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CONTENTS ***Pests & Diseases***

Invasive Plants

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2014/202 First report of Grapevine flavescence dorée phytoplasma in Germany

The NPPO of Germany recently informed the EPPO Secretariat of the first record of Grapevine flavescence dorée phytoplasma (EPPO A2 List) on its territory. On 2014-10-01, the pathogen was detected in grapevine (*Vitis vinifera* cv. 'Chardonnay/SO4') in an officially registered nursery for the production of grapevine plants, located in Rheinland-Pfalz (Rhineland-Palatinate). Diseased grapevine plants showed typical symptoms of flavescence dorée. This finding was made during a monitoring programme carried out in accordance with the EU Decision 2014/497/EU* concerning *Xylella fastidiosa*. The phytoplasma was identified by the laboratory of the Julius Kühn-Institute using different PCR methods, and sequencing was done by INRA in France. The lot concerned included 4400 grafted plants; scion and rootstock originated from Germany and an Italian nursery, respectively. The vector of the disease, *Scaphoideus titanus* (Hemiptera: Cicadellidae), is not known to occur in Germany. Investigations have been initiated to trace back the possible origin of this infection. Phytosanitary measures have been taken to eradicate the disease. The movement of plants that are grafted on rootstocks from the same origin has been forbidden. Survey activities are on-going and additional measures are planned.
The pest status of Grapevine flavescence dorée phytoplasma in Germany is officially declared as: **Transient, only at one location in Rhineland-Palatinate, under eradication.**

* **Note**: EU measures have been triggered by the recent finding of *Xylella fastidiosa* in Italy (see EPPO RS 2013/184) to prevent its further spread within the EU, this bacterium does not occur in Germany.

Source: NPPO of Germany (2014-11).

Commission Implementing Decision (2014/497/EU) of 23 July 2014 as regards measures to prevent the introduction into and the spread within the Union of *Xylella fastidiosa* (Well and Raju). http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32014D0497&from=EN

Additional key words: new record **Computer codes:** PHYP64, DE

2014/203 *Xylella fastidiosa* detected for the first time on olive trees in Argentina

In October 2014, the presence of *Xylella fastidiosa* (EPPO A1 List) was reported in olive trees (*Olea europaea* cv. 'Arauco') in the areas of Aimogasta (La Rioja) and Cruz del Eje (Córdoba) in Argentina. Out of 50 tested plants, half of them were found to be infected with the bacterium. Symptoms of leaf scorch have been observed in affected plants. Surveys will be carried out in Argentina to determine the extent of the disease and its vectors. This is the first time that *X. fastidiosa* is detected on olive trees in Argentina. Previously, the bacterium had only been detected in plum (*Prunus domestica*), almond (*P. dulcis*) and citrus trees.

Source: INTERNET
INTA. Revista RIA (dated 2014-10-20). Se halló un nuevo patógeno en olivo.
http://ria.inta.gov.ar/?p=5665

Additional key words: detailed record, host plant **Computer codes:** XYLEFA, AR

2014/204 Studies on the transmission of *Xylella fastidiosa* by *Philaenus spumarius* in Puglia, Italy

The detection of *Xylella fastidiosa* in October 2013 in olive trees affected by a quick decline syndrome on the west coast of the Salento peninsula in Italy (EPPO RS 2013/184), prompted research for potential insect vectors of the bacterium. A three month survey was carried out to determine which xylem feeding insect species were occurring in affected olive orchards. Results showed that the dominant species was *Philaenus spumarius* (Hemiptera: Aphrophoridae) which made up 60% of the collected specimens; 30% were identified as *Euscelis lineolatus* (Hemiptera: Cicadellidae), and the remaining 10% were not identified. In November 2013, adults of *P. spumarius* were collected from ground vegetation in olive orchards infested by *X. fastidiosa*. PCR showed that 67% (40 out of 60) of the collected specimens tested positive for *X. fastidiosa*. The bacterium was not detected in *E. lineolatus*. Transmission tests using field-collected insects showed that *P. spumarius* transmitted the *X. fastidiosa* Salento strain to periwinkle test plants. In these preliminary tests, transmission was not obtained to olive trees but research will continue.

Source: Saponari M, Loconsole G, Cornara D, Yokomi RK, de Stradis A, Boscia D, Bosco D, Martelli GP, Krugner R, Porcelli F (2014) Infectivity and transmission of *Xylella fastidiosa by Philaenus spumarius* (Hemiptera: Aphrophoridae) in Apulia, Italy. *Journal of Economic Entomology* **107**(4), 1316-1319.

