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2005/017 New data on quarantine pests and pests of the EPPO Alert List

By browsing through the CABI Abstracts, the EPPO Secretariat has extracted the following new data concerning quarantine pests and pests included on the EPPO Alert List. The situation of the pest concerned is indicated in bold, using the terms of ISPM no. 8.

- **New records**

Peach latent mosaic pelamoviroid (formerly on the EPPO A lists) is reported for the first time from Bosnia and Herzegovina (Matic *et al.*, 2004). **Present, first found in 2004.**

During a survey done in 17 orchards in the northern and Sahel regions of Tunisia, *Peach latent mosaic pelamoviroid* (formerly on the EPPO A lists) was detected for the first time (Fekih Hassen *et al.*, 2004). **Present, first found in 2004.**

In Ukraine, typical symptoms of grapevine yellows were observed in vineyards in the Ovidiopolskij region (near Odessa) which had been planted in 2000 with cv. Chardonnay. Molecular studies revealed the presence of a stolbur phytoplasma (associated with bois noir disease). It is noted that the vector, *Hyalesthes obsoletus*, is reported to be present in the south of Ukraine. This is the first documented report of stolbur phytoplasma infecting grapevines in Ukraine which confirms earlier observations (Milkus *et al.*, 2004). **Present, confirmed in 2004 near Odessa.**

- **Detailed records**

Cucumber vein yellowing ipomovirus (EPPO A2 list) occurs in courgette, cucumber, melon and watermelon grown in protected conditions in Andalucía, Spain (Anonymous, 2003a).

In Italy, *Ceroplastes ceriferus* (Homoptera: Coccidae – EPPO Alert List) occurs in Emilia-Romagna, in a limited area near Lugo (Bariselli, 2004).

Heterodera glycines (EPPO A1 list) is reported for the first time from North Dakota in USA (Bradley *et al.*, 2004).

Iris yellow spot tospovirus (IYSV - EPPO Alert List) is reported from Oregon (US). During 2004, a few onion seed crops in Jefferson county in central Oregon showed severe symptoms. The presence of the virus was confirmed in these affected crops (Crowe & Pappu, 2005). IYSV has also been detected in onion crops in Georgia (Mullis *et al.*, 2004) and New Mexico (Creamer *et al.*, 2004).

Puccinia horiana (EPPO A2 list) occurs in Poland. It is reported that over the last 20 years of observation, the fungus has appeared on chrysanthemum every year with variable incidence, depending on cultivars and environmental conditions (Wojdyla, 2004).



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Citrus canker (*Xanthomonas axonopodis* pv. *citri* – EPPO A1 list) was recently found in a new county (St Lucie) of Florida (US). Eradication measures have been taken (Promed posting, 2005).

Oleander leaf scorch caused by *Xylella fastidiosa* (EPPO A1 list) is reported for the first time from Texas, USA. So far, it had only been reported from California and Florida (Huang *et al.*, 2004).

- **Absence**

The 2003 Annual Report of the phytosanitary service of Valle d'Aosta region (IT) provides useful information on the current situation of pests and diseases. For regulated pests, the situation has not fundamentally changed since 2002 (see EPPO RS 2003/165), but surveys confirmed the absence in 2003 of: *Erwinia amylovora*, Grapevine flavescence dorée, *Ralstonia solanacearum* (all on the EPPO A2 list) in Valle d'Aosta region (Anonymous, 2003b).

- **New host plants**

Arceuthobium gillii (EU Annexes, as non-European *Arceuthobium* spp.) is known to occur in Mexico (Sierra Madre occidental from Central Durango and Northern Sinaloa into Chihuahua and Sonora). In Mexico, it commonly parasitizes *Pinus leiophylla* var. *leiophylla* and var. *chihuahuana*, *P. lumholtzii* and *P. herrerae*. It is rarely found on *P. arizonica* and *P. cooperi*. In USA, *A. gillii* occurs in Southern Arizona (mountains of Chiricahua, Huachuca, Santa Rita, Rincon, Santa Catalina) and in Southern New Mexico (mountains of Animas). In Arizona, a small population of *A. gillii* parasitizing *Pinus engelmannii* was observed for the first time. 4 infested trees were found in the vicinity of heavily infested *P. leiophylla* var. *chihuahuana* (Daugherty & Mathiasen, 2005).

Arceuthobium vaginatum subsp. *cryptopodum* (EPPO A1 list) severely parasitizes several species of *Pinus* in Southern USA and Northern Mexico, but so far it had not been found on *Picea* species. In June 2004, *A. vaginatum* subsp. *cryptopodum* was observed for the first time on a *Picea pungens* tree in Colorado. This tree, planted for ornamental purposes, was located near heavily infested *Pinus ponderosa* trees (Mathiasen *et al.*, 2005).

Strawberry latent ringspot virus (EU Annexes) is reported for the first time on *Mentha*. Several mint clones grown in a USDA germplasm collection showed yellow veinbanding symptoms (Postman *et al.*, 2004)

Source: Anonymous (2003a) Incidencia de plagas y enfermedades en la Comunidades Autónomas en 2002 - Andalucía. **Phytoma España, 28-34.**
Anonymous (2003b) Rapport d'activité 2003. Service phytosanitaire de l'arboriculture fruitière et des cultures. Région autonome de la Vallée d'Aoste, 120 pp.
Bariselli M (2004) Un nuovo pericoloso parassita delle piante ornamentali: la cocciniglia *Ceroplastes ceriferus*. Agricoltura no. 1 (supplement), January 2004, 4 pp. Servizio fitosanitario, Regione Emilia-Romagna, Bologna, IT.



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- Bradley CA, Biller CR, Nelson BD (2005) First report of soybean cyst nematode (*Heterodera glycines*) on soybean in North Dakota. **Plant Disease**, **88(11)**, p 1287.
- Creamer R, Sanogo S, Moya A, Romero J, Molina-Bravo R, Cramer C (2004) *Iris yellow spot virus* on onion in New Mexico. **Plant Disease**, **88(9)**, p 1049.
- Crowe FJ, Pappu HR (2005) Outbreak of *Iris yellow spot virus* in onion seed crops in Central Oregon. **Plant Disease**, **89(1)**, p 105.
- Daugherty C, Mathiasen R (2005) First report of Chihuahua pine dwarf mistletoe (*Arceuthobium gillii*) on Apache pine (*Pinus engelmannii*). **Plant Disease**, **89(1)** p 106.
- Fekih Hassen I, Kummert J, Marbot S (2004) First report of *Pear blister canker viroid*, *Peach latent mosaic viroid* and *Hop stunt viroid* infecting fruit trees in Tunisia. **Plant Disease**, **88(10)**, p 1164.
- Huang Q, Brlansky RH, Barnes L, Li W, Hartung JS (2004) First report of oleander leaf scorch caused by *Xylella fastidiosa* in Texas. **Plant Disease**, **88(9)**, p 1049.
- Mathiasen R, Haefeli M, Marcus N (2005) Southern dwarf mistletoe, *Arceuthobium vaginatum* subsp. *cryptopodum* found parasitizing *Picea pungens* in Colorado. **Plant Disease**, **89(1)** p 106.
- Matic S, Al-Rwahnih M, Myrta A (2004) First record of *Peach latent mosaic viroid* and *Hop stunt viroid* in Bosnia and Herzegovina. **Journal of Plant Pathology**, **86(3)**, 263-264.
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- Mullis SW, Langston Jr DB, Gitaitis RD, Sherwood JL, Csinos AC, Riley DG, Sparks AN, Torrance RL, Cook MJ (2004) First report of *Vidalia* onion (*Allium cepa*) naturally infected with *Tomato spotted wilt virus* and *Iris yellow spot virus* (Family *Bunyaviridae*, Genus *Tospovirus*) in Georgia. **Plant Disease**, **88(11)**, p 1285.
- Postman JD, Tzanetakis IE, Martin RR (2004) First report of *Strawberry latent ringspot virus* in a *Mentha* sp. from North America. **Plant Disease**, **88(8)**, p 907.
- Promed posting of 2005-05-10. Citrus canker – USA (Florida). Canker outbreak reported in St Lucie County. <http://www.promedmail.org>
- Wojdyla AT (2004) Development of *Puccinia horiana* on chrysanthemum leaves in relation to chemical compounds and time of their application. **Journal of Plant Protection Research**, **44(2)**, 91-102.

