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CONTENTS

97/088 New data on pests of quarantine importance

By browsing through the literature, the EPPO Secretariat has extracted the following new data concerning pests of quarantine importance.

New geographical records

Apple mosaic ilarvirus (EPPO A2 quarantine pest on *Rubus*) was identified on almond in Tunisia with a low incidence (for more details see: Zeramdini, H.; di Terlizzi, B.; Savino, V. (1996) Phytosanitary status of almond and apricot in Tunisia. Bulletin OEPP/EPPO Bulletin, 26(1), 155-160).

Apple mosaic ilarvirus (EPPO A2 quarantine pest on *Rubus*) was found on silver birch (*Betula pendula*) in Czech Republic. Review of Plant Pathology, 76(3), p 313 (2412).

Cherry leaf roll nepovirus (EPPO A2 quarantine pest on *Rubus*) was identified on a few olive trees in the Cinta region in Portugal. Review of Plant Pathology, 76(5), p 523 (4058).

Frankliniella occidentalis (EPPO A2 quarantine pest) was found in Chile during summer 1995 causing severe losses on peaches, nectarines and table grapes. According to the EPPO Secretariat this is the first report of *F. occidentalis* in Chile. Review of Agricultural Entomology, 85(4), p 482 (3717).

The presence of *Phyllocnistis citrella* is recorded in northern Argentina. Review of Agricultural Entomology, 85(4), p 487 (3753).

Detailed records

Anastrepha fraterculus (EPPO A1 quarantine pest) was observed in Rio Grande do Norte, Brazil. Review of Agricultural Entomology, 85(3), p 308 (2389).

Bemisia tabaci biotype B (EPPO A2 quarantine pest) is present in Pakistan. The populations studied were collected from cotton in the area of Multan. Review of Agricultural Entomology, 85(4), p 409 (3142).

Erwinia chrysanthemi (EPPO A2 quarantine pest) was observed on carnation in a commercial glasshouse in Campinas, State of Saõ Paulo, Brazil. This is the first

report of *E. chrysanthemi* as a pathogen of carnation in Brazil. Review of Plant Pathology, 76(4), p 428 (3298).

Ips cembrae (EU Annex II/B) occurs in Siberia, Russia. Review of Agricultural Entomology, 85(3), p 368 (2844).

Xanthomonas vesicatoria (EPPO A2 quarantine pest) occurs on *Capsicum annuum* in Kerala, India. Review of Plant Pathology, 76(3), p 286 (2195).

Source: **EPPO Secretariat, 1997-05.**

Additional key words: new records, detailed records

Computer codes: ANSTFR**,** APMXXX, BEMIAR, CRLRXX, DENCFR, ERWICH, FRANOC, IPSXCE, PHYNCI, XANTVE, AR, CL, BR, CZ, PT, RU, TN

97/089 Situation of some quarantine pests in Hungary in 1996

The Plant Protection Service of Hungary recently informed the EPPO Secretariat of the situation of some quarantine pests observed in 1996:

- *Bemisia tabaci* (EPPO A2 quarantine pest): its presence was observed very locally in two glasshouses.
- *Cryphonectria parasitica* (EPPO A2 quarantine pest): is present on 2 sites (70 ha), the infested area did not increase. Nurseries are free from the disease.
- *Diabrotica virgifera virgifera* (EPPO A2 quarantine pest): caught by pheromone traps in the south of the country (see also EPPO RS 97/033). No breeding populations were found on maize crops.
- *Globodera rostochiensis* (EPPO A2 quarantine pest): infested soils and crops were found in 15 isolated areas (212,4 ha) which are placed under quarantine.
- *Helicoverpa armigera* (EPPO A2 quarantine pest): it occurs in spot infestations in 16 counties (approximately 52479 ha) on various crops: maize, tobacco, sugarbeet, alfalfa, potato, vegetables and ornamental plants.
- *Puccinia horiana* (EPPO A2 quarantine pest): it was observed locally on 19 places (0.6 ha), in commercial crops and in house gardens.

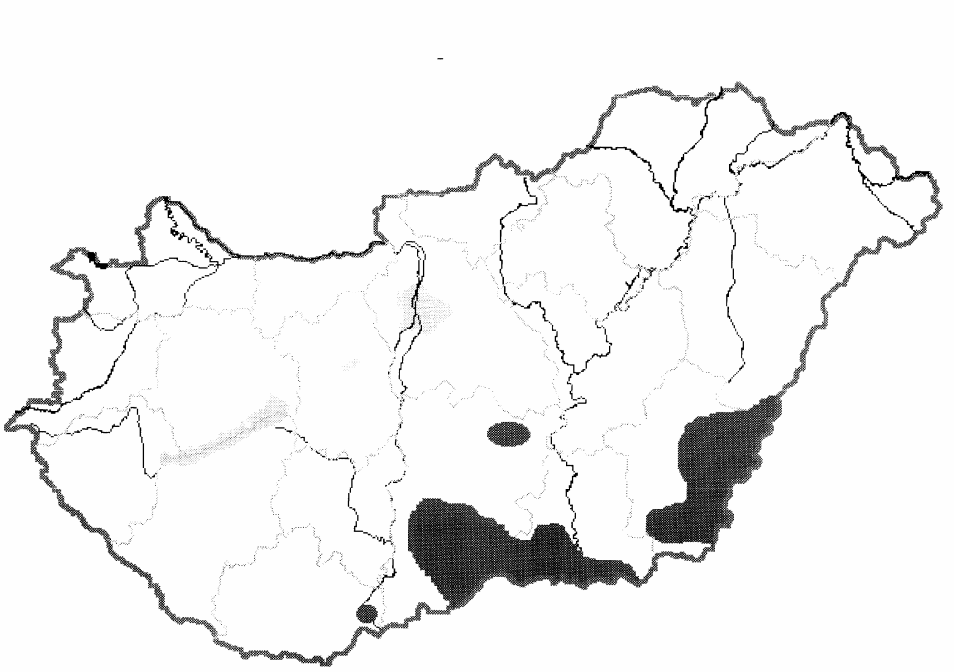
Source: **Plant Protection Service of Hungary, 1997-04.**

