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2001/061 First report of *Potato spindle tuber pospiviroid* on tomato crops in New Zealand

Potato spindle tuber pospiviroid (PSTVd - EPPO A2 quarantine pest) is reported for the first time in New Zealand. The disease first came to the attention of the Ministry of Agriculture and Forestry in May 2000, when a tomato grower reported unusual symptoms. A survey on tomato crops was later carried out, and the presence of the viroid was confirmed in 3 sites in the North Island and 1 in the South Island. It is suspected that PSTVd was introduced through imported contaminated seeds. The situation of PSTVd in New Zealand can be described as follows: **Present: found only on tomato crops in 3 sites in North Island and 1 site in South Island**.

Source: Potato spindle tuber viroid – New Zealand. ProMED posting of 2001-03-14. http://www.promedmail.org

Additional key words: new record **Computer codes:** POSTXX, NZ

2001/062 Studies on Tomato yellow leaf curl viruses in some Mediterranean countries

Accumulation of molecular data has led scientists to divide *Tomato yellow leaf curl begomovirus* (EPPO A2 quarantine list) into several species. In a proposal for naming geminiviruses, Fauquet *et al*. (2000) proposed 8 different species: including *Tomato yellow leaf curl gegomovirus - Sardinia* (TYLCV-Sar, first reported in Sardinia) and *Tomato yellow leaf curl begomovirus - Israel* (TYLCV-Is, first reported in Israel). Studies were carried out to identify the species of Tomato yellow leaf curl viruses present in Europe (Accotto *et al*., 2000). Tomato leaves from plants showing symptoms were collected from Italy, Spain and Portugal from 1991 to 1998. Several identification methods were tested and it was found that for typing purposes, RFLP was the most suitable. All European samples tested belonged to one of the two species. TYLCV-Sar was identified on samples from: Italy (Sardegna, Sicilia) and Spain. TYLCV-Is was identified on samples from Portugal and Spain (in some Spanish samples both viruses were present).

Source: Accotto, G.P.; Navas-Castillo, J.; Noris, E.; Moriones, E.; Louro, D. (2000) Typing of tomato yellow leaf curl viruses in Europe.
European Journal of Plant Pathology, 106(2), 179-186.

Fauquet, C.M.; Maxwell, D.P.; Gronenborn, B.; Stanley, J. (2000) Revised proposal for naming geminiviruses.
Archives of virology, 145(8), 1743-1761.
Also available on INTERNET
http://iltab.danforthcenter.org/naming/howtoname.html

Additional key words: detailed records **Computer codes:** TMYLCX, ES, IT, PT

2001/063 First report of *Tomato yellow leaf curl begomovirus – Israel* in the Bahamas

In December 1996, symptoms of stunting, curling, marginal chlorosis of leaves and reduction of fruit number were observed in tomato crops on the island of North Andros, Bahamas. In autumn 1997, similar symptoms were seen on the island of Eleuthera, Bahamas. In some fields, disease incidence reached up to 100%. PCR studies revealed the presence of *Tomato yellow leaf curl begomovirus -Israel* (EPPO A2 quarantine pest) in symptomatic plants. This is the first report of this virus in the Bahamas. The situation of *Tomato yellow leaf curl begomovirus - Israel* in the Bahamas can be described as follows: **Present: found only in two islands (North Andros, Eleuthera)**.

Source: Sinisterra, X.; Patte, C.P.; Siewnath, S.; Polston, J.E. (2000) Identification of tomato yellow leaf curl virus-Is in the Bahamas.
Plant Disease, 84(5), p 592.

Additional key words: new record **Computer codes:** TMYLCX, BS

2001/064 Transmission studies of *Tomato yellow leaf curl begomovirus* by *Bemisia tabaci*

Studies were carried out in Israel on the transmission of *Tomato yellow leaf curl begomovirus* by *Bemisia tabaci* (both EPPO A2 quarantine pests) biotype B. PCR was used to trace the movement of the virus within its insect vector. Results showed that whiteflies were able to transmit TYLCV 8 h (latent period) after they were caged with infected tomato plants. During this latent period, TYLCV was first detected in the head of *B. tabaci* after an acquisition access period of 10 min. After 40 min, TYLCV was found in the midgut and after 90 min in the hemolymph. The virus was detected in salivary glands 5.5 h after it was first detected in the hemolymph. Immunocapture-PCR assays showed that the capsid protein of TYLCV was present in the insect organs at the same time as DNA, suggesting that at least part of the virus circulates as virions within *B. tabaci*. It was also observed that females were more efficient vectors than males. The authors commented that TYLCV presents several features of an insect pathogen. It remains associated with the insect for its entire adult life, and this has a negative impact on life expectation and fecundity of *B. tabaci*. TYLCV invades the reproductive system and may be transmitted sexually to other individuals. The authors felt that probably most of the virus acquired by the insect leaves the circulative pathway (described above) at some unknown point and is stored in unknown tissues for long periods.

