ORGANISATION EUROPEENNE
ET MEDITERRANEENNE
POUR LA PROTECTION DES PLANTES

EUROPEAN AND
MEDITERRANEAN
PLANT PROTECTION
ORGANIZATION

EPPO Reporting Service

NO. 8 PARIS, 2017-08

21 Bld Richard Lenoir
75011 Paris

Tel: 33 1 45 20 77 94
Fax: 33 1 70 76 65 47

E-mail: hq@eppo.int
Web: www.eppo.int

2017/145 New data on quarantine pests and pests of the EPPO Alert List

By searching through the literature, the EPPO Secretariat has extracted the following new data concerning quarantine pests and pests included (or formerly included) on the EPPO Alert List, and indicated in bold the situation of the pest concerned using the terms of ISPM no. 8.

- **New records**

In the Russian Far East, a male specimen of *Anoplophora glabripennis* (Coleoptera: Cerambycidae – EPPO A1 List) was discovered in August 2014 on the territory of Primorsky Krai, close to the Chinese border (approximately 0.5-1 km). **Present, a single specimen found in Primorsky Krai (close to China)** (Shamaev, 2016).

In Iraq, *Bactrocera zonata* (Diptera: Tephritidae – EPPO A2 List) was first found in spring 2016 in Wasit province. Later surveys using pheromone traps detected the pest in other provinces (Almuthana, Baghdad, Karbela, Najaf, Salahaldeen, Wasit) (Abdulrazak *et al.*, 2016). **Present, only in some areas (Almuthana, Baghdad, Karbela, Najaf, Salahaldeen, Wasit provinces).**

In Croatia, during surveys on grapevine viruses conducted on 9 autochthonous cultivars grown along the coast, *Grapevine Pinot gris virus* (*Trichovirus*) and *Grapevine red globe virus* (*Maculavirus*) were detected for the first time (Vončina *et al.*, 2017). **Present, no details.**

Grapevine Pinot gris virus (*Trichovirus*, GPGV) has recently been found in Australia. During 2015-2017, a total of 575 samples of grapevine (*Vitis vinifera*) were collected from commercial vineyards and tested. GPGV was detected in 6 samples from New South Wales and 3 from South Australia. All varieties (8 in total) had been imported from Europe during the last 4 to 19 years (Wu and Habili, 2017). **Present: only in some areas (New South Wales, South Australia)**.

In China, during surveys on nematodes conducted in October 2015 and May 2016, *Heterodera zeae* (formerly EPPO Alert List) was found in soil samples collected from a maize (*Zea mays*) field near Laibin (Guangxi). In this field (0.2 ha), maize plants showed leaf yellowing and stunting. As *H. zeae* is a potential risk to maize crops, the authors noted that control measures were needed to prevent its further spread (Wu *et al.*, 2017). **Present, first specimens detected in 1 maize field (Guangxi).**

In Sudan, during surveys of citrus trees conducted in commercial orchards, nurseries and gardens from 2013 to 2014, symptoms of citrus canker were observed on lime trees (*Citrus aurantifolia*) in the state of Al Qadarif (Gadaref). High disease incidence was observed near the city of Al Qadarif. Studies have revealed the presence of a new strain of *Xanthomonas citri* subsp. *citri* (EPPO A1 List). It is concluded that further research is needed to characterize strains of *X. citri* subsp. *citri* which are present in Eastern Sudan (Abubaker *et al.*, 2016). **Present, first found in 2013 in Eastern Sudan.**

Hypocryphalus scabricollis and *Xyleborus bispinatus* (Coleoptera: Curculionidae) have been reported the first time in Southeastern Sicily, Italy. During the summers of 2014 and 2015, large infestations of both species were recorded in 8 locations on common fig (*Ficus carica*). These infestations caused rapid death and desiccation of many fig trees of various ages, growing individually, in small groups, or in large plantations for fruit production. In some areas, wild varieties of figs were also infested. All infested trees were cut down and burnt (Faccoli *et al.*, 2016).

The presence of the Asian hornet, *Vespa velutina* (Hymenoptera: Vespidae), is confirmed in Belgium. In November 2016, a nest was found in Guignies (south of Tournai). This first nest was destroyed but Asian hornet specimens were found in nearby localities in 2017 (Internet, 2017).

- **Host plants**

In Algeria, during studies carried out in the oasis of Ziban (Biskra region) from August 2009 to July 2011, *Tuta absoluta* (Lepidoptera: Gelechiidae – EPPO A2 List) was found for the first time on beet (*Beta vulgaris*) and spinach (*Spinacia oleracea*), as well as on the weed species *Chenopodium bonus-henricus* and *C. rubrum* (Drouai *et al*., 2016).

- **Epidemiology**

Studies conducted in Italy during 2013-2014 suggested that *Colomerus vitis* (Acari: Eriophyidae) is a potential vector of *Grapevine Pinot gris virus* (*Trichovirus*) (Malagnini *et al.*, 2016).

