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2014/020 New outbreak of Bursaphelenchus xylophilus in Spain

In Spain, a new outbreak of *Bursaphelenchus xylophilus* (EPPO A2 List) was detected during the official annual survey (see also EPPO RS 2010/051, 2010/202, 2012/047). The presence of *B. xylophilus* was confirmed in December 2013 in a sample taken from pine trees (*Pinus* spp.) showing decline symptoms in a forest stand located in the municipality of 'Santi-Spíritus', province of Salamanca (Castilla y León). The initial positive result was obtained in 2013-11-22 by the regional laboratory on the basis of morphological characteristics. This result was confirmed by molecular methods on 2013-11-26 by the same laboratory, and on 2013-12-11 by the national reference laboratory. The origin of this new outbreak in Spain is unknown. Eradication measures were immediately taken and included: surveys to delimit the infested zone and establish demarcated areas in accordance with the EU Decision 2012/535/EU, destruction of all affected trees. Information about this new outbreak of *B. xylophilus* will be provided to all stakeholders and local authorities. Regional regulations specifying the measures to be taken and a specific Action Plan are being prepared. The pest status of *Bursaphelenchus xylophilus* in Spain is officially declared as: Transient, actionable, under eradication.

Source: NPPO of Spain (2014-01).

Additional key words: detailed record

Computer codes: BURSXY, ES

2014/021 Diabrotica virgifera virgifera is no longer a quarantine pest for the European Union

In December 2013, the EU Standing Committee on Plant Health agreed to delete Diabrotica virgifera virgifera (Coleoptera: Chrysomelidae, EPPO A2 List) from the list of harmful organisms included in the plant health Directive 2000/29/EC (list of guarantine pests), and to repeal the EU emergency measures (Decision 2003/766/EC on emergency measures to prevent the spread within the Community of Diabrotica virgifera Le Conte). It was acknowledged that the specific control measures put in place in 2003 against D. virgifera virgifera did not prevent its spread within the European Union as it is now established in 13 EU Member States, representing a large part of the EU maize cultivation area. The impact assessment which was carried out by the EU Commission concluded that it was neither feasible to pursue an eradication of this pest from the EU, nor to prevent its further spread into the areas which are currently free. It was also acknowledged that effective and sustainable control methods (e.g. crop rotation) against D. virgifera virgifera were available. Therefore, on request of the agricultural sector, the regulation of D. virgifera virgifera as a quarantine pest was considered no longer appropriate within the EU territory, and a recommendation on sustainable control measures which can be used in infested areas (Commission Recommendation 2014/63/EU) was issued in February 2014

 Source:
 European Commission. DG Health and Consumers. Plant Health (2014-02-07)

 Commission de-lists "western corn rootworm" as a quarantine pest.

 http://ec.europa.eu/dgs/health_consumer/dyna/enews/enews.cfm?al_id=1453

Commission Recommendation (2014/63/EU) of 6 February 2014 on measures to control *Diabrotica virgifera virgifera* Le Conte in Union areas where its presence is confirmed. <u>http://eur-</u> lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2014:038:0046:0048:EN:PDF Commission Implementing Decision 2014/62/EU of 6 February 2014 repealing Decision 2003/766/EC on emergency measures to prevent the spread within the Community of *Diabrotica virgifera* Le Conte. <u>http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2014:038:0045:0045:EN:PDF</u>

Additional key words: regulations

Computer codes: DIABVI, EU

2014/022 Anoplophora glabripennis found again in Canada

In September 2013, the presence of *Anoplophora glabripennis* (Coleoptera: Cerambycidae - EPPO A1 List) was officially confirmed by the Canadian Food Inspection Agency (CFIA) in an industrial area near Pearson International Airport in Mississauga, Ontario (CA). It can be recalled that between 2003 and 2007, *A. glabripennis* had been found in the cities of Toronto and Vaughan. A quarantine area was established and an active eradication campaign was undertaken. Based on international standards, the pest was considered eradicated from this area in April 2013 (see EPPO RS 2013/076) after not being detected for five years. Following this detection in Mississauga, a new regulated area has been delimited (covering parts of the cities of Mississauga and Toronto) and phytosanitary measures are being taken, including surveys and restrictions on the movement of host plants (nursery stock, trees, logs, timber, wood, wood chips and bark chips). Residents were advised to check their trees regularly for signs of the pest and to report any suspicious sightings to CFIA. The public was also asked not to move firewood.

The situation of *Anoplophora glabripennis* in Canada can be described as follows: **Present**, **isolated outbreak detected in Mississauga (Ontario) in 2013**, **under official control**.

Source: INTERNET Canadian Food Inspection Agency. - Asian long-horned beetle found in Mississauga, Ontario. <u>http://www.inspection.gc.ca/about-the-cfia/newsroom/news-releases/2013-09-</u> <u>20/eng/1379685062894/1379685078216</u> - Asian long-horned beetle infested place order. <u>http://www.inspection.gc.ca/plants/plant-protection/insects/asian-long-horned-</u> <u>beetle/order/eng/1386095262010/1388532690960</u> - Regulated area for the Asian long-horned beetle now in effect in Mississauga and Toronto. <u>http://www.inspection.gc.ca/about-the-cfia/newsroom/news-</u> <u>releases/2013-12-03/eng/1386096220998/1386096232915</u>

Additional key words: detailed record

Computer codes: ANOLGL, CA

2014/023 Update on the situation of Anoplophora glabripennis in Lombardia region (IT)

In Italy, *Anoplophora glabripennis* (Coleoptera: Cerambycidae - EPPO A1 List) was found for the first time in Lombardia region in June 2007 (EPPO RS 2007/166) and then in Veneto region (RS 2009/157, RS 2014/010). In both regions, it is subject to eradication measures. In Lombardia, *A. glabripennis* was first found in the municipality of Corbetta (Milano province) in a private garden on 1 *Acer* (maple) and 3 *Betula* (birch) trees. As this garden belonged to an industrial company assembling mechanical parts from China, it is suspected that wood packaging material from China has been the pathway of introduction. Surveys were immediately carried out in this area and no other infested plants were detected in 2008 and 2009. In March 2010, 2 *Acer* trees were found infested in the municipality of

Vittuone (Milano province). In April 2010, all potential hosts (85 *A. saccharinum*, 5 *Populus nigra* and 7 *Salix alba*) were destroyed within a radius of 100 m around the infested trees. In 2011 and 2012, no infested trees were found. In 2013, 2 *Acer* trees were found to be infested in the municipality of Sedriano (province of Milano). It is suspected that the past activities of an industrial company (no longer operating) which handled wood packaging material were the likely source of this new outbreak. Eradication measures were implemented and included the destruction of all potential hosts (9 *Acer* trees) within a radius of 100 m around the infested trees.