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

Computer codes: ARESS, CERPCE, CVYV00, ERWIAM, HETDGL, IYSV00, PHYP10, PHYP64, PLMVD0, PSDMSO, PUCCHN, SLRSV0, XANTCI, XYLEFA, BA, ES, IT, MX, PL, TN, UA, US



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2005/018 First record of *Plum pox potyvirus* in Tunisia

So far *Plum pox potyvirus* (PPV - EPPO A2 list) had not been found in Tunisia. In 2000, mother blocks of *Prunus* were tested for the presence of viruses. Random collection of suspicious samples did not, at that time, result in the detection of PPV. However, the appearance of virus-like symptoms in leaves and fruits of Japanese plums (*Prunus salicina*) in stone-fruit tree germplasm collections led to further screening tests. Plant material was taken from collections of Japanese plum at 2 locations (Grombalia in the Cap Bon region and Sbikha in the Kairouan region) where suspicious symptoms had been observed. Samples were collected from 34 trees at Grombalia and from 82 trees at Sbikha, corresponding in total to 11 different cultivars. Samples were tested for the presence of PPV by grafting onto GF 305, and by serological and molecular tests. Results confirmed the presence of PPV at the 2 locations on 57 *P. salicina* trees (corresponding to 9 cultivars). Only PPV-D was detected. It is hypothesized that PPV has been introduced into Tunisia with imported plants for planting. All infected trees have been destroyed. It is stressed that PPV is a very serious threat to *Prunus* production and that strict phytosanitary measures are needed to prevent any further spread of sharka in Tunisia.

The situation of *Plum pox potyvirus* in Tunisia can be described as follows: **Present, first reported in 2004, found in 2 germplasm collections of *Prunus salicina*, under official control.**

Source: Boulila M, Briard P, Ravelonandro M (2004) Outbreak of *Plum pox potyvirus* in Tunisia.
Journal of Plant Pathology, 86(3), 197-201.

Additional key words: new record

Computer codes: PPV000, TN

2005/019 First report of *Plum pox potyvirus* in Argentina

The NPPO of Argentina has officially notified the IPPC Secretariat of the first finding of *Plum pox potyvirus* (EPPO A2 list) on its territory. The identity of the virus was confirmed by DAS-ELISA and electronic microscopy in January 2005. PPV was detected in one property on plums and apricots (*Prunus domestica*, *P. armeniaca*), in the Province of San Juan (Departamento Pocito). The property and its vicinity were placed under quarantine and all plants were destroyed. The situation of *Plum pox potyvirus* in Argentina can be described as follows: **Present, first reported in 2005 in one location (Province of San Juan), under eradication.**

Source: Argentina - emergency action for plum pox virus detection (03 February 2005)
International Phytosanitary Portal. <https://www.ippc.int>

Additional key words: new record

Computer codes: PPV000, AR



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2005/020 *Plum pox potyvirus* occurs in Kazakhstan

Central Asia is considered as the region of origin of apricot (*Prunus armeniaca*). In Kazakhstan, wild populations of apricot grow on the slopes of the Tien-Shan mountain range. These trees are useful sources of material for plant breeding. Studies were done on the presence of *Plum pox potyvirus* (EPPO A2 list) on wild apricot trees growing in the northern range of Tien-Shan (Zailiyski Alatou) and on plum trees from a collection (Pomological Garden in Talgar, east of Almaty). The presence of PPV was detected (ELISA and molecular tests) in all plum trees tested (11 trees) and in several apricot trees (9 trees). All tested plum trees presented severe leaf symptoms, whereas only a single apricot tree showed fruit symptoms. The isolates from plum and apricot were typed as D strain. The EPPO Secretariat had previously no data on the occurrence of PPV in Kazakhstan.

The situation of *Plum pox potyvirus* occurs in Kazakhstan can be described as follows: **Present, reported in 2004 in wild apricots and 1 germplasm collection of plum.**

Source: Spiegel S, Kovalenko EM, Varga A, James D (2004) Detection and partial molecular characterization of two *Plum pox virus* isolates from plum and wild apricot in Southeast Kazakhstan.
Plant Disease 88(9), 973-979.

Additional key words: new record

Computer codes: PPV000, KZ

2005/021 *Toxoptera citricida* does not occur in Iran

The record of *Toxoptera citricida* (Homoptera: Aphididae – EPPO A1 list) in Iran is erroneous. It was based on a misinterpretation of an Iranian publication. CABI has confirmed with the original author of the paper that *T. citricida* is not present in Iran.

Source: Personal communication with L. Charles, CABI, 2005-02.

Additional key words: denied record

Computer codes: TOXOCI, IR



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2005/022 A new bacterium, ‘*Candidatus Liberibacter americanus*’ is associated with citrus greening in Brazil

As reported earlier, symptoms of citrus greening (or Huanglongbing) have recently been observed in Brazil, in São Paulo State (EPPO RS 2004/103, 2004/145) and studies are being done to identify the causal agent(s). 43 symptomatic and 25 asymptomatic samples of sweet orange (*Citrus sinensis*) were tested for the presence of ‘*Candidatus Liberibacter africanus*’ and ‘*Candidatus Liberibacter asiaticus*’ by PCR with specific primers for both bacteria. All results were negative. However, when testing the same samples by PCR with universal primers for the amplification of bacterial 16S rDNA, all symptomatic samples gave a positive results (but not the asymptomatic ones), thus confirming the presence of a bacterium. The 16S rDNA product was cloned, sequenced and compared with those of ‘*Ca. L. africanus*’ and ‘*Ca. L. asiaticus*’. While the 16S rDNA sequence of these two species of *Liberibacter* have 97.5% sequence identity, the 16S rDNA sequence of the new bacterium shared only 93.7 % identity with that of ‘*Ca. L. asiaticus*’ and 93.9 % with that of ‘*Ca. L. africanus*’. In addition, the secondary structure of the 16S rDNA possessed the characteristic features of *Liberibacter* species. The authors considered that the studied bacterium is a new and distinct *Liberibacter*, tentatively called ‘*Candidatus Liberibacter americanus*’. Specific primers were then developed for the detection of this new species. During further surveys, the new bacterium was detected in 214 symptomatic leaf samples collected from 47 farms in 35 municipalities, while ‘*Ca. L. asiaticus*’ was only found 4 times within these 47 farms.

Source: Texeira DC, Ayres J, Kitajima EW, Danet L, Jagoueix-Eveillard S, Saillard C, Bové JM (2005) First report of a Huanglongbing-like disease of Citrus in Sao Paulo State, Brazil and association of a new *Liberibacter* species ‘*Candidatus Liberibacter americanus*’, with the disease.
Plant Disease, 89(1), p 107.