Additional key words: detailed records

Computer codes: BEMITA, DIABVI, ENDOPA, HETDRO, HELIAR, PUCCHN

97/090 Situation of fireblight in Hungary in 1996

Erwinia amylovora (EPPO A2 quarantine pest) was reported for the first time in Hungary in spring 1996 (EPPO RS 96/106) near Kecskemét (central part of the country). Further surveys showed that the disease was mainly found in south and south-east of the country (EPPO RS 97/009), on 279 sites (242 ha of infected orchards, 28.316 infected trees), as shown on the map below. The Plant Protection Service of Hungary stressed that nurseries are free from the disease and are subjected to regular phytosanitary inspections.



Distribution of *Erwinia amylovora* in 1996

Source: **Plant Protection Service of Hungary, 1997-04**

Additional key words: detailed record **Computer codes:** ERWIAM, HU

97/091 First report of a phytoplasma causing pear decline in Australia

Pear trees showing decline symptoms were observed in one of the main pear-growing region, the Goulburn Valley in Victoria, Australia. Affected trees show restricted foliation, interveinal chlorosis, and reduced productivity. PCR was used to detect phytoplasmas in symptomatic trees, and restriction fragment length polymorphism (RFLP) analysis showed that patterns obtained were identical to those from sweet potato little leaf phytoplasma. The authors noted that a recent survey has shown that phytoplasmas of that group (which also include papaya yellow crinkle and papaya mosaic) are prevalent in Australia and occur in a wide range of host plants. They felt that this finding is not in contradiction with observations made in California (US) where pear decline appears to be associated with genetically different phytoplasmas (Kirkpatrick *et al*., 1993). This is the first report of a phytoplasma causing pear decline in Australia.

Source: Schneider, B.; Gibbs, K.S. (1997) Detection of phytoplasmas in declining pears in Southern Australia. **Plant Disease, 81(3), 254-258.**

Kirkpatrick, B.C.; Purcell, A.H.; Gao, J.L.; Fisher, J.F.; Uyemoto, J.K. (1993) At least three genetically distinct MLOs cause pear decline and peach yellow leafroll disease in California. **Phytopathology, 83, p 1341.**

Additional key words: new record **Computer codes:** PRDXXX, AU

97/092 Peach latent mosaic viroid occurs on stone fruits other than peach and can be transmitted by razor blades

As stated in EPPO Reporting Service 96/175, peach latent mosaic viroid (the A1 entry is 'American peach mosaic') is more widely distributed than previously thought. Further studies have been carried out and have confirmed that peach latent mosaic viroid is indeed distinct from the causal agent of American peach mosaic disease observed in south western USA and Mexico. The later is still uncharacterized, and so far thought to be related to cherry mottle leaf closterovirus. Until now, peach was considered as the only host for peach latent mosaic viroid, as it was not possible to detect the disease on other stone fruit species by graft testing on several indicator plants followed by re-testing on peach GF-305. But by using molecular techniques (PCR), it was possible to detect peach latent mosaic viroid in cherry, plum and apricot plants from countries in Europe (Italy – see also EPPO RS 97/093, France,

Romania, former Yugoslavia) and Asia (Nepal). The nucleotide sequence of a sweet cherry isolate has been studied. It was found that this isolate is 91 to 92 % homologous with peach latent mosaic isolates (French and Italian) from peach. Concerning apricot and plum isolates, further studies are needed on their relationships with peach isolates. The authors noted that peach can be considered as the major host of peach latent mosaic viroid, but that plum, apricot and cherry are also natural hosts, although the pathogen is rare on these plants.
In addition, studies were carried out on the mechanical transmissibility of peach latent mosaic viroid. Experiments demonstrated that the viroid could readily be transmitted with contaminated razor blades. This observation suggests that peach latent mosaic viroid may be transmitted in orchards from infected to healthy trees by pruning equipment.

Source: Hadidi, A.; Giunchedi, L.; Shamloul, A.M.; Poggi-Pollini, C.. Amer, M.A. (1997) Occurrence of peach latent mosaic viroid in stone fruits and its transmission with contaminated blades.
Plant Disease, 81(2), 154-158.

Additional key words: new host plants, epidemiology **Computer codes:** PCLMXX

97/093 Peach latent mosaic viroid detected on plum in Italy

During a recent survey carried out in plum orchards in Italy, the presence of peach latent mosaic viroid has been detected in two plum cultivars (cvs Black diamond and Angeleno) at different geographical locations in central Italy. Infected plum samples showed bark necrosis and bark split on branches and trunk; shoots and stems of 1 or 2 year old presented short internodes and reduced growth. However, on the basis of biological and serological assays, two viruses were found in association with peach latent mosaic viroid (apple chlorotic leaf spot trichovirus in a sample, and prunus necrotic ringspot ilarvirus in the second one). The symptoms observed in the two plum trees infected by peach latent mosaic viroid were similar to those observed in other plum trees infected only by the two viruses (alone or in association). This suggests that most probably peach latent mosaic viroid does not play a specific role in the symptomatology described above. Nevertheless, the authors stressed that this is the first report of peach latent mosaic viroid on plum in Italy.