Note: the 3 outbreak areas are close to each other. The distance between the infested sites in Corbetta and Vittuone is approximately 900 m. The distance between the infested sites in Vittuone and Sedriano is approximately 2.5 km.

Source: NPPO of Italy (2014-01).

Additional key words: detailed record

Computer codes: ANOLGL, IT

2014/024 Anthonomus eugenii eradicated from the Netherlands

In the Netherlands, *Anthonomus eugenii* (Coleoptera: Curculionidae - EPPO A1 List) was first found in July 2012 in 4 greenhouses producing *Capsicum annuum* fruit in Westland (see EPPO RS 2012/203). In January 2013, 2 other greenhouses were also found to be infested by *A. eugenii*. All greenhouses were situated close to each other and a surveillance programme (including the use of pheromone traps) was initiated within an area of 4 x 9 km around the infested facilities, covering more than 50 production sites of *C. annuum* fruit. In addition, pheromone traps were also placed in greenhouses producing tomatoes (*Solanum lycopersicum*) and ornamental Solanaceae within an area of 2 x 3 km around the infested facilities. Eradication measures were taken against *A. eugenii* and included: application of pesticides, destruction and secured removal of the plants and growing medium in all infested greenhouses. As the pest was no longer detected, the NPPO of the Netherlands officially declared in December 2013 that the pest had successfully been eradicated.

The pest status of *Anthonomus eugenii* in the Netherlands is officially declared as: Absent, eradicated.

Source: NPPO of the Netherlands (2013-12).

Additional key words: absence, eradication

Computer codes: ANTHEU, NL

2014/025 First report of Hishimonus hamatus in Slovenia

The NPPO of Slovenia recently informed the EPPO Secretariat of the first record of *Hishimonus hamatus* (Hemiptera: Cicadellidae) near Nova Gorica (Western part of Slovenia). In September 2012, the first specimens of *H. hamatus* were incidentally caught in a light trap. As light proved to be very attractive, in particular to males, light traps were placed in 3 different localities in the surroundings of Nova Gorica. At the same time, potential host plants were periodically surveyed, and additional specimens were collected with a sweep net in 2013. No direct damage caused by this leafhopper was observed. However, it is stressed that related species (e.g. *H. phycitis* and *H. sellatus*) are known

vectors of phytoplasma diseases. In Slovenia, adults and nymphs of *H. hamatus* were collected mainly from *Ligustrum lucidum* but also from several other ornamental trees planted in public greens: *L. japonicum, Lagerstroemia indica, Euonymus japonicus, Chamaecyparis lawsoniana, Cupressus sempervirens* and *Thuja occidentalis*. The presence of numerous nymphs (3rd, 4th and 5th instars) on all sampled trees (except *T. occidentalis*) showed that these tree species can be considered as host plants of *H. hamatus*. In Japan, the insect was recorded on *E. japonicus, Sambucus javanica, Ilex crenata* and *Serissa japonica*.

H. hamatus originates from Asia. It was independently described twice, first in 1976 by Kuoh on material collected from Southern China, and in 1978 by Okada in Japan under the name *H. araii*. This name was later recognized as a junior synonym of *H. hamatus*. This insect occurs in China, the Korean peninsula and Japan. This is the first time that *H. hamatus* is reported outside its native geographical range, however this does not necessarily mean that Slovenia is the primary introduction site in Europe. Interestingly, a discussion forum on the Internet suggests that this species has also been observed in Italy, but this has not been confirmed. In Slovenia, no phytosanitary measures were taken.

The pest status of *Hishimonus hamatus* in Slovenia is officially declared as: **Transient**, **non-actionable**.

Source: NPPO of Slovenia (2014-01).

Seljak G (2013) *Hishimonus hamatus* Kuoh (Hemiptera: Cicadellidae): a new alien leafhopper in Europe. *Acta Entomologica Slovenica* **21**(2), 123-130.

INTERNET Forum Natura mediterraneo. http://www.naturamediterraneo.com/forum/topic.asp?TOPIC_ID=222916

Additional key words: new record

Computer codes: HISHHA, SI

2014/026 First report of Pseudomonas syringae pv. actinidiae in Slovenia

In Slovenia, the presence of *Pseudomonas syringae* pv. *actinidiae* (EPPO A2 List) was discovered in early summer 2013. The bacterium was found during an official detection survey carried out in the endangered area of Primorska (Istra, Vipavska dolina, Goriška Brda - Western Slovenia) where kiwifruit is grown. Kiwifruit orchards in Vipavska dolina, Goriška Brda and Slovenska Istra were visually inspected and symptomatic material was sampled. The following species and cultivars were inspected:

- A. deliciosa cv. 'Hayward' (prevalent in production of kiwi fruits in Slovenia), cvs. 'Tomuri', 'Green light' and 'Jenny'
- A. chinensis cvs. 'Soreli' and 'Delen'
- A. arguta cvs. 'Issai' and 'Weiki'.

Samples collected from 2 kiwifruit orchards (*A. deliciosa* cv. 'Hayward') in Vipavska dolina tested positive for *P. syringae* pv. *actinidiae*. During this official survey, no other infected *Actinidia* spp. plants were identified. It is noted that there are no kiwifruit nurseries within a radius of 4 km around the infected orchards.