Additional key words: etiology

Computer codes: LIBESP, BR



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2005/023 Details on the situation of Citrus blight in Costa Rica

The etiology of citrus blight (EPPO A1 list) remains unknown; a pathogen is suspected but has not yet been identified. This disease was first reported in the 1980s in Brazil, where it is now responsible for the removal of nearly 10 % of trees per year. Since 1997, symptoms of citrus blight have been observed in several groves in northern Costa Rica (the major citrus-producing region of the country covering approximately 25,000 ha). Symptoms included a general decline and wilt of tree canopy, leaf drop, twig dieback, small fruit, delayed blossom, poor growth and death. A survey done in the Guanacaste province revealed symptoms in 7-years old orange trees (*Citrus sinensis* cvs Valencia and Pineapple) grafted on Carrizo citrange (*C. sinensis* x *Poncirus trifoliata*). Since 1997, 6 % of the trees in this area have been replanted annually because of citrus blight symptoms. Similar situations were also observed in other groves in the northern citrus area. Laboratory tests (dot immunobinding assay to detect a protein associated with the disease, and tests of zinc accumulation in the trunk wood and water uptake) gave positive results and indicated the presence of citrus blight in symptomatic trees. This confirms earlier reports of citrus blight disease in Costa Rica (see EPPO RS 99/135).

Source: Villalobos W, Moreira L, Derrick KS, Beretta MJG, Lee RF Rivera C (2005)
First report of Citrus blight in Costa Rica.
Plant Disease 89(1), p 108.

Additional key words: detailed record

Computer codes: CSB000, CR

2005/024 First report of *Little cherry closterovirus-1* in Poland

So far 3 closteroviruses associated with little cherry disease have been described (*Little cherry closterovirus-1* [LChV-1], LChV-2, LChV-3 – EU Annexes). In Poland, during the 2003 growing season, virus-like symptoms were observed on sour cherry trees (*Prunus cerasus*) growing in commercial orchards and in a germplasm collection of *Prunus*. Affected trees showed irregular, chlorotic mottling, distortion and premature leaf fall. Leaf samples were collected and tested (DAS-ELISA, RT-PCR) for several viruses affecting cherry. Results revealed the presence of *Cherry virus A* on 15 trees and of LChV-1 on 2 trees. These viruses are reported for the first time in Poland. Some trees were also affected by *Prunus necrotic ringspot ilarvirus* and *Prune dwarf ilarvirus*.

Source: Komorowska B, Cieślińska (2004) First report of *Cherry virus A* and *Little cherry virus-1* in Poland.
Plant Disease, 88(8), p 909.

Additional key words: new record

Computer codes: LCHV00, PL

2005/025 Weed hosts of *Pepino mosaic potexvirus*



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Pepino mosaic potexvirus (PepMV - EPPO Alert List) was first reported in Spain in 2000. It is present along the southern and eastern regions of Spain (provinces of Granada, Almería, Murcia, Alicante, Valencia and Barcelona), in Baleares and Islas Canarias. In summer 2001 and 2002, virus-like symptoms were observed in wild plants growing in the vicinity or within tomato fields in the provinces of Murcia and Almería. 62 samples of 42 common weed species were collected and tested for the presence of PepMV (DAS-ELISA with confirmation by RT-PCR). The presence of PepMV was detected in the following weed species: *Bassia scoparia*, *Calystegia sepium*, *Chenopodium murale*, *Convolvulus althaeoides*, *Convolvulus arvensis*, *Conyza albida*, *Coronopus* sp., *Diplotaxis eruroides*, *Echium creticum*, *Echium humile*, *Heliotropium europaeum*, *Moricandia arvensis*, *Onopordum* sp., *Piptatherum multiflorum*, *Plantago afra*, *Rumex* sp., *Sisymbrium irio*, *Sonchus tenerrimus*, *Taraxacum vulgare*. Although further studies are needed to assess more precisely the role of weed reservoirs in outbreaks of PepMV, these observations show that weeds might act as potential virus sources.

Source: Córdoba MC, Martínez-Priego L, Jordá C (2004) New natural hosts of *Pepino mosaic virus* in Spain.
Plant Disease, 88(8), p 906.

Additional key words: new host plants, epidemiology

Computer codes: PEPMV0

2005/026 Real-time PCR to detect *Erwinia amylovora*

Studies were done in Germany to develop a real-time PCR for the detection of *Erwinia amylovora* (EPPO A2 list). Specific primers were created from a DNA fragment of the common plasmid (pEA29). 11 isolates of *E. amylovora* from various geographic locations were successfully detected with this method, but not 8 strains belonging to other species of plant bacteria. *E. amylovora* could be detected in inoculated apple leaves and flowers and also from leaf and bark tissues collected from an infected orchard. It is considered that real-time PCR is highly sensitive and specific, less time-consuming than other PCR assays, and that it allows a quantitative determination of the amount of cells of *E. amylovora* in the assay. In addition, portable thermocyclers can be used directly in the field. Although still expensive (price of the machine and probe), real-time PCR may be very useful for screening large amounts of samples and obtaining quantitative data.

Source: Salm H, Geider K (2004) Real-time PCR for detection and quantification of *Erwinia amylovora*, the causal agent of fireblight.
Plant Pathology, 53(5), 602-610.

Additional key words: diagnostics

Computer codes: ERWIAM

2005/027 PCR to differentiate hop pathotypes of *Verticillium albo-atrum* in Slovenia



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Verticillium albo-atrum and *V. dahliae* (both on the EPPO A2 list) cause vascular wilt on many host plants and can cause economic damage on hop, more particularly *V. albo-atrum*. Verticillium wilt on hop presents different forms from mild to lethal, depending on pathogen virulence, cultivar susceptibility and ecological factors. In England, 3 types of lethal isolates of *V. albo-atrum* (PV1, PV2, PV3) have been reported and were distinguished on the basis of pathogenicity tests on different sets of hop cultivars. In Slovenia, hop wilt was first found in 1974 and appeared only sporadically in some hop gardens until 1997, when an outbreak of the lethal form of *V. albo-atrum* was reported in the western part of Savinja valley. In 2003, more than 180 ha of hop gardens had been affected. In Slovenia, on the basis of pathogenicity tests and molecular analysis, *V. albo-atrum* isolates have been classified as PG1 (mild) and PG2 (lethal) pathotypes. As pathogenicity tests are laborious and time-consuming, molecular tests were developed in Slovenia. Using specific primers targeting specific markers, it was possible to develop a PCR method which is able to differentiate rapidly between PG1 and PG2 pathotypes.

Source: Radišek S, Jakše J, Javornik B (2004) Development of pathotype-specific SCAR markers for detection of *Verticillium albo-atrum* isolates from hop. **Plant Disease**, **88(10)**, 1115-1122.

Additional key words: diagnostics

Computer codes: VERTAA

2005/028 First report of *Tetranychus evansi* in France

During prospections done in the south of France near the Spanish border (Pyrénées-Orientales), *Tetranychus evansi* (Acari: Tetranychidae – EPPO Alert List) was found on *Solanum nigrum* at two localities (Argelès-sur-Mer, Saint-Nazaire). The potential invasiveness of this species has been studied, mainly considering climatic factors. As a result, it was found that the pest could establish outdoors in a narrow band around the Mediterranean coast and Corse. For other parts in Southern France, the risk appears lower. These areas could also be invaded but colder winters or lower summer temperatures would probably limit the spread of the pest. It was also recognized that *T. evansi* has the potential to colonize glasshouses all over France.

Source: Migeon (2005) Un nouvel acarrien ravageur en France: *Tetranychus evansi* Baker et Pritchard. **Phytoma – La défense des Végétaux**, n° 579, 38-42.