Source: Ghanim, M.; Morin, S.; Czosneck H. (2001) Rate of *Tomato yellow leaf curl virus* translocation in the circulative transmission pathway of its vector, the whitefly *Bemisia tabaci*.
Phytopathology, 91(2), 188-196.

Additional key words: biology **Computer codes:** BEMITA, TMYLCX

2001/065 Details on *Bemisia tabaci* biotype B in India

As reported in EPPO RS 2000/148, *Bemisia tabaci* biotype B (EPPO A2 quarantine pest) has recently been reported for the first time in India. In May 1999, in Karnataka (district of Kolar), populations of *B. tabaci* on tomatoes increased drastically (1000 fold that observed previously). Studies showed that these populations belonged to the B biotype of *B. tabaci*. This increase of whitefly populations was associated with a severe tomato leaf curl disease which caused complete crop failure. Molecular studies revealed the presence of a begomovirus which presented 94% nucleotide sequence identity with *Tomato leaf curl begomovirus - Bangalore*. The authors expressed serious concerns about the introduction of the B biotype of *B. tabaci* in India, as it was already associated with a severe disease outbreak.

Source: Banks, G.K.; Colvin, J.; Chowda, Reddy, R.V.; Maruthi, M.N.; Muniyappa, V.; Venkatesh, H.M.; Kiran Kumar, M.; Padmaja, A.S.; Beitia, F.J.; Seal, S.E. (2001) First report of the *Bemisia tabaci* B Biotype in India and an associated *Tomato leaf curl virus* Disease Epidemic.
Plant Disease, 85(2), p 231.

Additional key words: detailed record **Computer codes:** BEMITA, IN

2001/066 New host plants of *Potato T trichovirus*

Ullucus tuberosus (ulluco), *Oxalis tuberosa* (oca) and *Tropaeolum tuberosum* (mashua) are reported as new host plants of *Potato T trichovirus* (EPPO A1 quarantine pest). These plants are Andean tuber crops which are often grown in small plots in association with potatoes in the Peruvian Highlands. The virus was isolated from leaves of naturally infected plants. *Potato T trichovirus* isolates from these new host plants and potato (*Solanum tuberosum* subsp. *tuberosum* x *S. tuberosum* subsp. *andigena*) were compared, using PCR and restriction enzyme digestions of the PCR product, and showed no variability.

Source: Lizárraga, C.; Querci, M.; Santa Cruz, M.; Bartolini, I.; Salazar, L.F. (2000) Other natural hosts of Potato virus T.
Plant Disease, 84(7), 736-738.

Additional key words: new host plants **Computer codes:** POTXXX

2001/067 Presence of grapevine bois noir phytoplasma in Croatia

Grapevine yellows diseases are reported from many viticultural regions of the world and phytoplasmas associated with these diseases belong to different groups [aster yellows, X-disease, elm yellows (e.g. grapevine flavescence dorée) and stolbur group (e.g. grapevine bois noir)]. In Croatia, symptoms of grapevine yellows have been observed in some regions. In 1998, phytoplasmas belonging to the stolbur group were reported. In autumn 1998, 28 samples were collected in vineyards from different regions in Croatia and tested (PCR, RFLP). Samples collected in eastern and north-western parts of Croatia presented symptoms; whereas those from Dalmatia and Istria showed no typical symptoms. Results demonstrated that bois noir phytoplasmas (belonging to stolbur group) could be found in symptomatic samples from eastern and north-western parts of Croatia. No phytoplasmas were detected in samples from Dalmatia and Istria. The EPPO Secretariat had previously no information on the occurrence of grapevine bois noir phytoplasma in Croatia. The situation of grapevine bois noir phytoplasma in Croatia can be described as: **Present, only in eastern and north-western parts of Croatia.**

Source: Šeruga, M.; Ćurković Perica, M.; Škorić, D.; Kozina, B.; Mirošević, N.; Šarić, A.; Bertaccini, A.; Krajačić (2000) Geographical distribution of bois noir phytoplasmas infecting grapevine in Croatia.
Journal of Phytopathology, 148(4), 239-242.