- **New pests**

In Northeastern Brazil (Saõ Francisco Valley), larvae of *Lasiothyris luminosa* (Lepidoptera: Tortricidae) were observed in 2015 causing extensive feeding damage to flowers and fruits of grapevine (*Vitis* spp.). Very little is known about the biology of *L. luminosa*. The first specimens (males) were collected in Santa Catarina (BR) and described in 1969 without any reports of feeding on grapes or any other plant. This is the first time that *L. luminosa* is reported to cause damage to a cultivated plant (and that females are observed). As its feeding behaviour is similar to that of *Lobesia botrana* (European grapevine moth) it is suggested to call it the American grapevine moth (Costa-Lima *et al*., 2016).
Pictures of the pest and its damage to grapes can be viewed on the Internet.
http://sic.sinavef.gob.mx/inicio/pages/single.php?noticia=2443

Sources:

Abdulrazak AS, Hadwan HA, Hassan SA, Aydan NI, Mohammed AK, Haider KM, Hussein SA (2016) New record of peach fruit fly *Bactrocera zonata* (Saunders) (Tephritidae: Diptera) in Iraq. *Arab and Near East Plant Protection Newsletter* no. 69, 4.

Abubaker MYA, Abu Dibar OAB, Elhassan SM, Yousif NME (2016) First report of citrus bacterial canker disease in lime (*Citrus aurantifolia* Swingle) in Gadaref State-Eastern Sudan. *Agriculture and Biology Journal of North America* **7**(5), 254-265.

Costa-Lima TC, Moreira GRP, Gonçalves GL, Specht A (2016) *Lasiothyris luminosa* (Razowski & Becker) (Lepidoptera: Tortricidae): A new grapevine pest in northeastern Brazil. *Neotropical Entomology* **45**(3), 336-339.

Drouai H, Mimeche F, Zedam A, Mimeche H, Belhamra M, Biche M (2016) New floristic records of *Tuta absoluta* Meyrick 1917, in Zibans's Oasis (Biskra Algeria). *Journal of Entomology and Zoology Studies* **4**(6), 130-132.

Faccoli M, Campo G, Perrota G, Rassati D (2016) Two newly introduced tropical bark and ambrosia beetles (Coleoptera: Curculionidae, Scolytinae) damaging figs (*Ficus carica*) in southern Italy. *Zootaxa* 4138(1), 189-194.

INTERNET

La biodiversité en Wallonie. Frelon asiatique *Vespa velutina nigrithorax.* Etat de la situation sur le territoire wallon au 28 juin 2017. http://biodiversite.wallonie.be/servlet/Repository/communique-frelon-asiatique-28-juin-2017.pdf?ID=37244&saveFile=true

Malagnini V, de Lillo E, Saldarelli P, Beber R, Duso C, Raiola A, Zanotelli L, Valenzano D, Giampetruzzi A, Morelli M, Ratti C, Causin R, Gualandri V (2016) Transmission of grapevine Pinot gris virus by *Colomerus vitis* (Acari: Eriophyidae) to grapevine. *Archives of Virology* **161**, 2595-2599.

Shamaev AV (2016) Asian longhorn beetle *Anoplophora glabripennis* (Motchulsky, 1854) as the object of forest quarantine. *Plant Health Research and Practice* **1**(15), 54-58.

Vončina D, Al Rwahnih M, Rowhani A, Gouran M, Almeida RPP (2017) Viral diversity in autochthonous Croatian grapevine cultivars. *Plant Disease* **101**(7), 1230-1235.

Wu HY, Qiu ZQ, Mo AS, Li JQ, Peng DL (2017) First report of *Heterodera zeae* on maize in China. *Plant Disease* **101**(7), p 1330.

Wu Q, Habili N (2017) The recent importation of Grapevine Pinot gris virus into Australia. *Virus Genes*. https://doi.org/10.1007/s11262-017-1475-6 (abst.).

Additional key words: new record, host plants, epidemiology, new pest

Computer codes: ANOLGL, CRYHSC, GNORAB, GPGV00, GPGV00, GRGV00, HETDZE, LASTLU, VESPVE, XANTCI, XYLBBI, AU, BE, BR, CN, DZ, HR, IT, RU, SD

2017/146 Quarantine list of the Eurasian Economic Union (EAEU)

The quarantine list of the Eurasian Economic Union (EAEU) which is composed of Armenia, Belarus, Kazakhstan, Kyrgyzstan and Russia was published in 2016-11-30. This list is shown below and has also been included into the EPPO Global Database.

- **List of quarantine pests which are absent from the EAEU territory (A1)**

Insects and mites

Acleris gloverana
Acleris variana
Agrilus anxius
Anoplophora chinensis
Anoplophora glabripennis
Blissus leucopterus
Callosobruchus spp.
Caulophilus latinasus
Ceroplastes rusci
Choristoneura fumiferana
Choristoneura occidentalis
Chrysodeixis eriosoma
Conotrachelus nenuphar
Corythucha arcuata
Dendroctonus brevicomis
Dendroctonus ponderosae
Dendroctonus rufipennis
Dendroctonus valens
Diabrotica barberi
Diabrotica virgifera virgifera
Drosophila suzukii
Echinothrips americanus
Epitrix cucumeris
Epitrix tuberis
Frankliniella fusca
Frankliniella insularis

