#### ORGANISATION EUROPEENNE ET MEDITERRANEENNE POUR LA PROTECTION DES PLANTES

EUROPEAN AND MEDITERRANEAN PLANT PROTECTION ORGANIZATION

# EPPO Reporting Service

### No. 2 Paris, 2015-02

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#### 2015/020 A new IPPC Secretary has been named

Mr Jingyuan Xia has been named by Mr Graziano da Silva (FAO Director General) as the new Secretary of the International Plant Protection Convention (IPPC). Mr Xia has a BSc in plant protection, as well as an MSc and PhD in entomology. He has held several senior positions within Chinese agricultural institutions and most recently has been Permanent Representative and Minister Plenipotentiary to FAO.

Source: IPPC website (2015-03-03). New IPPC Secretary Named.

https://www.ippc.int/en/news/new-ippc-secretary-named/

Additional key words: IPPC

#### 2015/021 PQR - the EPPO database on quarantine pests: new update

PQR - the EPPO database on quarantine pests (geographical distributions, host plants, regulatory status, pathways, and pictures) was updated on 2015-02-10. If PQR has already been installed on your computer, when opening the database you will be automatically notified that a new update is available.

The following new items have been added since the previous update (2014-09-08)

- New world distributions: e.g. Megacopta cribraria, Pseudacysta perseae, Singhiella simplex, Thrips setosus, Phenacoccus peruvianus.
- All recent data from the EPPO Reporting Service (September 2014 to January 2015) and updated pest statuses sent by several NPPOs of EPPO member countries.
- Many new pest and plant pictures: Acalymma vittatum, Acizzia jamatonica, Aleurocanthus woglumi, Aporia crataegi, Araujia sericifera, Arctotheca calendula, Bactrocera carambolae, Bactrocera dorsalis, Bemisia tabaci, Cacopsylla pyri, Caliroa cerasi, Cameraria ohridella, Ceratitis capitata, Chrysanthemum stem necrosis virus, Cydia pomonella, Dendrothrips ornatus, Diabrotica virgifera virgifera, Erannis defoliaria, Eriophyes pyri, Helicoverpa zea, Hosta virus X, Impatiens necrotic spot virus, Maconellicoccus hirsutus, Malus domestica, Neodiprion sertifer, Parthenium hysterophorus, Peronospora dianthicola, Phakopsora vitis, Phyllosticta citricarpa, Plasmopara petroselini, Popillia japonica, Prunus persica, Prunus serotina, Puccinia psidii, Ralstonia solanacearum, Raoiella indica,Rhagoletis cerasi, Rhynchophorus palmarum, Scolytus multistriatus, Spodoptera eridania, Spodoptera frugiperda, Stephanitis pyri, Verticillium dahliae, Vitis vinifera, Xanthomonas axonopodis pv. citri, Xanthomonas axonopodis pv. vesicatoria, Xylella fastidiosa.

The EPPO Secretariat would like to thank all contributors who have kindly sent their pictures which can be viewed in both PQR and Global Database. Additional pictures are always welcome! A quick and simple tool to upload pictures is available in Global Database (on every pest/plant webpage <a href="https://gd.eppo.int">https://gd.eppo.int</a>).

If you have not already installed PQR on your computer, you can download it (free) from the EPPO website: <a href="http://www.eppo.int/DATABASES/pqr/pqr.htm">http://www.eppo.int/DATABASES/pqr/pqr.htm</a>

**Source**: EPPO Secretariat (2015-02).

Additional key words: database, EPPO

#### 2015/022 First report of *Trioza erytreae* in mainland Spain

The NPPO of Spain has recently informed the EPPO Secretariat of the first report of *Trioza erytreae* (Hemiptera: Triozidae - EPPO A2 List, vector of huanglongbing) in mainland Spain\*. The outbreak was detected in the province of Pontevedra (Galicia region) in November 2014 during the official surveys that are regularly carried out in Galicia for the aphid *Toxoptera citricidus*. Scattered trees (more than 100) located in small private gardens and orchards in 8 municipalities were found to be infested by *T. erytreae*. Symptoms consisted of distorted buds and the presence of galls on the leaves. It is stressed that huanglongbing was not detected in tested samples. The origin of this outbreak is under investigation. Phytosanitary measures have been taken to eradicate *T. erytreae*. Eradication and contingency plans are being prepared by the Ministry of Agriculture, Food and Environment and are expected to be approved in the near future. It is recalled that *T. erytreae* is an EU regulated pest (Annex I/AII) and that the circulation of susceptible host plants within the EU territory is regulated.

The situation of of *Trioza erytreae* in Spain can be described as follows: **Present**, few occurrences, under eradication.

Source: NPPO of Spain (2015-02).

Additional key words: detailed record Computer codes: TRIZER, ES

### 2015/023 First report of Lycorma delicatula in the USA: addition to the EPPO Alert List

In September 2014, the presence of *Lycorma delicatula* (Hemiptera: Fulgoridae, spotted lanternfly) was confirmed in Pennsylvania (Berks county, US). This is the first time that this pest, which probably originates from China, is recorded in the USA. Eradication measures have been put into place and pest alerts have been issued. *L. delicatula* is a polyphagous insect which can feed on many woody plants, including fruit trees, grapevine and forest trees, and which has also shown invasive behaviour after its introduction into the Republic of Korea. Therefore, the EPPO Secretariat decided to add *L. delicatula* to the EPPO Alert List.

