ORGANISATION EUROPÉENNE ET MÉDITERRANÉENNE POUR LA PROTECTION DES PLANTES
EUROPEAN AND MEDITERRANEAN PLANT PROTECTION ORGANIZATION

EPPO

Reporting Service

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524/01 CY.... Changes in Phytosanitary Regulations of Cyprus

Cyprus has changed its Phytosanitary Regulations regarding the importation of fresh vegetables and ornamental plants. The changes came into force on 1992-04-17 and include now the following additions:

- Plants of family Solanaceae must be grown in an area where *Leptinotarsa decemlineata* does not occur.
- Certain plants of family Rosaceae (as specified in the order) must be grown in an area where *Erwinia amylovora* does not occur.
- Plants must come from a place of production tested against and found free from *Viteus vitifolii* during the last two growing seasons.
- Plants must have been grown at a place of production found free from *Frankliniella occidentalis*, *Liriomyza trifolii*, *L. huidobrensis*, *Trialeurodes vaporariorum*, *Thrips palmi*, *Chrysomphalus aonidum* and *Quadraspidiotus perniciosus*.
- Dracaena and yucca canes must be free from *Opogona sacchari* and they must have been treated by dipping before dispatch in an appropriate insecticide plus fungicide solution, which should be specified.
- Chrysanthemum plants must come from a place of production found free from *Puccinia horiana* during the last 3 months.
- For the establishment of mother plantations of rose, carnation, strawberry, chrysanthemum, gerbera and gypsophila for budwood, or cuttings or certified plant production, the imported material must be basic or material produced according to the EPPO scheme, or an equivalent certification scheme of the production country.
- For the establishment of commercial plantations of rose, carnation, chrysanthemum, gerbera and gypsophila for cut flower production, the imported material must be certified according to a certification scheme recognized by the European Community.
- Meristematic plants must come from basic mother material or mother material for multiplication and they must be hardened in insect-proof greenhouses and in sterile growing media and should not exceed 15 cm in height.
- Plants should be without flowers or flower buds.
- The importation of plants of order Coniferales is prohibited.

Source: **Plant Protection Service Cyprus (1992-04)**

524/02 JP....Chestnut mosaic from Japan

Plant breeders in France have imported *Castanea crenata* from Japan as a major parent of interspecific hybrids with the European chestnut *Castanea sativa*. These hybrids are intended for use as rootstocks with resistance to various diseases. Since these importations, European chestnuts grafted on hybrid rootstocks have been found to be affected by a new disease, Chestnut mosaic, presumably introduced from Japan. The exact etiology is not known, but the disease is evidently graft transmissible, and apparently spreads by above ground means also. The mosaic symptom is seen on *C. crenata* itself, while *C. sativa* remains symptomless. However, an infected *C. sativa* scion grafted on a susceptible rootstock will contaminate it, and, the whole plant will then decline.

Source: **INRA & CTIFL, France (1992-05)**

524/03 NZ....Host status for fruit flies in New Zealand

New Zealand scientists have proposed a definition and determination of the host status for multivoltine fruit fly species.
According to Cowley and associates a fruit fly host is "any fruit or vegetable in which fruit fly oviposit under field conditions, the eggs hatch into larvae, and the larvae acquire sufficient sustenance to form viable pupae from which adults eclose that are capable of reproduction".

Source: Cowley, J.M.; Baker, R.T.; Harte, D.S. (1992) Definition and determination of host status for multivoltine fruit fly (Diptera: Tephritidae) species.
Journal of Economic Entomology 85, 312-317.

524/04 ANSTSP...Quarantine treatment against fruit flies in Brazil

Studies were carried out in Brazil to investigate if the hot-water immersion treatment is suited as a quarantine treatment for Brazilian mangoes infested with *Anastrepha fraterculus*, *A. obliqua* (EPPO A1 organisms) and *Ceratitis capitata* (EPPO A2 organism).
Statistical estimations of the time needed to achieve probit 9 (99,9968% mortality) for eggs and larvae were:

	eggs	**larvae**
Anastrepha fraterculus	39.7 min	68.5 min
A. obliqua	65.7 min	65.2 min
Ceratitis capitata	59.4 min	79.7 min

Source: Nascimento, A.S.; Malavasi, A.; Morgante, J.S.; Duarte, A.L.A. (1992) Hot water immersion treatment for mangoes infested with Anastrepha fraterculus, A. obliqua, and Ceratitis capitata (Diptera: Tephritidae) in Brazil.
Journal of Economic Entomology 85, 456-460.