Frankliniella schultzei
Frankliniella tritici
Frankliniella williamsi
Halyomorpha halys
Helicoverpa zea
Ips calligraphus
Ips grandicollis
Ips pini
Ips plastographus
Leptoglossus occidentalis
Liriomyza huidobrensis
Liriomyza langei
Liriomyza nietzkei
Liriomyza sativae
Liriomyza trifolii
Margarodes vitis
Megaselia scalaris
Monochamus alternatus
Monochamus carolinensis
Monochamus clamator
Monochamus marmorator
Monochamus mutator
Monochamus notatus
Monochamus obtusus
Monochamus scutellatus
Monochamus titillator
Nemorimyza maculosa
Pantomorus leucoloma
Pectinophora gossypiella
Premnotrypes spp.
Pseudaulacaspis pentagona
Pseudococcus citriculus
Rhagoletis mendax
Rhagoletis pomonella
Rhizoecus hibisci
Saperda candida
Scirtothrips citri
Scirtothrips dorsalis
Spodoptera eridania
Spodoptera frugiperda
Spodoptera littoralis
Spodoptera litura
Tecia solanivora
Tetranychus evansi
Thrips hawaiiensis
Thrips palmi
Trogoderma granarium
Tuta absoluta
Zeugodacus cucurbitae (Bactrocera cucurbitae)
Zygogramma exclamationis

Nematodes
Bursaphelenchus xylophilus
Globodera pallida
Meloidogyne chitwoodi
Meloidogyne fallax

Fungi
Atropellis pinicola
Atropellis piniphila
Ceratocystis fagacearum
Ciborinia camelliae
Cochliobolus carbonum
Diaporthe vaccinii
Glomerella gossypii
Hymenoscyphus fraxineus (Chalara fraxinea)
Lecanosticta acicola (Mycosphaerella dearnessii)
Monilinia fructicola
Phymatotrichopsis omnivora
Phytophthora alni
Phytophthora kernoviae
Phytophthora ramorum
Puccinia pelargonii-zonalis
Sirococcus clavigignenti-juglandacearum
Stenocarpella macrospora
Stenocarpella maydis
Thecaphora solani
Tilletia indica

Bacteria and phytoplasmas
Acidovorax citrulli
Grapevine flavescence dorée phytoplasma (‘*Candidatus* Phytoplasma vitis’)
Pantoea stewartii subsp. *stewartii*
Ralstonia solanacearum
Rathayibacter tritici
Xanthomonas axonopodis pv. *allii*
Xanthomonas oryzae pv. *oryzae*
Xanthomonas oryzae pv. *oryzicola*
Xylophilus ampelinus

Viruses and viroids
Andean potato latent virus (Andean potato latent tymovirus)
Andean potato mottle virus (Andean potato mottle comovirus)
Cherry rasp leaf virus (Cherry rasp leaf cheravirus)
Peach latent mosaic viroid
Peach rosette mosaic virus (Peach rosette mosaic nepovirus)
Potato virus T (Potato T tepovirus)
Potato yellowing virus (Potato yellowing alfamovirus)
Tomato yellow leaf curl virus (Tomato yellow leaf curl begomovirus)

Weeds
Bidens pilosa
Euphorbia dentata
Helianthus californicus

Helianthus ciliaris
Ipomoea hederacea
Ipomoea lacunosa
Iva axillaris
Solanum carolinense
Solanum elaeagnifolium
Striga spp.

- **List of quarantine pests which are of limited distribution in the EAEU territory (A2)**

Insects
Agrilus mali
Agrilus planipennis
Bemisia tabaci
Carposina niponensis
Ceratitis capitata
Ceroplastes japonicus
Chrysodeixis chalcites
Corythucha ciliata
Dendroctonus micans
Dendrolimus sibiricus
Epilachna vigintioctomaculata
Frankliniella occidentalis
Grapholita molesta
Hyphantria cunea
Lopholeucaspis japonica
Lymantria dispar asiatica
Monochamus galloprovincialis
Monochamus impluviatus
Monochamus nitens
Monochamus saltuarius
Monochamus sutor
Monochamus urussovi
Myiopardalis pardalina
Numonia pyrivorella
Phthorimaea operculella
Polygraphus proximus
Popillia japonica
Pseudococcus comstocki
Quadraspidiotus perniciosus
Viteus vitifoliae

Nematodes
Globodera rostochiensis

Fungi
Cercospora kikuchii
Colletotrichum acutatum
Diaporthe helianthi
Phytophthora fragariae
Puccinia horiana
Stagonosporopsis chrysanthemi (Didymella ligulicola)
Synchytrium endobioticum

Bacteria and phytoplasmas
'Candidatus Phytoplasma mali'
'Candidatus Phytoplasma pyri'
Erwinia amylovora

Viruses and viroids
Beet necrotic yellow vein virus (Beet necrotic yellow vein benyvirus)
Impatiens necrotic spot virus (Impatiens necrotic spot tospovirus)
Plum pox virus (Plum pox potyvirus)
Potato spindle tuber viroid
Tobacco ringspot virus (Tobacco ringspot nepovirus)
Tomato ringspot virus (Tomato ringspot nepovirus)

Weeds
Acroptilon repens
Ambrosia artemisiifolia
Ambrosia psilostachya
Ambrosia trifida
Cenchrus longispinus
Cuscuta spp.
Solanum rostratum
Solanum triflorum

Source: EPPO Secretariat (2017-08).
Eurasian Economic Union. Decision no. 158 (30th of November 2016) of the Council of the Eurasian Economic Commission. https://docs.eaeunion.org/docs/en-us/01413200/cncd_06032017_158

Additional key words: quarantine list

2017/147 EPPO communication kits: new templates for pest-specific posters and leaflets

As a result of the work of the EPPO Panel on Plant Protection Information, new EPPO communication material has been published on the EPPO website. Templates for pest-specific posters and leaflets have been prepared. The objective of this work was to provide NPPOs with templates that could be easily adapted to different types of pest-specific information campaigns (e.g. early warning, pest reporting, containment and eradication programmes). For posters, several possible titles and types of contents have been proposed using three examples: *Agrilus planipennis, Popillia japonica* and huanglongbing. The example of *Popillia japonica* has been used to prepare a template leaflet, largely based on a leaflet prepared by Italy. NPPOs are expected to personalize and translate these documents to adapt them to their own needs and branding.

