



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

# EPPO

## Reporting Service

Paris, 1994-08-01

Reporting Service 1994, No. 8

### CONTENTS

- |                        |   |
|------------------------|---|
| 94/152...CZ            | - Quarantine pests in Czech Republic  |
| 94/153...PHTOOP        | - <i>Phthorimaea operculella</i> in Russia  |
| 94/154...XANTOR/RU     | - Update of <i>Xanthomonas oryzae</i> pv. <i>oryzae</i> in Russia                                   |
| 94/155...BEMITA/GP     | - <i>Bemisia tabaci</i> is present in Guadeloupe  |
| 94/156...CIDSS/VN      | - Citrus pests in Vietnam   |
| 94/157...TOXOCI/JM     | - New records of <i>Toxoptera citricidus</i> in Jamaica and Puerto Rico                             |
| 94/158...TOXOCI        | - <i>Toxoptera citricidus</i> is present in Cuba  |
| 94/159...TOXOCI        | - EPPO Distribution List for <i>Toxoptera citricidus</i>  |
| 94/160...CSGXXX        | - EPPO Distribution List for citrus greening bacterium  |
| 94/161...DIAACI/TRIZER | - EPPO Distribution Lists for <i>Diaphorina citri</i> and <i>Trioza erytreae</i>                    |
| 94/162...SPIRSI        | - New host plants of <i>Spiroplasma citri</i> in Turkey   |
| 94/163...PHYNCI        | - First report of <i>Phyllocnistis citrella</i> in Florida  |
| 94/164...SCIRAC        | - Update on <i>Mycosphaerella dearnessii</i> in France  |
| 94/165...ABCLRX        | - Situation of apricot chlorotic leafroll MLO in Roussillon (France)                                |
| 94/166...GVFDXX        | - International survey on grapevine yellows   |
| 94/167...GVFDXX        | - Detection of MLO in <i>Scaphoideus titanus</i> reared on grapevines infected by flavescente dorée |
| 94/168...XANTPH        | - EPPO Distribution List for <i>Xanthomonas campestris</i> pv. <i>phaseoli</i>                      |
| 94/169...CONFERENCE    | - Fifth International Conference 'Rodens & Spatium' - Biodiversity and Adaptation                   |



# EPPO *Reporting Service*

## 94/152      CZ...Quarantine pests in Czech Republic

The EPPO secretariat has recently received details from the Plant Protection Service of the Czech Republic on the presence of EPPO quarantine pests in that newly separate country, as opposed to former Czechoslovakia. The main points are: 1) beet necrotic yellow vein furovirus (EPPO A2 quarantine pest) has been found in Czech Republic only since 1993 and only in a single field; 2) *Pseudomonas syringae* pv. *pisi*, not previously recorded in Czechoslovakia, was first found in Czech Republic in 1993, in the vicinity of Prague; 3) *Cryphonectria parasitica* (EPPO A2 quarantine pest) does not occur in Czech Republic, but was previously recorded as of restricted distribution in Czechoslovakia; 4) the Czech Republic declares that extensive detection surveys have confirmed the absence of *Globodera pallida* (EPPO A2 quarantine pest) and *Pseudomonas solanacearum* (EPPO A2 quarantine pest).

**Source:**            EPPO Secretariat, 1994-07.

**Additional key words:** new records, detailed record.

## 94/153      PHTOOP...*Phthorimaea operculella* in Russia

Although deleted from the EPPO A2 list in 1991-09, *Phthorimaea operculella* is considered as a quarantine pest in Russia and other former Soviet Republics. It was first found in USSR in 1938 at Poti (now in Georgia), but the outbreak was eradicated in two years. The species appeared again in Krym (Ukraine) and outbreaks have since been recorded in several areas of Ukraine (Odessa, Kherzon, Zaporozje, Donetsk, Dnepropetrovsk) in the republics of Abkhaziya and Adzhariya (now in Georgia) and in the far-southern Russian province of Krasnodar. The pest is said to have no potential in regions with an annual mean isotherm less than 10 °C. It is absent from most of Russia and from the Central Asian Republics. A 3 km isolation zone is established around any outbreak.