#### Lycorma delicatula (Hemiptera: Fulgoridae) - Spotted lanternfly

Why: Lycorma delicatula is a polyphagous pest, probably originating from China, which has recently been found in Pennsylvania (US). In the 2000s, it was introduced into the Republic of Korea where it rapidly spread, showing invasive behaviour and causing damage to vineyards. Considering the fact that L. delicatula can attack many woody plants of economic importance in the EPPO region, and that it has clearly shown invasive behaviour in its introduced range, the EPPO Secretariat decided to add it to the EPPO Alert List.

Where: *L. delicatula* is thought to originate from China. Its geographical distribution would need to be further investigated in parts of Asia. For example, several publications mention its presence in India but the EPPO Secretariat could not find any supporting evidence. **EPPO region:** Absent.

Asia: China (Anhui, Beijing, Guangdong, Hebei, Jiangsu, Shaanxi, Shandong, Shanghai, Sichuan, Tianjin, Zhejiang), Japan (at least in Honshu), Korea Republic (introduced in the 2000s and invasive), Taiwan, Vietnam.

<sup>\*</sup> EPPO note: it can be recalled that *T. erytreae* was found in 2002 in Las Palmas, Gran Canaria (Islas Canarias).

**North America**: USA (Pennsylvania). The presence of *L. delicatula* was confirmed in September 2014 in the county of Berks. Eradication measures are being implemented.

On which plants: *L. delicatula* is a polyphagous pest which feeds mainly on woody plants, including grapevine (*Vitis* spp.), fruit trees (e.g. *Malus, Prunus, Pyrus*), ornamental and forest trees (e.g. *Acer, Betula, Cornus, Juglans, Hibiscus, Liriodendron, Pinus, Populus, Quercus, Robinia, Salix, Syringa, Tetradium*). According to the literature, it can feed on approximately 70 different species (principally woody plants but also a few herbaceous plants). Host preference studies carried out in Republic of Korea have shown that *Vitis vinifera* and the invasive tree species, *Ailanthus altissima* (EPPO List of Invasive Alien Plants), are preferred host plants for adults, and are particularly attractive during the egg-laying period. In the past, it had even been envisaged to use *L. delicatula* as a biocontrol agent to limit populations of *A. altissima*.

Damage: Adults and nymphs feed on phloem tissues, extracting sap with their piercing and sucking mouthparts. Nymphs are mostly found on branches and rachises, and adults are mostly observed on tree trunks. *L. delicatula* excretes large amounts of honeydew on which sooty moulds can develop. Feeding activity can cause withering of the foliage, and attacked trees may develop weeping wounds on their trunks. Signs of infestation can include the presence of ants, bees, hornets or wasps which are attracted by sap oozing from wounds, or the presence of honeydew secretions building up at the base of the tree and blackened by the development of sooty mould. In the in the Republic of Korea, *L. delicatula* is considered to be a serious pest of grapevine, and when infestations are severe, stunting and plant mortality may occur.

Egg masses (30-50 eggs) are laid on tree trunks and are covered in a yellowish brown waxy deposit (resembling mud). In autumn, *A. altissima* is the preferred host for adult feeding and egg-laying. Eggs can also be laid on non-host material, such as bricks, stones, vehicles, or dead plants. There are 4 larval instars (nymphs). The first three instars are black with white spots but the 4<sup>th</sup> instar develops red patches in addition to the white dots. Nymphs start climbing up the trees after they emerge. Adult males are 20.5-22 mm long (from head to end of folded wings) and females are 24-26.5 mm long. Forewings are greyish with black spots and their tips are reticulated. Part of the hind wing is red with black spots and the rest is white and black. The abdomen is yellowish with black bands. *L. delicatula* has one generation per year and overwinters as eggs.

As L. delicatula is a beautiful insect, many pictures can be found on the Internet:

www.pda.state.pa.us/spottedlanternfly

http://hojae.net/520

http://justsixlegs.blogspot.fr/2014/12/new-invasive-pest-in-us-spotted.html

**Dissemination:** Adults are weak flyers but good hoppers. Over longer distances, infested plants and egg masses deposited non-plant material can transport the pest.

Pathway: Plants for planting, cut branches, wood?, non-plant material carrying egg masses.

#### Possible risks:

A large proportion of the known host plants of *L. delicatula* are grown in the EPPO region for fruit production, ornamental or forestry purposes. The fact that *L. delicatula* is considered as a serious pest of grapevine in the Republic of Korea is also of particular concern to the EPPO region. In the Republic of Korea, the presence of the pest in vineyards requires control measures. Sticky traps are placed at the base of the trees, as it has been observed that young nymphs easily fall from trees when disturbed by wind or encountering obstacles, and then climb up again. Insecticides are also used but the development of resistance might be an issue. Research is also carried out on the possible use of egg parasitoids (e.g. *Anastatus orientalis* (Hymenoptera: Eupelmidae)) to control *L. delicatula*. The fact that *L. delicatula* egg masses can be found on non-plant material adds to the risk of spread. Although data is generally lacking on the distribution of the pest in its native area, on its economic impact, and on its potential for establishment in the EPPO region, *L. delicatula* may present a risk to many woody plants which are grown in the EPPO region, including major fruit crops and forest trees.

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Additional key words: new record, EPPO Alert List Computer codes: LYCMDE, US

#### First report of Tuta absoluta in India 2015/024

In October 2014, the presence of Tuta absoluta (Lepidoptera: Gelechiidae - EPPO A2 List) was detected for the first time in India. The pest was initially found in Pune (Maharashtra) on tomato (Solanum lycopersicum) plants grown under plastic tunnels and in the field. Subsequently, the pest was found in the major tomato-growing districts of Maharashtra (i.e. Ahmadnagar, Dhule, Jalgaon, Nashik, Pune, and Satara). Severe infestations (>50% of plants affected) were observed in several tomato fields. Recent surveys carried out in January 2015 have also detected T. absoluta in the districts of Kolar and Bengaluru in Karnataka.