The identity of the bacterium was confirmed by the official bacteriological laboratory of the National Institute of Biology (NIB) according to the draft EPPO protocol (isolation on selective medium, PCRs, LOPAT, pathogenicity tests). These results were also confirmed by the French reference laboratory (Anses, Angers) which determined that the two studied isolates belonged to biovar 3 (a highly virulent biovar of *P. syringae* pv. *actinidiae*). It is thought that the disease was introduced into Slovenia in the preceding years via imports of

infected plants for planting, and was then spread by agricultural machinery. In the infected orchards, many plants showed symptoms of wilting, shoot dieback and some bacterial oozing. Pictures can be viewed on the National Institute of Biology and Slovenian NPPO websites:

<u>http://www.nib.si/bolezni/700-bakterijskiozigaktinidij</u> <u>http://www.uvhvvr.gov.si/si/delovna_podrocja/zdravje_rastlin/posebno_nadzorovani_org</u> anizmi/bakterijski ozig aktinidije/slikovno gradivo/

Phytosanitary measures are being implemented in accordance with the Commission Decision 2012/756/EU.

The pest status of *Pseudomonas syringae* pv. *actinidiae* in Slovenia is officially declared as: Present, subject to official control.

Source: NPPO of Slovenia (2014-01).

Commission Implementing Decision (2012/756/EU) of 5 December 2012 as regards measures to prevent the introduction into and the spread within the Union of *Pseudomonas syringae* pv. *actinidiae* Takikawa, Serizawa, Ichikawa, Tsuyumu & Goto. http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2012:335:0049:0054:EN:PDF

Additional key words: new record

Computer codes: PSDMAK, SI

2014/027 First report of Xanthomonas citri pv. citri in Burkina Faso

In July 2011, citrus canker was suspected in Burkina Faso in the area adjacent to the Sikasso province of Mali where *Xanthomonas citri* pv. *citri* (EPPO A1 List) has been confirmed. In November and December 2012, leaves of clementine (*Citrus clementina*), lemon (*C. limon*), Volkamer lemon (*C. volkameriana*), sweet orange (*C. sinensis*), tangelo (*C. paradisi x C. reticulata*) and mandarin (*C. reticulata*) were collected from orchards with trees showing symptoms of citrus canker in the Comoé, Houet and Kénédougou provinces of Burkina Faso. Laboratory analysis (isolation on semi-selective medium, PCR, sequencing, biological tests) confirmed the presence of *X. citri* pv. *citri*. This is the first time that *X. citri* pv. *citri* is reported from Burkina Faso. It is noted that surveys are needed to determine the distribution of citrus canker in Burkina Faso, that sanitation measures should be taken in orchards to reduce disease prevalence, and that citrus canker-free nurseries should be established.

The situation of *Xanthomonas citri* pv. *citri* in Burkina Faso can be described as: **Present**, **first detected in December 2012**.

Source: Juhasz CC, Leduc A, Boyer C, Guérin F, Vernière C, Pruvost O, Wonni I, Ouedraogo L (2013) First report of *Xanthomonas citri* pv. *citri* causing Asiatic citrus canker in Burkina Faso. *Plant Disease* 97(12), p 1653.

Additional key words: new record

Computer codes: XANTCI, BF

2014/028 First report of 'Candidatus Liberibacter solanacearum' in El Salvador

In April 2012, symptoms resembling those caused by 'Candidatus Liberibacter solanacearum' (EPPO A1 List, Solanaceae haplotypes) were observed on tomatoes (Solanum lycopersicum) grown near the town of Yuroconte (municipality of La Palma, Chalatenango department), El Salvador. Symptoms included plant chlorosis, severe stunting, leaf cupping, excessive branching of axillary shoots, as well as leaf purpling and scorching. In several fields of the infected area, the disease incidence ranged from 40 to 60%. Tomato fields were also heavily infested by Bactericera cockerelli (Hemiptera: Triozidae - EPPO A1 List). The molecular analysis of plant and psyllid samples confirmed the presence of 'Ca. L. solanacearum'. This is the first documented report of this bacterium in El Salvador. The situation of 'Candidatus Liberibacter solanacearum' in El Salvador can be described as follows: Present, first found in 2012 on tomatoes in the Chalatenango department.

Source: Bextine B, Aguilar E, Sengoda VG, McCue KF, Munyaneza JE (2013) First report of *Candidatus* Liberibacter solanacearum' on tomato in El Salvador. *Plant Disease* 97(9), p 1244.

Additional key words: new record

Computer codes: LIBEPS, PARZCO, SV

2014/029 'Candidatus Liberibacter solanacearum' found on tobacco (Nicotiana tabacum) in Honduras and Nicaragua

In April 2012, unusual symptoms were observed in commercial fields of tobacco (*Nicotiana tabacum*) in Honduras (department of EI-Paraíso), as well as in Nicaragua (several departments, including Esteli and Nueva Segovia). Affected plants showed apical leaf curling and stunting, overall chlorosis and plant stunting, young plant deformation with cabbage-like leaves, wilting, and internal vascular necrosis of stems and leaf petioles. All tobacco cultivars grown were affected, and disease incidence ranged from 5 to 100%. Tobacco fields were also heavily infested by *Bactericera cockerelli* (Hemiptera: Triozidae - EPPO A1 List). Laboratory analysis confirmed the presence of *'Candidatus* Liberibacter solanacearum' (EPPO A1 List, Solanaceae haplotypes) in diseased tobacco plants. This is the first time that tobacco is recorded as a host of *'Ca*. L. solanacearum'.

Source: Aguilar E, Sengoda VG, Bextine B, McCue KF, Munyaneza JE (2013) First report of *Candidatus* Liberibacter solanacearum' on tobacco in Honduras. *Plant Disease* **97**(10), 1376-1377.

> Munyaneza JE, Sengoda VG, Aguilar E, Bextine B, McCue KF (2013) First report of *Candidatus* Liberibacter solanacearum' associated with psyllid-infested tobacco in Nicaragua. *Plant Disease* **97**(9), 1244-1245.