All templates can be downloaded from the EPPO website, and the EPPO Secretariat would very much appreciate to receive feed-back from NPPOs on their use in national information campaigns.
https://www.eppo.int/PUBLICATIONS/poster_templates/poster_templates.htm

Source: EPPO Secretariat (2017-08).

Additional key words: communication

2017/148 *Rhynchophorus ferrugineus* does not occur in Australia

In Australia, *Rhynchophorus ferrugineus* (Coleoptera: Curculionoidea – EPPO A2 List) was recorded as present, as one specimen had been collected from Queensland. This specimen which was stored in the Australian National Insect Collection (Commonwealth Scientific and Industrial Research Organisation) has been reassessed and has been found to be a closely related species, *Rhynchophorus bilineatus** (formerly EPPO Alert List). In all other parts of Australia (Australian Capital Territory, New South Wales, Northern Territory, South Australia, Tasmania, Victoria, Western Australia), *R. ferrugineus* has never been recorded. The pest status for *Rhynchophorus ferrugineus* in Australia is officially declared as: **Absent: pest records invalid.**

* According to a recent review (Pullen *et al.*, 2014), *R. bilineatus* is currently not present in Australia.

Source: NPPO of Australia (2017-07).

INTERNET
Atlas of Living Australia. http://biocache.ala.org.au/occurrences/230cca74-ca88-4d39-9a93-b9990abd1874

Pullen KR, Jennings D, Oberprieler RG (2014) Annotated catalogue of Australian weevils (Coleoptera: Curculionoidea). *Zootaxa* **3896**, 481 pp.

Pictures: *Rhynchophorus ferrugineus*. https://gd.eppo.int/taxon/RHYCFE/photos

Additional key words: absence, denied record **Computer codes:** RHYCFE, AU

2017/149 *Platynota stultana* (Lepidoptera: Tortricidae): added again to the EPPO Alert List

Why: *Platynota stultana* (Lepidoptera: Tortricidae – omnivorous leafroller) is a highly polyphagous leafroller native to Mexico and the Southwestern USA. As its potential host range includes economically important agricultural crops, ornamental plants, and even some tree species, it was included on the EPPO Alert List from 1998 to 2002 but a that time this did not trigger international phytosanitary action. However, the situation changed in Europe when its presence was first detected in 2009 in Spain. The EPPO Panel on Phytosanitary Measures and the Working Party on Phytosanitary Regulations have recommended that this pest should be added to the EPPO A2 List (the final decision will be taken by the EPPO Council in September 2017). In the meantime, it was felt useful to add again *P. stultana* to the EPPO Alert List to attract the attention of the NPPOs.

Where: *P. stultana* is thought to originate from semiarid regions of Northwestern Mexico (e.g. Sonora) and the adjacent Southwestern USA (e.g. Arizona). During the 20th century, it has been recorded as introduced and established in California (1920s), Hawaii (1990s) and Florida (1960s). In other Eastern and Northern US states, it is mainly recorded as a glasshouse pest and its establishment in those states on outdoor crops seems unlikely, as climatic conditions (e.g. winter temperatures) would be a limiting factor. In Europe, *P. stultana* was first found in February 2009 in Southern Spain on greenhouse capsicum crops in the province of Almeria (Andalucía). It was then found in the provinces of Alicante, Granada (Andalucía) and in Murcia on glasshouse and field crops. Examination of tortricid specimens which had been caught before, suggest that *P. stultana* was probably present in Southern Spain as early

as 2005. In 2004, an incursion of a single larva (not followed by establishment) was noted in the United Kingdom on glasshouse plants of *Lantana* sp. which had been imported from the USA. Control measures were advised to the grower and the pest has not been found again.
EPPO region: Spain (Andalucía, Murcia).
North America: Mexico, USA (Arizona, Arkansas, California, Colorado, Florida, Hawaii, Illinois, Maryland, Massachusetts, Michigan, New Mexico, New York, North Carolina, Oklahoma, Oregon, Pennsylvania, Texas, Virginia).

On which plants: *P. stultana* is a highly polyphagous tortricid (hence its common name of 'omnivorous leafroller') which has been recorded on more than 25 plant families. Among the economically important host plants, the following species are mentioned in the literature: *Actinidia, Apium graveolens, Aster, Capsicum, Citrus limon, Citrus sinensis, Cyclamen, Dianthus, Juglans, Juniperus, Malus domestica, Medicago sativa, Phaseolus, Pinus, Prunus domestica, Prunus persica, Punica granatum, Pyrus, Rosa, Rubus, Salix, Solanum lycopersicum, Taxus, Trifolium, Vitis vinifera, Zea mays.* Many wild plants are listed as hosts and some of them may also be grown as ornamentals. In Spain, *P. stultana* has been recorded on *Capsicum annuum* (sweet pepper), *Solanum melongena* (aubergine), *Ocimum* spp. (basil).