524/05 **BTNYVX....Temperature requirements of beet necrotic yellow vein furovirus**

Experiments were carried out in Belgium to investigate the temperature requirements of *Polymyxa betae* and beet necrotic yellow vein furovirus (EPPO A2 quarantine organism. Four night/day temperatures (10/15, 15/20, 20/25 and 25/30° C) were compared in controlled environment conditions.
It was observed that the 20/25° C condition was the optimum both for the earliness of root infection by plasmodia and cytosori of *P. betae* as well as for the transmission and multiplication of BNYVV. The 10/15° C condition induced a reduction in germination of *P. betae* cytosori, a delayed occurrence of plasmodia and cytosori in infected roots as well as reduced multiplication of BNYVV.
The authors suggested that the expression of severe rhizomania symptoms in some countries might be related to the warmer climate in these countries.

Source: Goffart, J.P.; Maraite, H. (1992) Influence of temperature on Polymyxa betae Keskin and beet necrotic yellow vein virus (BNYVV).
Speech at the 44th Symposium on Crop Protection, Gent, BE in press!

524/06 **BTNYVX/BTSBXX...Beet soilborne furovirus induces rhizomania symptoms**

It was reported at the 44th Symposium of Crop Protection in Gent, BE, that beet soilborne furovirus serotype 2 has been observed inducing the same symptoms as beet necrotic yellow vein furovirus (EPPO A2 quarantine organism).
Prillwitz & Schlösser reported that beet soilborne furovirus 2 caused in greenhouse trials damage up to 40% and that interactions between BSBV2 and *Polymyxa betae* were observed. The authors concluded that beet soil-borne furovirus seems to be a part of the rhizomania syndrome.

Source: Prillwitz, H.; Schlösser, E. (1992) Beet soil-borne virus: occurrence, symptoms and effect on plant development.
Speech at the 44th Symposium on Crop Protection, Gent, BE in press!

524/07 **CERAFP....*Ceratocystis fimbriata* f. sp. *platani* in Sicily**

In recent years, Ceratocystis fimbriata f. sp. platani, causing canker stain of plane, has been actively spreading in Northern Italy. In 1988, it was first found in Sicily, in the town of Siracusa, where it is now established. In 1991, three infected trees were found in Palermo and destroyed. At present, the distribution in Sicily is limited to Siracusa.

Source: **University of Palermo, Italy**

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524/08 **CSGXXX....Citrus greening in Japan**

A survey in Japan in 1988 confirmed the presence of citrus bacterium (EPPO A1 quarantine pest) disease in the Ryukyu Islands. The vector *Diaphorina citri* (EPPO A1 quarantine pest) was also widely distributed in the islands.
The authors stated that since only few commercial citrus orchards are present in the area the occurrence of the disease would not present a serious problem.

Source: Miyakawa, T.; Tsuno, K. (1989) Occurrence of citrus greening disease in the southern islands of Japan.
Annals of the Phytopathological Society of Japan 55, 667-670.

524/09 **ERWIAM**...Erwinia amylovora present in Bermuda

The Plant Quarantine Service of Finland has informed EPPO that the Department of Agriculture, Fisheries and Parks of Bermuda has notified Finnish authorities about the occurrence of *Erwinia amylovora* (EPPO A2 organism) in Bermuda.

Source: **Plant Quarantine Service, Helsinki (1992-04)**
Department of Agriculture, Fisheries and Parks, Bermuda (1992-04)

524/10 **ERWIAM**...Erwinia amylovora present in Haiti

EPPO has been informed by the Ministry of Agriculture, Natural Resources and Rural Development of Haiti that *Erwinia amylovora* (EPPO A2 quarantine organism) is present in Haiti with a limited distribution.

Source: **Ministry of Agriculture, Natural Resources and Rural Development, Haiti (1992-05)**

524/11 ERWIAM...Spread of fireblight in Greece

In a recent article in Acta Horticulturae, Psallidas has documented the spread of Erwynia amylovora in Greece since its first appearance. The following map shows the districts which were found infested in successive years :