Additional key words: epidemiology **Computer codes:** XYLEFA, IT

2014/205 Citrus variegated chlorosis (*Xylella fastidiosa*) is not transmitted by citrus seeds

In Brazil, experiments have been conducted over a period of 7 years to evaluate the possible seed-to-seedling transmission of *Xylella fastidiosa* (EPPO A1 List) in sweet orange (*Citrus sinensis*). On this host, the bacterium causes a disease known as citrus variegated chlorosis. The bacterium was found colonizing the fruit (exocarp, central axis and mesocarp) and seed parts (seed coat, endosperm and embryo). However, *X. fastidiosa* was never detected (PCR) in seedlings grown from infected seeds. The authors concluded that these results indicate that *X. fastidiosa* is not transmitted from seeds to seedlings (Della Colletta-Filho *et al*., 2014). Another seed transmission study, also carried out in Brazil on sweet oranges and lemons (*C. sinensis* and *C. limon*), came to the same conclusion (Cordeiro *et al*., 2014).

Source: Cordeiro AB, Sugahara VH, Stein B, Leite Junior RP (2014) Evaluation by PCR of *Xylella fastidiosa* subsp. *pauca* transmission through citrus seeds with special emphasis on lemons (*Citrus limon* (L.) Burm. F). *Crop Protection* **62**, 86-92.

Della Coletta-Filho H, Alves Carvalho S, Carvalho Silva LF; Machado MA (2014) Seven years of negative detection results confirm that *Xylella fastidiosa*, the causal agent of CVC, is not transmitted from seeds to seedlings. *European Journal of Plant Pathology* **139**(3), 593-596.

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

2014/206 *Synchytrium endobioticum* found in Denmark

The NPPO of Denmark has recently informed the EPPO Secretariat of an isolated outbreak of *Synchytrium endobioticum* (EPPO A2 List) on its territory. This outbreak was found near the town of Ikast (centre of Jylland peninsula, Western part of Denmark). In September 2014, *S. endobioticum* was detected in 4 fields (of which 2 were contiguous) of ware potato (*Solanum tuberosum* cv. 'Kuras'), all belonging to the same grower. Other fields of the grower, in particular those adjacent to the four infected, have been officially inspected and did not show any signs of infestation.

Disease symptoms had been reported to the NPPO by the grower who initially suspected the occurrence of cyst nematodes. The identity of the fungus was confirmed by the Danish official laboratory on 2014-09-12 by microscopy and PCR (using two different primers). Further analysis will be made to identify the pathovar(s) of *S. endobioticum* involved. The possible origin of the disease is still under consideration. One of the infested fields has most likely been infested for several years. For more than a decade, the grower concerned has been producing and delivering ware potatoes exclusively to a nearby starch-producing factory and has never produced seed potatoes for marketing. Only certified seed potatoes originating from a small number of other EU Member States have been used. In many cases, those acquired seed potatoes have been multiplied by the grower himself, but for one year only (in accordance with the Danish legislation). Phytosanitary measures are being taken to prevent any further spread of *S. endobioticum*. Delimiting surveys (by visual control of tubers, followed by analysis of soil samples from all relevant fields) are continuing in all fields of the grower concerned and their vicinity. The removal of potatoes from all fields of the grower has been temporarily prohibited. According to survey results, potatoes will be released on a field-by-field basis and only for starch processing (as this is an acceptable method of destruction provided the handling of potato waste is adequate). Potato cultivation will be prohibited in infested fields, and restrictions on the future cultivation of potatoes and plants for planting in adjacent areas are still under consideration.

The pest status of *Synchytrium endobioticum* in Denmark is officially declared as: **Present, on some fields within one place of production exclusively of ware potatoes for processing, under official control.**

Source: NPPO of Denmark (2014-10).

Additional key words: detailed record **Computer codes:** SYNCEN, DK

2014/207 Updated situation of PSTVd in the Netherlands: eradication of the two outbreaks found in 2013 in tomatoes and *Dahlia*

The NPPO of the Netherlands recently informed the EPPO Secretariat of the successful eradication of two distinct outbreaks of *Potato spindle tuber viroid* (*Pospiviroid,* PSTVd – EPPO A2 List) which had been found in 2013 in a glasshouse of tomatoes (*Solanum lycopersicum*) grown for fruit production (see EPPO RS 2013/148) and in a *Dahlia* sp. corm production field (see EPPO RS 2013/194). There were no links between those two outbreaks. In addition, molecular analysis has confirmed that the Dutch PSTVd isolate from *Dahlia* is closely related to an isolate found in *Dahlia* in Japan, which together form a separate clade.