Damage: larvae of *P. stultana* feed on leaves. Leaves are rolled and tied by silk, as they construct their nests. In the literature, there is little information about the current severity of damage and economic losses caused by *P. stultana* in Mexico and the USA. In the 1970s, it was recorded as an important pest of grapevine in the San Joaquin Valley, California. On grapevine, larvae feed on leaves, flowers, and fruit. Feeding activities on berries favoured bunch rot which caused substantial reduction in yield (e.g. 25-80% loss). In Spain, for the moment there are no records of economic damage. The pest has mostly been observed on *C. annuum.* Larvae feed on the underside on the leaves, consuming the epidermis and mesophyll. Some damage has been described when larvae penetrate into capsicum fruit via the peduncle and bore galleries inside the fruit.
In North America where populations are established, *P. stultana* completes 4-6 generations per year, and adults may be present almost all year round. Eggs are laid in masses containing an average of 97 eggs per mass. Each female can lay from 100 to 600 eggs during its lifetime. Newly hatched larvae move towards the top of the plant and feed within a bud or between two leaves. Young larvae may also disperse to other hosts by ballooning in the wind on a silk thread. Later instars feed within a shelter constructed of rolled or folded leaves. Larvae complete 5 to 6 instars within a period of 20-30 days (in greenhouse conditions). Late instar larvae are approximately 12-15 mm long with a cream-colored, translucent abdomen. Larvae of the last generation overwinter in webbed nests. Pupation takes place in a rolled leaf. Adults are brownish moths with a wingspan of 2 to 2.5 cm.
Pictures can be viewed on the Internet:
https://www.ipmimages.org/browse/subthumb.cfm?sub=62856
http://idtools.org/id/leps/tortai/Platynota_stultana.htm

Dissemination: the flight capacity of *P. stultana* is not known but in general tortricids fly relatively short distances (e.g. 50-100 m). In international trade, *P. stultana* has often been intercepted on capsicum fruit from Mexico. Although the pathway of introduction of the pest into Spain remains unknown, it clearly shows that the pest has been able to move from one continent to another, most probably via movements of plants.

Pathway: plants for planting, cut flowers and branches, fruit of host plants from countries where the pest occurs.

Possible risks: considering the wide host range of *P. stultana*, this pest has the potential to damage many cultivated and wild plants in the EPPO region. However, there is still some

uncertainties about the level of damage and economic losses it can cause. Its introduction into Spain clearly demonstrates that it has the potential to enter and establish in the Southern and Mediterranean parts of the EPPO region. In other parts of the EPPO region, the pest is unlikely to establish outdoors but could be a threat to many glasshouse productions.

Sources

Aliniazee MT, Stafford EM (1972). Notes on the biology, ecology, and damage of *Platynota stultana* on grapes. *Journal of Economic Entomology* **65**(4), 1042–1044.

BakerJR (ed) (1994) Insect and related pests of flowers and foliage plants. Some important, common and potential pests in the Southeastern United States. North Carolina Cooperative Extension Service, US, 106 pp.

Brown JW (2009) *Platynota stultana* Walsingham, the omnivorous leafroller, resident in Florida? *Southern Lepidopterists' News* **31**(1), p 109.

Brown JW (2013) Two new neotropical species of *Platynota* with comments on *Platynota stultana* Walsingham and *Platynota xylophaea* (Meyrick) (Lepidoptera: Tortricidae). *Proceedings of the Entomological Society of Washington* **115**, 128-139.

Brown JW, Segura R, Santiago-Jiménez Q, Rota J, Heard TA (2011) Tortricid moths reared from the invasive weed Mexican palo verde, *Parkinsonia aculeata*, with comments on their host specificity, biology, geographic distribution, and systematics. *Journal of Insect Science* **11**(7), 17 pp. Available online: insectscience.org/11.7

CABI (2017) Invasive Species Compendium. Datasheet on *Platynota stultana*. http://www.cabi.org/isc/datasheet/41858#20057012379

Defra (2015) Rapid Pest Risk Analysis (PRA) for: P*latynota stultana*, 20 pp. https://secure.fera.defra.gov.uk/phiw/riskRegister/downloadExternalPra.cfm?id=3935

Dutch NPPO (2012). Quick scan number: ENT–2012-04 on *Platynota stultana*. https://english.nvwa.nl/topics/pest-risk-analysis/documents/risicobeoordeling/plantenziekten/archief/2016m/quick-scan-platynota-stultana-walsingham-22-september-2012

Groenen F, Baixeras J (2013) The 'Omnivorous Leafroller', *Platynota stultana* Walsingham, 1884 (Tortricidae: Sparganothini), a new moth for Europe. *Nota Lepidopterologica* **36**, 53-55.

INTERNET

- Noticias DuPont. Hortícolas. August 2011. *Platynota stultana*, lepidóptero que incrementa su presencia en cultivos hortícolas, 1 p. http://www2.dupont.com/Crop_Protection/es_ES/assets/downloads/pdfs/tecnica/Boletin_%20Agosto_%202011.pdf
- TortID. Tortricids of Agricultural Importance. Fact Sheet on *Platynota stultana*. http://idtools.org/id/leps/tortai/Platynota_stultana.htm
- University of Arizona. Cooperative Extension. Omnivorous leafroller (*Platynota stultana*) by D Kerns, G Wright, J Loghry. https://cals.arizona.edu/crop/citrus/insects/leafroller.pdf

MAGRAMA (2016) Pest Risk Analysis for *Platynota stultana* Walsingham, 1884. Ministerio de Agricultura, Alimentacion y Medio Ambiante (Spain), 71 pp.

