



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

EPPO

Reporting Service

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519/01 EPPO.....Pests which should NOT appear in EPPO Quarantine lists

The EPPO Working Party on Phytosanitary Regulations has made detailed recommendations (the A1 and A2 lists of quarantine pests) on pests which should be considered for inclusion in the phytosanitary regulations of EPPO Member Governments. It has also, in parallel, reviewed these regulations and made recommendations on pests which, owing to their wide distribution, their status as 'quality pests' or their unimportance, should NOT appear on A lists in EPPO regulations. These recommendations, made over a period of years, are here compiled.

1. Bacteria (Working Party 1979/1980)

Agrobacterium tumefaciens
Clavibacter tritici
Curtobacterium flaccumfaciens pv. betae
Curtobacterium flaccumfaciens pv. oortii
Erwinia carotovora spp. atroseptica
Pseudomonas gladioli pv. gladioli
Pseudomonas syringae pv. lachrymans
Pseudomonas syringae pv. mori
Pseudomonas syringae pv. mors-prunorum

Pseudomonas syringae pv. phaseolicola
Pseudomonas syringae pv. savastanoi
Pseudomonas syringae pv. syringae
Rhodococcus fascians
Xanthomonas campestris pv. begoniae
Xanthomonas campestris pv. campestris
Xanthomonas campestris pv. juglandis
Xanthomonas campestris pv. pelargonii

2. Insects (Working Party 1981/1985)

Acanthoscelides obsoletus
Acanthoscelides obtectus
Acaudaleyrodes citri
Acleris latifasciana
Acleris schalleriana
Aleurothrixus floccosus
Anihocericca castanea (= Aserica japonica)
Anihonomus pomorum
Anihonomus vestitus
Araecerus fasciculatus
Aspidiotus destructor
Batrachedra rileyi
Bruchidius incarnatus
Bruchidius ulicis
Bruchidius varius
Bruchophagus gibbus
Busseola fusca
Callosobruchus maculatus
Callosobruchus phaseoli
Carpophilus spp.

Caryedon pallidus
Caryedon serratus
Caulophilus oryzae
Cephalcia alpina
Ceroplastes rubens
Ceroplastes rusci
Ceroplastes sinensis
Cerostegia floridensis
Chromatomyia (Phytomyza) horticola
Chromatomyia (Phytomyza) syngenesiae
Chrysomphalus aonidum
Chrysomphalus dictyospermi
Coccus viridis
Corcyra cephalonica
Cosmopolites sorditus
Cryptolestes spp.
Cryptorhynchus lapathi
Cydia delineana
Dendroctonus micans



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Dendrolimus pini
Diabotrica balteata
Diabotrica longicornis
Diabotrica trivittata
Diabotrica undecimpunctata
Diabotrica virgifera
Dreyfusia (Adelges) piceae
Earias insulana
Ectomyeloides ceratoniae
Ephestia calidella
Ephestia figulilella
Ephestia kuehniella
Epicauta vittata
Epichoristodes galeata
Epilachna varivestis
Erythroneura comes
Eumerus strigatus
Eumerus tuberculatus
Eupoecilia ambiguella
Euproctis chrysorrhoea
Eurygaster integriceps
Eurytoma amygdali
Gilpinia hercyniae
Hemiberlesia cearidi
Hofmannophila pseudopretella
Icerya purchasi
Iridomyrmex humilis
Lampetia clavipes
Lasioderma serricorne
Lepidosaphes beckeri
Lepidosaphes gloverii
Leucaspis japonica
Lophocateres pusillus
Lyctus brunneus
Lyctus pallidus
Lymantria dispar
Lymantria monacha
Megastigmus spp.
Meloloniha spp.

