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CONTENTS

- [2002/169](#) - *Impatiens necrotic spot tospovirus* found in Finland
- [2002/170](#) - *Monilinia fructicola* found in Austria
- [2002/171](#) - *Strawberry latent ringspot nepovirus* does not occur in Israel
- [2002/172](#) - *Impatiens necrotic spot tospovirus* does not occur in Israel
- [2002/173](#) - *Glomerella acutata* found in Finland
- [2002/174](#) - Mango decline in Oman
- [2002/175](#) - Real-time quantitative PCR for *Xylella fastidiosa* on citrus
- [2002/176](#) - PCR method to identify *Meloidogyne chitwoodi*, *M. fallax* and *M. hapla*
- [2002/177](#) - First report of *Glomerella acutata* on strawberry in Bulgaria
- [2002/178](#) - Study on the genetic stability of Tomato yellow leaf curl-Sardinia begomovirus in Spain
- [2002/179](#) - Details on *Watermelon chlorotic stunt begomovirus* in Iran
- [2002/180](#) - New data on quarantine pests



EPPO *Reporting Service*

2002/169 *Impatiens necrotic spot tospovirus* found in Finland

The NPPO of Finland has informed the EPPO Secretariat that *Impatiens necrotic spot tospovirus* (EPPO A2 quarantine pest) was found in August 2002 in pot plants of *Begonia* spp., *Streptocarpus* spp. and *Impatiens walleriana* in one nursery producing pot plants and cut flowers. The source of infection is not know. Eradication measures were taken: infested pot plants were destroyed and appropriate treatments were applied. Before it was found, the virus had already spread on infected plants from this nursery to a park, from which no further spread was possible because no propagation material was produced. Appropriate treatment was applied.

Source: **NPPO of Finland, 2002-10**

Additional key words: detailed record

Computer codes: INSV, FI

2002/170 *Monilinia fructicola* found in Austria

The NPPO of Austria has recently informed the EPPO Secretariat that *Monilinia fructicola* was found in Austria for the first time during monitoring conducted in the framework of EU surveys. 3 positive peach fruits were found in 2 nurseries in the adjacent regions Niederösterreich and Wien. It has not been possible to determine the pathway of introduction into Austria. Monitoring will continue in 2003. The infested plants will be treated at the appropriate time. The pest status of *Monilinia fructicola* in Austria is declared as follows: **Present, only in two locations.**

Source: **NPPO of Austria, 2002-11**

Additional key words: new record

Computer codes: MONIFC, AT



EPPO *Reporting Service*

2002/171 *Strawberry latent ringspot nepovirus* does not occur in Israel

The NPPO of Israel has recently informed the EPPO Secretariat that *Strawberry latent ringspot nepovirus* (EPPO A2 quarantine list) is not present in Israel. It was detected in Israel in 1994 on lilies (oriental hybrid 'Stargazer') grown from bulbs imported from Europe (see EPPO RS 95/110). During delimiting surveys, the virus was found confined to greenhouses in only one isolated location of the Sharon Valley, and all infected material was destroyed. The scientific article reporting the first finding on lily also mentioned that this virus had previously been found once on rose. However, since the Israeli NPPO cannot find any independent written scientific evidence to verify this, the record is anecdotal and should henceforth be considered "unconfirmed". On the basis of repeated and ongoing detection surveys, including laboratory testing, carried out in Israel from the time of the first detection, it has been determined that this virus is not present. The pest status of *Strawberry latent ringspot nepovirus* in Israel is declared as follows: **Absent, detected once and destroyed, confirmed by survey.**

Source: NPPO of Israel, 2002-12

Additional key words: absence

Computer codes: SLRV, IL

2002/172 *Impatiens necrotic spot tospovirus* does not occur in Israel

As reported in EPPO RS 99/123, *Impatiens necrotic spot tospovirus* (EPPO A2 quarantine list) was detected in Israel in 1999 on anemone plants (*Anemone coronaria*) imported from Europe and being grown in open fields near Jerusalem. A delimiting survey was carried out, and all infected material was destroyed. Since that time, the results of extensive detection surveys and regular virus testing, particularly of the primary host *Impatiens*, indicate that this virus is no longer present in the country. The status of this pest in Israel is declared as follows: **Absent: found once and eradicated, confirmed by survey.**

Source: NPPO of Israel, 2002-12

Additional key words: absence

Computer codes: INSV, IL



EPPO *Reporting Service*

2002/173 *Glomerella acutata* found in Finland

The NPPO of Finland recently informed the EPPO Secretariat that *Glomerella acutata* (anamorph *Colletotrichum acutatum*) (EU Annex II/A2) was found in summer 2002 on strawberry plants at the Research Institute of Horticulture. The infected strawberry plants were used as research material (and not for propagation). The source of infestation is thought to be planting material (rooted plants) introduced from Canada in 2000. Symptoms of *G. acutata* appeared during the 2002 growing season and the disease was detected by ELISA. Strawberry plants were destroyed and quarantine measures applied.