Source: Faggiolini, F.; Loreti, S.; Barba, M. (1997) Occurrence of peach latent mosaic viroid (PLMVd) on plum in Italy.
Plant Disease, 81(4), p 423.

Additional key words: new host plants **Computer codes:** PCLMXX, IT

97/094 Tomato yellow vein streak: a new bigeminivirus of tomato in Brazil

Near Campinas, State of São Paulo, Brazil, symptoms were observed in tomato fields. Approximately, 20 % of young tomato plants showed yellow streaking of veins on the apical shoots. *Bemisia tabaci* (EPPO A2 quarantine pest) was able to transmit a pathogen from infected tomato plants to healthy tomato and potato plants, reproducing the original symptoms in tomato. On potato, the apical leaves showed yellow or green mottle which developed into leaf distortion with yellow blotches. The authors noted that these symptoms are similar to those caused by potato deforming mosaic disease. Molecular studies showed that the causal agent found in both tomato and potato plants is a bipartite bigeminivirus (bipartite geminivirus subgroup III) which is distinct from tomato mottle, bean golden mosaic (both EPPO A1 quarantine pests) and tomato yellow leaf curl (EPPO A2 quarantine pest) bigeminiviruses. The name tomato yellow vein streak bigeminivirus has therefore been proposed for this new virus.

Source: Faria, J.C.; Souza, J.A.C.; Slack, S.A.; Maxwell, D.P.; (1997) A new geminivirus associated with tomato in the State of São Paulo, Brazil. **Plant Disease, 81(4), p 423.**

Additional key words: new pest **Computer codes:** BR

97/095 Detection of rhizomania in Minnesota (US)

In Minnesota (US), several sugarbeet fields showed patches of pale greenish yellow foliage and upright leaves characteristic of rhizomania (beet necrotic yellow vein furovirus – EPPO A2 quarantine pest). Other symptoms observed included reduced root size and root proliferation. Samples were taken in August 1996 and tested (ELISA, Western blot, inoculation to *Chenopodium quinoa* and *Beta macrocarpa*). Beet necrotic yellow vein furovirus was identified in 59 of the 90 sugar beet samples tested. Sugarbeet plants showing foliar vein clearing, vein banding, mosaic and vein necrosis were all found to be infected by beet soilborne mosaic furovirus. In addition, beet soilborne furovirus was also found in three samples. This is the first report of these three furoviruses in Minnesota. The authors also noted that the distribution of rhizomania observed in the fields suggests that the disease has probably been present in previous crops without being detected.

Source: Wisler, G.C.; Widner, J.N.; Duffus, J.E.; Liu, H.Y.; Sears, J.L. (1997) A new report of rhizomania and other furoviruses infecting sugar beet in Minnesota.
Plant Disease, 81(2), p 229.

Additional key words: detailed record **Computer codes:** BTNYVX, US

97/096 Role of alternative weed hosts in transmission of beet necrotic yellow vein furovirus

Studies were carried out in UK on the role of alternative weed hosts of beet necrotic yellow vein furovirus (EPPO A2 quarantine pest) in disease transmission. The authors recalled that the first outbreak of rhizomania in UK was reported from Suffolk in 1987 and a further 51 outbreaks have been reported since. However, these are still confined to limited areas of Norfolk and Suffolk (East of England). The host range of beet necrotic yellow vein furovirus and *Polymyxa betae* was determined by growing plants in naturally infested soils from these areas in glasshouse conditions, followed by ELISA testing. Results showed that plant species infected by rhizomania (except *Beta vulgaris*) were included in the families Chenopodiaceae (*Atriplex patula*, *Chenopodium bonus-henricus*, *C. hybridum*, *C. polyspermum* and *Spinacia oleracea*), Amaranthaceae (*Amaranthus retroflexus*) and Caryophyllaceae (*Silene alba*, *S. vulgaris*, *S. noctiflora* and *Stellaria graminea*). Only *Polymyxa betae* isolates from *B. vulgaris*, *C. polyspermum* and *S. oleracea* were found to be able to transmit rhizomania back to sugarbeet. In addition, when various species of weeds from infested fields were tested, none was found infected by rhizomania. The authors concluded that the weed hosts probably play only a minor role in spreading the disease in the field, compared to that of *B. vulgaris*, *B. vulgaris* crop types or spinach (*S. oleracea*).

Source: Hugo, S.A.; Henry, C.M.; Harju, V. (1996) The role of alternative hosts of *Polymyxa betae* in transmission of beet necrotic yellow vein virus (BNYVV) in England.
Plant Pathology, 45(4), 662-666.

Additional key words: detailed record, epidemiology **Computer codes:** BTNYVX, GB

97/097 Detection of chrysanthemum stunt viroid in Northern Italy

In Lombardy (Northern Italy), a serious disease was observed on chrysanthemum. Affected plants showed stunting, flower deformations and early flowering. The causal agent was identified as chrysanthemum stunt viroid (EPPO A2 quarantine pest).

Source: Bianco, P.A.; Belli, G. (1996) Detection and identification of chrysanthemum stunt viroid (CSVd) in Northern Italy.
Abstract of a paper presented at the 9th International symposium on virus diseases of ornamental plants (ISHS), Herzliya (IL), 1996-03-17-22.
Phytoparasitica, 24(4), p 324.

Additional key words: detailed record **Computer codes:** CHSXXX, IT

96/098 Occurrence of cherry leaf roll nepovirus on walnut in Bulgaria

The occurrence of cherry leaf roll nepovirus (EPPO A2 quarantine pest on *Rubus*) is reported on walnut trees (*Juglans regia*) in Bulgaria. The EPPO Secretariat had previously no data on this virus in Bulgaria.