The situation of *Tuta absoluta* in India can be described as follows: Present, first found in October 2014, occurring in several districts of Maharashtra and Karnataka.

Source: INTERNET

> Indian Council of Agricultural Research (ICAR). Tuta absoluta: a new invasive pest. http://www.icar.org.in/en/node/8600

Additional key words: new record Computer codes: GNORAB, IN

#### 2015/025 First report of *Hercinothrips dimidiatus* in Portugal

The NPPO of Portugal recently informed the EPPO Secretariat of the first report of Hercinothrips dimidiatus (Thysanoptera: Thripidae) on its territory. In October 2014, high levels of infestation were found on plants of Aloe arborescens (Xanthorrhoeaceae) in the municipalities of Lisbon, Oeiras and Cascais. These plants were grown in gardens (public and private) and along the roads. H. dimidiatus was found during research studies on thrips conducted by the National Plant Health Laboratory (INIAV, Ep). The insect was identified by INIAV on the basis of its morphological characteristics and this identification was confirmed by a taxonomist. Studies are being conducted by INIAV in order to better understand the bioecology of H. dimidiatus and determine the most appropriate control measures. Very little information is available in the literature on this thrips species. H. dimidiatus is only known to occur in South Africa where it has been found in Liliaceae (without any further details) and no information is provided on the damage it may cause. The pest status of Hercinothrips dimidiatus in Portugal is officially declared as: Present, restricted distribution.

Source: NPPO of Portugal (2014-11).

INTERNET

ThripsWiki. http://thrips.info/wiki/Hercinothrips\_dimidiatus

Additional key words: new record Computer codes: HERCDI, PT

#### 2015/026 First report of *Phenacoccus peruvianus* in Austria

The NPPO of Austria recently informed the EPPO Secretariat of the first report of *Phenacoccus peruvianus* (Hemiptera: Pseudococcidae) on its territory. The pest was found on sweet pepper plants (*Capsicum annuum*) in a greenhouse located in the region of Vienna. These plants had been purchased from another EU Member State. The pest was identified morphologically in the laboratory (Institute for Sustainable Plant Production of AGES (Austrian Agency for Health and Food Safety)). The regional Plant Protection Service ordered the destruction of the infested plants and disinfection of the greenhouse.

The pest status of *Phenacoccus peruvianus* in Austria is officially declared as: **Transient**, actionable, under eradication.

Source: NPPO of Austria (2015-02).

Additional key words: new record Computer codes: PHENPR, AT

#### 2015/027 First report of Acizzia jamatonica in Austria

The NPPO of Austria recently informed the EPPO Secretariat of the first report of *Acizzia jamatonica* (Homoptera: Psyllidae, formerly EPPO Alert List) on its territory. The pest was found in a private garden on 1 tree of *Albizia julibrissin*, in the region of Burgenland. The pest was morphologically identified in the laboratory (Institute for Sustainable Plant Production of AGES (Austrian Agency for Health and Food Safety)). The origin of the pest is unknown. The regional Plant Protection Service has ordered an insecticide treatment. The pest status of *Acizzia jamatonica* in Austria is officially declared as: **Transient**, actionable, under eradication.

Source: NPPO of Austria (2015-02).

Additional key words: new record Computer codes: ACIZJA, AT

#### 2015/028 Eradication of *Ralstonia solanacearum* from Austria

In Austria, annual systematic official surveys for the occurrence of *Ralstonia solanacearum* (EPPO A2 List) have been conducted since 1995. In 2009, the Austrian NPPO had informed the EPPO Secretariat of the first finding of *R. solanacearum* in Niederösterreich (see EPPO RS 2009/083). In 2008, the bacterium was first detected during routine testing in one lot of ware potatoes (*Solanum tuberosum* cv. 'Ditta') from a supermarket in Kärnten. Investigations showed that the infested lot originated from a producer located in Niederösterreich and had been grown from certified seed potatoes (which had tested negative before planting). The infested lot of ware potatoes was only marketed in Austria. The possible source of contamination remained unknown. Phytosanitary measures were taken in accordance with the EU Directive 98/57/EC. As none of the subsequent surveys detected the bacterium, the NPPO of Austria now considers that *R. solanacearum* has been eradicated.

The pest status of *Ralstonia solanacearum* in Austria is officially declared as: **Absent**: **pest eradicated**.

Source: NPPO of Austria (2015-02).

Additional key words: absence, eradication Computer codes: RALSSO, AT

#### 2015/029 First report of 'Candidatus Liberibacter solanacearum' in Austria

The NPPO of Austria recently informed the EPPO Secretariat of the first report of 'Candidatus Liberibacter solanacearum' (EPPO A1 List - Solanaceae haplotypes) on Apiaceae on its territory. The pathogen was found in the region of Tyrol in 2 fields of carrot and celery (Daucus carota subsp. sativus and Apium graveolens, both Apiaceae). Samples were taken from Solanaceae plants growing in adjacent fields but all tested negative for 'Ca. L. solanacearum', thus confirming that Solanaceae haplotypes were not present in Austria. The identity of the pathogen was confirmed by PCR tests at the Institute for Sustainable Plant Production of AGES (Austrian Agency for Health and Food Safety). The origin of this infection is unknown. The regional Plant Protection Service has ordered the destruction of the infested plants by ploughing under.