Source: NPPO of Finland, 2002-10

Additional key words: new record

Computer codes: COLLAC, FI

2002/174 Mango decline in Oman

Decline disorders have been observed in nearly all mango-growing regions of the world. The main causes mentioned in the literature are fungal complexes associated with nutritional deficiencies. In Oman, the disease does not seem to be associated with a single known pathogen, and causes tree mortality at all ages. There are some indications that the disease is associated with a breakdown of defence mechanisms, probably induced by phytoplasma (detected in diseased trees by nested-PCR amplification) and associated with high gommosis, leading to subsequent infestation by other pests in twigs, trunks and roots. No fungicide or insecticide can be used to control mango decline. In Oman, mango decline killed approximately 20 000 trees in 2001 and has spread to all mango-growing areas. A strategy is being prepared, combining sanitation measures and suitable measures taken at given times, to avoid the rapid decline and death of trees. Mango decline has also been observed in United Arab Emirates.

Source: M. B'Chir, personal communication, 2002-11

Additional key words: detailed record

Computer codes: OM



EPPO Reporting Service

2002/175 Real-time quantitative PCR for *Xylella fastidiosa* on citrus

In Brazil, a real-time quantitative PCR method was developed for *Xylella fastidiosa* (EPPO A1 list). It was used on artificially infested *Citrus sinensis* and *Citrus reticulata* (by inoculation or grafting), using known resistant and susceptible cultivars. This method allowed quantification of *X. fastidiosa*, and determination of its temporal and spatial distribution, in citrus tissues. The method is straightforward, sensitive and reproducible. It also confirmed earlier results obtained on grapevine according to which multiplication and spread of *X. fastidiosa* is faster within more susceptible cultivars. The authors believe that this method is convenient for the study of different aspects of the development of *X. fastidiosa* in citrus and could also be used in citrus breeding programme to identify sources of resistance or tolerance to *X. fastidiosa*.

Source: Oliveira, C; Vallim, M.A.; Semighini, P.; Araújo, W.L.; Goldman, G.H.; Machado, M.A. (2002) Quantification of *Xylella fastidiosa* from citrus trees by real-time polymerase chain reaction assay.
Phytopathology, 92(10), p 1048-1054

Additional key words: detection method

Computer codes: XYLEFA

2002/176 PCR method to identify *Meloidogyne chitwoodi*, *M. fallax* and *M. hapla*

A PCR method for *Meloidogyne chitwoodi* (EPPO A2 list), *M. fallax* (EPPO A2 list) and *M. hapla* was developed as part as an EU project to develop management tools for the two which are quarantine nematodes in Europe. A set of species-specific primers was developed for the differentiation of the three species by one-step multiplex PCR. Amplifications were achieved on bulk samples of DNA and on individual nematodes (juveniles, males or females). Unlike other techniques, which require the use of several methods to differentiate between the three species, this method worked alone, at low levels of contamination. It can be used to detect the three species in root samples and in dot-blotted DNA.

Source: Wishart, J.; Phillips, M.S.; Blok, V.C. (2002) Ribosomal intergenic spacer: a polymerase chain reaction diagnostic for *Meloidogyne chitwoodi*, *M. fallax* and *M. hapla*.
Phytopathology, 92(8), p 884-892.

Additional key words: diagnostics

Computer codes: MELGCH, MELGFA, MELGHA



EPPO *Reporting Service*

2002/177 First report of *Glomerella acutata* on strawberry in Bulgaria

During spring 2001 and 2002, damage on strawberry fruits was observed in the region of Plovdiv, Bulgaria. Symptoms typical of *Glomerella acutata* (anamorph *Colletotrichum acutatum*) (EU Annex II/A2) were observed. *G. acutata* was identified in the laboratory based on morphology, inoculation studies and species-specific PCR amplification. This is the first report of *G. acutata* in Bulgaria.

Source: Bobev S.G.; Zveibil A.; Freeman, S. (2002) First report of *Colletotrichum acutatum* on strawberry in Bulgaria.
Plant disease, 86(10), p 1178.