Additional key words: new record

Computer codes: TETREV, FR

2005/029 Rapid spread of soybean rust (*Phakopsora pachyrhizi*) in the Americas: addition to the EPPO Alert List



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Two distinct pathogens are involved in soybean rust: *Phakopsora pachyrhizi* and *P. meibomia* (see EPPO RS 2002/030). *P. pachyrhizi* is more aggressive and is considered as one of the most destructive foliar disease of soybean (*Glycine max*). *P. pachyrhizi* originates from Asia (hence its common name: Asian soybean rust) but in recent years, it has spread to other continents. The first confirmed report of *P. pachyrhizi* on the African continent was made in 1996 from Kenya, Rwanda, and Uganda, and the disease then continued to spread to other African countries. *P. pachyrhizi* was first reported in Hawaii in 1994, but until very recently it was still absent from the continental part of USA. In South America, *P. pachyrhizi* was first detected in Paraguay in 2001, in a limited number of fields in the Paraná River basin bordering Brazil. By 2002, soybean rust was widespread throughout Paraguay and in limited areas of Brazil bordering Paraguay, with reports of severe disease in some fields in both countries. During the 2003 growing season, the pathogen was detected in most of the soybean-growing regions of Brazil with significant yield losses (approximately 5% of the annual production). In Argentina, the pathogen was found in 2002 in a limited area in the north of the country. In 2004, the disease spread readily throughout most soybean-growing areas of northwest and northeast Argentina. In USA, *P. pachyrhizi* was first found in November 2004 in Louisiana, and later in other southeastern states. It is considered that the rust was transported from South America to North America by Hurricane Ivan which occurred in September 2004. There are also recent reports of the disease in Bolivia and Uruguay. Although, it is not entirely clear whether *P. pachyrhizi* would be able to survive in Euro-Mediterranean conditions (cold winter temperatures, lack of humidity), a CLIMEX study did not exclude the possibility that *P. pachyrhizi* could survive in southern Mediterranean countries. As this damaging rust of soybean is still absent from the Euro-Mediterranean region, the EPPO Secretariat decided to add it to the EPPO Alert List.

Phakopsora pachyrhizi (Asian soybean rust)

Why	The recent and rapid spread of <i>Phakopsora pachyrhizi</i> in the Americas attracted our attention. Although data is lacking on potential establishment in the Euro-Mediterranean region (tropical and sub-tropical pathogen), the EPPO Secretariat decided to add it to the EPPO Alert List.
Where	Asia: Cambodia, China, India, Indonesia, Japan, Korea, Malaysia, Nepal, Philippines, Russia (Far East), Taiwan, Thailand, Vietnam. Africa: Ghana, Mozambique, Nigeria, Rwanda, Sierra Leone, South Africa, Uganda, Zambia, Zimbabwe. North America: USA (Alabama, Arkansas, Florida, Georgia, Hawaii, Louisiana, Mississippi, Missouri, North Carolina, Tennessee). South America: Argentina, Bolivia, Brazil (Goias, Maranhão, Mato Grosso, Mato Grosso do Sul, Minas Gerais, Paraná, Rio Grande do Sul, São Paulo), Paraguay, Uruguay. Oceania: Australia, Papua New Guinea.
On which plants	Soybean (<i>Glycine max</i>) is the main cultivated host but many other Fabaceae can host this rust, for example: <i>Lupinus hirsutus</i> , <i>Medicago arborea</i> , <i>Melilotus officinalis</i> , <i>Phaseolus vulgaris</i> , <i>P. lunatus</i> , <i>Vicia dasycarpa</i> , <i>Vigna unguiculata</i> , and the weed <i>Pueraria montana</i> var. <i>lobata</i> (kudzu). More data is needed on the range and economic importance of <i>P. pachyrhizi</i> on legume hosts, other than soybean.
Damage	The most common symptoms of infection by <i>P. pachyrhizi</i> are tan-to-dark brown or reddish brown lesions (2 to 5 mm ²) which are usually clustered along the veins. Lesions contain erumpent, globose uredinia. Urediniospores are released through the circular ostiole. The disease begins with small, water-soaked lesions, which gradually increase in size, turning from grey to tan or brown. They assume a polygonal shape restricted by leaf veins and usually



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coalesce to form larger lesions. As the plant matures and sets pods, the symptoms spread rapidly to the middle and upper parts of the plant. Lesions are found on petioles, pods, and stems but are most abundant on leaves. As rust severity increases, premature defoliation and early maturation of plants is common. In areas where the pathogen occurs commonly, yield losses up to 80% have been reported. Successful infection is dependent on the availability of moisture on plant surfaces. At least 6 h of free moisture is needed for infection with maximum infections occurring with 10 to 12 h of free moisture. Temperatures between 15 and 28°C are ideal for infection.

Dissemination	Over long distances, <i>P. pachyrhizi</i> is mainly spread by wind-borne spores (e.g. in USA, it is considered that Hurricane Ivan transported it from South America to Southern USA, see Internet animation https://netfiles.uiuc.edu/ariatti/www/SBR/Ivan.htm). Trade of host plants cannot be excluded as a pathway (e.g. leafy vegetables, ornamentals, pods).
Pathway	Plants for planting, ornamental cut foliage, vegetables of host plants may ensure dissemination of the pathogen.
Possible risks	Soybean is an important crop in the EPPO region. <i>P. pachyrhizi</i> is considered as a serious rust disease in countries where it occurs. Control methods are available (chemical control, destruction of weed hosts) but more data is needed on their efficacy. Preliminary CLIMEX studies have showed that low winter temperatures and lack of humidity are limiting factors for the establishment of the pathogen, and therefore in Europe, only Southern Mediterranean countries may be at risk. However, more detailed studies on its potential for establishment would be needed for the EPPO region.
Source(s)	Klag N (2005) Soybean Rust. NAPPO Newsletter, March, p 4. Pivonia S, Yang XB (2004) Assessment of the potential year-round establishment of soybean rust throughout the World. Plant Disease, 88(5), 523-529. INTERNET ProMed postings. http://www.promedmail.org Soybean rust – USA: 1 st report (2004-11) Soybean rust, Asian strain – Arkansas: 1 st report (2004-11). Soybean rust, Asian strain - Brazil (2004-12). Soybean rust, Asian strain – Argentina (2005-01). Soybean rust, Asian strain – USA (Florida) : 1 st report 2005 (2005-03). USDA-APHIS. Pest Alert. Soybean Rust. http://www.aphis.usda.gov/ppq/ep/soybean_rust/ Plant Management Network. Soybean Rust. http://www.plantmanagementnetwork.org/infocenter/topic/soybeanrust/

EPPO RS 2005/029
Panel review date

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Entry date 2005-03



EPPO Reporting Service

2005/030 EPPO report on notifications of non-compliance (detection of regulated pests)

The EPPO Secretariat has gathered the notifications of non-compliance for 2004 received since the previous report (EPPO RS 2004/127) from the following countries: Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, France, Finland, Germany, Ireland, Israel, Italy, Netherlands, Portugal, Slovenia, Spain, 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 notifications of non-compliance made because of the detection of regulated pests. Other notifications of non-compliance 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 notifications.

