. medusae-populina*.

Source: Newcombe, G.; Stirling, B.; McDonald, S.; Bradshaw jr, H.D. (2000) *Melampsora* x *columbiana*, a natural hybrid of *M. medusae* and *M. occidentalis*.
Mycological Research, 104(3), 261-274.

Additional key words: taxonomy, genetics

Computer codes: MELMME, US

EPPO Reporting Service

2000/164 EPPO report on selected intercepted consignments

The EPPO Secretariat has gathered the intercepted consignment reports for 2000 received since the previous report (EPPO RS 2000/147) from the following countries: Bulgaria, Czech Republic, Denmark, Estonia, France, Finland, Germany, Greece, Ireland, Lithuania, Netherlands, Norway, Poland, Portugal, Romania, Slovenia, Sweden, 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 (*).

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: A correction should be made to the previous report (EPPO RS 2000/147). *Rhizopertha dominica* was intercepted by Poland (not by Czech Republic) on triticum (stored products) imported from Czech Republic (not from Poland). The entry in 2000/147 for *Rhizopertha dominica* intercepted by Poland should read:

<i>Rhizopertha dominica</i>	<i>Triticum</i>	Stored products	Czech Republic	Poland	4
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In addition, *Globodera pallida* was intercepted by Slovenia on ware potatoes (not stored products).

Pest	Consignment	Type of commodity	Country of origin	C. of destination	nb
<i>Acaridae</i>	<i>Linum usitatissimum</i>	Stored products	Czech Republic	Poland	1
	<i>Linum usitatissimum</i>	Stored products	Slovakia	Poland	1
<i>Agromyzidae</i>	<i>Gypsophila</i>	Cut flowers	Netherlands	Estonia	1
<i>Ambrosia</i>	<i>Glycine max</i>	Stored products	Hungary	Poland	1
	<i>Helianthus annuus</i>	Stored products	Hungary	Poland	2
	<i>Helianthus annuus</i>	Stored products	Slovakia	Poland	2
	<i>Helianthus annuus</i>	Stored products	Ukraine	Poland	4
	<i>Sorghum bicolor</i>	Stored products	Slovakia	Poland	1
	<i>Zea mays</i>	Stored products	Austria	Poland	1
	<i>Zea mays</i>	Stored products	France	Poland	4
	<i>Zea mays</i>	Stored products	Hungary	Poland	7
<i>Ambrosia artemisiifolia</i>	<i>Helianthus annuus</i>	Seeds	Hungary	Lithuania	1
	<i>Zea mays</i>	Seeds	Hungary	Lithuania	1
<i>Ambrosia, Iva</i>	<i>Helianthus annuus</i>	Stored products	Ukraine	Poland	1
<i>Anarsia lineatella</i>	<i>Prunus persica</i>	Fruits	Greece	Poland	2
Beet necrotic yellow vein benyvirus	<i>Citrus limon</i>	Plants for planting	Italy	United Kingdom	1