The pest status of 'Candidatus Liberibacter solanacearum' in Austria is officially declared as: Transient, actionable, under surveillance.

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Source: NPPO of Austria (2015-02).

Additional key words: new record Computer codes: LIBEPS, AT

#### 2015/030 First report of *Pseudomonas syringae* pv. aesculi in Austria

The NPPO of Austria recently informed the EPPO Secretariat of the first findings of *Pseudomonas syringae* pv. *aesculi* (formerly EPPO Alert List) in the regions of Vienna and Niederösterreich. In both cases, the identity of the bacterium was confirmed by PCR tests at the Institute for Sustainable Plant Production of AGES (Austrian Agency for Health and Food Safety). In Vienna, the bacterium was found in a private garden on 14 trees of *Aesculus x carnea* cv. *'Briotii'* which had been purchased from another EU Member State. In Niederösterreich, the bacterium was detected on *Aesculus hippocastanum* trees in a public place where new trees of different origins have been replanted several times from 2005 to 2009. The origin of the infection is unknown. In both regions, the Regional Plant Protection Services have ordered the infected trees to be uprooted and destroyed.

The pest status of *Pseudomonas syringae* pv. *aesculi* in Austria is officially declared as **Transient**, **actionable**, **under eradication**.

Source: NPPO of Austria (2015-02).

Additional key words: new record Computer codes: PSDMAX, AT

#### 2015/031 First report of 'Candidatus Phytoplasma fragariae' in the United Kingdom

The NPPO of the United Kingdom recently informed the EPPO Secretariat of the first outbreak of 'Candidatus Phytoplasma fragariae' on its territory. In November 2014, the pathogen was found at one location in Southern UK in a stand of Corylus sp. trees (approximately 10-15 years old and of unknown origin). Approximately 20 trees were showing decline. Symptoms included yellowing of leaves with necrosis at the edges, thinning out of the foliage and general decline. Nearby Corylus trees were showing much more vigorous and normal growth. This also appears to be the first record of this pathogen infecting Corylus. 'Ca. P. fragariae' is a Stolbur group phytoplasma and is closely related to 'Ca. P. solani'. This outbreak was notified to the NPPO by the local wildlife trust, as Corylus trees were exhibiting unusual symptoms. The identity of the pathogen was then confirmed by sequencing.

Containment action has been taken. All symptomatic trees were destroyed and further testing is being done to delimit the extent of the outbreak. Further monitoring will be undertaken in the summer when surrounding trees are in leaf.

The pest status of 'Candidatus Phytoplasma fragariae' in the United Kingdom is officially declared as: Transient, actionable, under eradication.

Source: NPPO of the United Kingdom (2014-12).

Additional key words: new record Computer codes: PHYPFG, GB

#### 2015/032 *Phytophthora ramorum* found in Bayern, Germany

The NPPO of Germany recently informed the EPPO Secretariat of the detection of *Phytophthora ramorum* (EPPO A2 List) in a new area in Germany. In 2014-12-12, the disease was found on 14 (out of 15) rhododendron plants (*Rhododendron catawbiense* 'Grandiflorum') in a private garden at Pöcking, Bayern. Symptoms of shoot dieback and leaf spot were observed. The diseased plants had been delivered to this garden in April 2014, and the first disease symptoms appeared in September 2014. The pathogen was identified morphologically. The plants have been destroyed and tracing-back studies to determine their origin are on-going.

The pest status of *Phytophthora ramorum* in Germany is officially declared as: **Present**, few occurrences.

Source: NPPO of Germany (2014-12).

Additional key words: detailed record Computer codes: PHYTRA, DE

#### 2015/033 Cryphonectria parasitica occurs in Belgium

The NPPO of Belgium recently informed the EPPO Secretariat that the presence of *Cryphonectria parasitica* (EPPO A2 List) on its territory has been confirmed by laboratory testing. In spring 2014, symptoms of the disease were observed by a forestry consulting company on 3 chestnut trees (*Castanea sativa* cv. 'Marron de Lyon'). These trees had been planted in the 2000s along a roadside (comprising in total 120 trees over 900 m) in the communes of Wemmel (Flemish region) and Jette (Brussels-Capital Region). The responsible authorities of the Brussels-Capital Region reported their suspicion of the disease to the Federal Agency for the Safety of the Food Chain (FASFC) on 2014-12-11. Trees were sampled by FASFC on 2014-12-16 and the identity of the fungus was confirmed after laboratory analysis by the National Reference laboratory CRA-W on 2015-01-08. Inspection carried out by FASFC on 2014-12-16 revealed that 59 of the 120 trees showed symptoms of the disease. Discussions about the official measures to be applied are still ongoing. Reinforced surveillance of the country and in particular within the 5 and 40 km radius zones surrounding the outbreak site will be implemented.

The pest status of *Cryphonectria parasitica* in Belgium is officially declared as: **Present**, **under surveillance**.

Source: NPPO of Belgium (2015-02).

