



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

EPPO

Reporting Service

Paris, 1993-11-01

Reporting Service 1993, No. 11

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EPPO *Reporting Service*

93/191 EPPO/PQR...New version of PQR distributed

The EPPO Secretariat has distributed at the end of October 1993 a new version of PQR (EPPO's Data Base on the distribution of quarantine organisms) containing: 1. updated geographical distribution data especially from Germany and Italy; 2. updated address and phone information for RPPQ's and national Plant Protection Services; 3. data on four quarantine pests recently added to the EPPO lists; 4. correction of an error in the last version of the program, which gave access to countries only through their ISO codes. The new version of PQR has been sent to all users who registered for the regular updates.

Source: EPPO Secretariat, Paris (1993-10)

93/192 EPPO/PQR...Requirements to install PQR in MS-Dos 6.0

EPPO's PQR data base may not work properly if users have installed it under MS-Dos 6.0. In this case certain changes should be made to the CONFIG.SYS file of their computer.

If the CONFIG.SYS file contains the line:

.....EMM386.EXE..NOEMS....

the word "NOVCPI" should be added to the line.

In case the CONFIG.SYS file contains the line:

.....EMM386.EXE..RAM.....

then the file "PQR.BAT" should be changed to read:

SET CLIPPER = F45;V12;Eφφφ

Source: EPPO Secretariat, Paris (1993-10)



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EPPO/INFOEPPO...Contents of INFOEPPO in September 1993

Since 1993-08-25 the following items have been placed into the INFOEPPO on-line computer information service of EPPO. Note that only a part of these messages will also appear in the EPPO Reporting Service. News items in the INFOEPPO system will be visible for 8 weeks only and then automatically cleared!