Additional key words: new host plant

Computer codes: LIBEPS, PARZCO, HN, NI

2014/030 First report of *Erwinia pyrifoliae* on strawberries in the Netherlands

The NPPO of the Netherlands recently informed the EPPO Secretariat of the first finding of an *Erwinia* species in strawberry (*Fragaria ananassa*) which was assigned to the *E. pyrifoliae* taxon. *E. pyrifoliae* is closely related to *Erwinia amylovora* (EPPO A2 List) and was initially described in 1999 in Korea on *Pyrus pyrifolia* (Asian or nashi pear) causing symptoms resembling those of fireblight (EPPO RS 99/134). In Japan, *Erwinia* isolates from *P. ussuriensis* or *P. communis* were found to be closely related to *E. pyrifoliae* but it is not entirely clear whether they were distinct species or not from *E. pyrifoliae*.

In the Netherlands, symptomatic strawberry plants collected from two different locations (glasshouse commercial crops) were received in June and October 2013 for diagnosis. The identity of the bacterium was confirmed on 23 December 2013 by the National Reference Centre (biochemical and molecular tests of pure cultures followed by pathogenicity tests on *F. ananassa* cv. 'Elsanta'). Affected strawberry plants showed intense blackening of immature fruits, fruit calyx and attached stems. In many cases, fruits were also heavily distorted. No symptoms were observed on the leaves. The discolouration was obvious inside young fruits which presented an intense darkening/blackening of the fruit tissue at the edges, and the fruit tissue was extremely shiny in the middle. Release of bacterial slime was additionally observed on the surface of the young fruits and their attached stems (ooze formation). Symptomatic fruit were unmarketable. At the two different locations, symptoms were generally observed across the whole greenhouses and disease incidence was high (with approximately 50% of the plants bearing at least 1 symptomatic fruit). Pictures of symptoms can be viewed on the Dutch NPPO website:

https://www.vwa.nl/actueel/bestanden/bestand/2204723

It is noted that according to the time when infection starts during the strawberry growing season, economic losses can greatly vary from low (when infection occurs at the last stages of the cultivation for fruit production) to very high (when infection occurs at the initial stages of the cultivation for fruit production). The origin of the introduction of *E. pyrifoliae* in strawberry crops in the Netherlands is unknown. In 2014, a specific surveillance programme of strawberry fruit growers will be carried out to determine the distribution of *E. pyrifoliae* in the Netherlands. Depending on the outcome of this surveillance programme, further phytosanitary measures will be considered. Since affected crops have already been removed, no further phytosanitary measures have been taken at the affected fruit companies.

The pest status of *Erwinia pyrifoliae* in the Netherlands is officially declared as: **Present**, only in some areas, only in protected cultivation.

Source: NPPO of the Netherlands (2014-01).

Kim WS, Gardan L, Rhim SL, Geider K (1999) *Erwinia pyrifoliae* sp. nov., a novel pathogen that affects Asian pear trees (*Pyrus pyrifolia* Nakai). *International Journal of Systematic Bacteriology* **49**, 899-906.

Additional key words: new record, new host plant

Computer codes: ERWIPY, NL

2013/031 Update on the situation of *Fusarium foetens* in the Netherlands

In the Netherlands, *Fusarium foetens* (EPPO A2 List) was first found in 2000 in a breeding/propagation company of begonias (*Begonia x hiemalis*). In the early 2000s, as incidental findings of *F. foetens* were made in nurseries of begonia, phytosanitary measures were implemented to eradicate this fungus. In 2011, a PRA was conducted by the Dutch NPPO and it was concluded that the disease was essentially spread by infected propagation material, and that the implementation of voluntary certification schemes by growers was more effective than phytosanitary measures to stop disease spread. Therefore, *F. foetens* is no longer submitted to official phytosanitary measures but is controlled within the framework of certification schemes for the production of healthy planting material. The NPPO stressed that the major Dutch producer of begonia cuttings (80%) is registered with the Naktuinbouw quality certification system 'Elite', and that

other propagation companies apply similar quality systems to ensure pest freedom of their planting material.

The pest status of *Fusarium foetens* in the Netherlands is officially declared as: **Present**, few occurrences.

Source: NPPO of the Netherlands (2013-11).

PRA *Fusarium foetens*, April 2010, Plant Protection Service, the Netherlands. <u>http://www.nvwa.nl/onderwerpen/english/dossier/pest-risk-analysis/evaluation-of-pest-risks</u>

Naktuinbouw quality certification system 'Elite'. http://www.naktuinbouw.nl/en/topic/naktuinbouw-elite

Additional key words: detailed record

Computer codes: FUSAFO, NL

2014/032 First report of *Plum pox virus* in Israel

The NPPO of Israel recently informed the EPPO Secretariat of the first record of *Plum pox virus* (*Potyvirus*, PPV - EPPO A2 List) on its territory. In April 2013, PPV was found on apricot and plum (*Prunus armeniaca*, *P. domestica*) in 2 small commercial orchards (2.6 ha in total, density of 500 trees/ha) at Zichron Yaakov. Unusual symptoms had been noticed by the grower. Laboratory studies (ELISA, RT-PCR, TaqMan RT-PCR and sequencing) confirmed the presence of PPV-D in diseased trees. Eradication measures were taken. Both orchards were uprooted and burnt. All trees within a radius of 500 m around any infected tree were tested (ELISA and TaqMan RT-PCR). A plan of action to continue surveying all surrounding areas and nurseries was developed and is being implemented.

The pest status of *Plum pox virus* in Israel is officially declared as: **Isolated finding**, **under** eradication.

Source: NPPO of Israel (2013-12).

Additional key words: new record

Computer codes: PPV000, IL

2014/033 First report of *Citrus tristeza virus* in Bosnia and Herzegovina

In Bosnia and Herzegovina, the citrus-growing area is small (approximately 6 ha) and limited to the river Neretva valley, close to the Adriatic coastal region. Mandarins (*Citrus reticulata*) and lemons (*C. limon*) grafted on trifoliate orange (*Poncirus trifoliata*) are the most cultivated species. In June 2012, 25 samples were collected from 25 citrus trees (*C. reticulata, C. aurantium, C. limon, C. sinensis, P. trifoliata, Fortunella margarita*) in several commercial citrus orchards and one nursery, located in Mostar, Čapljina, and Ljubuški. 10 of the 25 citrus trees exhibited leaf chlorosis, whereas all others were symptomless. Serological and molecular tests confirmed the occurrence of *Citrus tristeza virus* (*Closterovirus*, CTV - EPPO A2 List) in 14 out of the 25 tested samples. Although a very small number of samples were tested in this study, CTV appears to be widely distributed in the citrus orchards of the country as CTV was found at all inspected locations of the Herzegovina region. This is the first time that CTV is reported from Bosnia and Herzegovina.