Miller SE, Hodges RW (1995) *Platynota stultana*, the omnivorous leaf-roller, established in the Hawaiian Islands (Lepidoptera: Tortricidae). *Bishop Museum Occasional Papers* no. 42, 36-39.

Zhang BC (1994) Index of economically important Lepidoptera, CABI, Wallingford, UK, 599 pp.

EPPO RS 1998/180, 2017/149

Panel review date - Entry date 2017-07

Additional key words: Alert List **Computer codes:** PLAAST

2017/150 First report of *Puccinia hemerocallidis* in Portugal

Puccinia hemerocallidis (EPPO A2 List) is reported for the first time in Portugal. In November 2015, rust symptoms were observed on daylily plants (*Hemerocallis* sp.) in gardens in the areas of Lisbon and Tavira (mainland Portugal), and in Funchal (Madeira island). A study was conducted and the disease was found on *H. lilioasphodelus* in 6 out of the 9 gardens surveyed, with an incidence reaching 85 to 90%. Bright orange pustules, often covering a large part of the leaves (25 to 75% of leaf surface), were observed. Laboratory analysis (morphology, pathogenicity tests) confirmed the identity of the fungus. The authors noted that this first report in Portugal is also a first record for Europe. The possible dissemination of *P. hemerocallidis* into the European daylily industry, with over 2 000 European-bred cultivars, raises concerns.
The situation of *Puccinia hemerocallidis* in Portugal can be described: **Present, first found in 2014 in several gardens in mainland Portugal and Madeira.**

Source: Silva E, Carvalho R, Nunes N, Ramos AP, Talhinhas P (2016) First report of *Puccinia hemerocallidis* causing daylily rust in Europe. *Plant Disease* **100**(10), p 2163. http://apsjournals.apsnet.org/doi/full/10.1094/PDIS-02-16-0242-PDN

Additional key words: new record **Computer codes:** PUCCHM, PT

2017/151 First report of *Pantoea stewartii* in Malaysia

In Malaysia, a new bacterial disease of jackfruit (*Artocarpus heterophyllus*) called 'jackfruit bronzing' has increasingly been observed. Symptoms are characterized by a yellowish-orange to reddish discoloration of the pulp and axis inside the fruit. In April 2016, diseased jackfruit samples showing bronzing symptoms were collected in a plantation in Muadzam Shah (Pahang state, peninsular Malaysia). Laboratory studies (isolation, PCR, pathogenicity tests) confirmed the presence of *Pantoea stewartii* (EPPO A2 List) in symptomatic samples.
The situation of *Pantoea stewartii* in Malaysia can be described as follows: **Present, occurrence confirmed in 2016 in one jackfruit plantation (Pahang state, peninsular Malaysia).**

Source: Zulperi D, Manaf N, Ismail SI, Karam DS, Yusof MT (2017) First report of *Pantoea stewartii* subsp. *stewartii* causing fruit bronzing of jackfruit (*Artocarpus heterophyllus*), a new emerging disease in Peninsular Malaysia. *Plant Disease* **101**(5), p 831.

Pictures: *Erwinia stewartii*. https://gd.eppo.int/taxon/ERWIST/photos

Additional key words: new record **Computer codes:** ERWIST, MY

2017/152 Citrus leprosis disease is associated with several viruses

Citrus leprosis (EPPO A1 List) is a viral disease of citrus crops causing severe defoliation, girdled limbs, premature fruit drops, twig dieback, reduction in both fruit quality and yield, as well as tree death. It is an emerging disease which is currently spreading in the Americas. Citrus leprosis is a complex disease, transmitted by mites in the genus *Brevipalpus*. Disease symptoms are associated with two taxonomically distinct classes of viruses:

- positive-sense RNA and cytoplasmic viruses: *Citrus leprosis virus C* (*Cilevirus*, CiLV-C), *Citrus leprosis virus C2* (*Cilevirus*, CiLV-C2) and *Hibiscus green spot virus 2* (*Higrevirus*, HGSV-2);
- negative-sense RNA and nuclear viruses: *Citrus leprosis virus N* (*Dichoravirus*, CiLV-N), *Citrus necrotic spot virus* (*Dichoravirus*, CiNSV).

According to the literature, the geographical distribution of these viruses is as follows (the cytoplasmic type viruses being the most prevalent and widely distributed):
CiLV-C: Argentina, Belize, Bolivia, Brazil, Colombia, Costa Rica, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Uruguay, Venezuela.
CiLV-C2: Colombia.
CiLV-N: Brazil, Colombia, Mexico, Panama.
CiNSV: Colombia, Mexico.
HGSV-2: USA (Hawaii).