- **Tomatoes**

In June 2013, an outbreak of PSTVd was detected in one glasshouse producing tomato fruits. Only a few tomato plants in one row were affected. All plants had been destroyed; quarantine and hygiene measures had been imposed. The NPPO of the Netherlands now confirms that PSTVd has been eradicated from this production site.

- **Dahlia**

At the end of August 2013, PSTVd was detected in a dahlia corm production field. No symptoms were observed in infected plants. Surveillance records and testing of related lots belonging to other growers did not reveal other infected lots. On the infected production site, all infected lots have been destroyed. In 2014, the cultivation of *Dahlia* has been prohibited in fields which had been used in 2013 by the grower concerned, and all planting material for the next season will have to be renewed and produced by other growers. An official survey of other Dutch growers of *Dahlia* has been completed in the course of 2014, and the viroid was not found.

The pest status of *Potato spindle tuber viroid* in the Netherlands is officially declared as:
Transient in ornamentals. One outbreak in *Dahlia* sp. 2013, eradicated.
Incidental finding in potato (*Solanum tuberosum*) at a breeding company. Under eradication.
Incidental finding in tomato (*Solanum lycopersicum*) fruit production in 2013, eradicated.
Not known to occur in pepper (*Capsicum* L.).

Source: NPPO of the Netherlands (2014-10).

Additional key words: eradication, absence **Computer codes:** PSTVD0, NL

2014/208 First reports of Grapevine Pinot gris virus in the Czech Republic, Slovak Republic and Slovenia

Grapevine Pinot gris virus (*Trichovirus*, GPGV) is a newly described virus of grapevine which was originally identified in a grapevine plant (*Vitis vinifera* cv. 'Pinot gris') showing symptoms of chlorotic mottling and leaf deformations in the Autonomous Province of Trento, in Italy. This plant was also infected by several other viruses and viroids, and the initial studies carried out in Italy could not ascertain that the presence of GPGV was consistently associated with the observed symptoms. In addition to Italy, GPGV has also been detected in the Republic of Korea causing inner necrosis of berries and poor fruit set in cv. 'Tamnara' (see EPPO RS 2014/006). Two recent studies have detected the presence of GPGV in grapevine samples collected from the Czech Republic and Slovak Republic, as well as from Slovenia.

- **Czech Republic and Slovak Republic**

Molecular studies (small-RNA deep sequencing, RT-PCR) have confirmed the presence of GPGV in grapevine samples collected from the Czech Republic and Slovak Republic. As a result, sequences of 13 isolates of GPGV could be obtained and characterized. Among these isolates, 12 were collected from various cultivars (including cvs. 'Alibernet', 'André', 'Dornfelder', 'Muller Thurgau', 'Veltliner', 'Welschriesling') at different locations in the Slovak Republic (Čachtice, Pezinok, Topolcianky, Svaty Jur, Zelenec), and 1 GPGV isolate was collected on cv. 'Laurot' at Lednice in the Czech Republic. These studies showed that GPGV could be frequently detected in a relatively limited number of samples,

which may suggest that this virus is common in grapevine and more widely distributed than originally thought. In addition, it was not only detected in 'Pinot gris' or 'Traminer', but in other white and red-berry cultivars. It is also pointed out that in this current work, no typical symptoms could be associated with GPGV, and all GPGV-infected Slovak and Czech grapevines were simultaneously infected by other viruses. Therefore, it is underlined that further studies are needed to understand the prevalence, geographical distribution and pathogenicity of GPGV.

- **Slovenia**

In vineyards of the Western part of Slovenia, unusual virus-like symptoms were first observed in 2001 on grapevine cvs. 'Pinot gris' and 'Sauvignonasse'. Symptomatic plants showed shortened internodes, poor leaf development, mottling, and deformation of leaves that resulted in poor growth. During intensive visual inspections carried out from 2002 to 2006, these symptoms were observed on most grapevine cultivars grown in the Primorska region, although cvs. 'Pinot gris' and 'Sauvignonasse' remained the most commonly affected ones. Following the detection of GPGV in Italy and the Republic of Korea, its possible presence in Slovenia was studied. At 3 locations in the Primorska region, 42 leaf samples were collected mainly from symptomatic grapevine plants but also from asymptomatic ones. These samples (including cvs. 'Pinot gris', 'Pinot noir' and 'Muscat blanc') were tested for the presence of GPGV (RT-PCR, sequencing), and the virus was detected in 40 samples. It is stated that this new disease seems to be spreading in the Primorska region where it is causing considerable economic losses, and that it was also found in other regions of Slovenia in 2013. As in the other studies carried out in Europe, it is stressed that because GPGV could be found in symptomless plants, its role in the development of the currently observed grapevine disease should be further investigated.