#199 11-MAY-93	Sysop: EPPO News Flashes
#329 25-AUG-93	Eppohq: Flame chlorosis - a new disease
#330 25-AUG-93	Eppohq: Coniothyrium stem canker of Eucalyptus
#331 25-AUG-93	Eppohq: Narcissus viruses occurring in China
#332 25-AUG-93	Eppohq: CKCCXX in the Pacific region
#333 25-AUG-93	Eppohq: TMSWXX/EC
#334 25-AUG-93	Eppohq: TMSWXX/WMSWXX
#335 25-AUG-93	Eppohq: ERWIAM
#336 25-AUG-93	Eppohq: XANTCI
#340 25-AUG-93	Eppohq: FUSAAL - ES
#341 25-AUG-93	Eppohq: FUSAAL - MA
#342 25-AUG-93	Eppohq: TILLCO/TILLCA
#343 25-AUG-93	Eppohq: BURSXY
#344 25-AUG-93	Eppohq: BURSXY
#345 25-AUG-93	Eppohq: XIPHAM/XIPHSP
#346 25-AUG-93	Eppohq: XIPHAM
#349 27-SEP-93	Sysop: A new Lopian appears in Paris
#351 29-SEP-93	Eppohq: NZ - REGULATIONS
#352 29-SEP-93	Eppohq: LEPTDE - BIOLOGY
#353 29-SEP-93	Eppohq: PISOST - BIOLOGY
#354 29-SEP-93	Eppohq: DITYSP - PUBLICATION
#355 29-SEP-93	Eppohq: NE - Vegetable pests in Niger
#356 29-SEP-93	Eppohq: PUBLICATIONS - Phytophylactica terminate
#357 29-SEP-93	Eppohq: TMSWXX/Fransu - Vector of TSWV
#358 29-SEP-93	Eppohq: BURSXY - DISTRIBUTION (MX)
#359 29-SEP-93	Eppohq: MELGCH - HOSTS
#360 29-SEP-93	Eppohq: CSTXXX - DISTRIBUTION (AU)
#361 29-SEP-93	Eppohq: HETDPA - hatching of <i>Globodera pallida</i>
#362 29-SEP-93	Eppohq: BEMITA - Squash silverleaf
#363 29-SEP-93	Eppohq: TMSWXX - New tospovirus from Brazil
#364 29-SEP-93	Eppohq: GVFDXX - Grapevine MLO's in Italy (IT)
#365 29-SEP-93	Eppohq: PSDMPI - Economic importance
#366 29-SEP-93	Eppohq: FRANOC - Winter survival in Denmark (DK)
#367 29-SEP-93	Eppohq: ARETS - Resistance in western hemlock
#368 30-SEP-93	Eppohq: PRABMY - Biocontrol in Italy (IT)
#369 30-SEP-93	Eppohq: FRANOC - Resistance in chrysanthemums
#370 30-SEP-93	Eppohq: BEMITA/TMYLCX - Resistance in tomato
#371 30-SEP-93	Eppohq: FRANOC - Resistance in cucumber
#372 01-OCT-93	Eppohq: NAPPO - Publication Bulletin 11
#373 01-OCT-93	Eppohq: NAPPO/OIRSA - Fruit fly publication
#374 01-OCT-93	Eppohq: CERTCA - Attractiveness of excrements
#380 04-OCT-93	Eppohq: BURSXY - Distribution list
#381 04-OCT-93	Eppohq: SPC - New Plant Protection Officer
#382 04-OCT-93	Eppohq: CPPC - New Plant Protection Officer
#383 04-OCT-93	Eppohq: TOXOCI - Further spread in the Caribbean
#384 04-OCT-93	Eppohq: TOXOCI - EPPO Distribution List
#385 05-OCT-93	Eppohq: PUCCHN - Found in Mexico
#386 05-OCT-93	Eppohq: PUCCHN - Distribution List
#388 19-OCT-93	Eppohq: XIPHAM - Taxonomy
#389 19-OCT-93	Eppohq: PHYTFR - Taxonomy
#390 19-OCT-93	Eppohq: PHYTFR - Resistance of strawberry cvs.
#391 19-OCT-93	Eppohq: IT - Pests in Piemonte (IT)
#392 19-OCT-93	Eppohq: IT - Pests in Liguria (IT)
#393 19-OCT-93	Eppohq: IT - Pests in Lombardia (IT)
#394 19-OCT-93	Eppohq: IT - Pests in Veneto (IT)
#395 19-OCT-93	Eppohq: IT - Pests in Friuli - Venezia Giulia (IT)
#396 19-OCT-93	Eppohq: IT - Pests in Emilia-Romagna (IT)
#397 19-OCT-93	Eppohq: IT - Pests in Toscana (IT)
#398 19-OCT-93	Eppohq: IT - Pests in Umbria (IT)
#399 19-OCT-93	Eppohq: IT - Pests in Marche and Abruzzo (IT)
#400 19-OCT-93	Eppohq: ERWIAM - Update from Romania (RO)
#401 19-OCT-93	Eppohq: LU - New Phytosanitary Regulations
#402 19-OCT-93	Eppohq: CN - New Phytosanitary Regulations
#403 19-OCT-93	Eppohq: AL - New Plant Quarantine Act
#404 19-OCT-93	Eppohq: TR - Head of Plant Protection Service
#405 21-OCT-93	Eppohq: CS/CZ/SK - Interception report for 1992
#406 21-OCT-93	Eppohq: SE - Interception report for 1992
#407 21-OCT-93	Eppohq: TN - Interception report for 1992
#408 21-OCT-93	Eppohq: HU - Interception report for 1992
#409 21-OCT-93	Eppohq: HU - Presence of quarantine pests

End of list!

Source:

EPPO Secretariat, INFOEPPO, Paris (1993-10)



EPPO *Reporting Service*

93/194 INTERCEPTIONS...Interception Report 1993-04/10

Since the last EPPO interception report of 1993-04 UK, Tunisia, Switzerland, Sweden, Spain, Netherlands, Bulgaria, Germany, Finland, Cyprus, Czechia and Austria have sent copies of their actual interceptions to the EPPO Secretariat. During this period no EPPO A1 quarantine pests were intercepted by the countries. A complete listing of the interceptions from the single countries can be found in INFOEPPO.

Source: EPPO Secretariat, Paris (1993-10)



EPPO Reporting Service

93/195

FAO/NEAR EAST...Recent Publications on citrus pests and nematodes

The Regional Office for the Near East of FAO has published the report of the workshop on "Citrus Pest Problems in the Near East Region" which was held in Antalya, TR, in 1992-05-25/29. The report gives a good overview on the citrus pests and diseases occurring in the region and the efforts by the different countries to control the spread of them.