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Pest	Consignment	Type of commodity	Country of origin	C. of destination	nb
Bemisia tabaci	<i>Ajuga</i>	Cuttings	Israel	United Kingdom	2
	<i>Alternanthera</i>	Aquarium plants	Singapore	France	1
	<i>Alternanthera</i>	Aquarium plants	Singapore	United Kingdom	2
	<i>Anubias</i>	Aquarium plants	Singapore	France	2
	<i>Anubias barteri</i>	Aquarium plants	Singapore	Denmark	1
	<i>Artemisia dracunculus</i>	Cut flowers	Israel	France	3
	<i>Bacopa</i>	Aquarium plants	Israel	France	1
	<i>Bacopa monnieri</i>	Aquarium plants	Thailand	France	1
	<i>Capsella bursa-pastoris</i>	Cut flowers	Israel	France	4
	<i>Dendranthema</i>	Cuttings	Kenya	Netherlands	3
	<i>Dipladenia</i>	Cuttings	Israel	Denmark	1
	<i>Echinodorus amazonicus</i>	Aquarium plants	Thailand	France	1
	<i>Echinodorus berteroi</i> , <i>E. subulatus</i>	Aquarium plants	Sri Lanka	Denmark	1
	<i>Echinodorus bleheri</i>	Aquarium plants	Thailand	France	1
	<i>Eryngium</i>	Cut flowers	Thailand	France	1
	<i>Euphorbia pulcherrima</i>	Cuttings	(Netherlands)	United Kingdom	1
	<i>Euphorbia pulcherrima</i>	Plants for planting	Germany	United Kingdom	1
	<i>Euphorbia pulcherrima</i>	Plants for planting	Indonesia	United Kingdom	1
	<i>Euphorbia pulcherrima</i>	Cuttings	Netherlands	United Kingdom	4
	<i>Euphorbia pulcherrima</i>	Plants for planting	Netherlands	United Kingdom	1
	<i>Euphorbia pulcherrima</i>	Cuttings	Netherlands	United Kingdom	1
	<i>Gerbera jamesonii</i>	Plants for planting	Greece	Bulgaria	1
	<i>Gypsophila</i>	Cut flowers	Israel	United Kingdom	2
	<i>Hemigraphis colorata</i>	Aquarium plants	Singapore	United Kingdom	1
	<i>Hemigraphis colorata</i> , <i>Hygrophila</i>	Aquarium plants	Singapore	United Kingdom	1
	<i>Hibiscus rosa-sinensis</i>	Plants for planting	Netherlands	Poland	1
	<i>Hibiscus rosa-sinensis</i>	Plants for planting	Netherlands	United Kingdom	1
	<i>Hibiscus rosa-sinensis</i>	Plants for planting	Unknown origin	Denmark	1
	<i>Hygrophila</i>	Aquarium plants	Israel	France	1
	<i>Hygrophila</i>	Aquarium plants	Singapore	United Kingdom	1
	<i>Hygrophila polysperma</i>	Aquarium plants	Singapore	France	1
	<i>Hygrophila polysperma</i>	Aquarium plants	Thailand	France	1
	<i>Hygrophila rosanervis</i>	Aquarium plants	Singapore	France	1
	<i>Hypericum</i>	Cut flowers	Netherlands	Ireland	1
	<i>Limnophila</i>	Aquarium plants	Thailand	France	1
	<i>Limnophila aromatica</i>	Aquarium plants	Thailand	France	2
	<i>Limnophila aromatica</i>	Aquarium plants	Vietnam	France	2
	<i>Lobelia cardinalis</i>	Plants for planting	Spain (Canary is.)	Denmark	1
	<i>Lysimachia</i>	Aquarium plants	Israel	France	1
	<i>Manihot esculenta</i>	Vegetables	Nigeria	United Kingdom	2
	<i>Mentha</i>	Vegetables	Israel	France	2
	<i>Origanum</i>	Vegetables	Israel	France	4
	<i>Piper sarmentosum</i>	Vegetables	Thailand	France	4
	<i>Ruellia malacosperma</i>	Plants for planting	USA	Denmark	1
	<i>Solidago</i>	Cut flowers	Israel	Ireland	2
	<i>Solidago</i>	Cut flowers	Israel	United Kingdom	3
	<i>Solidago</i>	Cut flowers	Netherlands	Ireland	2
	<i>Solidago</i>	Cut flowers	Netherlands	United Kingdom	1
	<i>Solidago</i>	Cut flowers	Spain	Ireland	2
	Bemisia tabaci, Bemisia afer, Mononychellus progresivus, Paraleyrodes minei	<i>Manihot esculenta</i>	Vegetables	Nigeria	United Kingdom