3. Nematodes (Working Party 1986)

Anguina tritici
Aphelenchoides fragariae
Aphelenchoides ritzemabosi
Aphelenchoides spp.
Ditylenchus destructor
Ditylenchus faustus
Heterodera goettingiana
Heterodera humuli

Merodon equestris
Monomorium pharaonis
Morganella longispina
Myriopardalis pardalina
Operophtera brumata
Oryzaephilus mercator
Oryzaephilus surinamensis
Parasaissetia nigra
Paratrioza cockerellii
Pectinophora malvella
Phorbia brunnescens
Phthorimaea ocellatella
Planococcus citri
Pristiphora abietina
Pseudaonidia paeoniae
Pseudococcus calceolariae
Ptinus tectus
Reticulitermes flavipes
Rhyzopertha dominica
Saissetia coffeae
Saperda carcharias
Sitophilus granarius
Sitophilus oryzae
Sitophilus zea-mais
Sitotroga cerealella
Sphaeraspis viti
Taeniothrips laricivorus
Tenebroides mauritanicus
Thaneroclerus buqueti
Thomasiniana lavandula
Thrips (Taeniothrips) simplex
Tribolium castaneum
Tribolium confusum
Trogoderma inclusum
Unaspis citri
Xylosandrus germanus
Zabrotes subfasciatus



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4. Mites (Working Party 1986)

Aculops lycopersici
Cecidophyopsis ribis
Oligonychus ununguis
Panonychus ulmi

Phytocoptella avellanae
Tarsonemus pallidus var. *fragariae*
Tarsonemus pallidus var. *pallidus*
Tetranychus urticae

5. Fungi (Working Party 1990)

Alternaria brassicae
Alternaria brassicola
Botryosphaeria festucae (*Diplodia frumenti*)
Botryosphaeria obtusa
Botryotinia ciborioides (= *Sclerotinia trifoliorum*)
Botrytis tulipae
Cercospora kikuchii
Claviceps purpurea
Cochliobolus heterostrophus
Cochliobolus lunatus
Cochliobolus stenopilus
Colletotrichum lini
Colletotrichum lindemuthianum
Cytospora sacchari
Daldinia concentrica
Diaporthe eres
Discosphaerina fulvida
Drepanopeziza punctiformis
Embellisia helianthi
Eutypa lata
Exobasidium japonicum
Fusarium oxysporum f.sp. *gladioli*
Fusarium oxysporum f.sp. *narcissi*
Fusarium oxysporum f.sp. *vasinfectum*
Guignardia baccae
Heterobasidion annosum
Hypoxyton mammatum
Leptosphaeria maculans
Lophodermella sulcigena
Lophodermium pinastri

Mycosphaerella schoenoprasii
Mycovelosiella vaginae
Nematospora coryli
Ovulinia azaleae
Peronosclerospora maydis
Phaeocryptopus gaeumannii
Phomopsis viticola
Phytophthora cactorum
Phytophthora cambivora
Phytophthora citrophthora
Phytophthora phaseoli
Pleiochaeta setosa
Puccinia arachidis
Pyrenophora graminea
Rhizodcline pseudotsugae
Rhizoctonia tuliparum
Sclerotinia bulborum
Sclerotinia gladioli
Sclerotium cepivorum
Septoria azaleae
Septoria gladioli
Septoria glycines
Setosphaeria turcica
Spongospora subterranea
Thanatephorus cucumeris (*Rhizoctonia solani*)
Tilletia secalis
Trachysphaera fructigena
Typhula trifolii
Uromyces dianthi
Ustilago allii

Source: EPPO Secretariat (1991-12)



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519/02 BG.....New Phytosanitary Certificate of
Bulgaria

The EPPO Secretariat has been informed that Bulgaria has issued a new Phytosanitary Certificate. According to information from the Ministry of Agriculture in Sofia, the new certificate is in accordance with the IPPC and resembles the Phytosanitary Certificate of Belgium.

Source: Ministry of Agriculture, Sofia (1991-11)



EPPO *Reporting Service*

519/03 DK/SYVBXX.....Strawberry vein banding
caulimovirus not present in strawberry
plants in Denmark

Concerning EPPO Reporting Service article 515/04 about the detection in Norway of strawberry vein banding caulimovirus in *Fragaria* plants originating from Denmark, the Danish Plant Directorate has informed EPPO that the virus has not been found by the Plant Directorate or the Plant Protection Service of Denmark in strawberry plants either inside or outside the compulsory certification system operating for strawberry plant production in Denmark.