Also published was the report of the expert consultation on "Plant Nematode Problems and their Control in the Near East Region" which was held in Karachi, PK, on 1992-11-22/26. The report features country accounts on the occurrence and control of nematodes and provides conclusions and recommendations. A list of potential A1 and A2 quarantine nematodes for the Near East Region is included.

Source: FAO, Regional Office for the Near East, Cairo, EG (1993-06)

93/196

NEAR EAST/CIDSS..Citrus pests in the Near East

According to a listing in the report on the workshop on "Citrus Pest Problems and their Control in the Near East Region" published by the Regional Office of the Near East of FAO the following citrus pests of quarantine concern to EPPO are present in the region. The following listings concern only distribution records which are considered "new" to the EPPO Secretariat:

Ceratitis capitata (EPPO A2 quarantine pest) - pest of minor importance in Yemen

Aleurothrixus floccosus (potential EPPO A2 quarantine pest) - citrus pest of minor importance in Lebanon and Morocco and of moderate importance in Tunisia. A record for Syria is, however, based on questionable taxonomy.

Dialeurodes citri (potential EPPO A2 quarantine pest) - the pest is considered very important in Syria and moderately important in Lebanon, Pakistan, and Turkey. The pest is also present in Morocco.

Aonidiella citrina (potential EPPO A2 quarantine pest) - The pest is of moderate importance in Iran and present in Turkey.

Quadraspidiotus perniciosus (EPPO A2 quarantine pest) - a record given for Jordan is based on questionable taxonomy.

Scirtothrips aurantii (potential EPPO quarantine pest) - The pest is present in Yemen.

Citrus satsuma dwarf virus (potential EPPO A2 quarantine pest) - the pest is of moderate importance in Iran and Turkey.

Citrus tristeza closterovirus (EPPO A2 quarantine pest) - new records were given for Morocco and Saudi Arabia, in both countries a pest of minor importance.

Citrus vein enation disease (potential EPPO A2 quarantine pest) - the pest was recorded from Iran with a minor importance.

Citrus greening bacterium (EPPO A2 quarantine pest) - citrus greening is present in Syria.

Xiphinema americanum (EPPO A2 quarantine pest) - the nematode has been recorded as present in Iran and of minor importance to citrus. *Since X. americanum (sensu stricto) is not recorded outside North America and is not regarded as a pest of citrus this record is most probably based on another species within the X. americanum group.*

Source: FAO, Regional Office for the Near East, Cairo, (1993-06)



EPPO *Reporting Service*

93/197 AL/CN/LU...New Phytosanitary Regulations

The EPPO Secretariat in Paris has received during recent months the new phytosanitary regulations of China and Luxembourg. The Animal and Plant Quarantine Regulations of China have been received in an English translated version.

Also Albania has sent EPPO its new Plant Quarantine Act which has been issued in 1993-01-19. This also is an English translation and a copy can be obtained from the EPPO Secretariat.

Source: **EPPO Secretariat, Paris (1993-10)**

93/198 HU...Occurrence of quarantine pests in Hungary

A report has been sent to EPPO by the Ministry of Agriculture in Budapest, (HU), on the occurrence of quarantine pests in Hungary. EPPO A1 quarantine pests were not found in the country. Several EPPO A2 quarantine pests have, however, a limited distribution:

- Cryphonectria parasitica (ENDOPA) has been found on two sites of approximately 70 ha and has not spread further during the last year. Sites for the production of propagation material are free from the pathogen.
- Globodera rostochiensis (HETDRO): Two isolated areas of 110 ha were found to be infested and are under quarantine restrictions.
- Frankliniella occidentalis (FRANOC): Spot occurrence was observed on 6 sites of about 6 ha.
- Bemisia tabaci (BEMITA): The whitefly was found at glasshouses of two growers.
- Puccinia horiana (PUCCHN): White rust of chrysanthemum was observed in 4 places (1 ha) mainly in house gardens.

Source: **Ministry of Agriculture, Budapest (1993-05)**

93/199 TR...New Head of Plant Protection Service in Turkey

EPPO has been informed by the Ministry of Agriculture Forestry and Rural Affairs of Turkey that Dr A. Nizamettin GÜVENER has been appointed as the new Director General to the Directorate of Protection and Control within the Ministry. Dr Güvener commenced his position on 1993-09-20 and has replaced Prof. E. Istanbuluoglu.