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Pest	Consignment	Type of commodity	Country of origin	C. of destination	nb
<i>Bruchus</i>	<i>Pisum arvense</i>	Stored products	Czech Republic	Poland	1
<i>Chrysodeixis chalcites</i>	<i>Musa</i>	Plants for planting	Netherlands	United Kingdom	1
<i>Clavibacter michiganensis</i> subsp. <i>michiganensis</i>	<i>Lycopersicon esculentum</i>	Seeds	India	France	1
<i>Clavibacter michiganensis</i> subsp. <i>sepedonicus</i>	<i>Solanum tuberosum</i>	Ware potatoes	Finland	Norway	1
	<i>Solanum tuberosum</i>	Ware potatoes	Germany	Czech Republic	3
	<i>Solanum tuberosum</i>	Ware potatoes	Germany	Netherlands	1
	<i>Solanum tuberosum</i>	Ware potatoes	Hungary	Poland	1
<i>Colletotrichum</i>	<i>Tillandsia ionantha</i>	Plants for planting	Guatemala	United Kingdom	1
<i>Colletotrichum gloeosporioides</i>	<i>Tillandsia brachycaulos</i>	Plants for planting	Guatemala	United Kingdom	1
<i>Cryptolestes ferrugineus</i>	<i>Triticum</i>	Stored products	Czech Republic	Poland	1
<i>Ditylenchus destructor</i>	Ornamentals	Bulbs and tubers	Netherlands	Lithuania	1
<i>Ditylenchus dipsaci</i>	<i>Narcissus</i>	Bulbs	France	Netherlands	1
<i>Ephestia cautella</i> , <i>E. elutella</i>	<i>Theobroma cacao</i>	Stored products	Côte d'Ivoire	Poland	1
<i>Frankliniella occidentalis</i>	<i>Dendranthema</i>	Pot plants	Netherlands	Estonia	1
	<i>Dianthus</i>	Cut flowers	Germany	Poland	1
	<i>Dianthus</i>	Cut flowers	Netherlands	Estonia	1
	<i>Dianthus</i>	Cut flowers	Netherlands	Slovenia	1
	<i>Euphorbia pulcherrima</i>	Plants for planting	Finland	Estonia	1
	Ornamentals	Cut flowers	Netherlands	Estonia	1
	Ornamentals	Cut flowers	Netherlands	Lithuania	55
	Ornamentals	Pot plants	Netherlands	Lithuania	6
	Ornamentals	Cut flowers	Poland	Lithuania	1
	Ornamentals	Cut flowers	Spain	Lithuania	1
	<i>Rosa</i>	Cut flowers	Netherlands	Estonia	1
	<i>Saintpaulia ionantha</i>	Pot plants	Netherlands	Estonia	1
	<i>Zantedeschia</i>	Cut flowers	Netherlands	Slovenia	1
<i>Globodera</i>	<i>Solanum tuberosum</i>	Ware potatoes	Italy	Finland	1
	<i>Solanum tuberosum</i>	Ware potatoes	Italy	Ireland	2
<i>Globodera pallida</i>	<i>Solanum tuberosum</i>	Ware potatoes	Italy	Finland	2
<i>Globodera pallida</i> , <i>G. rostochiensis</i>	<i>Solanum tuberosum</i>	Ware potatoes	Italy	Finland	1
<i>Globodera rostochiensis</i>	<i>Solanum tuberosum</i>	Ware potatoes	France	Czech Republic	4
	<i>Solanum tuberosum</i>	Ware potatoes	Hungary	Poland	1
	<i>Solanum tuberosum</i>	Ware potatoes	Italy	Czech Republic	13
	<i>Solanum tuberosum</i>	Ware potatoes	Spain	Czech Republic	1
	<i>Solanum tuberosum</i>	Ware potatoes	United Kingdom	Norway	1
<i>Helicoverpa</i>	<i>Dianthus</i>	Cut flowers	Morocco	Germany	1