Source: Glasa M, Predajňa L, Komínek P, Nagyová A, Candresse T, Olmos A (2014) Molecular characterization of divergent grapevine Pinot gris virus isolates and their detection in Slovak and Czech grapevines. *Archives of Virology* **159**, 2103-2107.
Mavrič Pleško I, Viršček Marn M, Seljak G, Žežlina I (2014) First report of Grapevine Pinot gris virus infecting grapevine in Slovenia. *Plant Disease* **98**(7), p 1014.

Additional key words: new record **Computer codes:** GPGV00, CZ, SI, SK

2014/209 First report of *Drosophila suzukii* in the Czech Republic

The NPPO of the Czech Republic recently informed the EPPO Secretariat of the first record of *Drosophila suzukii* (Diptera: Drosophilidae – EPPO A2 List) on its territory. The pest was found during a specific detection survey. On September 2014, adults were caught in a trap containing apple vinegar and located in a garden in the village of Stará Role (district of Karlovy Vary). No damage was observed. In 2014-09-11, 2 males of *D. suzukii* were identified. In the following weeks, more specimens of *D. suzukii* were caught in the same trap: 2 males and 8 females captured during the period from the 2nd to the 15th of September, and 13 males and 9 females captured from the 16th to the 22nd September. The pathway of introduction of *D. suzukii* into the Czech Republic remains unknown. No official measures were taken.
The pest status of *Drosophila suzukii* in the Czech Republic is officially declared as: **Present, only in some areas.**

Source: NPPO of the Czech Republic (2014-10).

Additional key words: new record **Computer codes:** DROSSU, CZ

2014/210 First report of *Drosophila suzukii* in the Slovak Republic

The NPPO of the Slovak Republic recently informed the EPPO Secretariat of the first record of *Drosophila suzukii* (Diptera: Drosophilidae – EPPO A2 List) on its territory. The pest was found during an official monitoring programme. On 2014-10-09, *D. suzukii* was caught in a trap located in a farm (village of Malé Ludince, district of Levice), between vine production buildings and fruit trees (apple and plum). No damage was observed. The identity of the pest was confirmed on 2014-10-16 using the EPPO Diagnostic protocol (PM 7/115(1) *Drosophila suzukii*). The origin of the pest is not known.
The pest status of *Drosophila suzukii* in the Slovak Republic is officially declared as: **Transient, actionable, under surveillance.**

Source: NPPO of the Slovak Republic (2014-10).

Additional key words: new record **Computer codes:** DROSSU, SK

2014/211 First report and eradication of *Spodoptera littoralis* in Germany

The NPPO of Germany recently informed the EPPO Secretariat of the first record of *Spodoptera littoralis* (Lepidoptera: Noctuidae – EPPO A2 List) on its territory. On 2014-05-23, *S. littoralis* was found in 700 sweet potato plants (*Ipomoea batatas* cv. 'Bright ideas') in a nursery in Hesse. The plants were heavily infested. The pest was identified morphologically by the German NPPO and this identification was confirmed by the Dutch NPPO. It is suspected that *S. littoralis* was introduced into the nursery with imports of plants from outside the EU. The young *I. batatas* plants had been imported and initially grown by another German nursery but *S. littoralis* has never been found in this nursery which is officially inspected every second week. The *I. batatas* plants originated in El Salvador, however *S. littoralis* is not known to occur either in El Salvador or in any other country in the Americas. It is noted that other plants imported from outside the EU were also grown in the nursery in Hesse. It is therefore suspected that *S. littoralis* might have been introduced with other imported plants from Africa. Phytosanitary measures have been taken to eradicate the pest. Infested plants have been treated several times with insecticides and quarantine has been imposed. A survey including neighbouring nurseries has been carried out.
The pest status of *Spodoptera littoralis* in Germany is officially declared as: **Absent, eradicated.**

Source: NPPO of Germany (2014-10).