Additional key words: detailed record Computer codes: ENDOPA, BE

#### 2015/034 Tomato spotted wilt virus found again in Austria

The NPPO of Austria recently informed the EPPO Secretariat of a new finding of *Tomato spotted wilt virus* (*Tospovirus*, TSWV - EPPO A2 List) on is territory. The virus was found in the region of Salzburg on plants of *Solanum lycopersicum*, *Capsicum annuum* and *Gerbera* sp. The identity of the virus was confirmed by PCR tests (Institute for Sustainable Plant Production of AGES (Austrian Agency for Health and Food Safety)). The infected plants of *Solanum lycopersicum* and *Capsicum annuum* were grown under a plastic tunnel in a vegetable producing farm. These plants had been purchased from another EU Member State. The infected plants of *Gerbera* sp. were detected in the greenhouse of another

producer. In both cases the origin of the infection could not be identified. The transmission by thrips cannot be excluded. The regional Plant Protection Service has ordered the destruction of the infested plants by burning, as well as the disinfection of the plastic tunnel and the greenhouse.

The pest status of *Tomato spotted wilt virus* in Austria is officially declared as: **Transient**, actionable, under eradication.

Source: NPPO of Austria (2015-02).

Additional key words: detailed record Computer codes: TSWV00, AT

#### 2015/035 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 on the EPPO Alert List, and indicated in bold the situation of the pest concerned using the terms of ISPM no. 8.

#### New records

*Diaphorina citri* (Hemiptera: Liviidae - EPPO A1 List) occurs in Colombia. It was first found in 2007 and has since been reported from the states of Antioquia, Atlántico, Bolívar, Caldas, Cauca, Cesar, Córdoba, Cundinamarca, Magdalena, Meta, Norte de Santander, Quindío, Risaralda, Santander, Sucre, Tolima and Valle del Cauca (Kondo and Simbaqueba, 2014). **Present, widespread**.

In Puerto Rico, *Helicoverpa armigera* (Lepidoptera: Noctuidae - EPPO A2 List) was found for the first time in September 2014. During an official survey, a single adult male moth was caught in a pheromone trap which was located in a bean field in San Germán (NAPPO, 2014). **Present, only in some areas**.

Maconellicoccus hirsutus (Hemiptera: Pseudococcidae - EPPO A2 List) occurs in Colombia. It was originally reported from the states of Atlántico, Cesar, Guajira and Magdalena in 2008, but studies of specimens in collections have indicated that it was probably introduced in 2003. The mealybug was also found on Old Providence Island in 2010 and the island of San Andrea in 2012. It is thought to have been introduced on these islands via imports of infested ornamental plants from continental Colombia (Kondo and Simbaqueba, 2014). Present, only in some areas.

Monilia polystroma is reported for the first time in Italy. The fungus was detected during a survey conducted in 2013 on stored peaches (*Prunus persica* - various cultivars) in Emilia-Romagna and Sardinia. Affected fruit presented symptoms of brown rot. Further studies are necessary to determine the geographical distribution, prevalence, and economic importance of this pathogen in Italy (Martini *et al.*, 2014). **Present, no details**.

In May 2013, symptoms of bacterial leaf streak were observed on rice plants at the panicle emergence stage in fields at Musenyi, Gihanga (both localities in Bubanza province) and Rugombo (Cibitoke province), in Burundi. Laboratory analysis confirmed the presence of *Xanthomonas oryzae* pv. *oryzicola* (EPPO A1 List) in diseased rice plants. This is the first time that this bacterium is recorded in Burundi and surveys will be conducted to determine the extent of the disease (Afolabi *et al.*, 2014). **Present**, **only in some areas**.

In Uruguay, *Tomato chlorosis virus* (*Crinivirus*, ToCV - EPPO A2 List) is reported for the first time. ToCV was detected during a survey carried out in 2012/2013 in 2 major-tomato producing regions (Salto and Canelones). *Tomato infectious chlorosis virus* was not detected during this survey (Arruabarrena *et al.*, 2014). **Present, only in some areas**.

#### Detailed records

Dothistroma pini, causing red band needle blight, has been detected in Indiana, North Dakota and South Dakota (US). This pathogen has also been found in pine species which were not previously recorded as host plants: i.e. Pinus albicaudis, P. cembra, P. flexilis, and P. ponderosa (Barnes et al., 2014).

Maconellicoccus hirsutus (Hemiptera: Pseudococcidae - EPPO A2 List) continues to spread in Brazil. After a first record in the state of Roraima in 2010, the pest was also found in the states of Espírito Santo and Bahia. In Espírito Santo, it was first observed in May 2012 in commercial fields of okra (Abelmoschus esculentus) in the municipality of Cachoeiro de Itapemirim. Other specimens were then found on the same site on more plants (Abelmoschus esculentus, Solanum americanum and an unidentified weed). In 2013, M. hirsutus was detected in another municipality (Linhares) in Espirito Santo and for the first time in the state of Bahia in the municipality of Mucuri on cocoa (Theobroma cacao) plants (Culik et al., 2014; Internet, 2014).

In France, an outbreak of *Melampsora medusae* (EPPO A2 List) was detected in December 2013 on several clones of poplar (*Populus* spp.) grown in a nursery in the department of Gers (Aquitaine region). Surveys are being carried out to delimit the extent of the disease (Anon., 2014).

*Tomato chlorosis virus* (*Crinivirus*, ToCV - EPPO A2 List) occurs in the province of Shandong, China. In 2012, severe symptoms were observed in greenhouse tomato plants in the city of Shouguang and other localities (Zhao *et al.*, 2014).

In Hungary, *Tuta absoluta* (Lepidoptera: Gelechiidae - EPPO A2 List) was first found in Bács-Kiskun county, in the Southern part of the country (EPPO RS 2010/052). From 2011 to 2013, studies using pheromone and light traps showed that the pest has been spreading east- and westwards. *T. absoluta* was trapped in both field and glasshouse tomatoes and some specimens were also caught in potato fields. The early flight of adults (end of February/beginning of March) which has been observed in the fields suggests that *T. absoluta* is able to overwinter in the Carpathian Basin (Agoston & Fazekas, 2014).