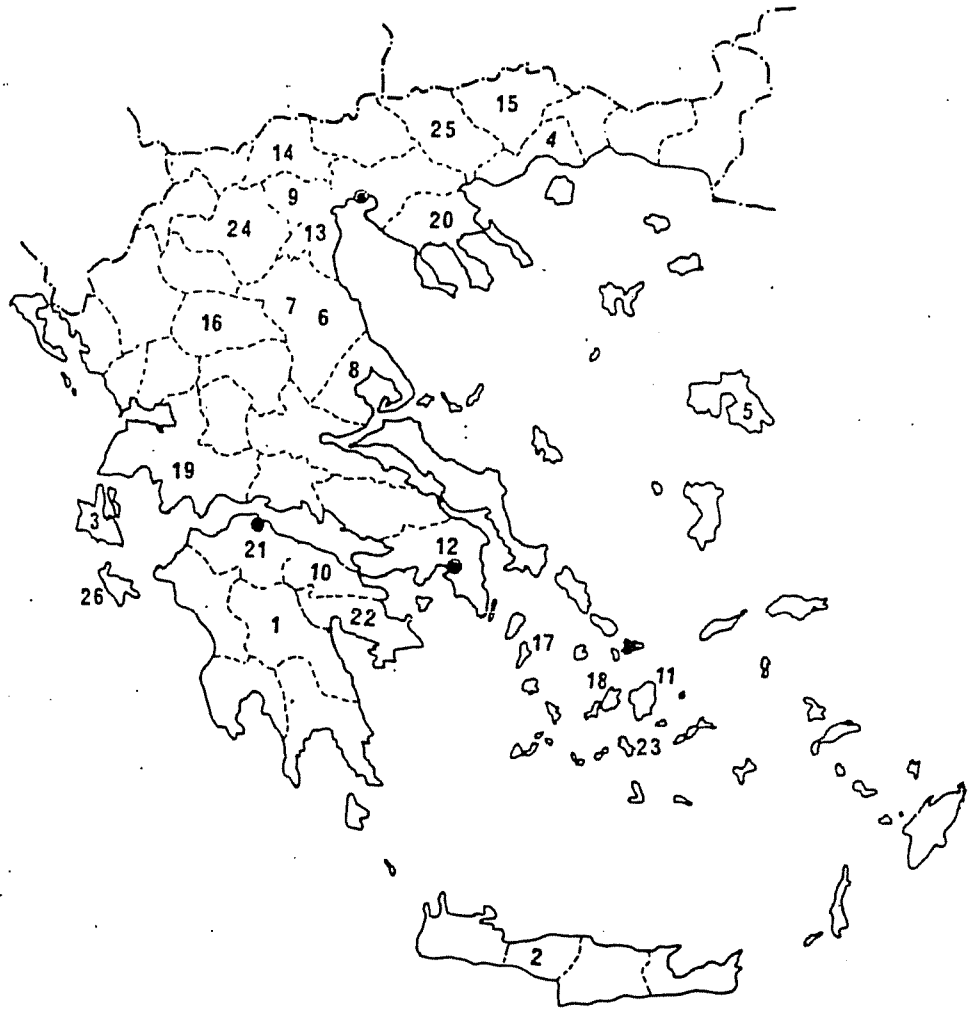

Figure 1 - Fireblight evolution in Greece chronologically 1984 (1), 1985 (2 and 3), 1986 (4,5), 1987 (6 to 15), 1988 (17 to 21) and 1989 (22-25). Numbers represent Districts.

Source: Psallidas, P.G. (1990) Fireblight of pomaceous trees in Greece - evolution of the disease and characteristics of the pathogen Erwinia amylovora.
Acta Horticulturae n°273, 25-32

524/12 **ERWIAM...EPPO Distribution List of Erwinia amylovora**

Due to the two new records for *Erwinia amylovora* (EPPO A2 quarantine organism) the distribution list for fireblight has to be changed accordingly:

EPPO Distribution List: *Erwinia amylovora*

EPPO region: Belgium, Bulgaria (Bobev, 1990, personal communication), Cyprus (EPPO Reporting Service 457), Czechoslovakia (Kudela, 1988), Denmark, Egypt (new outbreaks from 1983, following a much earlier outbreak in 1964 - EPPO Reporting Service 467), France (except south-east) (Larue & Vincent, 1990), Germany, Greece (Psallidas, 1990), Ireland (EPPO Reporting Service 472), Israel (EPPO Reporting Service 459, Shabi _et al_., 1990), Italy (Puglia area only - EPPO Reporting Service 511), Lebanon (EPPO Reporting Service 498), Luxembourg, Netherlands, Norway (EPPO Reporting Service 471; Sletten, 1990), Poland, Sweden (EPPO Reporting Service 477), Switzerland (isolated incidents, not established - EPPO Reporting Service 506/07; Grim & Vogelsänger, 1989), Turkey (Oktem & Benlioglu, 1988), UK (including Northern Ireland - EPPO Reporting Service 484), USSR (Armenia only, according to EPPO Reporting Service 506/08, but there are also published records in Crimea), Yugoslavia (EPPO Reporting Service 509/14).

Asia: China (unconfirmed), Israel (EPPO country), Lebanon (potential EPPO country), Korea Republic (unconfirmed), Saudi Arabia (unconfirmed), Turkey (EPPO country), Vietnam (unconfirmed), India (Papdiwal & Deshpande, 1978; on rose and therefore dubious). The record in Japan cited in the first edition of the EPPO data sheet (OEPP/EPPO, 1983) is an error.