**Source:**            Anonymous (1993), Zashchita Rastenii, no. 9, p 25.



# EPPO Reporting Service

**94/154**      **XANTOR/RU...Update of *Xanthomonas oryzae* pv. *oryzae* in Russia**

A bacterial isolate from rice in Russia has been identified as *Xanthomonas oryzae* pv. *oryzae* (EPPO A1 quarantine pest) and reported by the Plant Protection Service from the Far Eastern provinces (Reporting Service 498, 1988-09). However, according to recent information, no cases of bacterial leaf blight disease have been reported in any part of Russia in recent years. The pathogen could possibly be considered 'found, but not established'.

**Source:**            Anonymous (1993) , Zashchita Rastenii, no. 9, p 26.

**Additional key words:** detailed record.

**94/155**      **BEMITA/GP...*Bemisia tabaci* is present in Guadeloupe**

Surveys have been carried out in Guadeloupe from 1985 to 1990, approximately sixty samples have been collected and 12 different species of Aleyrodidae have been found: *Aleurodicus dispersus*, *Aleuroglandulus malangae*, *Aleurothrixus floccosus*, *Aleurothrixus myrtacei*, *Aleurotrachelus atratus*, *Aleurotrachelus trachoides*, *Aleurotulus anthuricola*, *Bemisia tabaci* (EPPO A2 quarantine pest), *Paraleyrodes pulverans*, *Paraleyrodes urichii*, *Trialeurodes vaporariorum*, *Trialeurodes variabilis*. Severe outbreaks of *Bemisia tabaci*, especially on melon, were observed in 1990 for the first time. However, the authors felt that *B. tabaci* has probably been present in Guadeloupe since the beginning of the 1970s, as symptoms of diseases apparently due to geminiviruses transmitted by *B. tabaci* have been observed since then.

**Source:**            Etienne, J.; Quiot, J.B.; Russell, L.M. (1991) Les Aleyrodidae de Guadeloupe, cas de *Bemisia tabaci*.

**Rencontres Caraïbes en Lutte biologique, Guadeloupe, 5-7 novembre 1990. Les Colloques de l'INRA n°58, 85-91.**

**Additional key words:** new record.



# EPPO Reporting Service

## 94/156      CIDSS/VN...Citrus pests in Vietnam

Surveys have been carried out in 1990-08 and 1991-03 in order to identify important citrus pests and diseases in Vietnam. One of the most serious problems is caused by citrus greening bacterium and its vector *Diaphorina citri* (both EPPO A1 quarantine pests), especially in Northern Vietnam in orchards and in some nurseries. However, during those two surveys, the disease and its vector were not observed in the region near Ho Chin Minh City (Southern Vietnam). Damage due to citrus tristeza closterovirus (EPPO A2 quarantine pest) and exocortis have been found, and the author assumed that citrus tatter leaf capillovirus (potential EPPO A1 pest) is also probably present. *Xanthomonas campestris* pv. *citri* (EPPO A1 quarantine pest) is frequently severe on sweet oranges in northern orchards but is less serious in the south. Other important diseases reported are: *Phytophthora citrophthora*, *Meliola citricola* and *Elsinoe fawcetti* (EU Annex II/A1).

The vector of citrus tristeza, *Toxoptera citricidus* (EPPO A1 quarantine pest), is widespread in Vietnam but its direct damage is limited. Infestations of *Phyllocnistis citrella* (citrus leaf miner) are generally severe in many orchards and nurseries and this pest is the main target of insecticide treatments. In Northern Vietnam, ripening fruits are often attacked by *Bactrocera dorsalis* (EPPO A1 quarantine pest). Other important pests reported are: *Citripestis sagittiferella* (citrus moth borer), *Nadezhdiella cantori* (longhorn beetle), *Eudocima (Othreis)* spp. (fruit piercing moth), *Panonychus citri* (red spider mite). *Aleurocanthus woglumi* (EPPO A1 quarantine pest) and *Anoplophora chinensis* (potential EPPO A1 quarantine pest) have also been found in Vietnam.

These are the first specific reports known to the EPPO Secretariat of Citrus greening, *Toxoptera citricidus* and *Bactrocera dorsalis* in Vietnam.