The situation of *Citrus tristeza virus* in Bosnia and Herzegovina can be described as follows: **Present**, **first found in 2012 in Herzegovina region**.

Source: Delić D, Afechtal M, Djelouah K, Lolić B, Karačić A (2013) First report of *Citrus tristeza virus* in citrus orchards in Bosnia and Herzegovina. *Plant Disease* 97(12), p 1665.

Additional key words: new record

Computer codes: CTV000, BA

2014/034 New data on guarantine 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. The situation of the pest concerned is indicated in bold, using the terms of ISPM no. 8.

• New records

During summer 2012, a sudden leaf and twig blight disease was observed throughout the Northern forests of Iran on boxwood (*Buxus sempervirens* subsp. *hyrcana*). Morphological and molecular methods confirmed the presence of *Cylindrocladium buxicola* (formerly EPPO Alert List) in diseased plant material collected from the Guilan and Mazandaran provinces (Mirabolfathy *et al.*, 2013). Present, first found in 2012 in Northern forests.

Cherry necrotic rusty mottle virus (Betaflexiridae, CNRMV - formerly EPPO A2 List) is reported for the first time in South America from Chile. In October 2011, CNRMV was detected in leaf samples collected from 21 sweet cherry trees (*Prunus avium* cv. 'Bing') from Libertador General Bernardo O-Higgins and Maule regions. CNRMV was detected in 10 samples, and another virus, *Cherry green ring mottle virus*, was detected in 6 samples (Fiore and Zamorano, 2013). Present, first found in 2011 on a small number of samples from sweet cherry trees.

Diabrotica undecimpunctata (Coleoptera: Chrysomelidae - EPPO A1 List) was detected for the first time in Guam. A single specimen was collected from lettuce growing at a farm in Mangilao in June 2013 (Moore and Bamba, 2014). Present, a single specimen was found in June 2013.

In Guam, a single specimen of *Halyomorpha halys* (Hemiptera: Pentatomidae - formerly EPPO Alert List) was collected in a hotel room and identified in October 2013. It is presumed that it was introduced with the luggage of a visitor to Guam from Boston, US (Moore, 2014). Present, a single specimen was identified in October 2013.

Heterodera zeae (EPPO Alert List) was first found in Afghanistan in 2009. During a survey carried out in the Nangharhar province, cysts and second stage juveniles of *H. zeae* were detected in soil samples collected from 5 wheat fields which had been previously cultivated with maize (Asghari *et al.*, 2013). Present, first found in 2009 in the Nangharhar province.

In Indonesia, *Iris yellow spot virus* (*Tospovirus*, IYSV - formerly EPPO Alert List) was detected for the first time in April 2013 in a field crop of *Allium fistulosum* in Cipendawa (Cianjur district), West Java province (Pappu and Rauf, 2013). Present first found in 2013 in Cianjur district (West Java).

During a survey conducted in March 2011, *Columnea latent viroid* (*Pospiviroid*, CLVd) was found in tomato (*Solanum lycopersicum*) field crops in the municipality of Niono, Mali. Affected plants showed stunted growth, epinasty, and leaf chlorosis. In several fields, necrosis of leaf veins and stems was also observed (Batuman and Gilbertson, 2013). Present, first found in 2011 in tomato field crops.

• Detailed records

During a limited survey conducted from 2010 to 2012 in commercial vineyards and a germplasm repository, the presence of *Arabis mosaic virus* (*Nepovirus*, ArMV - EU Annexes) was detected in New York state (county of Ontario), USA (Celebi-Toprak, 2013).

In Poland, *Diabrotica virgifera virgifera* (Coleoptera: Chrysomelidae - EPPO A2 List) was first found in 2005 (2 locations in the voivodship of Podkarpacskie, Southeastern Poland). Since then the pest has continued to spread northwards. The official survey conducted in 2013 showed that *D. virgifera virgifera* occurred in 11 voivodeships located in the Southern part of Poland (Dolnośląskie, Lubelskie, Łódzkie, Małopolskie, Mazowieckie, Opolskie, Podkarpackie, Podlaskie, Śląskie, Świętokrzyskie, Wielkopolskie) (NPPO of Poland, 2013).

In Florida (US), a severe outbreak of downy mildew caused by *Plasmopara obducens* (formerly EPPO Alert List) was observed on *Impatiens walleriana* during winter 2012. The disease was observed in several counties (Broward, Collier, Hendry, Hillsborough, Manatee, Miami-Dade, Palm Beach), and its incidence reached nearly 100% in many affected landscape plantings (Palmateer *et al.*, 2013).

In Italy, *Monilinia fructicola* (EPPO A2 List) was detected in January 2012 during a survey for postharvest diseases on stored apples (*Malus domestica* cvs. 'Gala' and 'Pink Lady') in Emilia-Romagna (Martini *et al.*, 2013).

• New host plants

During summers 2008 and 2010, leaf and shoot blight, wilting of tips of young shoots, and cankers with brown discoloration on twigs were observed in 6 plants of *Rosa canina* in Ereğli district (Konya province, Central Anatolia region), Turkey. The presence of *Erwinia amylovora* (EPPO A2 List) was confirmed in these diseased plants (Bastas *et al.*, 2013).

• Diagnostics

A real-time PCR assay has been developed in the USA for the early detection of *Anisogramma anomala* (EPPO A1 List) (Molnar *et al.*, 2013).

Source: Asghari R, Pourjam E, Heydari R, Tanha Maafi Z, Latifi AM (2013) First report of corn cyst nematode, *Heterodera zeae* in Afghanistan. *Australasian Plant Disease Notes* 8, 93-96.
Bastas KK, Sahin F, Atasagun R (2013) First report of fire blight caused by *Erwinia amylovora* on rosehip (*Rosa canina*) in Turkey. *Plant Disease* 97(12), p 1652.
Batuman O, Gilbertson RL (2013) First report of *Columnea latent viroid* (CLVd) in tomato in Mali. *Plant Disease* 97(5), 692-693.
Celebi-Toprak, Thompson JR, Perry KL, Fuchs M (2013) *Arabis mosaic virus* in grapevines in New York State. *Plant Disease* 97(6), p 849.