Pest	Consignment	Type of commodity	Country of origin	C. of destination	nb
<i>Agromyzidae</i>	<i>Ocimum americanum</i>	Vegetables	Thailand	France	1
	<i>Ocimum basilicum</i>	Vegetables	Thailand	France	5
	<i>Ocimum basilicum</i>	Vegetables	Vietnam	France	3
<i>Aleyrodidae</i>	<i>Eryngium foetidum</i>	Vegetables	Thailand	France	3
	<i>Eryngium foetidum</i>	Vegetables	Vietnam	France	2
	<i>Eryngium foetidum, Ocimum</i>	Vegetables	Thailand	France	1
	<i>Jasminum</i>	Pot plants	India	United Kingdom	1
<i>Anagallis arvensis,</i> <i>Chenopodium, Euphorbia</i> <i>falcata, Papaver</i>	<i>Diplotaxis</i>	Seeds	Italy	Israel	1
<i>Aphididae</i>	<i>Davallia</i>	Plants for planting	Netherlands	Israel	1
<i>Bemisia tabaci</i>	<i>Amaranthus</i>	Cut flowers	Israel	Belgium	1
	<i>Annona, Eryngium</i>	Fruit & Vegetables	Thailand	Denmark	1
	<i>Aster</i>	Cut flowers	Israel	Netherlands	1
	<i>Aster</i>	Cut flowers	Israel	Netherlands	1
	<i>Aster, Rosa</i>	Cut flowers	Israel	Netherlands	1
	<i>Croton</i>	Plants for planting	Sri Lanka	United Kingdom	1
	<i>Duranta</i>	Cut flowers	Israel	Netherlands	1
	<i>Eryngium</i>	Vegetables	Thailand	Denmark	2
	<i>Eryngium foetidum</i>	Vegetables	Thailand	France	4
	<i>Eryngium foetidum</i>	Vegetables	Thailand	Netherlands	1
	<i>Euphorbia</i>	Plants for planting	Netherlands	United Kingdom	1
	<i>Euphorbia pulcherrima</i>	Cuttings	(Denmark)	Sweden	1
	<i>Euphorbia pulcherrima</i>	Cuttings	(Germany)	Sweden	3
	<i>Euphorbia pulcherrima</i>	Cuttings	(Kenya)	Sweden	4
	<i>Euphorbia pulcherrima</i>	Cuttings	(Netherlands)	Sweden	2
	<i>Euphorbia pulcherrima</i>	Cuttings	(Portugal)	Sweden	5
	<i>Euphorbia pulcherrima</i>	Plants for planting	Belgium	United Kingdom	1
<i>Euphorbia pulcherrima</i>	Plants for planting	Germany	Finland	1	
<i>Euphorbia pulcherrima</i>	Cuttings	Italy	Sweden	1	
<i>Euphorbia pulcherrima</i>	Cuttings	Kenya	Sweden	4	



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Pest	Consignment	Type of commodity	Country of origin	C. of destination	nb
<i>B. tabaci</i> (cont.)	<i>Euphorbia pulcherrima</i>	Pot plants	Netherlands	Bulgaria	2
	<i>Euphorbia pulcherrima</i>	Plants for planting	Netherlands	Finland	1
	<i>Euphorbia pulcherrima</i>	Plants for planting	Netherlands	United Kingdom	5
	<i>Euphorbia pulcherrima</i>	Cuttings	Portugal	Sweden	2
	<i>Gypsophila</i>	Cut flowers	Israel	Ireland	1
	<i>Helianthus annuus</i>	Cut flowers	Israel	United Kingdom	1
	<i>Hibiscus</i>	Pot plants	Netherlands	United Kingdom	1
	<i>Hygrophila</i>	Aquarium plants	Sri Lanka	France	1
	<i>Hypericum</i>	Cut flowers	Israel	Belgium	1
	<i>Hypericum</i>	Cut flowers	Israel	United Kingdom	1
	<i>Hypericum</i>	Cut flowers	Netherlands	Ireland	1
	<i>Hypericum, Phlox</i>	Cut flowers	Israel	Belgium	1
	<i>Ipomoea</i>	Vegetables	Gambia	United Kingdom	2
	<i>Limnophila</i>	Aquarium plants	Vietnam	France	1
	<i>Lisianthus, Trachelium</i>	Cut flowers	Israel	Netherlands	1
	<i>Mentha</i>	Vegetables	Morocco	France	1
	<i>Nomaphila</i>	Aquarium plants	Thailand	Denmark	1
	<i>Ocimum basilicum</i>	Vegetables	Israel	France	2
	<i>Ocimum basilicum</i>	Vegetables	Israel	Netherlands	6
	<i>Ocimum basilicum</i>	Vegetables	Morocco	France	1
	<i>Ocimum basilicum</i>	Vegetables	Thailand	Netherlands	1
	<i>Ocimum basilicum, O. sanctum</i>	Vegetables	Thailand	Netherlands	1
	<i>Ocimum, Eryngium foetidum</i>	Vegetables	Thailand	France	1
	<i>Origanum</i>	Vegetables	Senegal	France	1
	<i>Origanum vulgare</i>	Vegetables	Israel	France	2
	<i>Origanum vulgare</i>	Vegetables	Senegal	France	1
	<i>Origanum vulgare, Artemisia dracunculus</i>	Vegetables	Senegal	France	1
	<i>Origanum vulgare, Mentha, Artemisia dracunculus</i>	Vegetables	Morocco	France	1
	<i>Pelargonium</i>	Pot plants	Israel	United Kingdom	1
	<i>Petroselinum crispum</i>	Vegetables	Thailand	France	1
	<i>Piper sarmentosum</i>	Vegetables	Thailand	Ireland	1
	<i>Solidago</i>	Cut flowers	(Zimbabwe)	Sweden	1
	<i>Solidago</i>	Cut flowers	Egypt	Netherlands	1
	<i>Solidago</i>	Cut flowers	Israel	Belgium	2
	<i>Solidago</i>	Cut flowers	Israel	France	2
	<i>Solidago</i>	Cut flowers	Israel	Netherlands	4
	<i>Solidago</i>	Cut flowers	Israel	United Kingdom	4
	<i>Solidago</i>	Cut flowers	Zimbabwe	Netherlands	4
	<i>Trachelium</i>	Cut flowers	Israel	Netherlands	1
	<i>Bemisia tabaci, Liriomyza huidobrensis</i>	<i>Ocimum basilicum</i>	Vegetables	Thailand	Ireland
<i>Bemisia tabaci, Liriomyza trifolii</i>	<i>Solidago, Gypsophila</i>	Cut flowers	Israel	Netherlands	1
<i>Bemisia tabaci, Parabemisia myricae</i>	<i>Ipomoea</i>	Vegetables	Gambia	United Kingdom	1
<i>Bemisia tabaci, Spodoptera littoralis</i>	<i>Solidago</i>	Cut flowers	Israel	United Kingdom	1



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Pest	Consignment	Type of commodity	Country of origin	C. of destination	nb
<i>Chrysanthemum stunt pospiviroid</i>	<i>Dendranthema morifolium</i>	Pot plants	Netherlands	United Kingdom	1
<i>Chrysomphalus aonidum, Lepidosaphes (suspect tokionis)</i>	<i>Scindapsus</i>	Pot plants	Sri Lanka	United Kingdom	1
<i>Chrysomphalus aonidum, Pinnaspis strachani, Aspidiotus destructor</i>	<i>Dracaena</i>	Pot plants	Netherlands	United Kingdom	1
<i>Clavibacter michiganensis subsp. michiganensis</i>	<i>Lycopersicon esculentum</i>	Seeds	India	France	1
	<i>Solanum tuberosum</i>	Ware potatoes	Netherlands	Czech Republic	1
	<i>Solanum tuberosum</i>	Ware potatoes	Poland	Estonia	4
	<i>Solanum tuberosum</i>	Ware potatoes	Poland	Germany	1
	<i>Solanum tuberosum</i>	Ware potatoes	Poland	Sweden	1
<i>Clover yellow mosaic potexvirus</i>	<i>Verbena</i>	Plants for planting	Costa Rica	United Kingdom	3
<i>Coccidae larvae</i>	<i>Viburnum</i>	Plants for planting	Netherlands	Israel	1
<i>Contarinia maculipennis</i>	<i>Dendrobium</i>	Cut flowers	Thailand	Netherlands	1
	<i>Orchidaceae</i>	Cut flowers	Malaysia	Netherlands	1
<i>Cuscuta</i>	<i>Eruca sativa</i>	Seeds	Italy	Israel	1
<i>Dialeurodes vulgaris, D. kirkaldyi</i>	<i>Jasminum</i>	Pot plants	India	United Kingdom	1
<i>Diaspis bromeliae</i>	<i>Bromeliaceae</i>	Plants for planting	Netherlands	Israel	1
<i>Elsinoe</i>	<i>Citrus sinensis</i>	Fruits	Argentina	Spain	3
<i>Euphorbia maculata</i>	<i>Diplotaxis</i>	Seeds	Italy	Israel	1
<i>Geometridae larvae</i>	<i>Orchidaceae</i>	Cut flowers	Netherlands	Israel	1
<i>Guignardia citricarpa</i>	<i>Citrus limon</i>	Fruits	South Africa	Germany	1
	<i>Citrus sinensis</i>	Fruits	Brazil	Netherlands	4
	<i>Citrus sinensis</i>	Fruits	South Africa	Belgium	1
	<i>Citrus sinensis</i>	Fruits	South Africa	Netherlands	11
<i>Helicotylenchus, Meloidogyne</i>	<i>Crassula</i>	Plants for planting	China	France	1
<i>Helicoverpa armigera</i>	<i>Aster</i>	Cut flowers	Israel	Netherlands	1
	<i>Aster</i>	Cut flowers	South Africa	Netherlands	1
	<i>Capsicum annuum</i>	Vegetables	Turkey	Netherlands	1
	<i>Dianthus</i>	Cut flowers	Morocco	France	1
	<i>Dianthus caryophyllus</i>	Cut flowers	Morocco	France	1
	<i>Dianthus caryophyllus</i>	Cut flowers	Turkey	Netherlands	2
	<i>Eryngium</i>	Vegetables	Zimbabwe	Netherlands	1
	<i>Gypsophila</i>	Cut flowers	Israel	Netherlands	1
	<i>Lactuca sativa</i>	Vegetables	Spain	United Kingdom	1
	<i>Mentha</i>	Cut flowers	Morocco	France	1