**Source:** Whittle, A.M. (1992) Diseases and pests of citrus in Viet Nam.  
FAO Plant Protection Bulletin, 40(3), 75-81.

**Additional key words:** new records.



# EPPO Reporting Service

**94/157**      **TOXOCI/JM...New records of *Toxoptera citricidus* in Jamaica and Puerto Rico**

During surveys carried out in Jamaica, *Toxoptera citricidus* (EPPO A1 quarantine pest, vector of citrus tristeza closterovirus) has been found in citrus orchards, in the region of St Mary, in 1993-04. This is the first report of *Toxoptera citricidus* in Jamaica. The authors stressed that *T. citricidus* is now spreading in the Caribbean from south to north, as in 1990 it was only present in Trinidad, then found in Guadeloupe and Martinique at the end of 1991, in St Lucia in 1992, in Dominican Republic in 1992 and in Puerto Rico in 1992 (Garney and Yokomi, 1992, *Intern Report*, May, 7-8, 1992, 8 p). For the EPPO Secretariat, this reference is also the first report of *T. citricidus* in Puerto Rico. Further systematic surveys are necessary to study the distribution of the pest, as well as the phytosanitary status of citrus tristeza closterovirus in Jamaica.

**Source:**            Etienne, J.; Martinez, M. (1993). *Toxoptera citricidus* en Jamaïque : nouveau signalement pour les Caraïbes (Hom. Aphididae). *Nouvelle Revue d'Entomologie (Note Scientifique)*, 10(4), p 374.

**Additional key words:** new records.

**94/158**      **TOXOCI...*Toxoptera citricidus* is present in Cuba**

*Toxoptera citricidus* (EPPO A1 quarantine pest), vector of citrus tristeza closterovirus, has been found in Cuba in the eastern part of the island (provinces of Guantànamo, Santiago de Cuba, Granma y Holguin). This finding was reported to FAO by the Cuban Ministry of Agriculture in July 1993. The pest has been found on orange (*Citrus sinensis*) and on Mexican lime (*Citrus aurantifolia*). According to surveys carried out in the other parts of the country, *T. citricidus* is limited to the eastern part of the island and measures are taken to prevent further spread.

**Source:**            Anonymous (1993) *Toxoptera citricidus* en Cuba. *FAO Plant Protection Bulletin*, 41 (2), 123-124

**Additional key words:** new record.



# EPPO *Reporting Service*

## 94/159 TOXOCI...EPPO Distribution List for *Toxoptera citricidus*

Due to the new records of *Toxoptera citricidus* in Cuba, Jamaica, Puerto Rico and Vietnam, the geographical distribution can be modified as follows.

### EPPO Distribution List: *Toxoptera citricidus*

*T. citricidus* occurs predominantly in humid tropical regions and presumably originated in south-east Asia and spread on citrus plants to other tropical areas. It has also spread to areas of Mediterranean climate (Australia, South Africa, Chile).

**EPPO region:** Absent (supposed records from Cyprus, Italy, Malta and Spain refer to *T. aurantii*).

**Asia:** Widespread in south-east Asia; China, Indonesia, India, Japan, Korea Dem. People's Republic, Korea Republic, Malaysia, Philippines, Sri Lanka, Thailand, Taiwan, Vietnam.

**Africa:** Widespread south of the Sahara; Congo, Cameroon, Ghana, Kenya, Mauritius, Mozambique, Nigeria, Réunion, Senegal, Sierra Leone, South Africa, St. Helena, Sudan, Tanzania, Uganda, Zimbabwe.

**North America:** USA (Hawaii only).

**Central America and Caribbean:** Cuba, Dominican Republic, Guadeloupe, Jamaica, Martinique, Puerto Rico, Saint Lucia, Trinidad and Tobago.

**South America:** Widespread; Argentina, Brazil, Chile, Costa Rica, Ecuador, French Guiana, Guyana, Paraguay, Peru, Suriname, Uruguay, Venezuela.

**Oceania:** Australia (New South Wales, South Australia, Queensland, Victoria, Western, Australia, Tasmania), Cook Islands, Fiji, New Zealand (North Island).