#### Denied records

In 2013, the presence of *Meloidogyne fallax* (EPPO A2 List) was first reported in the USA (Nischwitz *et al.*, 2013). It was detected during a survey carried out in golf courses in San Francisco county, in California. However, further surveys were conducted from October 2012 to March 2013 in golf courses in several counties of California (including San Francisco county) and did not detect the nematode. USDA-APHIS considers that *M. fallax* does not occur in the USA (Anonymous, 2013).

#### Eradication

In October 2014, the government of Mexico officially announced the successful eradication of *Ceratitis capitata* (Diptera: Tephritidae - EPPO A2 List) from its territory (SAGARPA, 2014).

#### New host plants

In Oregon (US), zebra chip disease of potatoes (associated with 'Candidatus Liberibacter solanacearum' - solanaceous haplotypes EPPO A1 List) was first reported in 2011. The perennial weed, Solanum dulcamara, is also a host plant for the disease vector, Bactericera cockerelli. Recent studies showed that several S. dulcamara plants collected from three different locations in Oregon were naturally infected by 'Ca. L. solanacearum'. It is noted that further studies are needed to identify perennial host plants of 'Ca. L. solanacearum' which are playing a role in the disease epidemiology, because this might have consequences on the disease management strategy (Murphy et al., 2014).

In China, *Meloidogyne enterolobii* (EPPO A2 List) has been found on jujube (*Ziziphus jububa*) in Hainan. Affected trees showed stunting, wilting and general decline. They did not produce any flowers and fruit (Long *et al.*, 2014).

#### Epidemiology

Recent research has shown that *Asymmetrasca decedens* (Hemiptera: Cicadellidae) is a vector of 'Candidatus Phytoplasma phoenicium' (formerly EPPO Alert List), a phytoplasma which is associated with almond witches' broom (Abou-Jawdah et al., 2014).

Source:

Abou-Jawdah Y, Abdel Sater A, Jawhari M, Sobh H, Abdul-Nour H, Bianco PA, Molino Lova M, Alma A. (2014) *Asymmetrasca decedens* (Cicadellidae, Typhlocybinae), a natural vector of 'Candidatus Phytoplasma phoenicium'. *Annals of Applied Biology* **165**(3), 395-403.

Afolabi O, Milan B, Amoussa R, Koebnik R, Poulin I, Szurek B, Habarugira G, Bigirimana J, Silue D (2014) First report of *Xanthomonas oryzae* pv. *oryzicola* causing bacterial leaf streak of rice in Burundi. *Plant Disease* **98**(10), p 1426.

Agoston J, Fazekas I (2014) [Recent data on the distribution and biology of *Tuta absoluta* (Meyrick, 1917) in Hungary (Lepidoptera: Gelechiidae)]. *e-Acta Naturalia Pannonica* 7, 5-14 (in Hungarian).

Anonymous (2013) Exotic nematode survey. 2012 final accomplishment report. California Department of Food and Agriculture, 7 pp.

Anonymous (2014) Découverte de *Melampsora medusae* dans une pépinière en Aquitaine. *Lettre du DSF* n°49, 11-12.

Arruabarrena A, Rubio I, Gonzalez-Arcos M, Maeso D, Fonseca MEN, Boiteux IS (2014) First report of *Tomato chlorosis virus* infecting tomato crops in Uruguay. *Plant Disease* **98**(10), 1445-1446.

Barnes I, Walla JA, Bergdahl A, Wingfield MJ (2014) Four new host and three new state records of Dothistroma needle blight caused by *Dothistroma pini* in the United States. *Plant Disease* **98**(10), p 1443.

Culik MP, dos Santos Martins D, Zanuncio Jr JS, Fornazier MJ, Ventura JA, Peronti ALBG, Zanuncio JC (2013) The invasive hibiscus mealybug *Maconellicoccus hirsutus* (Hemiptera: Pseudococcidae) and its recent range expansion in Brazil. *Florida Entomologist* **96**(2), 638-640.

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(dated 2014-10-30).

http://www.sagarpa.gob.mx/saladeprensa/2012/Paginas/2014B852.aspx (via PestLens).

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Long HB, Bai C, Peng J, Zeng FY (2014) First report of the root-knot nematode *Meloidogyne enterolobii* infecting jujube in China. *Plant Disease* **98**(10), 1451-1452.

Martini C, Lantos A, di Francesco A, Guidareli M, d'Aguino S, Baraldi E (2014) First report of Asiatic brown rot caused by *Monilinia polystroma* on peach in Italy. *Plant Disease* **98**(11), p 1585.

Murphy AF, Catling RA, Goyer A, Hamm PB, Rondon SI (2014) First report of natural infection by 'Candidatus Liberibacter solanacearum' in bittersweet nightshade (Solanum dulcamara) in the Columbia Basin of Eastern Oregon. Plant Disease 98(10), 1425-1426.

NAPPO Phytosanitary Pest Alert System. Official Pest Reports. USA (2014-10-28) Detection of Old World bollworm (*Helicoverpa armigera*) in Puerto Rico. <a href="http://www.pestalert.org/oprDetail.cfm?oprID=600">http://www.pestalert.org/oprDetail.cfm?oprID=600</a>

Nischwitz C, Skantar A, Handoo ZA, Hult MN, Schmitt ME, McClure MA (2013) Occurrence of *Meloidogyne fallax* in North America, and molecular characterization of *M. fallax* and *M. minor* from U.S. golf course greens. *Plant Disease* **97**(11), 1424-1430.