Additional key words: new record **Computer codes:** GVBNXX, HR

2001/068 Insect vectors of apple proliferation phytoplasma

A few years ago, it was shown that apple proliferation phytoplasma (EPPO A2 quarantine pest) was transmitted by a leafhopper *Fieberiella florii* in apple orchards in Germany (Krczal *et al.*, 1989). More recently, it was found that a psyllid *Cacopsylla costalis* was also a vector of apple proliferation phytoplasma in apple orchards in Trentino, Italy (Frisinghelli *et al.*, 2000).

Source: Frisinghelli, C.; Delaiti, L.; Grando, M.S.; Forti, D.; Vindimian, M.E. (2000) *Cacopsylla costalis* (Flor 1861), as a vector of apple proliferation in Trentino.
Journal of Phytopathology, 148(7-8), 425-431.

Krczal, G.; Krczal, H.; Kunze, L. (1989) *Fieberiella florii* (Stal), a vector of apple proliferation agent.
Acta Horticulturae, no. 235, 99-106.

Additional key words: epidemiology **Computer codes:** APPXXX, PSYLCO

2001/069 Sieving method to isolate and detect teliospores of *Tilletia indica* in grain samples

A method was developed in USA to isolate teliospores of *Tilletia indica* (EPPO A1 quarantine pest) from infested wheat grain samples. Samples of 50 g are washed through 2 sieves (nylon screens) of 53 µm and 20 µm pore size in order to remove debris, and to concentrate and isolate teliospores. The material retained in the 20 µm pore size sieve is suspended and centrifuged. Then, it can be directly observed under the microscope (it is noted that the presence of debris is greatly reduced) or plated onto agar medium for teliospore germination followed by PCR assay. It was concluded that this method is reliable and much faster than the standard centrifuge seed wash method. In particular, it is now used by USDA and Agriculture Canada as their official protocol for detection of *T. indica* in grain samples.

Source: Peterson, G.L.; Bonde, M.R.; Phillips, J.G. (2000) Size-selective sieving for detection teliospores of *Tilletia indica* in wheat seed samples.
Plant Disease, 84(9), 999-1007.

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

2001/070 *Tecia solanivora* does not occur in Peru

The NPPO of Peru has recently informed the EPPO Secretariat that *Tecia solanivora* (EPPO Alert List) does not occur in Peru. The information which is permanently collected from trapping and surveillance programmes shows that *T. solanivora* has never occurred in Peru. The situation of *T. solanivora* in Peru can be described as follows: **Absent: confirmed by surveys**.

Source: NPPO of Peru, 2001-04.

Additional key words: absence **Computer codes:** SCROSO, PE

2001/071 Studies on damage caused by *Cryptorhynchus mangiferae* to mangoes

Cryptorhynchus (Sternochetus) mangiferae (EPPO A1 quarantine pest) is considered as a quarantine pest in several regions of the world because it was felt that it could cause serious economic damage to mango production. In particular, the following types of damage were considered: 1) pulp damage (caused by the neonate burrowing through the pulp to the developing seed) rendering mango fruits unmarketable or unappetizing; 2) reduction of germination capacity of mango seeds; 3) premature fruit drop. Studies were carried out in Hawaii (US) to assess the effect of *C. mangiferae* more particularly on mango seed germination. Naturally infested mango seeds were collected from mature fruits (polyembryonic and monoembryonic cultivars) and planted in pots. Results showed that germination rates for infested seeds were equal to those of uninfested seeds for a polyembryonic cultivar (*Mangifera indica* cv. Common). For the monoembryonic cultivar (cv. Haden), germination rate was significantly reduced but was still > 70%. Mango seeds were also artificially damaged by cutting away 25, 50 or 75% of the cotyledon before planting. None of these treatments was significantly different from undamaged controls, indicating that mango seeds can tolerate substantial damage and still germinate. Observations were also made on pulp damage caused by *C. mangiferae*. Out of a total of 3602 fruits, only 4 fruits (0.11%) showed evidence of direct damage to the pulp. However, it is recalled that in South Africa, pulp damage is reported when *C. mangiferae* adults emerge (exit holes) from fruits still attached to the trees in late-season cultivars. Preliminary studies on fruit drop did not show a significant impact of *C. mangiferae* on premature fruit drop but further studies are needed. The authors concluded that *C. mangiferae* might be a less serious pest than previously thought.

Source: Follet, P.A. Gabbard, Z. (2000) Effect of mango weevil (Coleoptera: Curculionidae) damage on mango seed viability in Hawaii.
Journal of Economic Entomology, 93(4), 1237-1240.