- Fiore N, Zamorano A (2013) First report of *Cherry green ring mottle virus* and *Cherry necrotic rusty mottle virus* in sweet cherry (*Prunus avium*) in Chile and South America. *Plant Disease* **97**(8), 1122-1123.
- Martini C, Spadoni A, Mari M (2013) First report of brown rot caused by *Monilinia fructicola* on apple in Italy. *Plant Disease* **97**(5), p 689.
- Mirabolfathy M, Ahangaran Y, Lombard L, Crous PW (2013) Leaf blight of *Buxus* sempervirens in Northern forests of Iran caused by *Calonectria pseudonaviculata*. *Plant Disease* **97**(8), 1121-1122.
- Molnar TJ, Walsh E, Capik JM, Sathuvalli V, Mehlenbacher SA, Rossman AY, Zhang N (2013) A real-time PCR assay for early detection of Eastern Filbert blight. *Plant Disease* **97**(6), 813-818.
- Moore A, Bamba J (2014) Spotted cucumber beetle (Southern corn rootworm) *Diabrotica undecimpunctata* (Coleoptera: Chrysomelidae). Guam New Invasive Species Alert no. 2014-02, 2 pp.

http://guaminsects.net/anr/sites/default/files/spotted%20cucumber%20beetle.pdf

- Moore A (2014) Brown marmorated stink bug *Halyomorpha halys* (Stal 1855) (Hemiptera: Pentatomidae). Guam New Invasive Species Alert no. 2014-01, 2 pp. <u>http://guaminsects.net/anr/sites/default/files/brownMarmoratedStinkBug.pdf</u> NPPO of Poland (2013-12).
- Palmateer AJ, Lopez P, Seijo TE, Peres NAR (2013) Severe outbreak of downy mildew caused by *Plasmopara obducens* on *Impatiens walleriana* in Florida. *Plant Disease* **97**(5), p 687.
- Pappu HR, Rauf A (2013) First report of *Iris yellow spot virus* infecting green onion in Indonesia. *Plant Disease* **97**(12), p 1665.

Additional key words: new record, detailed record, new host plant, diagnostics

Computer codes: ARMV00, CRNRM0, CRSPAN, CYLDBU, DIABUH, DIABVI, ERWIAM, HALYHA, HETDZE, IYSV00, MONIFC, PLASOB, AF, CL, GU, ID, IR, IT, PL, TR, US

2014/035 POR - 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 2014-03-06. As some users had reported difficulties with the previous system of PQR automatic updates (usually due to security reasons and need of administration rights), the EPPO Secretariat has decided to modify it. In addition, PQR data and pictures were previously provided in separate files. In the current system, this has been simplified for the users as data and pictures are provided and updated in a single operation.

Because this represents a major modification, users are now kindly requested to install PQR again on their computer (it is not necessary to delete/remove the old PQR).

Click on the link below:

http://newpgr.eppo.int/download.php

Enter your e-mail and choose the type of installation that best fits your IT environment:

- Installer (as before, you need administration rights, follow installation wizard)

- Zip package (you do NOT need administration rights, download the file, unzip, and run pqr.exe)

Once re-installed, PQR will function as before and users will be automatically notified when further updates are available.

The following new items have been added since the previous update (2013-09-12)

- New world distributions: e.g. *Heterobasidion irregulare*, *Geosmithia morbida*, *Pityophthorus juglandis*, *Trichoferus campestris* (update).
- New pest pictures (e.g. Aproceros leucopoda, Heterobasidion irregulare, Thaumatotibia leucotreta, Xylella fastidiosa).
- All recent data from the EPPO Reporting Service (September 2013 to January 2014)

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

Source: EPPO Secretariat (2014-03)

Additional key words: database, EPPO

2014/036 New book on 'Insects and diseases damaging trees and shrubs of Europe'

A new colour atlas on 'Insects and diseases damaging trees and shrubs of Europe' was published in 2013. It has been prepared with the collaboration of many scientists, and edited by Milan Zùbrik, Andrej Kunca and György Csòka. It is mainly addressed to specialists, professional practitioners and students in forestry or in park and garden management. The book is available in English or in French.

Zùbrik M, Kunca A, Csòka G (eds.) (2013) Insects and diseases damaging trees and shrubs of Europe. NAP Editions, 535 pp.

This atlas covers more than 1 100 species of pests causing damage to trees and shrubs in Europe and is illustrated by more than 4 300 pictures. Pests are presented in the order of their host plants (i.e. from *Abies alba* to *Viburnum* spp.). For each pest, colour photographs and a brief description (scientific name, common names in English (or French), life cycle, significance and broad distribution) are presented.

This colour atlas can be ordered from: <u>http://www.napeditions.com/en/</u> (English version) <u>http://www.napeditions.com/fr/</u> (French version)

Source: EPPO Secretariat (2014-01).

Additional key words: publication

2014/037 Arctotheca calendula found for the first time in the Hérault and Var Departments (France)

In France, *Arctotheca calendula* (Asteraceae, EPPO Alert List) has been known to occur in the departments of Landes, Pyrénées-Atlantiques since the 1980s, and in Corsica since the 1990s. It was also recorded in the Hérault and Var Departments in the 2000s. In the Hérault Department, it was recorded in Valras plage on white dunes, just nearby the campsite 'Lou Village' and in Sète at the site called 'Castellas'. In the Var Department, it is present in Hyères at the site called 'Notre-Dame'.

Source: Silene, Système d'information et de localisation des espèces natives et envahissantes. http://www.silene.eu/index.php?cont=accueil

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Additional key words: detailed record, invasive alien plant

Computer codes: AROCA, FR

2014/038 First report of Parthenium hysterophorus in Malaysia

Parthenium hysterophorus (Asteraceae, EPPO Alert List) has been found for the first time in Malaysia, on roadsides in the town of Batang Kali, Selangor state. It was found near Masjid Hulu Yam Baru on the edge of the road Jalan B57 and near the banks of the river Sungai Liam. The plant colonized open places, areas adjacent to the walls of vegetable farms or grew in small bushes. Seeds were observed on plant specimens found.