Zhao LM, Li G, Gao Y, Liu YJ, Sun GZ, Zhu XP (2014) Molecular detection and complete genome sequences of *Tomato chlorosis virus* isolates from infectious outbreaks in China. *Journal of Phytopathology* **162**(10), 627-702.

Additional key words: new record, denied record, detailed record, eradication, epidemiology, new host plant,

Computer codes: CERTCA, DIAACI, DOTSPI, EMPODC, GNORAB, HELIAR, LIBEPS, MELGFA, MELGMY, MELMME, MONIPO, PHENHI, PHENHI, PHYPPH, TOCV00, XANTTO, BI, BR, CN, CO, FR, HU, IT, MX, PR, US, US, UY

#### 2015/036 New EU regulation on invasive alien species comes into force

The EU regulation, No. 1143/2014, on the prevention and management of the introduction and spread of invasive alien species came into force on the 1<sup>st</sup> January 2015. The new regulation aims to address the adverse impact alien invasive species have on biodiversity, ecosystem services, human health and the economy in the EU Member States. The regulation is centered on three main themes (1) prevention, (2) early warning and rapid response and (3) management.

The Regulation will restrict the use, trade and transport of invasive alien species, as well as include management and control measures, underpinned by a list of invasive species of EU concern which will be compiled by Member States and regularly updated and reviewed every six years. The initial limit of 50 species has now been removed and this will enable Member States to take specific actions on invasive species of national concern.

Source: Official Journal of the European Union, link to the Regulation

http://eur-lex.europa.eu/legal-

content/EN/TXT/PDF/?uri=CELEX:32014R1143&from=EN

Genovesi P, Carboneras C, Vilà M, Walton P (2014) EU adopts innovative legislation on invasive species: a step towards a global response to biological invasions?

Biological Invasions DOI: 10.1007/s10530-014-0817-8.

Additional key words: invasive alien species, regulation, EU

#### 2015/037 Current situation of Solanum elaeagnifolium invasion in Jordan, Iraq, Lebanon and Syria

Solanum elaeagnifolium (Solanaceae, EPPO A2 List), is a perennial species native to Mexico and south-west USA. The species has a wide invasive range including Australia, the Americas (outside Mexico and SW USA), Africa, Asia and 15 countries in the EPPO region.

The FAO funded project 'Management of the invasive plant *Solanum elaeagnifolium* in the Near East' set out to develop action plans and capacity building to help mitigate the spread and impact of this species within the participating countries. Invaded habitats include a variety of land usages, but in particular *S. elaeagnifolium* invades cultivated land. *S. elaeagnifolium* was introduced into Syria in 1967 and Iraq and Jordan in 1970. New country records were recorded for this species with the most recent being Lebanon in 2012. The plant invades a variety of cropping systems including wheat, maize, olive groves, orchards and vegetable plantations. Impacts include competition with crop plants and associated difficulties when harvesting crops, blocking irrigation channels and loss of biodiversity. Under the FAO funded project, management measures in the region have focused on (1) prevention - including drafting of legislation to set a framework for (2) control and mitigation of this invasive alien plant.

Source:

Bouhache M, Gbéhounou G (2014) Current situation of *Solanum elaeagnifolium* Cav. Invasion in Near-East countries (Iraq, Jordan, Lebanon and Syria). *Revue Marocaine de Protection des Plantes* 6, 29-36.

FAO Link to project page: <a href="http://www.fao.org/agriculture/crops/intranet/projects-database/detail/en/c/94356/">http://www.fao.org/agriculture/crops/intranet/projects-database/detail/en/c/94356/</a>

Facebook: <a href="https://www.facebook.com/InvasivePlants">https://www.facebook.com/InvasivePlants</a>

Additional key words: invasive alien plants Computer codes: SOLEL, JO, LB, SY

### 2015/038 GB non-native species secretariat launches free online training in biosecurity

The GB non-native species secretariat has launched a number of free e-learning training modules in biosecurity targeting people working in the field with invasive species including staff, volunteers and contractors. The modules include an introduction to invasive non-native species (Module 1), an introduction to identification and recording (Module 2) and a module on biosecurity (Module 3).

Module 1 provides background information on invasive non-native species and covers topics that include why invasive non-native species are an issue, their impacts and how they are introduced and spread. This module also covers how we can respond to invasive species and what people can do to help prevent their introduction and spread. Module 2 has four components and includes training on identification of both invasive plants (fresh water and riparian) and invertebrate species. Module 3 covers training on biosecurity and explains why it is important, how to plan biosecurity measures and practicing biosecurity in the field.

Source: GB non-native species secretariat, Link to e-learning modules:

http://www.nonnativespecies.org/news/index.cfm?id=186

Additional key words: invasive alien species, training

#### 2015/039 C-S-R strategies of invasive plants in Croatia

A recent study evaluated the occurrence of invasive plant species in three biogeographical regions (Alpine, Continental and Mediterranean) in Croatia and in addition set out to subscribe C-S-R strategies to individual species. Under the C-S-R theory, originally set out in Grimes (1977) plants can be grouped into three main strategies, C- competitors, S-stress tolerators and R ruderals. Ten C-S-R plant types were recorded among invasive plants in Croatia with C-R strategists being the most common. In the Mediterranean region of Croatia, R strategists are more frequently found amoung IAPs and this may be due to intensive human induced habitat modification in this region compared to Alpine and Continental regions.