**This distribution list replaces all previous published EPPO Distribution Lists on *Toxoptera citricidus*!**

**Source:** EPPO Secretariat, 1994-07.



# EPPO *Reporting Service*

**94/160**      **CSGXXX...EPPO Distribution List for citrus greening bacterium**

Due to the new record of citrus greening bacterium in Vietnam (probably the heat-tolerant form) and data provided by Yemen, its geographical distribution can be modified as follows.

**EPPO Distribution List: Citrus greening bacterium**

**EPPO region:** Absent.

*Heat-sensitive form of the disease:*

**Asia:** Saudi Arabia, Yemen.

**Africa:** Comoros, Ethiopia, Kenya, Madagascar, Mauritius, Réunion, Saint-Helena (unconfirmed), South Africa, Swaziland, Tanzania, Zimbabwe.

*Heat-tolerant form of the disease:*

**Asia:** China, India (unconfirmed), Hong Kong (few reports), Indonesia, Japan (Ryukyu islands only), Malaysia, Nepal, Pakistan, Philippines, Saudi Arabia, Taiwan, Thailand, Vietnam.

**Africa:** Mauritius, Réunion.

Note that both forms of the disease exist in Réunion, Mauritius and Saudi Arabia. The Mediterranean area and most of the Middle East (e.g Iran) are still free from the disease. The infested area which is closest to the Mediterranean zone extends south of Mecca, along the Red Sea.

**This distribution list replaces all previous published EPPO Distribution Lists on Citrus greening bacterium!**

**Source:**            EPPO Secretariat, 1994-07.



# EPPO *Reporting Service*

94/161

DIAACI/TRIZER...EPPO Distribution Lists for *Diaphorina citri* and *Trioza erytreae*

Due to the new record of *Diaphorina citri* in Vietnam and information provided by Uruguay and Paraguay, its geographical distribution can be modified as follows.

EPPO Distribution List: *Diaphorina citri*

**EPPO region:** Absent.

**Asia:** Afghanistan, Bangladesh (unconfirmed), China (Guangdong), Hong Kong, India (unconfirmed), Indonesia, Japan (Ryukyu islands only), Kampuchea, Lao, Macau, Malaysia, Myanmar (Burma), Nepal, Pakistan, Philippines, Saudi Arabia, Singapore, Sri Lanka, Taiwan, Thailand, Vietnam.

**Africa:** Mauritius, Réunion.

**South America:** Brazil, Paraguay, Uruguay (few reports).

The EPPO secretariat, checking the sources of its distribution list for *Trioza erytreae* finds that CIE map no. 234 (of 1967) gives a record in "Congo (Kinshasa)". This is now Zaire, not Congo. The record in Congo previously given by EPPO is a mistake.

EPPO Distribution List: *Trioza erytreae*

**EPPO region:** Absent.

**Asia:** Saudi Arabia, Yemen.

**Africa:** Cameroon (south), Comoros, Ethiopia (Eritrea), Kenya, Madagascar, Malawi, Mauritius, Réunion, Rwanda, South Africa, St. Helena, Sudan, Swaziland, Tanzania, Uganda, Zaire (east), Zambia, Zimbabwe. The record in Congo given in *Quarantine Pests for Europe* is a mistake, arising from confusion with Zaire (the record going back to the colonial period).

Note that *D. citri* occurs in Afghanistan, Bangladesh, Brazil, Hong Kong, Japan, Macau, Myanmar, Singapore and Sri Lanka where citrus greening bacterium has not been recorded, while *T. erytreae* is found in Cameroon, Malawi, Rwanda, St. Helena, Sudan, Tanzania, Uganda, Zaire and Zambia where the disease has not been reported. Both insect vectors occur together in Mauritius, Réunion and Saudi Arabia.