Additional key words: new record, eradication **Computer codes:** SPODLI, DE

2014/212 First report of *Aproceros leucopoda* in Belgium

In Belgium, *Aproceros leucopoda* (Hymenoptera: Argidae – EPPO Alert List) was first detected by entomologists of the Royal Belgian Institute of Natural Sciences in 2013 (Boevé, 2013). In July and August 2013, the typical zig-zag feeding patterns of *A. leucopoda* were observed at different locations around Brussels, but neither larvae nor cocoons were found at that time. The occurrence of *A. leucopoda* was finally confirmed due to a finding of a late larval instar on a shrub of *Ulmus campestris* growing alongside a pond in Hoeilaart. One leaf on another branch of the same shrub was also attacked, but no

larva was present there. A few other elm trees or shrubs occurred in the immediate vicinity, but did not show any feeding patterns, and no other elms were present in the surroundings (within a radius <100 m). In 2014, several observations of the insect or typical feeding patterns were reported through citizen science between June and September, mainly in the centre of Belgium. No official phytosanitary measures were taken.
The pest status of *Aproceros leucopoda* in Belgium is officially declared as: **Present, only in some areas.**

Source: NPPO of Belgium (2014-10).

Boevé JL (2013) First record in Belgium of the invasive sawfly *Aproceros leucopoda* (Hymenoptera : Argidae) and some related ecological data. *Bulletin de la Société Royale Belge d'Entomologie* **149**, 217-221.

INTERNET
Natuurbericht web site. Lepenzigzagwesp verovert Vlaanderen. [Zigzag elm sawfly has reached Flanders]. http://www.natuurbericht.be/?id=12844&Eid=10085

Additional key words: new record **Computer codes:** APRCLE, BE

2014/213 First report of *Singhiella simplex* in Cyprus: addition to the EPPO Alert List

The NPPO of Cyprus recently informed the EPPO Secretariat of the first report of *Singhiella simplex* (Hemiptera: Aleyrodidae – ficus whitefly) on its territory, in the districts of Nicosia and Limassol. On 2014-07-21, the pest was incidentally found causing defoliation on *Ficus benjamina, F. binnendijkii,* and *F. microcarpa*. The identity of the whitefly was confirmed by Fera (GB). It is noted that this is the first record of *S. simplex* in Europe, and the first time that an infestation is recorded on *F. binnendijkii*. In Cyprus, *S. simplex* seems to be widespread in the area of Nicosia on ficus grown for ornamental purposes in public greens and private gardens, as well as in the area of Limassol in public greens, private gardens and in a garden centre. No official phytosanitary measures were taken.
The pest status of *Singhiella simplex* in Cyprus is officially declared as: **Present, seasonally.**

Singhiella simplex (Hemiptera: Aleyrodidae) – ficus whitefly
Why: The ficus whitefly, *Singhiella simplex,* was originally described in India. It has been introduced into the Americas and the Caribbean where it has shown an invasive behaviour, as well as a capacity to damage ficus trees in urban environments. Because it was recently found for the first time in Europe in Cyprus, the EPPO Secretariat decided to add this whitefly species to the EPPO Alert List.

Where: It is thought that *S. simplex* originates from Asia. It was originally described from material collected in Bihar, however the EPPO Secretariat could not find recent publications on the current situation of this whitefly species in Asia. In the 2000s, its presence was first noticed in the Americas and within a few years, the pest rapidly spread within this region.
EPPO region: Cyprus. Several American publications mentioned the finding of *S. simplex* in Israel in 2011, but no specific papers could be found in the literature to confirm this statement.
Asia: China (no details), India (no details), Myanmar.
North America: Mexico, USA (California, Florida).

Central America and the Caribbean: Barbados, Cayman Islands, Dominican Republic, Jamaica, Panama, Puerto Rico.
South America: Brazil (Minas Gerais, Rio de Janeiro, Sao Paulo), Colombia.

On which plants: *S. simplex* feeds on various species of *Ficus* (Moraceae): e.g. *Ficus aurea, F. altissima, F. bengalensis, F. benjamina, F. binnendijkii, F. citrifolia, F. lyrata, F. maclellandii,* and *F. microcarpa.* Not all *Ficus* species (or varieties) are attacked by *S. simplex*, in particular *F. religiosa* (sacred fig) and *F. carica* (edible fig) are not considered to be susceptible. In the literature, there is also an incidental record on *Rhododendron indicum* (azalea), but the host status of azaleas remains to be confirmed. In its introduced range, *S. simplex* has mainly been reported in urban trees, planted along roads, in parks and gardens.