Source: **Ministry of Agriculture Forestry and Rural Affairs, Ankara, (1993-10)**



EPPO *Reporting Service*

93/200 CSTXXX...EPPO Distribution List of Citrus tristeza closterovirus

Due to the new record of citrus tristeza closterovirus (EPPO A2 quarantine pest) for Saudi Arabia the distribution list of the pest is as follows:

EPPO Distribution List: Citrus Tristeza Closterovirus

CTV is widespread throughout tropical citrus-growing areas.

EPPO region: Restricted distribution in Israel, Italy, Spain, Turkey and Yugoslavia. Scattered infected trees have been found in Algeria (potential EPPO country), Cyprus, Egypt (potential EPPO country), France (Absent; old record from Corse, but has never been found again), Morocco (for latest information see EPPO Reporting Service No. 93/047; 1993, No. 3) and Tunisia, but apparently they have been eradicated. An unconfirmed report from Libya (potential EPPO country) is probably confusion with stubborn disease (EPPO Reporting Service 504/02). Intercepted only in Portugal.

Asia: Brunei Darussalam, China, India, Indonesia, Iran, Israel, Japan, Malaysia, Nepal, Philippines, Saudi Arabia, Sri Lanka, Taiwan, Thailand and Turkey. Suspected in former Democratic Yemen.

Africa: Algeria (see above), Cameroon, Chad, Egypt (see above), Gabon, Ghana, Kenya, Libya (see above), Mauritius, Mozambique, Morocco (see above), Nigeria, Réunion, South Africa, Tanzania, Tunisia (see above), Uganda, Zambia, Zaire, Zimbabwe.

North America: USA - main citrus areas (Florida and California).

Central America and Caribbean: Costa Rica, Dominica, Dominican Republic, El Salvador, Jamaica, Nicaragua, Panama, Trinidad and Tobago.

South America: Argentina, Brazil, Colombia, Ecuador, Guyana, Paraguay, Peru, Surinam, Uruguay and Venezuela. The disease has been eradicated from Chile.

Oceania: American Samoa, Australia (limited distribution), Fiji, New Caledonia, New Zealand (widespread) and Samoa.

This distribution List replaces all previous published EPPO Distribution Lists on Citrus tristeza closterovirus!

Source: EPPO Secretariat, Paris (1993-10)



EPPO *Reporting Service*

93/201 TMSWXX...New tospovirus from Brazil

A new tospovirus isolate originating from Brazil had been investigated and found distinct from tomato spotted wilt tospovirus (potential EPPO A2 quarantine pest) and impatiens necrotic spot tospovirus (potential EPPO A2 quarantine pest). The isolate systemically infected *Petunia hybrida*, but did not infect *Cucumis sativus*. Analysis of its single stranded RNA (S RNA) indicated that the new isolate is more closely related to the TSWV isolates than to INSV. The isolate was provisionally designated as TSWV-B until further biological and molecular evidence allow a further and more precise classification.

Source: Pang, S.-Z.; Slightom, J.L.; Gonsalves, G. (1993) The biological properties of a distinct tospovirus and sequence analysis of its S RNA. *Phytopathology* **83**, 728-733.

93/202 TMSWXX..Epidemiology of tomato spotted wilt tospovirus in Liguria (IT)

In Liguria (IT), the influence of wild plants on the occurrence of tomato spotted wilt tospovirus (potential EPPO A2 quarantine pest) were investigated. During the summer of 1992, 1446 samples of weeds and wild plants from 22 botanical families were collected and investigated for the presence of tomato spotted wilt tospovirus and impatiens necrotic spot tospovirus (potential EPPO A2 quarantine pest). Only 14 samples proved to be TSWV positive and none showed any infection by impatiens necrotic spot tospovirus. The authors assumed that the very small amount of infected weeds and wild plants indicate that they do not play a major role in the epidemiology of tomato spotted wilt tospovirus.