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Pest	Consignment	Type of commodity	Country of origin	C. of destination	nb
<i>H. armigera</i> (cont.)	<i>Momordica</i>	Vegetables	Thailand	Netherlands	1
	<i>Ocimum basilicum</i>	Vegetables	Thailand	Netherlands	2
	<i>Origanum vulgare</i>	Vegetables	Israel	France	1
	<i>Phaseolus vulgaris</i>	Vegetables	(Kenya)	Netherlands	1
	<i>Phaseolus vulgaris</i>	Vegetables	Egypt	Netherlands	1
	<i>Pisum sativum</i>	Vegetables	(Kenya)	Netherlands	1
	<i>Pisum sativum</i>	Vegetables	(Zimbabwe)	Netherlands	2
	<i>Pisum sativum</i>	Vegetables	Kenya	Netherlands	9
	<i>Pisum sativum</i>	Vegetables	South Africa	Netherlands	2
	<i>Pisum sativum</i>	Vegetables	Tanzania	Netherlands	3
	<i>Pisum sativum</i>	Vegetables	Zambia	Netherlands	2
	<i>Pisum sativum</i>	Vegetables	Zimbabwe	Netherlands	10
	<i>Solidago</i>	Cut flowers	Zimbabwe	Netherlands	2
<i>Hirschmanniella</i>	<i>Eichhornia crassipes</i>	Aquarium plants	Israel	Germany	1
	<i>Hydrocharitaceae</i>	Aquarium plants	Thailand	Belgium	1
	<i>Hygrophila</i>	Aquarium plants	Thailand	Belgium	3
	<i>Vallisneria</i>	Aquarium plants	Singapore	France	5
	<i>Vallisneria gigantea</i>	Aquarium plants	Singapore	France	1
<i>Lepidoptera</i>	<i>Gypsophila</i>	Cut flowers	Israel	Cyprus	1
	<i>Hibiscus</i>	Cut flowers	Israel	Cyprus	1
	<i>Momordica charantia</i>	Vegetables	Kenya	France	1
<i>Lepidosaphes gloverii</i> , <i>Parlatoria ziziphi</i> , <i>P.</i> <i>pergandii</i> , <i>P. cinerea</i> , <i>Tarsonemidae</i> , <i>Aleurodicus</i> <i>dispersus</i>	<i>Citrus</i>	Leaves	Thailand	United Kingdom	1
<i>Leucinodes orbonalis</i>	<i>Solanum aculeatissimum</i>	Vegetables	Thailand	Netherlands	2
	<i>Solanum melongena</i>	Vegetables	Ghana	Italy	1
	<i>Solanum melongena</i>	Vegetables	Ghana	Netherlands	1
	<i>Solanum melongena</i>	Vegetables	Thailand	Netherlands	8
	<i>Solanum torvum</i>	Vegetables	Thailand	Netherlands	10
<i>Lily mottle potyvirus</i>	<i>Lilium</i>	Bulbs	Turkey	Israel	1
<i>Limax</i> , <i>Geoplanidae</i> , <i>Megascolecidae</i>	<i>Dicksonia</i>	Pot plants	New Zealand	United Kingdom	1
<i>Liriomyza</i>	<i>Carthamus</i>	Cut flowers	(Kenya)	Sweden	1
	<i>Gypsophila</i>	Cut flowers	Ecuador	Italy	1
	<i>Gypsophila</i>	Cut flowers	Ecuador	Sweden	1
	<i>Gypsophila</i>	Cut flowers	Israel	Germany	5
	<i>Gypsophila paniculata</i>	Cut flowers	(Spain)	Sweden	1
	<i>Ocimum basilicum</i>	Vegetables	Thailand	Denmark	1
	<i>Ocimum basilicum</i>	Vegetables	Thailand	Germany	1
	<i>Ocimum basilicum</i>	Vegetables	Vietnam	France	2
<i>Liriomyza huidobrensis</i>	<i>Dendranthema</i>	Cut flowers	Costa Rica	Netherlands	1
	<i>Eryngium alpinum</i>	Cut flowers	Kenya	Netherlands	2
	<i>Gerbera</i>	Plants for planting	Netherlands	Germany	1
	<i>Gypsophila</i>	Cut flowers	Ecuador	Netherlands	2
	<i>Gypsophila</i>	Cut flowers	Kenya	Netherlands	1
	<i>Gypsophila</i>	Cut flowers	Netherlands	Ireland	1