These five viruses have been recorded on the following host plants:
CiLV-C: *Citrus sinensis, C. paradisi, C. reticulata*. Also found in *Swinglea glutinosa* and *Commelina benghalensis*.
CiLV-C2: *C. sinensis*. Also found in *Dieffenbachia* sp., *Hibiscus rosa-sinensis* and *Swinglea glutinosa*.
CiLV-N: *C. aurantiifolia, C. aurantium, C. latifolia, C. limetta, C. limon, C. paradisi, C. reticulata, C. sinensis.*
CiNSV: *C. aurantium, C. paradisi, C. sinensis, C. tangerina*.
HGSV-2: *C. reticulata, C. sinensis, C. volkameriana*. Also found in *Hibiscus arnottianus* and *H. tiliaceus.*

Source: Cruz-Jaramillo JL, Ruiz-Medrano R, Rojas-Morales L, Lopez-Buenfil JA, Morales-Galvan O, Chavarin-Palacio C, Ramirez-Pool JA, Xoconostle-Cazares B (2014) Characterization of a proposed Dichorhavirus associated with the Citrus leprosis disease and analysis of the host response. *Viruses* **6**, 2602-2622.

Roy A, Hartung JS, Schneider WL, Shao J, Leon G, Melzer MJ, Beard JJ, Otero-Colina G, Bauchan GR, Ochoa R, Brlansky RH (2015) Role bending: complex relationships between viruses, hosts, and vectors related to citrus leprosis, an emerging disease. *Phytopathology* **105**(7), 1013-25.

Pictures: Citrus leprosis virus. https://gd.eppo.int/taxon/CILV00/photos

Additional key words: aetiology

Computer codes: CILV00, CILVC0, CILVC2, CILVN0, CINSV0, HGSV20

2017/153 *Brevipalpus phoenicis*, vector of citrus leprosis, is a species complex

Citrus leprosis (EPPO A1 List) is an economically important virus disease currently spreading in the Americas, associated with several virus species, and which is transmitted by mite species in the genus *Brevipalpus*, and more specifically by *Brevipalpus phoenicis* (Acari: Tenuipalpidae). Several studies (morphological and molecular) have indicated that *B. phoenicis* does not correspond to a single taxon but most probably to a species complex. In addition, the situation has been confused over the years by the lack of precise descriptions leading to numerous misidentifications, in particular to many confusions between *B. phoenicis* and *B. obovatus*. All these taxonomic and diagnostic difficulties have rendered data on geographical distribution, host range and epidemiology very uncertain. The taxonomy of *B. phoenicis* has been revised by conducting careful re-examination of numerous

voucher specimens with electron microscopy (LT-SEM,). Several groups previously placed within *B. phoenicis* sensu lato have been elevated to species rank, new synonymies have been established, and other previously described species are now considered to be part of this species complex. It is proposed that the *Brevipalpus phoenicis* sensu lato is composed of the following species:

- *Brevipalpus azores* sp. nov.
- *Brevipalpus feresi* sp. nov.
- *Brevipalpus ferraguti* sp. nov.
- *Brevipalpus hondurani*
- *Brevipalpus papayensis*
- *Brevipalpus phoenicis* sensu stricto
- *Brevipalpus tucuman* sp. nov.
- *Brevipalpus yothersi*

In these studies, geographical distributions and host plants are provided for these 8 species and can be retrieved in the EPPO Global Database. Among these species, it is noted that *B. yothersi* has a strong association with citrus leprosis disease. The complexities of the virus-vector-host interactions for this species complex illustrate the importance of taxonomy and diagnostic in understanding an economically important disease of citrus.

Source: Beard JJ, Ochoa R, Braswell WE, Bauchan GR (2015) *Brevipalpus phoenicis* (Geijskes) species complex (Acari: Tenuipalpidae) – a closer look. *Zootaxa* **3944**(1), 67 pp. DOI: 10.11646/zootaxa.3944.1.1

Sánchez-Velázquez EJ, Santillán-Galicia MT, Novelli VM, Nunes MA, Mora-Aguilera G, Valdez-Carrasco JM, Otero-Colina G, Freitas-Astúa J (2015) Diversity and genetic variation among *Brevipalpus* populations from Brazil and Mexico. *PLos ONE* **10**(7), 16 pp. https://doi.org/10.1371/journal.pone.0133861

Additional key words: taxonomy

Computer codes: BRVPAZ, BRVPFE, BRVPFR, BRVPHO, BRVPPH, BRVPTU, BRVPYO, PRVPST

2017/154 The suppressive potential of some grass species on the growth and development of *Ambrosia artemisiifolia*

Ambrosia artemisiifolia (Asteraceae: EPPO List of Invasive Alien Plants) is a North American native species and an alien species in Europe. It competes strongly with crop plants for water and nutrients. It rapidly impoverishes the soil. It can reduce yields of cereals and other field crops (e.g. sunflower), and causes problems in harvesting. Its presence greatly reduces the fodder quality of meadows and pastures (it is not palatable to livestock), and taints dairy products if cattle feed on it. In addition, the pollen of *A. artemisiifolia* is strongly allergenic in man, causing serious 'hay fever' in infested areas. The aim of the current study was to test the suppressive potential of some perennial grasses on the growth and seed production of *A. artemisiifolia*. Both greenhouse and outdoor pot trials were conducted with different combinations of the grass species– *Lolium perenne*, *Dactylis glomerata* and *Phleum pratense*. Fresh weight of biomass per plot, height of plants and the number of *A. artemisiifolia* plants were recorded three times in 2010–2011 in the greenhouse experiments and four times in 2011–2012 in the outdoor trials. At the end of each vegetation season, the seeds of *A. artemisiifolia* in each pot were collected and counted. The results showed that all three grass species can effectively suppress the growth and seed formation in *A. artemisiifolia*, but *L. perenne* developed more rapidly from the first year, and thus expressed its suppressive capacity earlier than the other two species. The study offers an effective means for control of *A. artemisiifolia* in waste lands and disturbed areas by combining the use of competitive perennial tuft-forming grasses and discontinued soil disturbance.