Additional key words: damage **Computer codes:** CRYPMA

2001/072 Efficacy of chipping logs to eliminate *Anoplophora glabripennis*

In USA, the eradication programme against *Anoplophora glabripennis* (EPPO A1 quarantine pest) includes the destruction of infested wood by chipping and incineration. The efficacy of chipping logs to destroy wood-boring insects was studied. Surrogate worms (plastic worms) of different sizes, as well as live larvae and pupae of several insect species (*Lymantria dispar*, *Phyllophaga annina*) were placed in logs. Results showed that although chipping did not cause damage to all plastic worms, all insects (larvae and pupae) were killed by the treatment. The authors felt that to eliminate *A. glabripennis* from infested wood, chipping without incineration is sufficient.

Source: Wang, B.; Mastro, V.C.; McLane, W.H. (2000) Impacts of chipping on surrogates for the longhorned beetle *Anoplophora glabripennis* (Coleoptera: Cerambycidae) in logs.
Journal of Economic Entomology, 93(6), 1832-1836.

Additional key words: eradication **Computer codes:** ANOLGL

2001/073 Survey on *Erwinia amylovora* in pear orchards in Israel

In Israel, pear trees are grown on approximately 1500 ha, mainly in the northern part of the country (1200 ha) in western and upper Galilee, and Hula valley. *Erwinia amylovora* (EPPO A2 quarantine pest) was first reported in Israel, in 1985, in the northern part. Within 2 years, the disease spread to all pear-producing regions of Israel. During the 10 years that followed the introduction of the disease, foci were scattered and the intensity of the disease remained mild on average. Nevertheless, in some areas the disease was severe, leading to yield losses, tree mortality and uprooting of entire orchards. Severe outbreaks were then respectively observed in the Sharon production area (75% pear orchards had to be destroyed) in 1995, and in the northern part of Israel, in 1996. This has triggered a survey on *E. amylovora* in pear orchards from 1996 to 1999. The aim was to determine the extent and intensity of the disease, and to evaluate the efficacy of control methods. Information was collected on: extent and severity of the disease, exact location of orchards, phenology of the crops, climatic data, treatments applied (copper, bactericides). The identity of the pathogen was checked in several instances, and the presence of *E. amylovora* was always confirmed. On average, the survey showed that the disease was severe in 1996, moderate in 1998 and 1999, and mild in 1997. This general trend did not necessarily reflect the situation in individual orchards, as severe outbreaks could be seen during mild or moderate years and vice versa. Results also showed that, in a given orchard, the disease intensity observed during the previous season could provide a good estimation of the probability of disease incidence during the following season in years with mild epidemics (but not in years with moderate epidemics, as a higher pressure of the disease probably favours spread from one orchard to another). It was also found that copper treatments applied before bloom in order to reduce the initial inoculum were not efficient, and therefore they are no longer recommended to growers. Concerning the efficacy of bactericide treatments, it was showed that the key element was the correct timing of the applications and not the number of applications. These treatments must be applied shortly before or after the occurrence of infection periods.

Source: Shtienberg, D.; Oppenheim, D.; Herzog, Z.; Zilberstaine, M.; Kritzman, G. (2000) Fire blight of pears in Israel: infection, prevalence, intensity and efficacy of management actions.
Phytoparasitica, 28(4), 361-374.

Additional key words: detailed record **Computer codes:** ERWIAM, IL

2001/074 New host plants for *Liberobacter asiaticum*

In Asia, citrus greening bacterium (*Liberobacter asiaticum* – EPPO A1 quarantine pest) is spread by *Diaphorina citri*. So far, there has been no data on host plants other than citrus. In Taiwan, studies were done on four Rutaceous plants which are suitable hosts of *Diaphorina citri*: *Murraya paniculata* var. *paniculata* (common jasmin orange), *Murraya euchrestifolia* (curry leaf), *Limonia acidissima* (wood apple) and *Severinia buxifolia* (Chinese box orange). Graft inoculation was used to transmit the bacterium to plants. The presence and multiplication of *L. asiaticum* in the plants was monitored by dot hybridization tests using a specific DNA probe. Results showed that the bacterium can survive and multiply in *S. buxifolia* and *L. acidissima*, but not on *M. paniculata* var. *paniculata* and *M. euchrestifolia*. It was also observed that *S. buxifolia* is a good host (as good as citrus), whereas *L. acidissima* is a transient host in which the bacterium exists temporarily and disappears after a few months (5 to 10 months). *S. buxifolia* is a spinous shrub which is often found in citrus orchards, in India, Malaysia, Vietnam, southern China and Philippines. *L. acidissima* is commonly grown for ornamental purposes in Thailand, India and Indonesia. Preliminary results obtained by using *D. citri* to transmit the disease and a more sensitive detection method (PCR) were similar to those presented above. Further studies on host plants of *L. asiaticum* will continue to better understand the role of alternative hosts in the disease epidemiology.