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Pest	Consignment	Type of commodity	Country of origin	C. of destination	nb
<i>L. huidobrensis</i> (cont.)	<i>Gypsophila</i>	Cut flowers	Netherlands	United Kingdom	3
	<i>Lisianthus</i>	Cut flowers	Brazil	Netherlands	1
	<i>Ocimum basilicum</i>	Vegetables	Israel	Ireland	1
	<i>Ocimum basilicum</i>	Vegetables	Thailand	Ireland	1
<i>Liriomyza sativae</i>	<i>Gypsophila</i>	Cut flowers	Israel	Netherlands	1
	<i>Ocimum basilicum</i>	Vegetables	Thailand	Ireland	1
<i>Liriomyza trifolii</i>	<i>Dendranthema</i>	Cut flowers	Spain (Canary isl.)	Netherlands	1
	<i>Gypsophila</i>	Cut flowers	Israel	Netherlands	3
	<i>Ranunculus, Asclepias,</i> <i>Eustoma</i>	Cut flowers	Israel	Netherlands	1
<i>Meloidogyne,</i> <i>Cricematidae,</i> <i>Rotylenchus</i>	<i>Erythrina corallodendrum</i>	Plants for planting	Thailand	France	1
<i>Meloidogyne,</i> <i>Cricematidae,</i> <i>Rotylenchus,</i> <i>Tylenchorhynchus</i>	<i>Erythrina corallodendrum,</i> <i>Ravenea, Arecastrum</i> <i>romanzoffianum, Copernicia,</i> <i>Livistona, Bambusa</i>	Plants for planting	Thailand	France	1
<i>Nematoda</i>	<i>Codiaeum, Araceae,</i> <i>Livistona</i>	Plant for planting	Sri Lanka	France	1
<i>Niphona</i>	<i>Bambusa</i>	Bamboo cane	China	United Kingdom	1
<i>Parthenothrips dracaenae</i>	<i>Anthurium</i>	Cut flowers	Netherlands	Israel	1
<i>Pepino mosaic potexvirus</i>	<i>Lycopersicon esculentum</i>	Seeds	Chile*	France	2
	<i>Lycopersicon esculentum</i>	Seeds	India*	France	2
	<i>Lycopersicon esculentum</i>	Fruits	Netherlands	United Kingdom	1
	<i>Lycopersicon esculentum</i>	Fruits	Spain	United Kingdom	1
	<i>Lycopersicon esculentum</i>	Fruits	Spain (Canary isl.)	United Kingdom	1
<i>Phoma</i>	<i>Capsicum annum</i>	Seeds	Netherlands	Israel	1
<i>Phytophthora ramorum</i>	<i>Rhododendron</i>	Plants for planting	(Germany)	Sweden	1
	<i>Rhododendron catawbiense</i>	Plants for planting	(Netherlands)	Sweden	1
	<i>Rhododendron ponticum</i>	Pot plants	France	United Kingdom	1
	<i>Rhododendron ponticum</i>	Pot plants	Netherlands	United Kingdom	1
<i>Polygonum aviculare,</i> <i>Geranium pusillum,</i> <i>Galium, Descurainia</i> <i>sophia, Thlaspi arvense,</i> <i>Silene</i>	<i>Allium schoenoprasum</i>	Seeds	Czech Republic	Israel	1
<i>Polygonum aviculare,</i> <i>Setaria viridis,</i> <i>Chenopodium</i>	<i>Dianthus caryophyllus</i>	Seeds	Italy	Israel	1
<i>Polygonum convolvulus</i>	<i>Anethum graveolens</i>	Seeds	France	Israel	1
	<i>assorted seeds for birds</i>	Stored products	Belgium	Israel	1
	<i>Hordeum vulgare</i>	Stored products	Russia	Israel	1
	<i>Hordeum vulgare</i>	Stored products	Ukraine	Israel	2



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Pest	Consignment	Type of commodity	Country of origin	C. of destination	nb
<i>P. convolvulus</i> (cont.)	<i>Spinacea oleracea</i>	Seeds	Germany	Israel	1
	<i>Spinacea oleracea</i>	Seeds	Netherlands	Israel	1
	<i>Triticum aestivum</i>	Stored products	Russia	Israel	4
	<i>Triticum aestivum</i>	Stored products	Ukraine	Israel	1
<i>Polygonum convolvulus</i> , <i>Sclerotinia sclerotiorum</i>	<i>Petroselinum crispum</i>	Seeds	Denmark	Israel	2
<i>Pseudaulacaspis cockerelli</i>	<i>Annona cherimola</i>	Seeds	USA	United Kingdom	1
<i>Quadraspidiotus perniciosus</i>	<i>Cydonia</i>	Fruits	Turkey	Israel	1
<i>Radopholus</i>	<i>Anubias</i>	Aquarium plants	Thailand	Germany	1
<i>Radopholus similis</i>	<i>Anubias</i>	Aquarium plants	Spain (Canary isl.)	Germany	1
<i>Rhizoecus</i>	<i>Guzmania</i>	Pot plants	Netherlands	Israel	1
<i>Sclerotinia sclerotiorum</i>	<i>Raphanus sativus</i>	Seeds	USA	Israel	1
	<i>Satureja</i>	Seeds	Denmark	Israel	1
	<i>Satureja</i>	Seeds	Italy	Israel	1
	<i>Satureja</i>	Seeds	USA	Israel	1
<i>Snails (Mollusca)</i>	<i>Dieffenbachia</i>	Pot plants	Netherlands	Israel	1
<i>Spodoptera</i>	<i>Anemone nemorosa</i>	Cut flowers	Israel	United Kingdom	1
	<i>Anemone nemorosa</i>	Cut flowers	Italy	United Kingdom	1
<i>Spodoptera littoralis</i>	<i>Dianthus caryophyllus</i>	Cut flowers	Turkey	Netherlands	1
	<i>Rosa</i>	Cut flowers	Uganda	Netherlands	1
<i>Strawberry mild yellow edge virus</i>	<i>Fragaria ananassa</i>	Plants for planting	Chile	France	1
<i>Thrips</i>	<i>Dendrobium</i>	Cut flowers	Thailand	Belgium	5
	<i>Gypsophila</i>	Cut flowers	Kenya	France	1
	<i>Momordica</i>	Vegetables	Kenya	Germany	1
	<i>Momordica balsamina</i>	Vegetables	Dominican Rep.	Germany	1
<i>Thrips palmi</i>	<i>Dendrobium</i>	Cut flowers	Thailand	Belgium	2
	<i>Dendrobium</i>	Cut flowers	Thailand	Czech Republic	1
	<i>Dendrobium</i>	Cut flowers	Thailand	Denmark	1
	<i>Dendrobium</i>	Cut flowers	Thailand	Netherlands	6
	<i>Luffa acutangula</i>	Vegetables	Ghana	Netherlands	1
	<i>Momordica</i>	Vegetables	Dominican Rep.	United Kingdom	1
	<i>Momordica</i>	Vegetables	Thailand	Netherlands	3
	<i>Momordica charantia</i>	Vegetables	Dominican Rep.	United Kingdom	1
	<i>Orchis</i>	Cut flowers	Thailand	France	1
	<i>Orchis</i>	Cut flowers	Thailand	France	1
	<i>Solanum aculeatissimum</i>	Vegetables	Thailand	Netherlands	1
	<i>Solanum aculeatissimum</i> ,	Vegetables	Thailand	Netherlands	1
	<i>Momordica charantia</i>	Vegetables	Dominican Rep.	France	1
<i>Solanum melongena</i>	Vegetables	Dominican Rep.	Netherlands	1	
<i>Solanum melongena</i>	Vegetables	Suriname	Netherlands	10	
<i>Solanum melongena</i>	Vegetables	Thailand	Netherlands	1	



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Pest	Consignment	Type of commodity	Country of origin	C. of destination	nb
<i>Thysanoptera</i>	<i>Momordica charantia</i>	Vegetables	India	France	5
	<i>Momordica charantia</i>	Vegetables	Thailand	France	1
	<i>Orchis</i>	Cuttings	Thailand	France	1
	<i>Solanum aculeatissimum</i>	Vegetables	Thailand	France	5
	<i>Solanum melongena</i>	Vegetables	Suriname	France	1
	<i>Solanum melongena</i>	Vegetables	Thailand	France	2
	<i>Solanum melongena</i>	Vegetables	Togo	France	3
<i>Trialeurodes ricini</i>	<i>Murraya koenigii</i>	Leaves	India	United Kingdom	1
<i>Trialeurodes vaporariorum</i>	<i>Hypericum</i>	Cut flowers	Kenya	France	2
<i>Virus (unidentified filamentous virus)</i>	<i>Solanum jasminoides</i>	Plants for planting	Netherlands	Israel	1
<i>Weed seeds</i>	<i>Cocos nucifera</i>	Growing media	India	Israel	1
	<i>Cocos nucifera</i>	Growing media	Sri Lanka	Israel	2
<i>Xanthomonas axonopodis pv. citri</i>	<i>Citrus latifolia</i>	Fruits	Mexico	Spain	1
<i>Xiphinema americanum</i>	<i>Dicksonia</i>	Plants for planting	New Zealand	United Kingdom	1