Source: Lazarova-Topchiiska, M. (1995) [Identification of the cherry leaf roll virus in Persian walnut (*Juglans regia* L.) tissue.]
Plant Science, 32(7-8), 99-108.

Additional key words: new record **Computer codes:** CRLRXX, BG

97/099 RT-PCR test to detect tomato spotted wilt tospovirus

A reverse transcription-polymerase chain reaction (RT-PCR) test has been developed in United Kingdom to detect tomato spotted wilt tospovirus (potential EPPO A2 quarantine pest) and improved by the use of an immunocapture stage (for the initial extraction process of the viral RNA) and a colorimetric estimation (by using digoxigenin-labelled nucleotide). Authors felt that this colorimetric assay offers a new, convenient and sensitive test for the detection of tomato spotted wilt tospovirus in infected plant tissues. It can be used on large numbers of samples and the results can be read and recorded with the same equipment as for ELISA. Although it is

slightly more laborious and costly than ELISA, it can constitute a very useful complement. Finally, by using 'universal primers' this method can be adapted to detect tospoviruses in general.

Source: Weekes, R.; Barker, I.; Wood, K.R. (1996) An RT-PCR test for the detection of tomato spotted wilt tospovirus incorporating immunocapture and colorimetric estimation.
Journal of Phytopathology, 144(11-12), 575-580.

Additional key words: new detection method **Computer codes:** TMSWXX

97/100 Probabilities of detecting *Clavibacter michiganensis* subsp. *sepedonicus* in seed potato lots with serological tests

In potato certification schemes a zero tolerance is required for *Clavibacter michiganensis* subsp. *sepedonicus* (EPPO A2 quarantine pest), but the pathogen may not always be detected during visual inspection of seed crops. Serological methods (IF, ELISA) are available to detect latent infections in samples of stems or tubers. The probability of detecting ring rot in seed potato lots, although dependent on test efficacy, is also a function of sample size and incidence of infection. Sample size can be set empirically within the limits of practicability and cost effectiveness. The incidence of the disease is unknown, but generally tends to be low. Tests can be done on stems of mother plants or on the progeny tubers (seed potato tubers). But it has been shown that bacterial populations were higher in stems than in tubers. Studies were carried out in Canada to compare proportions of stems and progeny tubers that become infected on plants grown from seed pieces inoculated at different rates of inoculum with ring rot, in four different cultivars (cvs. Red Pontiac, Russet Burbank, Superior, Katahdin).
The incidence of asymptomatic stem and tuber infections were determined in the four potato cultivars at three levels of inoculum. At the high inoculum level, 51-93 % of the stems were affected at 80 days after planting, and 10-59 % of the tubers were infested at harvest. Probabilities of detecting *Clavibacter michiganensis* subsp. *sepedonicus* in stem and tuber samples under simple random sampling were calculated. The calculated probabilities were compared with those obtained in preliminary field experiments on two potato cultivars (cvs Red Pontiac, Russet Burbank). Results showed that probabilities of detection, calculated for a sample of 400 stems from an hypothetical field of 10 ha, planted with 330,000 seed tubers of which 1% were infected, where higher for all inoculum levels (low, medium and high) at 80 days after planting, than at 60 days. The actual detection levels for the two

cultivars planted in the field with predetermined incidence levels of ring rot infected plants were reasonably close to predicted probabilities.

Source: De Boer, S.H.; Hall, J.W. (1996) The probability of detecting *Clavibacter michiganensis* subsp. *sepedonicus* by indexing seed potato lots with serological tests.
Journal of Phytopathology, 144(9-10), 459-463.

Additional key words: sampling, detection method **Computer codes:** CORBSE

97/101 Use of UV-absorbing sheets to protect vegetable crops against virus vector insects and virus diseases

Studies carried out in Israel have shown that the use of ultraviolet-absorbing sheets in plastic tunnels could protect vegetable crops (tomato and cucumber) from infestation with *Bemisia tabaci*, *Frankliniella occidentalis* (both A2 quarantine pests) and *Aphis gossypii*. In addition, the protection against *B. tabaci* also resulted in a significantly reduced spread of tomato yellow leaf curl bigeminivirus (EPPO A2 quarantine pest).

Source: Antignus, Y.; Mor, N.; Ben Joseph, R.; Lapidot, M.; Cohen, S. (1996) Ultraviolet-absorbing plastic sheets protect crops from insect pests and from virus diseases vectored by insects.
Entomological Society of America, 25(5), 919-924.

Additional key words: control method, IPM **Computer codes:** BEMITA, FRANOC, TMYLCX

97/102 PCR detection method for *Colletotrichum acutatum* on strawberry

A PCR method for the detection of *Colletotrichum acutatum* (EU Annex II/A2) has been developed in Northern Ireland (UK). Specific primers amplified a 490 bp fragment from several isolates of *C. acutatum* but not from other members of the genus *Colletotrichum*. With these primers, amplification was also obtained from DNA extracted from strawberry tissues infected by *C. acutatum*. Southern hybridization analysis confirmed that the 490 bp fragments from *C. acutatum* DNA and from infected strawberry are identical.