Source:

Vuković N, Miletić M, Milović M, Jelaska S D (2014) Grime's CSR strategies of the invasive plants in Croatia. *Periodicum Biologorum* 116, 323-329.

Grime JP (1977) Evidence for the existence of three primary strategies in plants and its relevance to ecological and evolutionary theory. *American Naturalist* **111**(982), 1169-1194.

Additional key words: invasive alien plants

Computer codes: HR

### 2015/040 COST Action FA1203 Sustainable management of Ambrosia artemisiifolia in Europe (SMARTER)

Under the COST Action FA1203, Sustainable Management of *Ambrosia artemisiifolia* in Europe (SMARTER) a conference and workshop SMARTER and stakeholder exchange on 'Invasive plants management success and regulation' was held in Brussels (BE) on 2015-01-21/22. The aim of the meeting was to progress with discussion on the regulation of biocontrol agents to control invasive plants species in Europe and to define success in the management of *A. artemisiifolia* at a local and European level.

Standardization and facilitation in the regulation of classical biocontrol agents at a European level was discussed along with the current techniques used by experts to control and assess the impact of *A. artemisiifolia*.

Source: SMARTER website: <a href="http://ragweed.eu/">http://ragweed.eu/</a>

Additional key words: conference, training, biological control Computer codes: AMBEL, BE

### 2015/041 National Invasive Species Awareness Week (USA) provides webinar presentations on invasive species topics

of invasive available series species webinars are via http://www.nisaw.org/2015webinar.html as part of the national Invasive Species Awareness Week (23<sup>rd</sup> to the 27<sup>th</sup> February 2015) hosted by the National Association of Invasive Plant Councils (US). In total five webinars are available; the first looks at landscape-scale invasive plant control projects. Within the first presentation, 3 talks present varying approaches to invasive plant management from an Invasive Species Strike Team applying rapid response to invasive species management, to landscape scale partnerships and control efforts both locally and regionally. The 2<sup>nd</sup> presentation highlights the PlaycleanGo campaign aimed to raise awareness for recreational uses of outside areas throughout the US and Canada. In the 3<sup>rd</sup> presentation titled 'Invasive plant listing: taking it up a notch with a national standard' Loewenstein from Auburn University details how a task force in North America has been working to devise and implement an international standard to ensure consistency when compiling lists of invasive species based on environmental damage. The penultimate presentation EDDMapS, smartphone APPS and the Naisma mapping standard details some of the technology being used to map and detail the range of invasive species where data is combined from a number of organizations to strengthen the tool. The last talk in the series highlights the 'Don't move firewood' campaign in North America which is concerned with the spread of invasive pests in contaminated material.

Source: National Invasive Species Awareness Week, hosted by the National Association of

Invasive Plant Councils (US). <a href="http://www.nisaw.org/2015webinar.html">http://www.nisaw.org/2015webinar.html</a>

Additional key words: invasive alien species, presentations, training Computer codes: CA US

# 2015/042 Are native-range habitats of invasive plants similar to invaded-range habitats?

Understanding why some invasive alien plant species are more successful invaders than others is an important aspect in invasive species ecology. In this recent study Hejda *et al.* (2015) compared native and introduced ranges of 286 invasive plant species at a global level. The study found that the majority of invasive plant species were native to forest habitats whereas native aquatic habitats were the source of the lowest number of invasive plant species. Pre-adaptation in native range habitats, to climatic and ecological variation – and the occurrence of some species in an array of native habitats may allow increased invasiveness in introduced regions. The authors highlight that in this study, invasive plants differed in their native range habitat type based on the geographical direction of invasion.

Source:

Hejda M, Chytrý M, Pergl J, Pyšek P (2015) Native-range habitats of invasive plants: are they similar to invaded range habitats and do they differ according to the geographical direction of invasion? *Diversity and Distributions* 21, 312-321.

http://onlinelibrary.wiley.com/doi/10.1111/ddi.12299/abstract

Additional key words: invasive alien plants

# 2015/043 17<sup>th</sup> European Weed Research Society (EWRS) Symposium (Montpellier, FR, 2015-06-23/26)

The 17<sup>th</sup> European Weed Research Society (EWRS) Symposium will be held in Montpellier, France on 2015-06-23/26. The theme of the symposium is 'Weed management in changing environments'. Sessions where experts will present in English will include chemical management, weed biology, technologies and trends, weed ecology, integrated management and new challenges. The deadline for early bird registration is 2015-04-15.

Source: European Weed Research Society (EWRS) website: <a href="http://ewrs2015.org/">http://ewrs2015.org/</a>

Additional key words: invasive alien plants, conference Computer codes: FR

### 2015/044 13<sup>th</sup> International EMAPi Conference (Hawai'i Island, USA, 2015-09-20/24)

The 13<sup>th</sup> International EMAPi Conference 'Ecology and Management of Alien Plant Invasions' will be held in Hawai'i (USA) on 2015-09-20/24.

General themes for the conference will include impacts of plant invasions, connecting science to management and restoration, biosecurity and risk assessment - including early detection and rapid response, ecological studies - reproduction and spread, global change and plant invasions, biocontrol of invasive plants, mechanical and chemical control of invasive plants, genetics and evolution of invasive plants, invader traits and resident communities, biogeography and macroecology of plant invasions, inventories- floras and databases and engaging the public with invasive plant issues.

The deadline for abstract submission is 2015-04-30.

Source: EMAPi 2015 website: http://www.emapi2015.hawaii-conference.com/

Additional key words: invasive alien plants, conference Computer codes: US