**These distribution lists replace all previous published EPPO Distribution Lists on *Diaphorina citri* and *Trioza erytreae*!**

**Source:** EPPO Secretariat, 1994-07.





# EPPO Reporting Service

## 94/162      SPIRSI...New host plants of *Spiroplasma citri* in Turkey

The host range (non citrus-hosts) of *Spiroplasma citri* (EU quarantine pest, Annex II/A2) has been studied in the Çukurova region which is the main citrus-growing region of Turkey. Up till now, in the Mediterranean region, only *Catharanthus roseus*, *Hirschfeldia incana* and *Sisymbrium irio* were known as natural non-citrus hosts of *S. citri*. During this study, approximately 250 samples of plants representing 27 species in 15 families have been tested by ELISA from 1988 to 1990, and attempts to culture the causal agent of stubborn were then carried out for plants found to be infected by ELISA. The results obtained showed that, in addition to *Catharanthus roseus*, *S. citri* was isolated from *Crepis echioides*, *Echium* sp. and *Sesamum indicum* (sesame), which are reported for the first time as natural host plants of *S. citri*. *S. citri* was also detected by ELISA in *Digitaria sanguinalis*, *Salsola kali* and *Sorghum halepense*, but could not be isolated from these plants. It was also found that a vector of *S. citri*, *Circulifer opacipennis* is abundant and commonly found on sesame. The authors concluded that among these new host plants, *Sesamum indicum* is the most important, and stressed that it can play a significant role in the epidemiology of the disease, as it is widely grown in the Çukurova region and highly infected.

**Source:** Kersting, U.; Sengonca, Ç.; Çinar, A. (1992) Detection of *Spiroplasma citri* in non-citrus host plants and their associated leafhopper vectors in southern Turkey.  
**FAO Plant Protection Bulletin, 40 (3), 89-94**

**Additional key words:** new host plants.

## 94/163      PHYNCI...First report of *Phyllocnistis citrella* in Florida (US)

The citrus leafminer, *Phyllocnistis citrella*, has been reported for the first time in Florida (US), in 1993-05. Its impact on citrus crops is still unknown but this pest, originating from Asia, represents a very serious threat for citrus orchards and nurseries in Florida. Insecticide treatments with imidacloprid will be applied. This is apparently the first report of *Phyllocnistis citrella* in the New World.

**Source:** Anonymous (1994) Leafminer threatens Florida Citrus.  
**NAPPO Newsletter, 14 (1), p 10.**

**Additional key words:** new record.



# EPPO Reporting Service

## 94/164      SCIRAC...Update on *Mycosphaerella dearnessii* in France

As previously mentioned in Reporting Service 94/087, *Mycosphaerella dearnessii* (EPPO A2 quarantine pest) has recently been found in France. The disease was discovered at the beginning of 1993 on *Pinus attenuata* x *radiata* hybrids, and is only present in the south-west of France (Aquitaine and Midi-Pyrénées). Symptoms appear mainly on older needles, as yellow spots becoming brownish with a dark centre, the diseased needles then dry and fall. Up till now, in Aquitaine, tree mortalities have been observed on stands of *Pinus attenuata* x *radiata*, more than three years old. In 1993-03, the French Plant Protection Service set up an eradication programme. The following actions were taken: identification of *Pinus attenuata* x *radiata* stands (150-200 ha) and collection of samples (paying attention also to maritime pine (*Pinus pinaster*)), complete destruction of plots where contaminated trees are found, 5-year surveys of all sites and their surroundings with collection of samples in spring and autumn, searching for funds to replace destroyed stands. In 1993, the French Plant Protection Service has tested 365 samples in Aquitaine, and 15 in Midi-Pyrénées. During surveys carried out elsewhere in France, all tested samples (110 samples from 21 different sites) gave negative results. It has been found that all contaminated stands of *Pinus attenuata* x *radiata* are located in Aquitaine (except one in Gers), representing 105 ha which are being destroyed. No maritime pine has been found infested, but other species of pines directly in contact with highly infested *P. attenuata* x *radiata* showed serious decline or even death. The French Plant Protection Service will continue to make all possible efforts to eradicate this disease.

**Source:** Lévy, A.; Lafaurie, C. (1994) Découverte de *Scirrhia acicola* - Un nouveau pathogène foliaire des pins *attenuata* x *radiata* en Aquitaine. *Phytoma - La Défense des végétaux*, no. 463, 33-35.