Source: Hung, T.H.; Wu; M.L.; Su, H.J. (2000) Identification of alternative hosts of the fastidious bacterium causing citrus greening disease.
Journal of Phytopathology, 148(6), 321-326.

Additional key words: new host plants **Computer codes:** LIBEAS

2001/075 Scientific and practical aspects of the eradication programme against *Xanthomonas axonopodis* pv. *citri* in Florida

In a letter addressed to the editor of Phytopathology, Gottwald *et al*. (2001) described the scientific and practical aspects of the eradication programme against *Xanthomonas axonopodis* pv. *citri* in Florida (US). It is acknowledged that the significant increase of international travel and trade has dramatically increased the risk of introducing dangerous plant pests. The introduction of citrus canker has had a considerable political, social and economic impact in Florida, which has forced the authorities to establish an eradication programme. If established, the disease would have a direct effect on citrus production (debilitation of trees, losses in fruit quality and yield), but the main difficulties would be the restrictions or prohibitions on interstate and international fruit trade. The Florida citrus industry is mainly concentrated in the southern half of the state, close to rapidly expanding urban population centres. As the outbreaks of citrus canker originated from urban areas, eradication did not only affect producers but very large numbers of urban home-owners who possess citrus for ornamental purposes or garden fruit production. The importance and difficulties in obtaining sound scientific data for the establishment of eradication programmes were illustrated in this letter. Initially, based on data from Argentina, it was considered that the bacterium spreads up to 32 m during rainstorms. Therefore, it was decided in Florida to destroy all infected trees, as well as susceptible citrus trees located within a radius of 38 m. Despite this measure, the disease continued to spread. Research studies were then carried out and showed that this distance had to be increased to 580 m. In addition, a sentinel grid (1.6 x 1.6 km) was established to organize regular surveys. All susceptible hosts were located on this grid and regularly surveyed (every 30 days). The practical difficulties in implementing this eradication programme were explained, such as the strong refusal of owners and growers when their trees are destroyed (personal threat, law suits brought against the state by residents and municipalities, etc.), and the question of finances on how to fund the programme itself and the compensations paid to owners and growers. It was recognized that it is extremely difficult to eradicate completely a pathogen like *X. axonopodis* pv. *citri* which has spread to the extent observed in Florida, and which is likely to be re-introduced in the future. However, it is stressed that the magnitude of response to the current epidemic of citrus canker in Florida is unprecedented in plant pathology and represents a scale of public attention and governmental effort that would normally be devoted to eradication of a newly introduced human or livestock disease. Debate is taking place on the concept and feasibility of eradication, and many questions arise reflecting different views among researchers, growers and private owners such as ‘Can we live with citrus canker?’, ‘Can we afford not to protect our agriculture?’, ‘How to allocate adequate resources to simultaneous battle fronts? (as other pathogens like *Plum pox potyvirus* or *Xylella fastidiosa* are also causing problems in other parts of USA).

Source: Gottwald, T.R.; Hugues, G.; Graham, J.H.; Sun, X.; Riley, T. (2001) The citrus canker epidemic in Florida: the scientific basis of regulatory eradication policy for an invasive species.
Phytopathology, 91(1), 30-34.

Additional key words: quarantine **Computer codes:** XANTCI, US

2001/076 PCR method to detect *Alternaria alternata* apple pathotype (*A. mali*)

The form-genus *Alternaria* includes both pathogenic and non-pathogenic species. Within *A. alternata*, 7 pathogens which could not be distinguished from saprophytic *A. alternata* on the basis of conidial morphology, but which presented a particular pathogenicity, have been designated as pathotypes (however, it must be noted that this classification is subject to debate). These pathotypes have a distinct and limited host range and are characterized by the production of host-specific toxins. Recent work has indicated that Alternaria pathogens which produce host-specific toxins are pathogenic variants within the species *Alternaria alternata*. Therefore, Alternaria blotch of apple is now considered to be caused by *Alternaria alternata* apple pathotype, although it was previously described as the distinct virulent form of *Alternaria mali* (EPPO A1 quarantine pest). Recently, a gene playing a crucial role in the biosynthesis of the apple-specific toxin (AM-toxin) was cloned and characterized. It was also shown that this gene is only present in isolates of *A. alternata* apple pathotype. Using primers targeted for this gene, a PCR method has been developed to identify specifically isolates of *A. alternata* apple pathotype which produce the AM-toxin.