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Pest	Consignment	Type of commodity	Country of origin	C. of destination	nb
<i>Helicoverpa armigera</i>	<i>Dendranthema</i>	Cuttings	France	Netherlands	1
	<i>Dianthus</i>	Cut flowers	Spain	United Kingdom	1
	<i>Pisum</i>	Vegetables	Zambia	United Kingdom	1
<i>Icerya seychellarum</i>	<i>Chamaerops humilis</i>	Plants for planting	Egypt	United Kingdom	1
Impatiens necrotic spot tospovirus	<i>Streptocarpus</i>	Plants for planting	Germany	Sweden	1
<i>Leptinotarsa decemlineata</i>	<i>Solanum tuberosum</i>	Ware potatoes	Austria	United Kingdom	1
	<i>Solanum tuberosum</i>	Ware potatoes	France	United Kingdom	1
	<i>Solanum tuberosum</i>	Ware potatoes	Italy	Ireland	1
	<i>Solanum tuberosum</i>	Ware potatoes	Italy	United Kingdom	3
<i>Liriomyza</i>	<i>Allium</i>	Vegetables	Kenya	United Kingdom	1
	<i>Coreopsis</i>	Cuttings	USA	Netherlands	1
	<i>Gerbera jamesonii</i>	Plants for planting	Netherlands	United Kingdom	1
	<i>Gypsophila</i>	Cut flowers	Israel	United Kingdom	1
	<i>Gypsophila paniculata</i>	Cut flowers	Israel	United Kingdom	1
<i>Liriomyza huidobrensis</i>	<i>Carthamus</i>	Cut flowers	Netherlands	United Kingdom	1
	<i>Dendranthema</i>	Cut flowers	Netherlands	Ireland	1
	<i>Eustoma</i>	Cut flowers	Israel	Ireland	1
	<i>Eustoma</i>	Cut flowers	Netherlands	Ireland	1
	<i>Gypsophila</i>	Cut flowers	Netherlands	Ireland	3
	<i>Gypsophila</i>	Cut flowers	Netherlands	United Kingdom	3
	<i>Gypsophila perfecta</i>	Cut flowers	Netherlands	United Kingdom	2
	<i>Moluccella laevis</i>	Cut flowers	Israel	United Kingdom	1
	<i>Pisum</i>	Vegetables	Kenya	United Kingdom	2
	<i>Solidago</i>	Cut flowers	Netherlands	Ireland	1
<i>Liriomyza sativae</i>	<i>Ocimum</i>	Vegetables	Thailand	France	3
	<i>Ocimum basilicum</i>	Vegetables	Thailand	France	2
	<i>Ocimum canum</i>	Vegetables	Thailand	France	3
	<i>Ocimum sanctum</i>	Vegetables	Thailand	France	2
<i>Liriomyza trifolii</i>	<i>Gypsophila</i>	Cut flowers	Netherlands	Slovenia	1
	<i>Gypsophila perfecta</i>	Cut flowers	Israel	United Kingdom	1
<i>Liriomyza, Bemisia tabaci</i>	<i>Gypsophila perfecta</i>	Cut flowers	Israel	United Kingdom	1
<i>Mycosphaerella pini</i>	<i>Pinus mugo</i>	Plants for planting	Hungary	Czech Republic	1
Pepino mosaic potexvirus	<i>Lycopersicon esculentum</i>	Vegetables	Spain	United Kingdom	1
<i>Phomopsis</i>	<i>Ginkgo biloba</i>	Plants for planting	New Zealand	United Kingdom	1
<i>Phthorimaea operculella</i>	<i>Solanum tuberosum</i>	Ware potatoes	Israel	Norway	1
Potato Y potyvirus	<i>Solanum tuberosum</i>	Breeding material?	Argentina	Netherlands	1
<i>Puccinia horiana</i>	<i>Dendranthema</i>	Pot plants	Germany	Portugal	1
	<i>Dendranthema</i>	Cut flowers	Netherlands	Estonia	1