Source: Van Os, B.; Stancanelli, G.; Mela, L.; Lisa, V. (1993) Ruolo delle piante spontanee ed infestanti nell'epidemiologia di tospovirus in Liguria. *Informatore Fitopatologico* **43** No.10, 40-44



EPPO *Reporting Service*

93/203

ERWIAM...Update on the fireblight situation in Romania

A confirmation of the outbreaks of *Erwinia amylovora* (EPPO A2 quarantine pest; see also Reporting Service 93/170, 1993, No. 9) has been given to EPPO by the Ministry of Agriculture and Food of Romania. The disease has been found on pear, apple and cotoneaster in the regions of Braila and Arges. The identity of the bacterium was confirmed at the Appalachian Fruit Research Station of the USDA in West Virginia, (US). Romanian plant protection authorities have issued internal regulations to prevent the further spread of fireblight in the country.

Source: - Ministry of Agriculture and Food, Romania, (1993-10)



EPPO Reporting Service

93/204 XANTCI/SA...Update on the occurrence of *Xanthomonas campestris* pv. *citri* in Saudi Arabia

It was reported at the workshop on "Citrus Pest Problems and their Control in the Near East Region" that *Xanthomonas campestris* pv. *citri* (EPPO A1 quarantine pest) has spread further in Saudi Arabia. The disease was first found in 1983 in the Southwestern Region of the country, but has spread in the following years to the Western Region. Efforts to limit its spread have resulted in only limited success. Experiments to control the disease by applications of a spray mixture of the antibiotic Kasugamycin and copper oxychloride proved unsuccessful. Quarantine regulations within the country to prevent the spread to some important citrus growing regions have been imposed.

Source: **FAO, Regional Office for the Near East, Cairo, (1993-06)**

93/205 XANTSP...Fatty acid comparison of *Xanthomonas campestris* pathovars

Studies in the USA were carried out in order to compare the fatty acid composition of nine *Xanthomonas campestris* pathovars. By means of gas liquid chromatography and mass spectrometry the nine pathovars were distinguished and classified in three groups:

- Group 1: *Xanthomonas campestris* pv. *dieffenbachiae* (EPPO A1 quarantine pest)
Group 2: *X. campestris* pv. *campestris*
 X. campestris pv. *citri* A & B (EPPO A1 quarantine pest)
 X. campestris pv. *manihotis*
 X. campestris pv. *phaseoli* (EPPO A2 quarantine pest)
 X. campestris pv. *pruni* (EPPO A2 quarantine pest)
 X. campestris pv. *vesicatoria* (EPPO A2 quarantine pest)
Group 3: *X. campestris* pv. *glycines*
 X. campestris pv. *citri* E (EPPO A1 quarantine pest)
 X. campestris pv. *begonia*

Source: Wells, J.; Civerolo, E.; Hartung, J.; Pohronezny, K. (1993) Cellular fatty acid composition of nine pathovars of *Xanthomonas campestris*. **Journal of Phytopathology** 138, 125-136.



EPPO *Reporting Service*

93/206

PSDMPI...Yield reductions of pea caused by *Pseudomonas syringae* pv. *lisi*

Experiments were carried out in the United Kingdom (GB) to assess the yield reduction of single pea plants infected by *Pseudomonas syringae* pv. *lisi* (EPPO A2 quarantine pest). It was found that the yield was reduced by 24, 47 or 71% following an inoculation with pea bacterial blight during reproductive, vegetative or both reproductive and vegetative growth stages, respectively. Yield reductions were expressed as reduced numbers per seeds per pod and a reduced number of pods per plant.

Source:

Roberts, S.J. (1993) Effect of bacterial blight (*Pseudomonas syringae* pv. *lisi*) on the growth and yield of single pea (*Pisum sativum*) plants under glasshouse conditions.
Plant Pathology 42, 568-576.



EPPO *Reporting Service*

93/207

PHYTFR/PHYTRU..Taxonomy of *Phytophthora fragariae*

A joint German-Scottish microbiological study on the taxonomy of *Phytophthora fragariae* var. *fragariae* and var. *rubi* (both EPPO A2 quarantine pests) was carried out by analyzing restriction fragment length polymorphisms in nuclear and mitochondrial DNA of the two pathogens.

The German-Scottish research team detected a close relationship between the two varieties of *P. fragariae*, but also clear distinguishing marks, which confirms their separation at varietal level (see also Reporting Service 93/174 1993, No. 10). Comparisons of *P. fragariae* var. *rubi* isolates from different origins showed a strong homogeneity of all isolates. The authors assumed, therefore, that the pathogen is responsible for root rot of raspberries world-wide wherever the disease has been found. Both *P. fragariae* varieties could easily be distinguished from other *Phytophthora* spp. with the exception of *P. cambivora* which showed a considerable similarity.