The Danish Plant Directorate stressed further that, after leaving Denmark, the plants were held at the experimental station in Norway with different strawberry cultivars of different origins for a period of two years.

Source: Plant Directorate, Denmark (1991-12)



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519/04 **FAO/IBPGR.....New publications on the safe movement of germplasm**

In 1991 the Food and Agriculture Organization of the United Nations (FAO) and the International Board for Plant Genetic Resources (IBPGR) have published a new series on the safe movement of germplasm.

The new series includes:

- Safe Movement of Grapevine Germplasm
- Safe Movement of Cassava Germplasm
- Safe Movement of Vanilla Germplasm
- Safe Movement of Citrus Germplasm

Source: FAO, Rome (1991)



EPPO *Reporting Service*

519/05 **GB..Changes in the Plant Health Legislation**
of Northern Ireland

The Department of Agriculture for Northern Ireland (DANI) has issued changes in the Plant Health Legislation of Northern Ireland.

The changes came into force on 1991-10-03 and include among other things the addition of *Bemisia tabaci* to the list of harmful organisms and the requirement of phytosanitary certificates for certain cut flowers originating in from non-EC countries.

Source: DANI, GB (1991-11)



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519/06 TR....New Plant Quarantine Regulations of
Turkey

The Turkish authorities have issued new Plant Quarantine Regulations. The new regulations came into force in 1991-03-08.

An English version has been prepared by:

General Directorate of Protection and Control
Akay Cad No. 3
Bakanliklor
Ankara/Turkey

Source: General Directorate of Protection and Control
(1991-12)



EPPO *Reporting Service*

519/07 TMSWXX....Effects of water stress on tomato spotted wilt virus

In Argentina, experiments were carried out to study the effects of water stress on symptom expression and infection by tomato spotted wilt virus (potential EPPO A2 organism) on tomato.

The experiments showed that water stress decreases the virus concentration in tomato plants as well as the systemic infection symptoms. Therefore, the authors conclude that in tomato-growing areas, subject to water stress, visual inspections of tomatoes for tomato spotted wilt tospovirus could lead to underestimations of the disease incidence.

Source: Córdoba, A.R.; Taleisnik, E.; Brunotto, M.; Racca, R. (1991) Mitigation of tomato spotted wilt virus infection and symptom expression by water stress. *Journal of Phytopathology* 133, 255-263.

519/08 TMSWXX.....Tomato spotted wilt virus intercepted in Sweden

The Swedish Board of Agriculture has informed EPPO that a consignment of saintpaulia seedlings from Germany has been intercepted due to the infection by tomato spotted wilt virus (potential EPPO A2 organism).

Source: Swedish Board of Agriculture (1991-11)



EPPO *Reporting Service*

519/09 TOSTXX.....New hosts for tobacco streak ilarvirus

Tobacco streak ilarvirus (EPPO A1 organism) can naturally infect lettuce and escarole. The symptoms on escarole and lettuce include chlorosis and necrotic lesions.

In laboratory studies in Florida, US, isometric, virus-like particles were isolated from lettuce and escarole which could be identified as the bean red node strain of tobacco streak ilarvirus.

Source: McDaniel, L.L.; Raid, R.N.; Elliot, C.; Nagata, R.T. (1991) Purification and characterization of an isolate of tobacco streak ilarvirus infecting escarole and lettuce in South Florida.
Abstracts of the 1991 Annual Meeting of the American Phytopathological Society, Phytopatology 81, 1216.



EPPO *Reporting Service*

519/10 PSDMSS....New bacterial watermelon fruit blotch in Florida

A new bacterial watermelon fruit blotch disease has been reported in Florida, US. The disease was first observed in spring 1989 on watermelons showing large, firm, dark green and water-soaked lesions with irregular margins. In some fields yield losses up to 50% due to the pathogen were reported. The symptoms were similar to those of *Pseudomonas pseudoalcaligenes* subsp. *citrulli* which were first observed in 1965 in Florida.