Source: Rezaul K (2013) Parthenium invasion: weed it out before it is too late. New Straits Times. 25th October 2013. <u>http://www.nst.com.my/opinion/letters-to-the-editor/parthenium-invasion-weed-it-out-before-it-s-too-late-1.384246</u>

Additional key words: new record, invasive alien plants

Computer codes: PTNHY, MY

2014/039 Proceedings of the workshop on invasive alien species at the European Parliament (Brussels, BE, 2013-12-17)

A workshop on invasive alien species was organized at the European Parliament in Brussels (BE) on 2013-12-17. The aim of the workshop was to allow an exchange of views on the new proposal for a regulation on the prevention and management of the introduction and spread of invasive alien species between members of the European Parliament, the European Commission, stakeholders, NGOs, public administration and academia. The report of presentations and exchanges of this encounter are available on the European Parliament website.

Source: Rabitsch W, Schindler S, Essl F, Read B (2014) Proceedings of the workshop on invasive alien species. Brussels, 17th of December 2013. Directorate general for internal policies. Policy Department A: economic and scientific policy. 82 pp. <u>http://www.europarl.europa.eu/document/activities/cont/201401/20140122ATT78</u> 042/20140122ATT78042EN.pdf

Additional key words: invasive alien plants, regulations

Computer codes: EU

2014/040 Israeli plant import regulations regarding invasive alien plants

According to the Israeli Plant Import Regulations, the following invasive alien plants are listed as guarantine pests: Acroptilon repens (Asteraceae, EPPO List of Invasive Alien Plants), Alectra spp. (Orobanchaceae), Ambrosia spp. (Asteraceae) (except A. maritima), Arceuthobium spp. (Santalaceae), Chrysopogon aciculatus (Poaceae), Cirsium arvense (Asteraceae), Commelina benghalensis (Commelinaceae), Cuscuta spp. (Convolvulaceae), Cyperus alopecuroides (Cyperaceae), Cyperus amabilis (Cyperaceae), Cyperus articulatus (Cyperaceae), Cyperus brevifolius (Cyperaceae), Cyperus iria (Cyperaceae), Cyperus rotundus (Cyperaceae), Elymus repens (Poaceae), Emex australis (Polygonaceae), Euphorbia spp. (Euphorbiaceae), Helianthus ciliaris (Asteraceae), Kyllinga brevifolia (Cyperaceae), Ipomoea hederacea (Convolvulaceae), Ipomoea nil (Convolvulaceae), Ipomoea turbinata (Convolvulaceae), Leptochloa chinensis (Poaceae), Orobanche spp. (Orobanchaceae), Paspalum scrobiculatum (Poaceae), Polygonum argyrocoleon (Polygonaceae), Polygonum convolvulus (Polygonaceae), Polygonum pensylvanicum radicans (Anacardiaceae), Rorippa (Polygonaceae), Rhus spp. (Brassicaceae), Toxicodendron pubescens (Anacardiaceae), Rottboellia cochinchinensis (Poaceae), Setaria pallidefusca (Poaceae), Sida spinosa (Malvaceae), Solanum carolinense (Solanaceae), Solanum sarrachoides (Solanaceae), Solanum rudepannum (Solanaceae), Sonchus arvensis (Asteraceae), Striga spp. (Orobanchaceae) and Viscum album (Santalaceae).

Source: State of Israel, Ministry of Agriculture and Rural Development, Plant Protection and Inspection Services (2009) Plant Import Regulations. 237 pp.

Additional key words: invasive alien plants, regulation

Computer codes: 1AKTG, 1AMBG, 1AREG, 1CVCG, 1EPHG, 1ORAG, 1RORG, 1STRG, AGRRE, CENRE, CIRAR, CLYMU, COMBE, CYPAI, CYPAO, CYPAR, CYPIR, CYPRO, CYSAC, EMEAU, HELCI, IPOHE, IPONI, KYLBR, LEFCH, PASSC, POLAG, POLCO, POLPY, ROOEX, SETPF, SIDSP, SOLCA, SOLSA, SOLTO, SONAR, TOXRA, TOXQU, VISAL, IL

2014/041 Plants regulated as guarantine pests in Belarus

The Order of the Belarus Ministry of Agriculture and Food of the 19th November 2010 lists the following invasive alien plants as quarantine pests: *Ambrosia artemisiifolia* (Asteraceae, EPPO List of Invasive Alien Plants), *Ambrosia trifida* (Asteraceae), *Ambrosia psilostachya* (Asteraceae), *Iva axillaris* (Asteraceae), *Acroptilon repens* (Asteraceae), *Bidens pilosa* (Asteraceae), *Cenchrus pauciflorus* (Poaceae), *Cuscuta* sp. (Convolvulaceae), *Euphorbia dentata* (Euphorbiaceae), *Ipomoea hederacea* (Convolvulaceae), *Ipomoea Iacunosa* (Convolvulaceae), *Solanum elaeagnifolium* (Solanaceae, EPPO A2 List), *Solanum carolinense*, *S. rostratum*, *S. triflorum* (Solanaceae) and *Striga* sp. (Orobanchaceae).

Source: Order of the Belarus Ministry of Agriculture and Food of 2010-11-19 no. 84.

Additional key words: invasive alien plants, regulation

Computer codes: 1CVCG, 1STRG, AMBEL, AMBTR, AMBPS, BIDPI, CCHPA, CENRE, EPHDE, IPOHE, IPOLA, IVAAX, SOLCA, SOLEL, SOLRS, SOLTR, BY

2014/042 Update on the pest risk assessments on invasive alien plants in Great Britain

Within Great Britain, a non-native species risk analysis mechanism was established in 2006. Risk assessments are carried out by independent experts and reviewed by a panel of experts. Following this process, risk assessments are available online for comment before being finalized. Since 2011, new risk assessments for the following plant species have been completed. For each species, the major conclusions of the risk assessment are presented.