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Pest	Consignment	Type of commodity	Country of origin	C. of destination	nb
<i>Pulvinaria psidii</i>	<i>Dicksonia</i>	Plants for planting	South Africa	United Kingdom	1
<i>Ralstonia solanacearum</i>	<i>Solanum tuberosum</i>	Ware potatoes	Hungary	Slovenia	1
<i>Rhizopertha</i>	<i>Hordeum vulgare</i>	Stored products	Croatia	Slovenia	2
<i>Rhizopertha dominica</i>	<i>Hordeum vulgare</i>	Stored products	Czech Republic	Poland	3
	<i>Triticum</i>	Stored products	Czech Republic	Poland	4
	<i>Triticum aestivum</i>	Stored products	Czech Republic	Poland	1
	<i>Triticum aestivum</i>	Stored products	Hungary	Poland	1
<i>Rhizopertha dominica, Ambrosia</i>	<i>Zea mays</i>	Stored products	Czech Republic	Poland	1
<i>Rhizopertha, Sitophilus</i>	<i>Hordeum vulgare</i>	Stored products	Croatia	Slovenia	1
<i>Sitophilus</i>	<i>Hordeum vulgare</i>	Stored products	Croatia	Slovenia	1
<i>Sitophilus granarius</i>	<i>Helianthus annuus</i>	Stored products	Slovakia	Poland	1
<i>Sitophilus oryzae</i>	<i>Hordeum vulgare</i>	Stored products	Czech Republic	Poland	2
	Mixture of fodder	Stored products	Czech Republic	Poland	1
	<i>Triticum</i>	Stored products	Czech Republic	Poland	18
	<i>Triticum</i>	Stored products	Slovakia	Poland	1
	<i>Triticum aestivum</i>	Stored products	Czech Republic	Poland	5
	<i>Triticum aestivum</i>	Stored products	Hungary	Poland	3
	<i>Zea mays</i>	Stored products	Czech Republic	Poland	1
	<i>Zea mays</i>	Stored products	Slovakia	Poland	1
<i>Sitophilus oryzae, Cryptolestes ferrugineus, Acaridae</i>	<i>Helianthus annuus, Linum usitatissimum</i>	Stored products	Slovakia	Poland	1
<i>Sitophilus oryzae, Rhizopertha dominica</i>	<i>Hordeum vulgare</i>	Stored products	Czech Republic	Poland	1
<i>Sitophilus oryzae, Tribolium</i>	<i>Hordeum vulgare</i>	Stored products	Czech Republic	Poland	1
	<i>Triticale</i>	Stored products	Czech Republic	Poland	1
<i>Sitophilus zea-mays</i>	<i>Helianthus annuus</i>	Stored products	Slovakia	Poland	1
<i>Spodoptera</i>	<i>Euphorbia, Boophane, Othonna</i>	Plants for planting	South Africa	Germany	1
<i>Stenocarpella maydis</i>	<i>Zea mays</i>	Seeds	USA	Romania	1
<i>Thrips</i>	<i>Dendrobium</i>	Cut flowers	Thailand	Germany	1
	Orchidaceae	Cut flowers	Thailand	Germany	1
<i>Thrips palmi</i>	<i>Solanum melongena</i>	Vegetables	Suriname	Netherlands	1
Thysanoptera	<i>Dendrobium</i>	Cut flowers	Thailand	Germany	1
	<i>Momordica charantia</i>	Vegetables	Thailand	France	1
	Orchidaceae	Cut flowers	Singapore	France	1
	Orchidaceae	Cut flowers	Thailand	France	1
	<i>Solanum melongena</i>	Vegetables	Dominican Rep.	France	2
	<i>Solanum melongena</i>	Vegetables	Thailand	France	1

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Pest	Consignment	Type of commodity	Country of origin	C. of destination	nb
Tomato ringspot nepovirus	<i>Fragaria ananassa</i>	Plants for planting	United Kingdom	Romania	1
<i>Tribolium</i>	<i>Glycine max</i>	Stored products	Netherlands	Poland	1
	<i>Hordeum vulgare</i>	Stored products	Czech Republic	Poland	2
	<i>Hordeum vulgare</i>	Stored products	Slovakia	Poland	2
	<i>Secale cereale</i>	Stored products	Czech Republic	Poland	1
	<i>Secale cereale</i>	Stored products	Slovakia	Poland	1
	<i>Triticum</i>	Stored products	Czech Republic	Poland	5
	<i>Triticum</i>	Stored products	Hungary	Poland	2
	<i>Triticum aestivum</i>	Stored products	Czech Republic	Poland	2
	<i>Zea mays</i>	Stored products	Czech Republic	Poland	2
	<i>Zea mays</i>	Stored products	Hungary	Poland	1
<i>Tribolium castaneum</i>, <i>Liposcelis</i>, Acaridae, <i>Laemophloeus minutus</i>	<i>Theobroma cacao</i>	Stored products	Côte d'Ivoire	Poland	1
<i>Tribolium</i>, Acaridae	<i>Avena sativa</i>	Stored products	Czech Republic	Poland	1
<i>Tribolium</i>, <i>Rhizopertha dominica</i>	<i>Hordeum vulgare</i>	Stored products	Slovakia	Poland	1
<i>Trogoderma granarium</i>	<i>Hordeum vulgare</i>	Stored products	Czech Republic	Poland	1
	<i>Hordeum vulgare</i>	Stored products	Slovakia	Poland	1