Source: Sreenivasaprasad, S.; Sharada, K.; Brown, A.E.; Mills, P.R. (1996) PCR-based detection of *Colletotrichum acutatum* on strawberry. **Plant Pathology, 45(4), 650-655.**

Additional key words: new detection method **Computer codes:** COLLAC

97/103 Further details on the situation of *Rhagoletis completa* in Italy

In the EPPO Reporting Service 97/037, the situation of *Rhagoletis completa* (EU Annex I/A1) in Italy was briefly presented. Since then, the EPPO Secretariat has obtained more details, especially on the damage observed. It can be recalled that *R. completa* was first found in Europe on walnut in 1991, in Switzerland (Ticino) and at the same time in Northern Italy (Friuli-Venezia Giulia and Veneto). In 1992, it was also observed in Lombardia and Piemonte. In 1994, it was reported in Trentino. Surveys are being carried out by using yellow sticky traps with ammonium carbonate as an attractant. They confirmed the presence of the pest in Northern Italy, and showed that *R. completa* was also present in a limited area in Central Italy, near Viterbo (Lazio). Damage observed is caused by oviposition punctures and the feeding of larvae on the walnut husk; as a consequence brown blotches develop on the husk and then enlarge. Usually, attacked nuts fall prematurely. In north-east Italy, damage levels up to 70-80 % have been observed. In Lombardia, a 30 % reduction in walnut production has been estimated. The authors also stressed the possibility that *R. completa* might attack fruit species other than walnut, and in particular peaches, although no such attacks have yet been detected in Italy. Prof. Trematerra (personal communication) indicated that very strong damage has been observed on walnut trees near apple orchards, and he has observed damage caused by Diptera (other than *Ceratitis capitata*) on apples, but the species was not identified.
Concerning other potential hosts of *R. completa*, little information can be found from the literature. Peaches are reported as occasional hosts in the Pacific Northwest of the USA (Retan, 1991). In California, Yokohama and Miller (1994) noted that in the San Joaquin valley, no larval infestations have been observed in peaches, nectarines or plums. However, in field and laboratory experiments, they have shown that peaches and nectarines can be considered as poor hosts for *R. completa* and plums as non-hosts. Studies on ovipositional preference of *R. completa* were carried on various fruits, vegetables and walnut cultivars

(Abudulmadjid Kasana *et al*., 1995). Among fruits (other than walnut) and vegetables tested, pear was most often chosen for oviposition, followed by nectarine, apple, Capsicum, potato and tomato. But larvae completed their growth and development only in nectarine.

Source:

Abdulmadjid Kasana; Aliniazee, M.T.; Kasana, A. (1995) Ovipositional preferences of the walnut husk fly, *Rhagoletis completa* (Diptera: Tephritidae) on various fruits, vegetables and varieties of walnuts.
Journal of the Entomological Society of British Columbia, 82, 3-7. (CABI abstract)

Retan, A.H. (1991) Walnut husk fly.
Extension Bulletin, College of Agriculture and Home Economics, Washington State University, no. EB0904, 3pp. (CABI abstract)

Trematerra, P.; Paparatti, B.; Girgenti, P. (1995) Attenzione alla presenza della mosca delle noci.
Informatore Agrario, 51(47), 74-76.

Yokohama, V.Y.; Miller, G.T. (1994) Walnut husk fly (Diptera: Tephritidae) pest-free and preovipositional periods and adult emergence for stone fruits exported to New Zealand.
Journal of Economic Entomology, 87(3), 747-751.

Additional key words: detailed record **Computer codes:** ANSTOB, IT

97/104 Studies on *Parabemisia myricae* in Italy

Studies were carried out in Campania (Italy) from 1992 to 1994 on the population dynamics and parasitoids of *Parabemisia myricae* (EPPO A2 quarantine pest) in citrus orchards. The authors recalled that *P. myricae* was first recorded in Italy (Sicilia) in 1990, but then spread to all citrus-growing areas in Italy. It was found for the first time in Campania in 1992 (new detailed record). The results of these studies showed that the insect overwinters mainly as the fourth nymphal stage and subpupa. Reproduction then starts on new shoots from March-April and 4-5 generations per year are observed. A complex of parasitoids including: *Eretmocerus debachi*, *Encarsia meritoria* and *Encarsia transvena* was able to maintain the pest population at a low level. On average, the total rate of parasitization was 49.3 % in 1992, 52.5 % in 1993 and 34.3 % in 1994, and no chemical treatments were needed.

Source:

Viggiani, G. (1996) Fenologia, dinamica delle popolazioni e parassitoidi di *Parabemisia myricae* (Kuwana) (Homoptera: Aleyrodidae) in Campania.
Bollettino del Laboratorio di Entomologia Agraria 'Filippo Silvestri', Portici, vol. 51, 137-153.

Additional key words: detailed record, biology **Computer codes:** PRABMY, IT

97/105 Parasitoids of *Anastrepha fraterculus* and *Ceratitis capitata* in Argentina

Studies were carried out in the Tucumán* province on the parasitoids of *Anastrepha fraterculus* (EPPO A1 quarantine pests) and *Ceratitis capitata* (EPPO A2 quarantine pest) which are the two economically important fruit fly species in commercial fruit orchards in Argentina. Hymenopteran parasitoids were obtained from 5% of the tephritid puparia collected from 1991 to 1993, in urban and rural areas, from the ground below guava and peach trees. *C. capitata* was attacked by *Pachycrepoideus vindemmiae* (Pteromalidae) and *Aganaspis pelleranoi* (Eucoilidae). *A. fraterculus* was attacked by *Doryctobracon areolatus* (Braconidae) and *A. pelleranoi*. Although parasitism rates are low, the authors felt that further studies are necessary to determine the impact of these parasitoids on fruit fly populations.

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* Tucumán province is a new detailed record for *A. fraterculus*.

Source: Ovruski, S.M. (1995) Pupal and larval-pupal parasitoids (Hymenoptera) obtained from *Anastrepha* spp. and *Ceratitis capitata* (Dipt.: Tephritidae) pupae collected in four localities of Tucumán Province, Argentina.
Entomophaga 40(3/4), 367-370.