Ambrosia artemisiifolia (Asteraceae, EPPO List of Invasive Alien Plants) is so far only recorded as casual in Great Britain and occurring on less than 100 ha. The probability of entry is considered as very likely as a contaminant of bird feed. It seems likely that at least in some of the warmest regions in Great Britain, the species could establish. If the species establishes, it would also be very likely to spread from established populations producing seed. The main impacts are expected on human health and agriculture.

Elodea canadensis (Hydrocharitaceae) is already a widely established aquatic plant and is regarded as naturalized in most parts of Great Britain. The pathway of entry is through trade of the species for horticultural purposes. Given the long establishment history of this plant in Great Britain, it is unlikely to cause much further damage, but it has the potential to invade new habitats, especially man-made water bodies such as drainage channels and gravel pits. In addition, movement into areas currently uncolonised cannot be ruled out.

Elodea nuttallii (Hydrocharitaceae, EPPO List of IAP) is also already a widely established aquatic plant in Great Britain, in particular in England. The pathway of entry is through trade of the species for horticultural purposes. It is considered to be in an expansion phase and has the potential to spread further. The plant should be regarded as having a high risk of being invasive and should be strongly recommended as a priority target for eradication or control in new sites. It also has the potential to move into areas currently uncolonised, particularly in north-eastern England, Scotland (north of the Central Lowlands) and Wales, in either new habitats or in habitats currently occupied by *E. canadensis*, which it displaces.

Eucalyptus glaucescens, E. gunnii and *E. nitens* (Myrtaceae) are widely established as ornamental garden trees and trial plantations. Entry pathway is by intentional importation of seed. Due to increased interest in growing these species for short rotation forestry and cut foliage, imports may increase in the future. There appears to be no evidence of natural regeneration of *E. glaucescens, E. gunnii* and *E. nitens* in Great Britain and the potential for spread currently appears to be low. The most important environmental impacts may be on loss of biodiversity, increased fire risk and lowering of water tables, and these impacts would be greatest at sites of high conservation or social value. The overall risk for these species is considered to be low, but given the potential for rapid developments in both the volumes that may be grown, and new varieties which could quickly be developed, the situation should be closely monitored.

Rhododendron ponticum (Ericaceae, EPPO Observation list of Invasive Alien Plants) is already widely established accross the whole of Great Britain and is spreading. The main pathway of introduction for *R. ponticum* has been ornamental horticulture. This species is causing massive economic losses within its existing geographic range. Losses are due to management and control costs for the species, losses of biodiversity, impacts on landscape aesthetics, loss of grazing land, impacts on forestry, and the species' role as a reservoir for the pathogens *Phytophthora ramorum* (Peronosporaceae, EPPO A2 List) and *P. kernoviae* (Peronosporaceae, EPPO A2 List). Sargassum muticum (Sargassaceae) is an algae which occurs throughout southern England, and has also been found in Wales, and recently on the west coast of Scotland. The species entered as a contaminant of oysters. No negative impacts on biodiversity have been observed, but the species may be able to change community (biotope) structure and dominance (having a visual impact where it forms dense beds). The species is considered as a potential 'nuisance species'.

Wasabia japonica (Brassicaceae) is currently grown commercially in Great Britain and traded as a commodity from overseas suppliers. The species has highly specific requirements for growth and could only establish in small stream margins in open areas, most likely in the Sussex and London area. Spread by seed and fragmentation are unlikely. Impacts are expected to be low as the species is not tolerant of competition with other species. The overall risk that this species represents is considered to be very low.

 Source:
 GB Non-native species Secretariat.

 http://www.nonnativespecies.org/index.cfm?pageid=143

2011/066 Pest risk analysis on invasive alien plants in the United Kingdom.

Additional key words: invasive alien plants, risk assessments

Computer codes: AMBEL, ELDCA, ELDNU, EUCGS, EUCGU, EUCNT, ETMWA, RHOPO, SARGMU, GB

2014/043 Giving common names to invasive alien plants

There is no clearly defined process for devising common names for invasive alien species (IAS). Pseudo-scientific names such as 'lantana' for *Lantana camara* carry no 'common meaning', and create communication barriers with non-scientists and the general public when using such names. Furthermore, invasive alien plants are also often named with names of indigenous plants and mistaken with them.

A working group in KwaZulu-Natal is running a pilot study for naming invasive alien plants in Zulu. The objective of this project is to correct the inappropriate use of naming invasive alien species to create Zulu names that describe the bad image of these plants to get public involvement when combating them. The end product of the project shall be a booklet with the Zulu names.

Source: Invasive Species South Africa Website, Naming invasive alien plants in isiZulu. http://www.invasives.org.za/item/551-naming-invasing-alien-plants-in-isizulu.html

> Sithole HJN, Macdonald IAW (2013) What's in a name? Directing the 'common naming' of invasive alien species. Abstract. Book of abstract of the EPPO/CoE/IUCN ISSG International Workshop 'How to communicate on pests and invasive alien plants?' Oeiras (PT), 2013-10-08/10. http://archives.eppo.int/MEETINGS/2013_conferences/communication_pt.htm

Additional key words: invasive alien species, social sciences

Computer codes: LANCA, ZA

2014/044 Presentation of the outcomes of the Life+ project on the management of Baccharis halimifolia in the País Vasco (ES)

The final seminar of the Life+ project 'Estuarios del País Vasco' will present the outcomes of 4 years of management of the invasive alien plant *Baccharis halimifolia* (Asteraceae, EPPO A2 List) over 700 ha in the estuaries of Urdaibai, Txingudi and Lea, and habitat restoration. This seminar will be held on the 13th of March 2014 in the Centro de Biodiversidad de Euskadi in the País Vasco (ES).

Source: Ihobe Website, Presentacion de resultados del proyecto Life+ Estuarios del País Vasco. <u>http://www.ihobe.net/Eventos/ficha.aspx?ldMenu=74e0675a-2235-4892-</u> af39-e5bf7072bc20&Cod=712

Additional key words: invasive alien plants, management

Computer codes: BACHA, ES