Source: Johnson, R.D.; Johnson, L.; Kohmoto, K.; Otani, H.; Lane, C.R.; Kodama, M. (2000) A polymerase chain reaction-based method to specifically detect *Alternaria alternata* apple pathotype (*A. mali*), the causal agent of Alternaria blotch of apple.
Phytopathology, 90(9), 973-976.

Additional key words: diagnostic method **Computer codes:** ALTEMA

2001/077 Role of ascospores in the spread of *Cryphonectria parasitica*

In France, *Cryphonectria parasitica* (EPPO A2 quarantine pest) occurs in the south (south of a line going from Savoie to Charente-Maritime, including Corse). Affected chestnut trees can be found in forests and orchards. In recent years, the disease has progressed towards the north-west and new isolated foci have been detected in areas which were previously free from the disease (Bretagne, Normandie and Alsace). Disease spread is ensured by conidia (asexual reproduction phase) which are dispersed by water over short distances and ascospores (sexual reproduction phase) which are released in the air and dispersed over longer distances. In France so far, ascospores had rarely been observed and therefore poorly studied. Experiments were done in 6 chestnut stands between 1995 and 1999. It was observed that the production of ascospores was not a rare event. Using two types of traps, it was shown that peaks of ascospore release occurred in spring and summer (whereas in USA, peaks were observed at the end of summer and in autumn). For one month, numbers of ascospores released could be related to temperatures and it was noted that numbers increased with temperatures. Ascospores were also released during rainfall periods. It was observed that old cankers produced higher numbers of ascospores. Pathogenicity of ascospores and conidia (asexual reproduction) was compared in inoculation tests. In particular, ascospores induced larger necrosis on chestnut twigs than conidia. It was concluded that ascospores play a significant role in disseminating the disease. In addition, as they introduce genetic variation within populations of the fungus, their release could cause difficulties in the use of hypovirulent strains which must be vegetatively compatible with the population to control. To limit the spread of the disease, prophylactic measures should be applied as early as possible. Diseased trees or branches have to be destroyed to reduce the inoculum. It was recommended that tree destruction and pruning should be done during dry periods.

Source: Guérin, L.; Bastien, S.; Dechavanne, R.; Poitevin, H. (2000) Le chancre du châtaignier. Rôle des ascospores dans la progression de la maladie.
Phytoma – La Défense des Végétaux, no. 532, 55-58.

Additional key words: detailed record, epidemiology **Computer codes:** ENDOPA, FR

2001/078 *Apple dimple fruit apscaviroid* is a new and distinct species

The disease called apple dimple fruit was first observed in some commercial trees of cultivar Starking Delicious in Campania, Italy. Symptoms were characterized by malformed fruits with crater-shaped green spots on the red skin. Small circular RNA was isolated from symptomatic fruits and the pathogen was tentatively called *Apple dimple fruit viroid*. It has now been confirmed that the disease is indeed caused by a new and distinct viroid species belonging to the genus Apscaviroid.

Source: Di Serio, F.; Malfitano, M.; Alioto, D.; Ragozzino, A.; Desvignes, J.C.; Flores, R. (2001) Apple dimple fruit viroid: fulfilment of Koch's Postulates and symptoms characteristics.
Plant Disease, 85(2), 179-182.

Additional key words: taxonomy

2001/079 EPPO report on notifications of non-compliance (detection of regulated pests)