• Fruit flies

Pest	Consignment	Country of origin	C. of destination	nb
<i>Anastrepha</i>	<i>Mangifera indica</i>	Dominican Rep.	Italy	1
<i>Bactrocera</i>	<i>Capsicum frutescens</i>	Thailand	France	1
<i>Bactrocera dorsalis</i>	<i>Annona squamosa</i>	Thailand	Czech Republic	1
<i>Ceratitis</i>	<i>Mangifera indica</i>	Israel	Italy	1
<i>Diptera</i>	<i>Citrus sinensis</i>	Egypt	France	1
<i>Non-European Tephritidae</i>	<i>Annona muricata</i>	Cameroon	France	1
	<i>Annona muricata</i>	Vietnam	France	1
	<i>Annona squamosa</i>	Thailand	France	1
	<i>Annona squamosa</i>	Vietnam	France	3
	<i>Annona squamosa, A. muricata</i>	Vietnam	France	1
	<i>Capsicum</i>	Thailand	France	4
	<i>Capsicum</i>	Vietnam	France	1
	<i>Capsicum frutescens</i>	Thailand	France	11
	<i>Citrus paradisi</i>	Honduras	Netherlands	1
	<i>Mangifera indica</i>	Burkina Faso	France	4
	<i>Mangifera indica</i>	Cameroon	France	7
	<i>Mangifera indica</i>	Côte d'Ivoire	France	5
	<i>Mangifera indica</i>	Dominican Rep.	Netherlands	1
	<i>Mangifera indica</i>	Egypt	France	1
	<i>Mangifera indica</i>	Indonesia	France	1
	<i>Mangifera indica</i>	Kenya	France	1



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Pest	Consignment	Country of origin	C. of destination	nb
<i>Non-European Tephritidae</i>	<i>Mangifera indica</i>	Mali	France	10
	<i>Mangifera indica</i>	Pakistan	France	7
	<i>Mangifera indica</i>	Senegal	France	2
	<i>Mangifera indica</i>	Thailand	France	5
	<i>Mangifera indica</i>	Vietnam	France	1
	<i>Mangifera indica, Syzygium samarangense</i>	Thailand	France	1
	<i>Passiflora quadrangularis</i>	Indonesia	France	2
	<i>Psidium guajava</i>	Brazil	France	1
	<i>Psidium guajava</i>	India	France	1
	<i>Psidium guajava</i>	Thailand	France	3
	<i>Syzygium jambos</i>	Thailand	France	1
	<i>Syzygium samarangense</i>	Thailand	France	4
	<i>Zizyphus</i>	Thailand	France	2

• Wood

Pest	Consignment	Type of commodity	Country of origin	C. of destination	nb
<i>Anoplophora glabripennis</i> (suspected)	Hardwood	Packing wood	China	Germany	2
<i>Bursaphelenchus xylophilus</i>	Coniferae	Packing wood	(USA)	Sweden	2
	Coniferae	Packing wood	USA	Estonia	2
	Coniferae	Packing wood	USA	Finland	2
<i>Cerambycidae</i> (suspect <i>Anoplophora</i>)	Hardwood	Packing wood	China	Germany	1
<i>Cerambycidae</i> live larvae	Hardwood	Packing wood	China	Germany	1
<i>Cerambycidae</i> live larvae, grub holes > 3 mm	Hardwood	Packing wood	China	Germany	1
<i>Coleoptera</i>	<i>Quercus</i>	Wood and bark	Bulgaria	Cyprus	1
Grub holes > 3 mm	Coniferae	Packing wood	Taiwan	Germany	1
	Hardwood	Packing wood	China	Germany	1
<i>Scolytidae</i>	<i>Abies</i>	Wood and bark	Romania	Cyprus	1
	<i>Pinus</i>	Wood and bark	Bulgaria	Cyprus	1
	<i>Pinus</i>	Wood and bark	Russia	Cyprus	1
<i>Scolytidae, Buprestidae</i>	<i>Fagus</i>	Wood and bark	Bulgaria	Cyprus	1



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- **Bonsais**

Pest	Consignment	Country of origin	C. of destination	nb
<i>Helicotylenchus</i>	<i>Ehretia</i>	China	France	3
	<i>Ehretia, Ficus</i>	China	France	1
	<i>Ficus</i>	China	France	3
	<i>Ligustrum</i>	China	France	1
	<i>Ligustrum, Celtis, Gardenia, Podocarpus, Zelkova, Ficus, Eugenia, Zanthoxylum</i>	China	France	1
	<i>Serissa</i>	China	France	1
<i>Meloidogyne</i>	<i>Ficus</i>	China	France	1
	<i>Syzygium, Duranta</i>	Indonesia	Belgium	1
<i>Nematoda</i>	<i>Eugenia</i>	China	France	1
	<i>Ficus microcarpa</i>	China	France	1
	<i>Ligustrum</i>	China	France	1
	<i>Zanthoxylum</i>	China	France	1
<i>Pratylenchus</i>	<i>Serissa</i>	China	France	2
<i>Rhizoecus hibisci</i>	<i>Serissa</i>	China	United Kingdom	1
<i>Tinocallis takachihoensis</i>	<i>Ulmus</i>	China	United Kingdom	1
<i>Tylenchorhynchus</i>	<i>Ilex crenata</i>	Japan	France	2
<i>Xiphinema americanum</i>	<i>Enkianthus perulatus, Ilex crenata</i>	Japan	France	1
<i>Xiphinema, Pratylenchus, Tylenchorhynchus, Helicotylenchus, Meloidogyne</i>	<i>Bambusa, Serissa, Ligustrum, Ficus</i>	Indonesia	Belgium	1

Source: EPPO Secretariat, 2005-02.



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2005/031 New books on scale insects

Two new books on scale insects have recently been published:

- A Systematic Catalogue of the Scale Insect Family Margarodidae (Hemiptera: Coccoidea) of the World by Yair Ben-Dov.

This catalogue of the scale insect family Margarodidae (Hemiptera: Coccoidea) includes data on 442 species and subspecies that are placed among 77 genera. Data is provided on their correct scientific names, taxonomy, common names, synonyms, host plants, distribution, natural enemies, biology, economic importance and published references.

400 pp; January 2005 - ISBN: 1-84585-000-9

Price: 57 euros

- A Systematic Catalogue of the Cerococcidae, Halimococcidae, Kermesidae, Micrococcidae, Ortheziidae, Phenacoleachiidae, Phoenicococcidae, and Stictococcidae (Hemiptera: Coccoidea) of the World by Douglass R. Miller, Maren E. Gimpel, and Alessandra Rung.

This publication provides systematic catalogues of eight families of scale insects for the world. Cerococcidae (ornate pit scales) including 72 valid species in 3 genera; Halimococcidae (pupillarial palm scales) including 21 valid species in 5 genera; Kermesidae (gall-like scales) has 91 species in 10 genera; Micrococcidae (Mediterranean scales) with 8 species in 2 genera; Ortheziidae (ensign scales) has 162 species in 11 genera; Phenacoleachiidae with 2 species in 1 genus; Phoenicococcidae (palm scale) with 1 species in 1 genus; and Stictococcidae with 15 species and 3 genera. It gives information on their scientific names, common names, synonyms, host plants, distribution, biology, economic importance, diagnostic features, keys for identification, and published references.

554 pp; January 2005 - ISBN: 1-84585-001-7

Price: 71 euros

Both books can be ordered from:

LAVOISIER, 14, rue de Provigny, 94236 Cachan, CEDEX, France • Tel: +33 (0)1 4740 6700 • Fax: +33 (0)1 4740 6702 • Email: export@Lavoisier.fr

Or, for United Kingdom, from: EXTENZA-TURPIN, Pegasus Drive, Stratton Business Park, Biggleswade, Beds. SG18 8TQ, UK • Tel: +44 (0)1767 604875 • Fax: +44 (0)1767 601640 • Email: curryt@extenza-turpin.com

Source: Personal communication with Ms McEnnerney, Intercept Limited, 2005-02.

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