Additional key words: new record

Computer codes: BG, COLLAC

2002/178 Study on the genetic stability of Tomato yellow leaf curl-Sardinia begomovirus in Spain

The evolution of Tomato yellow leaf curl-Sardinia begomovirus (EPPO A2 list as *Tomato yellow leaf curl begomovirus*) was studied for 8 years in Southern Spain. Three genomic regions of 166 isolates from three locations (in the regions Murcia, Málaga and Almería) were studied for their variability by single strand conformation polymorphism analysis. The genetic diversity of the virus over 8 years was low. The absence of clear geographical structure tends to indicate that the population of the virus is a unique, undifferentiated population. The authors however note that ecological conditions have changed since 1997, when another virus, Tomato yellow leaf curl virus-Israel begomovirus (also on EPPO A2 list as *Tomato yellow leaf curl begomovirus*), appeared and caused the progressive displacement of Tomato yellow leaf curl-Sardinia virus in the epidemics. Recombination between the two viruses has also occurred in Southern Spain. Further study of the epidemics caused by these viruses in Southern Spain is needed to understand their evolution and population dynamics.

Source: Sánchez-Campos, S.; Díaz, J.A.; Monci, F.; Bejarano, E.R.; Reina, J.; Navas-Castillo, J.; Aranda, M.A.; Moriones, E. (2002) High genetic stability of the begomovirus Tomato yellow leaf curl Sardinia virus in Southern Spain over an 8-year period.
Phytopathology, 92(8), 842-849

Additional key words: genetics

Computer codes: TYLCV, TYLCSV, ES



EPPO *Reporting Service*

2002/179 Details on *Watermelon chlorotic stunt begomovirus* in Iran

Watermelon chlorotic stunt begomovirus (WMCSV; EPPO Alert List) was first observed in the south of Iran on watermelon in 1998. Symptoms were so severe in some areas that growers had to stop growing watermelon. Studies were conducted on the host range of an Iranian isolate of WMCSV and its geographical distribution in Iran. In transmission studies, *Bemisia tabaci* easily transmitted WMCSV to watermelon, *Datura stramonium* and bean, but not to faba bean and tomato. Field surveys were also conducted on watermelon, melon, squash and cucumber crops in 10 major cucurbit-growing areas of Iran. WMCSV was found on watermelon in southern provinces (Hormozgan, Bushehr, Kerman, Sistan-Baluchestan). It was not detected in central and northern provinces (main areas of field-cucurbit production), despite the presence of *Bemisia tabaci* in most locations surveyed. Natural infection on squash* and wild watermelon (*Citrullus colocynthis*) was found only in the province of Hormozgan. It is not yet clear why WMCSV does not occur in the central or northern provinces of Iran, nor why infection on squash was found only in one of the infested provinces. The authors recommend that measures are put in place to prevent further spread of the virus.

* The natural infection of squash by WMCSV is new to the EPPO Secretariat.

Source: Bananej, K.; Ahoonmanesh, A.; Kheyr-Pour, A. (2002) Host range of an Iranian isolate of *Watermelon chlorotic stunt virus* as determined by whitefly-mediated inoculation and agroinfection, and its geographical distribution. **Journal of Phytopathology**, 150(8-9), 423-430.

Additional key words: detailed record, new host plant

Computer codes: WMCSV, IR



EPPO *Reporting Service*

2002/180 New data on quarantine pests

The EPPO Secretariat has extracted the following new information from the Review of Agricultural Entomology (September 2002):

Aleurocanthus spiniferus (EPPO A1 quarantine list) was found causing severe damage on tea during a survey of pests of tea gardens in Hefei City suburbs (Anhui region, China). Tea was not previously listed as a host of *A. spiniferus* by the EPPO Secretariat. Review of Agricultural Entomology, 90(9), p1169 (8275).

Anoplophora glabripennis (EPPO A1 quarantine list): studies conducted by US scientists in China on the dispersal of *A. glabripennis* have shown that its potential dispersal in one season was 1029 m and 1442 m, respectively for male and gravid female (well above previously reported distances). It is concluded that surveys for the pest and for infested trees should be conducted within at least 1500 m from previously infested trees in current US infestations. Review of Agricultural Entomology, 90(9), p 1184 (8377).

Liriomyza trifolii (EPPO A2 quarantine list) was found in Puerto Rico on onion. Review of Agricultural Entomology, 90(9), p 1170 (8280).

Source: **Review of Agricultural Entomology, 2002-09**

Additional key words: new record, new host, biology

Computer codes: ALECSN, ANOLGL, CN,
LIRITR, PR