The EPPO Secretariat has gathered the notifications of non-compliance (as they are now called by FAO ISPM no. 13) for 2001 received since the previous report (EPPO RS 2001/038) from the following countries: Bulgaria, Denmark, France, Finland, Germany, Ireland, Italy, Netherlands, Poland, Portugal, 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
Ambrosia	*Glycine max*	Stored products	Germany	Poland	2
	Glycine max	Stored products	Netherlands	Poland	1
	Helianthus annuus	Stored products	Hungary	Poland	2
	Helianthus annuus	Stored products	Slovakia	Poland	2
	Panicum miliaceum	Stored products	Czech Republic	Poland	1
Aphelenchoides fragariae	*Astilbe*	Plants for planting	Netherlands	Poland	1
	Paeonia	Plants for planting	Netherlands	Poland	1
Bemisia tabaci	*Alternanthera*	Aquarium plants	Singapore	Denmark	1
	Convolvulus	Cuttings	Israel	United Kingdom	1
	Convolvulus sabatius	Cuttings	Israel	United Kingdom	1
	Echinodorus	Aquarium plants	Sri Lanka	France	1
	Eryngium foetidum	Cut flowers	Vietnam	France	1
	Hygrophila	Aquarium plants	Israel	France	1
	Hygrophila	Aquarium plants	Thailand	France	1
	Hygrophila difformis	Aquarium plants	Singapore	France	2
	Hygrophila salicifolia	Aquarium plants	Singapore	France	2
	Hypericum androsaemum	Cut flowers	Israel	United Kingdom	1
	Lantana	Cuttings	Kenya	Netherlands	1
	Limnophila	Aquarium plants	Thailand	France	2
	Limnophila	Aquarium plants	Vietnam	France	1
	Limnophila aromatica	Aquarium plants	Thailand	France	1
	Manihot esculenta	Vegetables	Zaire	France	1
	Unspecified	Aquarium plants	Sri Lanka	France	1
	Various plants	Plants for planting	India	Denmark	1
Carpophilus hemipterus, Cryptolestes	*Theobroma cacao*	Stored products	Côte d'Ivoire	Poland	1
Clavibacter michiganensis* subsp. *michiganensis	*Lycopersicon esculentum*	Vegetables	Morocco	Germany	1
Clavibacter michiganensis* subsp. *sepedonicus	*Solanum tuberosum*	Ware potatoes	Germany	Netherlands	2
	Solanum tuberosum	Ware potatoes	Netherlands	Portugal	1
Claviceps purpurea	*Secale cereale*	Stored products	Germany	Poland	1
Cuscuta	*Medicago sativa*	Seeds	Hungary	Poland	1
	Trifolium repens	Seeds	Germany	Poland	1
Eutetranychus orientalis, Bemisia tabaci, B. afer	*Manihot esculenta*	Vegetables	Gambia*	United Kingdom	1
Frankliniella (suspect bispinosa or cephalica)	*Asparagus plumosus*	Vegetables	USA	United Kingdom	1
Globodera	*Solanum tuberosum*	Seed potatoes	Netherlands	Germany	1
Globodera rostochiensis	*Lillium*	Bulbs	Poland	Germany	1
	Solanum tuberosum	Ware potatoes	Greece	Bulgaria	1
	Solanum tuberosum	Seed potatoes	Netherlands	Germany	1
Helicoverpa armigera	*Dianthus*	Cut flowers	Kenya	Netherlands	3
	Phaseolus vulgaris	Vegetables	Senegal	Netherlands	2

Pest	Consignment	Type of commodity	Country of origin	C. of destination	nb
Helicoverpa zea	*Pisum sativum*	Vegetables	Guatemala	United Kingdom	1
Impatiens necrotic spot tospovirus	*Impatiens walleriana*	Plants for planting	Netherlands	Sweden	1
Iva	*Zea mays*	Stored products	Ukraine	Poland	1
Leptinotarsa decemlineata	*Petroselinum crispum*	Vegetables	Italy	Ireland	1
	Petroselinum crispum	Vegetables	Italy	United Kingdom	7
Liriomyza	*Argyranthemum frutescens*	Cut flowers	Italy	Sweden	1
	Artemisia dracunculus	Cut flowers	Morocco	France	1
	Gypsophila	Cut flowers	Morocco	France	1
	Ocimum basilicum	Vegetables	Thailand	Denmark	2
Liriomyza huidobrensis	*Coriandrum*	Vegetables	Cyprus	United Kingdom	1
	Dendranthema morifolium	Cuttings	Netherlands	United Kingdom	1
	Eustoma	Cut flowers	Netherlands	United Kingdom	1
	Gypsophila paniculata	Cut flowers	Israel	United Kingdom	1
	Molucella laevis	Cut flowers	Israel	United Kingdom	2
	Ranunculus	Cut flowers	Italy	United Kingdom	2
Liriomyza sativae	*Ocimum basilicum*	Vegetables	Thailand	France	1
Liriomyza trifolii	*Aster*	Cut flowers	Spain (Canary isl.)	United Kingdom	1
Maruca testulalis	*Phaseolus*	Vegetables	Kenya	United Kingdom	2
Melanagromyza (suspect bonavistae)	*Phaseolus*	Vegetables	Kenya	United Kingdom	1
Pepino mosaic potexvirus	*Lycopersicon esculentum*	Plants for planting	Netherlands	United Kingdom	1
	Lycopersicon esculentum	Vegetables	Spain	United Kingdom	4
	Lycopersicon esculentum	Vegetables	Spain (Canary isl.)	United Kingdom	3
Potato S carlavirus, Potato X potexvirus	*Solanum tuberosum*	Seed potatoes	Ecuador	Netherlands	1
Ralstonia solanacearum	*Solanum tuberosum*	Ware potatoes	Bangladesh	United Kingdom	2
	Solanum tuberosum	Ware potatoes	Egypt	Germany	3
Sitophilus oryzae	*Triticum aestivum*	Stored products	Germany	Poland	4
Sitophilus oryzae, S. granarius	*Triticum aestivum*	Stored products	Czech Republic	Poland	1
Spodoptera littoralis	*Dahlia*	Cuttings	Spain (Canary isl.)	United Kingdom	1
Thrips palmi	*Dendrobium*	Cut flowers	Thailand	Germany	1
Thysanoptera	*Solanum melongena*	Vegetables	Thailand	France	1