• Fruit flies

Pest	Consignment	Country of origin	C. of destination	nb
<i>Bactrocera</i>	<i>Mangifera indica</i>	Pakistan	France	2
	<i>Psidium guajava</i>	India	France	1
	<i>Psidium guajava</i>	Thailand	France	1
<i>Bactrocera latifrons</i>	<i>Capsicum</i>	Thailand	France	1
	<i>Capsicum frutescens</i>	Thailand	France	2
<i>Ceratitis</i>	<i>Mangifera indica</i>	Burkina Faso	France	1
	<i>Mangifera indica</i>	Cameroon	France	1
	<i>Mangifera indica</i>	Kenya	France	2
<i>Ceratitis capitata</i>	<i>Citrus sinensis</i>	Turkey	Romania	1
	<i>Citrus sinensis</i> , <i>C. limon</i>	Spain	Poland	1
<i>Ceratitis cosyra</i>	<i>Mangifera indica</i>	Senegal	France	1
Diptera	<i>Mangifera indica</i>	Guinea Bissau	Portugal	1
Tephritidae	<i>Citrus paradisi</i>	Argentina	Netherlands	1
	<i>Citrus reticulata</i>	Argentina	Netherlands	1
	<i>Mangifera indica</i>	Egypt	France	2

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- Wood

Pest	Consignment	Type of commodity	Country of origin	C. of destination	nb
<i>Anoplophora glabripennis</i>	Wood	Packing material	China	United Kingdom	2
<i>Bursaphelenchus xylophilus</i>	Coniferae	Wood	Canada	Sweden	1
	Coniferae	Packing material	USA	Finland	2
Grub holes > 3mm	Coniferae	Packing material	Canada	Finland	1
	Coniferae	Packing material	China	Ireland	1
	Coniferae	Packing material	Taiwan	Finland	1
	Hardwood	Packing material	China	Ireland	2
	Wood	Packing material	China	Denmark	1
	Wood (incl. Coniferae)	Packing material	China	Finland	1
	Wood (incl. Coniferae)	Packing material	China	Ireland	1
	Wood (incl. Coniferae)	Packing material	Mexico	Finland	3
	Wood (incl. Coniferae)	Packing material	Taiwan	Finland	2
	Wood (incl. Coniferae)	Packing material	USA	Finland	3
<i>Ips sexdentatus</i>	Coniferae	Wood	Russia	Poland	1
<i>Monochamus</i>	Wood	Packing material	China	Germany	1
<i>Monochamus sartor</i>	<i>Picea, Pinus</i>	Packing material	Latvia	United Kingdom	1
<i>Plagionotus, Chrysobothris affinis</i>	<i>Quercus</i>	Wood	Ukraine	Poland	1
Scolytidae	Wood (incl. Coniferae)	Packing material	China	Ireland	2

- Bonsais

8 consignments of bonsais (*Myrtus communis*, *Ulmus parvifolia*, *Ulmus* sp., *Zelkova*) from (Israel, China or re-exported from the Netherlands) were intercepted by United Kingdom because of the presence of: *Bemisia tabaci*, *Stegophora ulmea*, *Tinocallis takachihoensis*, *T. viridis*

Source: EPPO Secretariat, 2000-10.