Laboratory studies resulted in the isolation of a gram-negative, aerobic, rod-shaped, oxidase-positive and arginine dihydrolase-negative bacterium which was morphologically, physiologically and biochemically related to *P. a.* subsp. *citrulli*. However, in contrast to the previously described bacterium the new watermelon strains produced hypersensitive responses in tobacco and tomato.

During 1989 the disease was further reported in South-eastern, mid-Atlantic and mid-Western states.

Source: Somodi, G.C.; Jones, J.B.; Hopkins, D.L.; Stall; R.E.; Kuchorek, T.A.; Hodge, N.C.; Watterson, J.C. (1991) Occurrence of bacterial watermelon fruit blotch in Florida.
Plant Disease 75, 1053-1056



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519/11 **XANTCY..*Xanthomonas campestris* pv. *corylina***
endemic in Central Italy

In Central Italy (Lazio region), surveys were carried out in 1987-1990 to observe the occurrence of *Xanthomonas campestris* pv. *corylina* (EPPO A2 organism) in hazel orchards and wild *Corylus avellana* trees.

The results of these studies showed that the pathogen is present and can be considered endemic in Central Italy.

Source: Scortichini, M.; Rossi, M.P. (1991) Presenza endemica di *Xanthomonas campestris* pv. *corylina* in niccioleti del Lazio centrale.
Informatore Fitopatologico 2/1991, 51-56



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519/12 XANTIC/PSDMPA....New records of bacterial diseases

The EPPO Panel on Bacterial Diseases has been discussing two new bacterial diseases which have been found recently in Europe and which might imply a danger to agriculture:

Xanthomonas campestris pv. incanae has been found on Matthiola incanae in the United Kingdom and was previously recorded only in Australia, South Africa and the USA.

Pseudomonas syringae pv. papulans mainly known from North America has been found once in England, but was never confirmed. The pathogen was also detected on apple in Italy in 1983 on susceptible cultivars in one valley. However, the disease was never recorded again in Italy after this initial finding.

Source: EPPO Panel on Bacterial Diseases (1991-03)



EPPO *Reporting Service*

519/13 XANTPH...Survival of *Xanthomonas campestris*
pv. *phaseoli*

In the Dominican Republic experiments were carried out to study the survival of *Xanthomonas campestris* pv. *phaseoli* (EPPO A2 organism) in naturally infested dry bean (*Phaseolus vulgaris*) debris.

The pathogen survived for 5 months in debris on the soil surface, but could not survive 30 days if the infected debris was located at an depth of 15 cm in the soil.

Source: Arnaud-Satana, E.; Pena-Matos, E.; Coyne, D.P.; Vidaver, A.K. (1991) Longevity of *Xanthomonas campestris* pv. *phaseoli* in naturally infested dry bean (*Phaseolus vulgaris*) debris.
Plant Disease 75, 952-953.



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519/14 DIAPPC....Temperature effects on *Diaporthe*
phaseolorum var. *caulivora*

In the US, experiments were carried out to study the effects of different temperatures on production of perithecia and pycnidia by *Diaporthe phaseolorum* var. *caulivora* (EPPO A2 organism).

Pycnidia developed only on stems which were incubated at 20° and 25° C. The greatest number of perithecia developed on stems incubated at 25° C.

Source: Padgett, G.B.; Snow, J.P.; Berggren, G.T. (1991) Effects of temperature on production of perithecia and pycnidia by *Diaporthe phaseolorum* var. *caulivora*.

Abstracts of the 1991 Annual Meeting of the American Phytopathological Society, *Phytopatology* 81, 1143.



EPPO *Reporting Service*

519/15 **DACUCU....Fallen fruits a reservoir for**
Bactrocera cucurbitae

The impact of fallen fruits of *Carica papaya* (papaya) on the population dynamics of *Bactrocera cucurbitae* (EPPO A1 pest) was studied in Hawaii, US.

The results showed that the larval density of the melon fly was higher in papaya fruits on the ground than in the tree and the relative density of the population correlated significantly with the larval density in the fallen fruits, but not with larval density in tree fruits.