Source:

Stammler, G.; Seemüller, E.; Duncan, J.M. (1993) Analysis of RLFP's in nuclear and mitochondrial DNA and the taxonomy of *Phytophthora fragariae*.
Mycological Research 97, 150-156.



EPPO *Reporting Service*

93/208

DACUTR/CERTCA..Quarantine treatment of lemons against
Bactrocera tryoni and *Ceratitidis capitata*

In Australia experiments were carried out to evaluate the efficacy of a cold storage quarantine treatment for the disinfection of lemons against *Bactrocera tryoni* (EPPO A1 quarantine pest) and *Ceratitidis capitata* (EPPO A2 quarantine pest). Lemons were artificially infested with immature life stages of *B. tryoni* or *C. capitata* and then subjected to cold storage of 1° C for 14 d. First instars of *B. tryoni* and second instars of *C. capitata* proved to be the most cold-tolerant life stages of the fruit flies, but none of >43 000 *B. tryoni* first instars and >30 000 *C. capitata* second instars survived this described cold storage treatment. The fruit quality of lemons was not negatively influenced by the cold storage even if it lasted for 32 d.

Source:

Jessup, A.J.; De Lima, C.P.F.; Hood, C.W.; Sloggett, R.F.; Harris, A.M.; Beckingham, M. (1993) Quarantine disinfection of lemons against *Bactrocera tryoni* and *Ceratitidis capitata* using cold storage. *Journal of Economic Entomology* 86, 798-802.



EPPO *Reporting Service*

93/209

FRANOC...Resistance to *Frankliniella occidentalis* in cucumber

Experiments in the Netherlands were implemented to test various cucumber accessions in respect to their resistance to *Frankliniella occidentalis* (EPPO A2 quarantine organism). Several hundred cucumber accessions were tested and it was found that several accessions showed a fairly high level of resistance. Resistant accessions had an effect on the biology of *F. occidentalis* by negatively influencing their survival and reproduction. It was also found that the accessions with the highest level of resistance additionally showed resistance to spider mites. The authors concluded that the obtained results provide encouraging and good prospects for future resistance breeding programmes.

Source: Mollema, C.; Steenhuis, M.M.; Inggamer, H.; Soria, C. (1993) Evaluating the resistance to *Frankliniella occidentalis* in cucumber: Methods, genotypic variation, and effects upon thrips biology. *IOBC/WPRS Bulletin* 16(5), 77-82



EPPO *Reporting Service*

93/210 RHAGCO/IT...Occurrence of quarantine pests in Italy

The phytosanitary balance sheet for 1992 of all Italian provinces has been providing the information that *Rhagoletis completa* (EPPO A1 quarantine pest) is present in the province of Friuli-Venezia Giulia, located in the extreme east of the country at the border with Slovenia. However, only few specimens of this pest were found in the area of Pordenone. The exact listings of the quarantine pests present in the Italian provinces can be found in INFOEPPO.

Source: (1993) Bilancio fitosanitario dell'anno 1992.
 Informatore Fitopatologico 43 No.1, 7-49.

93/211 RHAGCO..EPPO Distribution List for *Rhagoletis completa*

Due to the new record of *Rhagoletis completa* (EPPO A1 quarantine pest; under review) in Italy the distribution list of this pest is as follows:

EPPO Distribution List: *Rhagoletis completa*

EPPO region: Absent, except for light-trapping reports from the Ticino area in Switzerland of nine males and one female of *R. completa* (1986-90) and a report from Friuli - Venezia Giulia, Italy. This suggests that this species has probably established in the region but there are no reports of it as a pest (B. Merz, Zürich, personal communication). The situation in Switzerland, and indeed in neighbouring countries, is not yet sufficiently clear for the A1 status of this *Rhagoletis* spp. to be reviewed.

North America: Mexico (possibly northern), USA (southern and central). Adventive in California since the early 1920s (Bush, 1966).

This distribution list replaces all previous published EPPO Distribution Lists on Rhagoletis completa!

Source: EPPO Secretariat, Paris (1993-10)