Additional key words: biological control, detailed records **Computer codes:** ANSTFR, CERTCA, AR

97/106 First outbreak of *Aphis gossypii* on potatoes in United Kingdom

In August 1993, small breeding colonies of *Aphis gossypii* were found for the first time on potatoes (cv. Maris Piper) in experimental plots at Auchincruive, Ayrshire, in the west of Scotland, UK. They were found on plants that had been sprayed four times with a mixture of two insecticides (organophosphorus and carbamate). In other countries, *A. gossypii* is a major pest of cotton and cucurbits, and is also extremely polyphagous attacking a wide range of field and glasshouse crops throughout the world. It reproduces well at temperatures above 30 °C and commonly infests potato crops in North Africa and India, where it has been reported to transmit potato leafroll luteovirus and potato Y potyvirus.
A clone of *A. gossypii* derived from a single aptera collected from this field was maintained on excised potato leaves. Studies showed that this clone transmitted potato leaf roll luteovirus but was a less efficient vector than other aphid species

which occur commonly on potato crops in UK (*Myzus persicae*, *Macrosiphum euphorbiae*, *Aulacorthum solani*).
Attempts were made to rear these aphids on cucumber and chrysanthemum plants. The authors noted that populations of this polyphagous species, collected from cucumber and chrysanthemum in glasshouses in the Netherlands, behave as genetically distinct host races. The clone from Scotland was able to breed only on chrysanthemum. In UK, reports of infestations of *A. gossypii* on glasshouse chrysanthemum began in late 1975, when it was found that the aphids could not be controlled by pirimicarb. The ability of the aphids found in Scotland to reproduce on insecticide-treated foliage and on chrysanthemum, but not on cucumber, suggests that these aphids originated from a strain associated with glasshouse crops and have adapted to outdoor conditions. Recent reports indicate that *A. gossypii* is now widespread on potatoes in England in 1996.

Source: *Aphis gossypii*: new potato virus vector ? -UK
Foster, G.N.; Woodford, J.A.T. (twoodf@scari.sari.ac.uk)
E-mail message of 1997-01 from PROMED
(promed-plant@usa.healthnet.org)

Additional key words: epidemiology **Computer codes:** APHIGO

97/107 *Phyllocnistis citrella* is present in Lebanon and Libya

Phyllocnistis citrella is reported as present in Lebanon. The author noted that this insect was already reported as a pest 25 years ago, it then disappeared and reappeared again 3 years ago. It affects seriously citrus production (lemon, sweet orange, clementine), and lemon seems to be the most susceptible species. Several parasitoids: *Pnigalio* sp. *Cirrospilus lyneus* and *C. luteus* were identified as natural enemies.

In Libya, *P. citrella* was observed in citrus orchards and nurseries in August 1995, in the western coast. *Pnigalio* sp. *Cirrospilus pictus* and *C. variegatus* were identified as natural enemies.

Source: Methni, J. (1996) Plant Protection News from Arab and Near East countries – Lebanon.
Arab and Near East Plant Protection Newsletter, FAO, no. 23, p 28

Kafu, A. A.; Bin Zitown, A.; El-Bakkoush, F. (1996) News from Arab and Near East countries – Libya.
Arab and Near East Plant Protection Newsletter, FAO, no. 23, p 28

Additional key words: new records **Computer codes:** PHYNCI, LB, LY

97/108 Control of *Rhynchophorus ferrugineus*

In the Middle East, *Rhynchophorus ferrugineus* is one of the most severe pests of date palms. This Asiatic palm weevil has also been recently introduced into Spain (see EPPO RS 96/096 and 97/010). One of the preferred control methods is to attract and kill adults in pheromone traps. A new pheromone-dispensing technique has been developed. The chemical compound used is a synthetic aggregation pheromone (4-methyl-5-nonanol), which has shown a good efficacy when emitted at 5 mg/day from the dispenser. This control system is available from the following company: Calliope, NPP S.A, Route d'Artix,
B.P. 80, 64150 Nogueres, (tel: (33) 5 59 60 92 92), France.

Source: Anonymous (1996) General News – Red date palm weevil "Attract and kill" system.
Arab and Near East Plant Protection Newsletter, FAO, no. 23, p 28

Additional key words: control method **Computer codes:** RHYCFE

97/109 EPPO report on selected intercepted consignments

The EPPO Secretariat has gathered the intercepted consignment reports for the beginning of 1997 received from the following countries: Austria, Cyprus, Czech Republic, Finland, France, Germany, Greece, Italy, Ireland, Morocco, Netherlands, Norway, Spain, Switzerland, United Kingdom. When a consignment has been re-exported and the country of origin is unknown, the re-exporting country is indicated in brackets. When the occurrence of a pest in a given country is not known to the EPPO Secretariat, this is indicated by an asterisk (*).

The EPPO Secretariat has selected interceptions made because of the presence of pests. Other interceptions due to prohibited commodities, missing or invalid certificates are not indicated. It must be pointed out that the report is only partial, as many EPPO countries have not yet sent their interception reports.