The authors suggest that fruits on the ground serve as a major breeding reservoir and that, therefore, the removal of fallen fruits from the ground should be an essential component in controlling the pest.

Source: Liquido, N.J. (1991) Fruits on the ground as a reservoir of resident Melon Fly (Diptera: Tephritidae) populations in papaya orchards.
Environmental Entomology 20, 620-625

519/16 **DACUCU....Failed male annihilation of**
Bactrocera cucurbitae

On the Japanese island of Iheya, experiments were conducted to annihilate the male population of *Bactrocera cucurbitae* (EPPO A1 pest) through cue-lure traps. However, the mating rates of mature females did not decrease significantly, compared to these on control islands and the infestation rates of melons were not always lower than in the previous year.

Therefore, the authors conclude that suppression of *B. cucurbitae* reproduction through male annihilation with cue-lure traps is problematic.

Source: Mabui, M.; Nakanori, H.; Kohama, T.; Nagamine, Y. (1990) The effect of male annihilation on a population of wild Melon Flies, *Dacus cucurbitae* Coquillett (Diptera: Tephritidae) in Northern Okinawa.
Japanese Journal of Applied Entomology and Zoology 34, 315-317.



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519/17 LEPTDE...*Escherichia coli* cloned with BT toxin becomes toxic to *Leptinotarsa decemlineata*

In Germany, a DNA fragment encoding an insecticidal toxin was isolated from *Bacillus thuringiensis* subsp. *tenebrionis*. The gene was inserted into several vector plasmids and expressed in *Escherichia coli* whose cell extracts later became insecticidal to *Leptinotarsa decemlineata* (EPPO A2 pest) larvae.

Source: Rhim, S.L.; Jahn, N.; Schnetter, W.; Geider, K. (1990) Heterologous expression of a mutated toxin gene from *Bacillus thuringiensis* subsp. *tenebrionis*.
FEMS Microbiology Letters 66, 95-99.

519/18 LEPTDE.....*Leptinotarsa decemlineata* in forests

In the USSR it has been reported that *Leptinotarsa decemlineata* (EPPO A2 pest) can increasingly be found in forests.

In 1988 Colorado beetles were observed mating on grasses in forest glades. The emigration of the Colorado beetle into the forests is explained by the practice of burning off the tops of potato plants and mass emergences of beetles due to favourable weather conditions.

Source: Kulik, A.V.; Timoshin, A.A. (1989) The Colorado beetle in the forest.
Zashchita Rastenii No. 6, 43.



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519/19

LEPTDE.....Flight behaviour of *Leptinotarsa*
decemlineata

In Massachusetts, US, experiments were carried out to study the flight behaviour of overwintered *Leptinotarsa decemlineata* (EPPO A2 pest).

Colorado beetles were collected in spring from infested fields and were fed potato foliage or left unfed. Unfed Colorado beetles flew more often, for longer periods and for greater distances than their fed companions. Unfed female beetles flew an average of 4879 m while fed females flew only an average of 1346 m.

The authors suggest that flight appears to have an important role in Colorado beetle finding host-plants after winter diapause.

Source: Ferro, D.N.; Tuttle, A.F.; Weber, D.C. (1991) Ovipositional and flight behavior of overwintered Colorado potato beetle (Coleoptera: Chrysomelidae). *Environmental Entomology* 20, 1309-1314.



EPPO *Reporting Service*

519/20 **LIRITR...Temperature effects on development**
of *Liriomyza trifolii*

In Germany, temperature effects on the development of *Liriomyza trifolii* (EPPO A2 pest) were studied.

Laboratory experiments showed that the temperature sums and threshold temperatures for development of the different stages were:

- egg: - 40,8 day-degrees C and 14° C
- larva: - 31,5 day-degrees C and 13,8° C
- pupa: - 107,4 day-degrees C and 13,6° C
- total: - 172,5 day-degrees C and 14,7° C

Source: Heyer, W.; Richter, S. (1990) Investigations into the temperature related development of serpentine leaf miner *Liriomyza trifolii* (Burgess) on beans (*Phaseolus vulgaris* L.)
Beiträge zur Entomologie 40, 259-264