Source: Vladimirov V, Valkova M, Maneva S, Milanova S (2017) The suppressive potential of some grass species on the growth and development of *Ambrosia artemisiifolia*. *Bulgarian Journal of Agricultural Science* **23**(2), 274–279.

Pictures: *Ambrosia artemisiifolia*. https://gd.eppo.int/taxon/AMBEL/photos

Additional key words: invasive alien plants **Computer codes:** DACGL, AMBEL LOLPE, PHLPR, RS

2017/155 *Bidens subalternans* in the EPPO region: addition to the EPPO Alert List

Why

Bidens subalternans (Asteraceae) is native to South America and was first recorded in Europe from Belgium in 1903. Although recorded from a number of EPPO countries, the species can often be confused with closely related congeners (for example *B. bipinnata*) and is often recorded as a rare ephemeral species. A better understanding of the occurrence of the species throughout the EPPO region along with reports of impacts is desirable.

Geographical distribution

EPPO region: Belgium, Croatia, France, Italy, Russia, Serbia, Spain, Switzerland.
South America: Argentina (native), Bolivia (native), Brazil (native), Chile, Colombia (native), Paraguay (native), Uruguay.
Asia: Republic of Korea.
Oceania: Australia.

Morphology

B. subalternans is an annual, herbaceous plant with an erect and branched stem. The stem is 40-100 cm, 4-angled, glabrous or sparsely hairy. Leaves are petiolate, 6-21 cm long, 2-pinnatisect or simply incised; lobes with short, dense or sparse hairs, more or less dentate,

or coarsely serrate, oblong-lanceolate or oblong-linear, acuminate. Capitula terminal, solitary, at the time of flowering 8-10 × 5-6 mm, at the time of fructification up to 17 × 16 mm; peduncles 1-4 cm long. Achenes numerous, 30-50, linear, 4-angled, furrowed, blackish, glabrous or sparsely hairy at apex. Flowering in August to October, fruiting in September and October.

Biology and ecology
Throughout its native and introduced range, seed production is very high and dispersal can occur up to 50 m from the parent plant facilitated by wind.

Habitats
In many countries, *B. subalternans* can invade a variety of habitats including stream and river banks, ruderal habitats, coastlines, roadsides, vineyards, olive groves and gardens and parks. The population of *B. subalternans* in Serbia was recorded from the town of Niš in the central railway station in ruderal habitats around the abandoned tracks and platforms. The population, which covers an area of several hundred square metres, is thought to have been established for several years now even though management measures (manual and chemical control) have been applied to the site every year to facilitate the functionality of the railway infrastructure.

Pathways for movement
B. subalternans has been historically recorded as a wool contaminant but more recent reports associated the species with grain importation.

Impacts
B. subalternans is reported to invade agricultural habitats in Serbia but to-date yet there are no data to show impacts on crop yields or biodiversity.

Control
There are few reports on the management of *B. subalternans* using chemical or manual control methods. It is reported that the species can become resistant to some herbicides especially those that include acetolactate synthase inhibitors.

Source: Bogosavljević SS, Zlatković BK (2015) Two alien species of *Bidens* (Compositae), new to the flora of Serbia. *Phytologia Balcanica* **21**(2)**,** 129-138.

Manual of the alien plants of Belgium (2017) *Bidens subalternans*. http://alienplantsbelgium.be/content/bidens-subalternans

Additional key words: invasive alien plants, alert list **Computer codes:** BIDSU, BE, RS

2017/156 Abiotic constraints and biotic resistance control the establishment success of *Humulus scandens*

Humulus scandens (Cannabaceae: EPPO List of Invasive Alien Plants) is an annual climber vine originating from East Asia. Within the EPPO region, it is only recorded in France, Hungary and Italy where it showed invasive behavior. *H. scandens* reproduces by wind and water dispersed seeds. Preferring moist soils, it can form dense stands in floodplains and along stream banks and lake shores, but can also thrive in disturbed areas such as roadsides and urban lots. It can be found in full sun or shade. In the current study, the authors set out to determine what is the influence of increasing resource availability on the performance and plasticity of *H. scandens* compared to a functionally similar co-occurring native species? A survey was conducted along the River Gardon (Southern France) where detailed measurements of the population along with soil characteristics, light availability, and vegetation cover was taken. A greenhouse experiment was conducted to compare the performance of *H. scandens* to *Galium aparine* along a gradient of increasing water and nitrogen availability. *H. scandens* performed better and showed higher plasticity in plant height than *G. aparine* under increased resource availability while the biomass did not differ in the lower part of the resource gradient. The study shows that by combining field and experimental studies at different life stages, a more complete understanding of how ecological filters shape successful invasions in the course of the plant life cycle can be gained.

Source: Fried G, Mahaut L, Pinston A, Carboni M (2017) Abiotic constraints and biotic resistance control the establishment success and abundance of invasive *Humulus japonicus* in riparian habitats. *Biological Invasions*. DOI: 10.1007/s10530-017-1533-y.

Pictures: *Humulus scandens*. https://gd.eppo.int/taxon/HUMJA/photos

Additional key words: new record, invasive alien plants **Computer codes:** HUMJA, FR