North America: Bermuda, Mexico, USA, Canada.

Central America and Caribbean: Guatemala (unconfirmed), Haiti.

South America: Colombia (unconfirmed). The record in Chile cited in the first edition of the EPPO data sheet (OEPP/EPPO, 1983) is an error.

Oceania: New Zealand.

This distribution list replaces all previously published EPPO distribution lists for *E. amylovora*.

Source: **EPPO Secretariat, Paris (1992-05)**

524/13 **PRODLI....Natural dispersal of Spodoptera litura**

In Japan, experiments were conducted to measure the dispersal distance of male *Spodoptera litura* (EPPO A1 quarantine pest).
It was found out that the mean flight distance during the first night after the release was 3.5 - 5.9 km while the flight distance during the whole experiment averaged 3 - 10.9 km.

Source: Wakamura, S.; Kozai, S.; Kegasawa, K.; Inoue, H. (1990) Population dynamics of adult Spodoptera litura (Fabricius) (Lepidoptera: Noctuidae): dispersal distance of male moths and its seasonal change.
Applied Entomology and Zoology 25, 447-456

524/14 **PSDMPI**...Transmission of *Pseudomonas syringae* pv. *pisi*

In the UK, experiments were carried out to study the effect of soil moisture on the transmission of *Pseudomonas syringae* pv. *pisi* (EPPO A2 organism) from seedling to seedling.
The results of the controlled-environment experiments showed that soil moisture plays a considerable role in the transmission of pea bacterial blight from seedling to seedling. The author suggested that infection takes place during germination and emergence and that the embryo is not infected. They assumed that a later sowing date in drier seedbeds might reduce bacterial blight.

Source: Roberts, S.J. (1992) Effect of soil moisture on the transmission of pea bacterial blight (*Pseudomonas syringae* pv. *pisi*) from seedling to seedling. **Plant Pathology 41, 136-140.EPPO**

524/15 **TMSWXX**...Hosts of tomato spotted wilt virus in The Netherlands

The Plant Protection Service of The Netherlands has extended its list of plants (see also EPPO Reporting Service 520/05) on which tomato spotted wilt virus (potential EPPO A2 quarantine organism) has been found in The Netherlands.
Newly recorded hosts are:

Cestrum aurantiarum
C. purpureum
Columnea hirta
C. hostag
C. kewensis
Dieffenbachia
Felicia amelloides
Hoya bella
H. linearis
Lysimachia congestiflora 'Lyssi'
Streptosolum jamesonii
Lactuca sativa

Source: **Plant Protection Service, Netherlands (1992-05)**

524/16 **TMSWXX**...Hosts of tomato spotted wilt virus in Italy

The Plant Protection Service of Italy has informed EPPO that tomato spotted wilt virus (potential EPPO A2 quarantine organism) is present in Italy and has infected folowing plant species since 1989:

Alstroemeria sp.
Anemone coronaria
Antirrhinum majus
Bouvardia sp.
Calendula officinalis
Capsicum annuum
Chrysanthemum morifolium
Cyclamen sp.
Dieffenbachia sp.
Eustoma grandiflora
Fatsia japonica
Impatiens sp.
Lactuca sativa
Lisianthus sp.
Lycopersicon esculentum
Limonium perezii
Limonium sinuatum
Ranunculus hybridus
Saintpaulia sp.
Solanum melongena
Trachelium coeruleum
Zantedeschia sp.

Source: **Service de Protection des Végétaux**
Regione Emilia-Romagna, Bologna, Italy (1992-05)

524/17 XANTCI....Resistance of citrus to *Xanthomonas campestris* pv. *citri*

Scientists from the fruit laboratory of the USDA in Beltsville have carried out studies to investigate if the lipid composition of citrus leaves might be responsible for the resistance of certain citrus cultivars to *Xanthomonas campestris* pv. *citri* (EPPO A1 organism).
According to their investigations significant differences occurred in the lipid composition of resistant and susceptible citrus cultivars. Leaves from resistant plants had less phospholipids, but more free sterols as well as a higher ratio of free sterols to total phospholipids than those from susceptible plants.
The authors assume that the differences in lipid metabolism may contribute to differences in the resistance of citrus leaves to *X. c.* pv. *citri*.

Source: Jiao, H.J.; Wang, S.Y.; Civerolo, E.L. (1992) Lipid composition of citrus leaves from plants resistant and susceptible to citrus bacterial canker.
Journal of Phytopathology 135, 48-56