**Additional key words:** detailed record.



# EPPO *Reporting Service*

**94/165**      **ABCLR...Situation of apricot chlorotic leafroll MLO in Roussillon (France)**

Observations made during the last twenty years have shown that 80 % of decline of apricot trees (*Prunus armeniaca*) in Roussillon (eastern Pyrénées) were due to apricot chlorotic leafroll MLO. Surveys have been carried in young apricot orchards since their plantation in 1981 or 1982, on 48 different plots (7244 trees, 28 ha) in this region. The aim was to study the behaviour towards this disease of three apricot cultivars (Rouge du Roussillon, Screara and Béliana) grafted on five different rootstocks (*Prunus domestica* Brompton and Reine Claude, myrobalan GF 31, Mariana GF 8-1 and Manicot seedling). Selected trees have been visually inspected twice a year, in winter and in summer, until they reach the growth stage of eight leaves. In doubtful cases, the presence of the pathogen was confirmed by indexing on susceptible apricot cultivars Luizet or Priana, grafted on *Prunus persica* GF 305. The results showed that in plots of susceptible trees (like cv. Béliana grafted on Mariana, or cv. Screara on Mariana), the disease spread rapidly and more than 35 % mortality was reached at growth stage 8 leaves. The most tolerant association was cv. Rouge du Roussillon grafted on Brompton. On these tolerant trees, multiplication rate of the disease and symptoms are reduced, and mortality remains under 5 %. The authors concluded that in regions where the disease is endemic, the choice of tolerant cultivars is essential to maintain a satisfactory production of apricots.

**Source:**            Cornaggia, D.; Audubert, A.; Desvignes, J.C. (1994) Enroulement chlorotique de l'abricotier en Roussillon - Influence du matériel végétal. *Phytoma - La Défense des végétaux*, no. 460, 20-23.

**Additional key words:** plant resistance/tolerance.



# EPPO *Reporting Service*

94/166

GVFDXX...International survey on grapevine yellows

Grapevine yellows corresponds to a group of diseases including grapevine flavescence dorée MLO (EPPO A2 quarantine pest transmitted by *Scaphoideus titanus*), bois noir disease (not transmitted by *S. titanus*), Vergilbungskrankheit, and other yellows observed in different parts of the world. These diseases cause similar symptoms, which in certain cases may be extremely serious. A specific ELISA test for grapevine flavescence dorée using polyclonal and monoclonal antibodies, was applied to try to clarify this complex situation of grapevine yellows in the world and to check whether some of these yellows are due to grapevine flavescence dorée MLO or are serologically related to it. Grapevine stems or leaves showing symptoms of grapevine yellows were collected from several parts of the world: France (138 samples), Italy (13), Switzerland (39), Israel (9), North America (31), South Africa (24) and Australia (26). The results showed that grapevine flavescence dorée MLO is only present in Southern France and Northern Italy (Friuli). In France, it was possible to clarify a very confusing situation, as all the symptomatic vines in the north-east of France (Bourgogne) reacted negatively, suggesting that the disease observed in this region is probably bois noir. No positive results were obtained from samples showing symptoms of grapevine yellows from Sicilia (IT), Emilia-Romagna (IT), Switzerland (western part and Ticino), Israel, USA (New York State), South Australia, or from samples showing symptoms of Shiraz decline disease (similar to other yellows but possibly related to a closterovirus) from South Africa. In addition, these results suggest that grapevine flavescence dorée is not serologically related to other yellows. The authors stress that their results do not guarantee the absence of grapevine flavescence dorée MLO from the areas where other yellows were found. They also stress that the other yellows are economically important and do present a phytosanitary risk.

**Source:**

Kuszala, C.; Cazelles, O.; Boulud, J.; Credi, R.; Granata, G. Kriel, G.; Magarey, P.; Magnien, C.; Pearson, R.C.; Refatti, E.; Tanne, E.; Caudwell, A. (1993) Contribution à l'étude des jaunisses de la vigne dans le monde. Prospection par test ELISA spécifique du mycoplasma-like organism (MLO) de la flavescence dorée.

*Agronomie*, 13 (10), 929-933.