Pest	Consignment	Type of commodity	Country of origin	Country of destination	nb
Asteromella sp.	*Codiaeum*	Cuttings	Togo	United Kingdom	1
Bemisia tabaci	*Begonia*	Pot plants	Netherlands	United Kingdom	1
	Euphorbia pulcherrima	Cuttings	USA	United Kingdom	1
	Ficus benjamina	Pot plants	Netherlands	United Kingdom	1
	Lantana camara	Cuttings	Israel	United Kingdom	4
	Lantana camara	Cuttings	Netherlands	United Kingdom	1
	Mandevilla	Cuttings	Israel	Netherlands	2
	Manihot esculenta (leaves)	Vegetables	Ghana	United Kingdom	1
	Manihot esculenta (leaves)	Vegetables	Nigeria	United Kingdom	3
	Phaseolus (leaves)	Vegetables	Ghana	United Kingdom	1
	Rosmarinus officionalis	Vegetables	Côte d'ivoire	United Kingdom	1
	Solidago canadensis	Cut flowers	Zimbabwe	United Kingdom	2
	Solidago canadensis.	Cut flowers	Zimbabwe	France	1
	Solidago sp.	Cut flowers	Israel	United Kingdom	1
	Solidago sp.	Cut flowers	Zimbabwe	France	1
	Solidago sp.	Cut flowers	Zimbabwe	United Kingdom	1
	Trachelium	Cut flowers	Israel	United Kingdom	1
Clavibacter michiganensis subsp. michiganensis	*Lycopersicon esculentum*	Seeds	Israel	Germany	1
Clavibacter michiganensis subsp. sepedonicus	*Solanum tuberosum*	Ware potatoes	France[1]	United Kingdom	1

[1] The EPPO Secretariat wrote to both countries concerned for more details. In UK, a small consignment of French potatoes was found infested by ring rot after IF tests and Gram stain reactions. The French Plant Protection Service noted that these tests have not been confirmed by biological tests. Enquiries on the origin of this potato lot showed that it had been produced on a small plot (1 ha), using seed potatoes multiplied without control by a non-professional person. The French Plant Protection Service stressed that according to the intensive surveys carried out on this disease on the whole territory, especially for the production of seed potatoes, France is considered as free from ring rot.

Pest	Consignment	Type of commodity	Country of origin	Country of destination	nb
Frankliniella occidentalis	*Kalanchoe*	Plants for planting	Denmark	Norway	1
Helicoverpa armigera	*Dianthus*	Cut flowers	Israel	Netherlands	1
	Dianthus	Cut flowers	Kenya	Netherlands	2
	Ocimum basilicum	Vegetables	South Africa	United Kingdom	1
	Pelargonium hortorum	Cuttings	Canary isl. (ES)	United Kingdom	1
	Pelargonium peltatum	Cuttings	Canary isl. (ES)	United Kingdom	1
	Phaseolus	Vegetables	Gambia	United Kingdom	1
	Phaseolus	Vegetables	Senegal	Netherlands	2
	Phaseolus	Vegetables	South Africa	Netherlands	1
	Pisum sativum	Vegetables	Gambia	United Kingdom	1
Leptinotarsa decemlineata	*Cichorium endivia*	Vegetables	Italy	United Kingdom	1
	Lactuca sativa	Vegetables	France	United Kingdom	1
	Lactuca sativa	Vegetables	Italy	United Kingdom	2
	Petroselinum crispum	Vegetables	Italy	Ireland	1
	Petroselinum crispum	Vegetables	Italy	United Kingdom	1
	Petroselinum crispum	Vegetables	Italy	Ireland	1
	Petroselinum crispum	Vegetables	Italy	United Kingdom	1
Liriomyza huidobrensis	*Apium graveolens*	Vegetables	Spain	United Kingdom	3
	Beta cicla	Vegetables	Cyprus	United Kingdom	2
	Calendula	Cut flowers	Italy	United Kingdom	1
	Carthamus	Cut flowers	Israel	United Kingdom	1
	Coriandrum sativum	Vegetables	Cyprus	United Kingdom	4
	Coriandrum sativum	Vegetables	Cyprus	United Kingdom	1
	Dendranthema	Cut flowers	Israel	Netherlands	2
	Dendranthema	Cut flowers	Netherlands	Ireland	2
	Gypsophila	Cut flowers	(Netherlands)	United Kingdom	1
	Gypsophila	Cut flowers	Israel	Ireland	3
	Gypsophila	Cut flowers	Israel	Netherlands	1
	Gypsophila	Cut flowers	Israel	United Kingdom	2
	Gypsophila	Cut flowers	Netherlands	United Kingdom	1
	Gypsophila	Cut flowers	United Kingdom	Northern Ireland (UK)	1
	Gypsophila	Cut flowers	United Kingdom	Northern Ireland (UK)	1
	Petroselinum sativum	Vegetables	Cyprus	United Kingdom	1
	Petunia	Cuttings	Netherlands	United Kingdom	2
	Spinacea oleracea	Vegetables	Cyprus	United Kingdom	3
	Trigonella foenum-graecum	Vegetables	Cyprus	United Kingdom	5
Liriomyza sativae	*Ocimum basilicum*	Leaves	Thailand	France	22
	Ocimum canum	Vegetables	Thailand	France	1
Liriomyza sp.	*Dianthus barbatus*	Cut flowers	Israel	Germany	2
	Gypsophila	Cut flowers	Israel	France	8
	Gypsophila	Cut flowers	Netherlands	Scotland (UK)	1
	Coriandrum sativum	Vegetables	Thailand	France	2
	Dendranthema	Cut flowers	Colombia	Germany	1
	Dendranthema	Cuttings	USA	Netherlands	1
	Eustoma grandiflorum	Cut flowers	Israel	Germany	1
	Gypsophila	Cut flowers	Israel	France	3
	Sanvitalia	Plants for planting	Israel	Netherlands	1
	Scaevola	Cuttings	Israel	Germany	2
Liriomyza trifolii	*Artemisia dracunculus*	Vegetables	Colombia	United Kingdom	1