- **Fruit flies**

Pest	Consignment	Country of origin	C. of destination	nb
Bactrocera	*Syzygium samarangense*	Thailand	France	1
Bactrocera latifrons	*Capsicum frutescens*	Thailand	France	9
Ceratitis	*Mangifera indica*	Côte d'Ivoire	France	1
	Mangifera indica	Kenya	France	1
***Tephritidae* (non-European)**	*Capsicum frutescens*	Mauritius	France	1
	Diospyros kaki	Brazil	Netherlands	1
	Diospyros kaki	Brazil	France	2
	Mangifera indica	Kenya	France	1
	Syzygium jambos	Mauritius	France	1
	Trichosanthes cucumerina	Mauritius	France	1

- **Wood**

Pest	Consignment	Type of commodity	Country of origin	C. of destination	nb
Batocera	Unspecified	Wood and bark	China	United Kingdom	1
Grub holes > 3mm	Coniferae	Packing material	Taiwan	Finland	1
	Coniferae	Packing material	USA	Finland	2
	Unspecified	Packing material	China	Denmark	3
	Unspecified	Packing material	China	France	1
	Unspecified	Packing material	USA	Finland	1
Monochamus	*Pinus sylvestris*	Wood (without bark)	Ukraine	Poland	1
***Monochamus* and grub holes > 3mm**	Coniferae	Packing material	China	Denmark	1
***Scolytidae* and grub holes > 3mm**	Coniferae and hardwood	Packing material	China	Ireland	1

- **Bonsais**

Pest	Consignment	Country of origin	Country of destination	nb
Dialeurodes citri	*Ligustrum*	China	United Kingdom	1
Gymnosporangium asiaticum	*Juniperus chinensis*	Japan	Netherlands	1
Meloidogyne	*Ficus*	China	France	1
Nematodes	*Ilex crenata, Taxus cuspidata*	Japan	Germany	1
	Juniperus chinensis	Japan	Germany	1
	Various bonsais	Japan	Germany	1

Pest	**Consignment**	**Country of origin**	**C. of destination**	**nb**
Rhizoecus hibisci, Helicotylenchus dihystera	*Serissa*	China	United Kingdom	1
Stegophora ulmea	*Ulmus*	China	United Kingdom	1

Source: EPPO Secretariat, 2001-04.

2001/080 On-line publications concerning seed-borne diseases

The FIS/ASSINSEL Secretariat has recently informed EPPO that 2 new publications concerning seed-borne diseases are now electronically available from its Web site: http://www.worldseed.org/ishis.htm

- A Pest Risk Analysis carried out by Prof. J. Pataky for FIS on *Pantoea stewartii* pv. *stewartii* (EPPO A2 quarantine pest) who recommends that the phytosanitary status or the requirements for the bacterium should be modified to take into account new scientific developments (e.g. low seed-transmission rate).
- 'Seed Health Testing Methods Reference Manual' published by the International Seed Health Initiative on Vegetable Crops. This manual includes test methods for 21 crop-disease combinations (including quarantine pests for Europe such as: *Xanthomonas axonopodis* pv. *phaseoli* on bean, *Ditylenchus dipsaci* on broad bean, *Xanthomonas vesicatoria* on capsicum and tomato).

Source: FIS/ASSINSEL Secretariat, 2001-01.

Additional key words: publications **Computer codes:** ERWIST