# EPPO *Reporting Service*

94/167

GVFDXX...Detection of MLO in *Scaphoideus titanus* reared on grapevines infected by flavescence dorée

A test using dot hybridization with biotinylated MLO-DNA probes was developed in Italy, in order to check the presence of MLO in *Scaphoideus titanus*, vector of grapevine flavescence dorée MLO (EPPO A2 quarantine pest). The insects were reared on infected grapevine and then tested. The results showed that MLOs were present in these insects. Though this study did not indicate whether the MLO (or the MLOs) detected is the causal agent of grapevine flavescence dorée, it was consistent with previous trials on insect transmission of grapevine flavescence dorée.

**Source:**

Bertaccini, A.; Arzone, A.; Alma, A.; Bosco, D.; Vibio, M. (1993) Detection of mycoplasma-like organisms in *Scaphoideus titanus* Ball reared on flavescence dorée infected grapevine by dot hybridizations using DNA probes.  
*Phytopathologia Mediterranea*, 32 (1), 20-23.



# EPPO *Reporting Service*

**94/168**      **XANTPH...EPPO Distribution List for *Xanthomonas campestris* pv. *phaseoli***

Due to modifications made by several countries during the validation of geographical data for quarantine pests, the geographical distribution of *Xanthomonas campestris* pv. *phaseoli* can be modified as follows.

**EPPO Distribution List: *Xanthomonas campestris* pv. *phaseoli***

**EPPO region:** Widespread in Bulgaria, Egypt (potential EPPO country), Hungary, Israel, Lebanon (potential EPPO country) and Spain; locally established in Cyprus, France, Germany, Greece, Italy, Moldova (potential EPPO country), Netherlands (few reports), Portugal (Madeira only), Romania, Russia (Black Sea, Krasnodar), Switzerland, Tunisia, Turkey and Yugoslavia; reported from but not established in former Czechoslovakia, Finland (unconfirmed), Morocco (unconfirmed), Poland (unconfirmed), Sweden (unconfirmed).

**Asia:** Bangladesh, Brunei Darussalam, China, Cyprus, Democratic People's Republic of Korea, Georgia, Hong Kong, India (unconfirmed), Indonesia, Israel, Japan, Lebanon, Kampuchea, Malaysia, Myanmar (Burma), Nepal, Philippines, Republic of Korea, Sri Lanka, Taiwan, Turkey, Vietnam, Yemen.

**Africa:** Central African Republic, Egypt, Ethiopia, Kenya, Madagascar, Malawi, Morocco (unconfirmed), Mozambique, Nigeria, Somalia, South Africa, Sudan, Tanzania, Tunisia, Uganda, Zambia, Zimbabwe.

**North America:** Bermuda, Canada, Mexico, USA (more prevalent east of the Rocky Mountains).

**Central America and Caribbean:** Barbados, Costa Rica, Cuba, Dominica, Dominican Republic, El Salvador, Guatemala, Honduras, Jamaica, Martinique, Nicaragua, Panama, Puerto Rico, St. Vincent and Grenadines, Trinidad and Tobago.

**South America:** Argentina, Brazil, Chile, Colombia, Ecuador, Paraguay, Uruguay, Venezuela.

**Oceania:** Australia, New Zealand, Samoa.

**This distribution list replaces all previous published EPPO Distribution Lists on *Xanthomonas campestris* pv. *phaseoli*!**

**Source:** EPPO Secretariat, 1994-07.



# EPPO *Reporting Service*

**94/169**      **CONFERENCE...Fifth International Conference 'Rodens & Spatium' - Biodiversity and Adaptation**

The Fifth International Conference 'Rodens & Spatium - Biodiversity and Adaptation' will be held in 1995-03-20/24, in Rabat (MA). This Conference mainly concerns relationships between rodents and their environment and is divided into the five following sessions : Diversity of ecophysiological and behavioural adaptations to extreme environmental conditions; Diversity of rodent-plant interactions; Diversity of communication modes and cognition in rodents; Rodents and people; Evolutionary biology of rodents.

Contact address:

Dr Abdelkader ZAIME  
Convener, Conference Rodens & Spatium  
Département de Physiologie Animale et Thérapeutique  
I.A.V. Hassan II, B.P., 6445 Rabat-Instituts  
10101 Rabat  
MOROCCO

Fax: (212-7) 77-71-19 or 77-58-38

**Source:**      EPPO Secretariat, 1994-07.