Pest	Consignment	Type of commodity	Country of origin	Country of destination	nb
	Aster	Cut flowers	Israel	United Kingdom	1
	Bupleurum	Cut flowers	Zimbabwe*	United Kingdom	1
	Colocasia esculenta	Vegetables	Nigeria	United Kingdom	1
	Colocasia esculenta	Vegetables	Nigeria	United Kingdom	1
	Corchorus (leaves)	Vegetables	Nigeria	United Kingdom	2
	Dendranthema	Cut flowers	Spain	United Kingdom	1
	Gypsophila	Cut flowers	Israel	United Kingdom	2
	Gypsophila	Cut flowers	Netherlands	Ireland	1
	Gypsophila	Cut flowers	Netherlands	Northern Ireland (UK)	1
	Mixed leaves	Vegetables	Nigeria	United Kingdom	2
	Ocimum basilicum	Vegetables	Morocco*	United Kingdom	1
	Ocimum basilicum	Vegetables	South Africa	United Kingdom	1
	Solidaster	Cut flowers	Israel	United Kingdom	1
Meloidogyne + Pratylenchus	*Rhapis excelsa*	Plants for planting	Costa Rica	Germany	1
Meloidogyne sp.	*Areca sp.*	Plants for planting	St Lucia	Germany	2
	Rosa sp.	Plants for planting	Denmark	Norway	4
	Rosa sp.	Plants for planting	Poland	Norway	3
Pyralidae	*Manihot esculenta (leaves)*	Vegetables	Nigeria	United Kingdom	1
Ralstonia solanacearum	*Solanum tuberosum*	Seed potatoes	Netherlands	Morocco	1
	Solanum tuberosum	Ware potatoes	Egypt	Greece	3
	Solanum tuberosum	Ware potatoes	Egypt	Spain	8
	Solanum tuberosum	Ware potatoes	Egypt	United Kingdom	31
	Solanum tuberosum	Ware potatoes	Egypt	Italy	1
R. solanacearum (race 1 BV4)	*Curcuma*	Bulbs and tubers	Thailand	Netherlands	4
Spodoptera littoralis	*Fuchsia*	Pot plants	Israel	Netherlands	1
	Ocimum basilicum	Vegetables	South Africa	United Kingdom	1
Spodoptera sp.	*Pelargonium*	Cuttings	Israel	United Kingdom	1
Tetranychus kanzawai	*Disporopsis arisanensis*	Plants for planting	Taiwan	United Kingdom	1
Thrips palmi	*Coriandrum sativum*	Cut branches	Thailand	France	4
	Dendrobium sp.	Cut flowers	Thailand	Germany	1
	Momordica charantia	Vegetables	Dominican Rep.	France	2
	Momordica charantia	Vegetables	Thailand	France	15
	Orchidaceae	Cut flowers	Singapour	France	1
	Orchidaceae	Cut flowers	Thailand	Spain	1
	Orchidaceae	Cut flowers	Thailand	France	7
	Rosa sp.	Cut flowers	India	Netherlands	5
	Solanum melongena	Vegetables	Dominican Rep.	France	1
	Solanum melongena	Vegetables	Thailand	France	1
	Solanum sp.	Vegetables	Thailand	France	1
Tomato ringspot nepovirus	*Pelargonium fragans*	Cuttings	Israel*	United Kingdom	1

- **Interceptions of fruit flies**

Pest	Consignment	Country of origin	Country of destination	nb
Bactrocera sp.	*Mangifera indica*	Indonesia	France	2
Bactrocera sp.	*Psidium guajava*	Thailand	France	3
Bactrocera sp.	*Psidium guajava*	Thailand	France	1
Ceratitis capitata	*Citrus reticulata*	Syria	Romania	1
Ceratitis capitata	*Citrus sinensis*	Syria	Romania	1
Ceratitis sp.	*Mangifera indica*	Kenya	France	1
Ceratitis sp.	*Mangifera indica*	Kenya	France	1
Tephritidae non European	*Momordica* sp.	Thailand	France	1

- **Bonsai**

36 consignments of various bonsai plants (*Acer buergerianum*, *Acer palmatum*, *Camelia sinensis*, *Carmona*, *Carpinus coreana*, *Celtis sinensis*, *Chaenomeles speciosa*, *Cryptomeria japonica*, *Forsythia*., *Ilex*, *Lagerstroemia*, *Lantana*, *Ligustrum*, *Pinus pentaphylla*, *Rhododendron*, *Sageretia*, *Scilla*, *Serissa*, *Ulmus coreana*, *Ulmus*, *Wisteria*., *Zelkova*) from China, Japon, Korea Republic and Netherlands have been intercepted by Belgium, France, United Kingdom. The following nematode species and genus have been found: *Criconematidae*, *Helicotylenchus dihystera*, *Helicotylenchus* sp., *Hemicriconemoides*, *Hemicycliophora* sp, *Macroposthonia xenoplax*, *Meloidogyne arenaria*, *Meloidogyne hapla*, *Meloidogyne* sp., *Pratylenchus loosi*, *Pratylenchus* sp., *Pratylenchus vulnus*, *Trichodoridae*, *Tylenchida*, *Tylenchorhynchidae*, *Tylenchorhynchus leviterminalis*, *Tylenchorhynchus* sp., *Xiphinema radicicola*.

Source: EPPO Secretariat, 1997-05.

97/110 New coordinator of the IPPC Secretariat

A new coordinator for the International Plant Protection Convention Secretariat has been recruited by FAO. Dr Robert Griffin from USDA-APHIS, Riverdale, Maryland (US) will replace Dr John Hedley, and his appointment is expected to start from the 1st of July 1997.

Source: **EPPO Secretariat, 1997-05.**