Damage: Adults and immature stages feed on the foliage. Unlike many other whiteflies, immature stages can be found on both the lower and upper surface of leaves. Feeding may cause yellowing of leaves, severe defoliation, and branch dieback. High populations are able to stunt the growth of young trees. *S. simplex* populations may reproduce rapidly and numbers of emerging adults may be quite large. In California, in some cities of Los Angeles county where *Ficus* trees were commonly planted on sidewalks and streets, clouds of adult whiteflies were observed creating a nuisance for residents.
S. simplex adults (approximately 1.4-1.6 mm long) have white wings with a faint greyish-brown band towards the middle of the wing. Pupae are small (1.3 mm long), red-eyed, with tan to light green (often semi-transparent) oval bodies. Elongate and yellowish eggs are mainly laid along the mid-rib on the underside of the leaves. Pictures of the pest and its damage can be viewed on the Internet:
http://borboletasbr.blogspot.fr/2012/07/singhiella-simplex-hemiptera.html
http://www.freshfromflorida.com/Divisions-Offices/Plant-Industry/Plant-Industry-Publications/Pest-Alerts/Fig-Whitefly
Little information is available on the biology of *S. simplex*. However, studies carried out in Florida (US) have shown that the total duration of the immature stages varied from 97.1 days at 15°C to 25.2 days at 30°C, adults live 8 days at 15°C, 4.2 days at 25°C and 2.5 days at 30°C.

Dissemination: Adults can fly over short distances (as in the case for other whiteflies, they readily fly when disturbed). Over long distances, trade of plants for planting of *Ficus* spp. is probably the main pathway.

Pathway: plants for planting, bonsais? of *Ficus* from countries where the pest occurs.

Possible risks: Many ornamental *Ficus* species are grown across Europe, under glass in the north but also outdoors in the south and around the Mediterranean Basin. In Florida, this pest is causing problems to home owners who are given advice on how to protect their trees and hedges. In Brazil, some large city trees were so severely defoliated and disfigured, that the municipalities had to take measures (survey, pruning) to protect their patrimonial value. Chemical control measures are available against *S. simplex* but the application of insecticides in the urban environment is not always possible. Under glasshouses, the arrival of a new pest is likely to increase the costs of treatment and may jeopardize IPM strategies already in place. Investigations are being carried out to identify potential natural enemies (e.g. *Encarsia* spp., entomopathogenic fungi) which may limit pest populations. As serious damage has been reported on ornamental *Ficus* spp. in areas where the pest has been introduced, it seems desirable to monitor the situation of *S. simplex* in the EPPO region and prevent its further spread.

Sources
Anonymous (2009) Invasive alert - new species found - Ficus whitefly. *Aliens of Xamayca: a newsletter on non-indigenous species in Jamaica* **2**(3), p 1.
González-Julián P, Carapia VE, Muñoz-Viveros AL, Castañeda-García CN (2013) Registro de la mosca blanca del Ficus *Singhiella simplex* (Singh, 1931) (Hemiptera: Aleyrodidae), en México. *Entomologia Mexicana* **12**(2), 1488-1493.
INTERNET
- Agrociencia Panamensis (2009-03-13) Deteccion de la mosca blanca del ficus, Singhiella simplex Singh. (Hemiptera: Aleyrodidae), en Cocle, Panama written by Eduaro Esquivel Rios. http://agrociencia-panama.blogspot.fr/2009/10/deteccion-de-la-mosca-blanca-del-ficus.html
- Department of Los Angeles. Department of Agricultural Commissioner/Weights and Measures. Ficus whitefly (Singhiella simplex). www.cdfa.ca.gov/plant/ppd/PDF/Singhiella_simplex.pdf
- Florida Department of Agriculture and Consumer Services. The fig whitefly *Singhiella simplex* (Singh) (Hemiptera: Aleyrodidae). http://www.freshfromflorida.com/Divisions-Offices/Plant-Industry/Pests-Diseases/The-Fig-Whitefly
- University of California, Riverside. Center for Invasive Species Research. Ficus whitefly (*Singhiella simplex*). http://cisr.ucr.edu/ficus_whitefly.html
Jesus MLF, Ferreira Jr AJ, Trindad, TD, Racca Fillho F, de Lima AF (2008) Registro de uma especie exotica de mosca branca (Hemiptera: Aleyrodidae) e sua disseminaçao no Brasil. Abstract of a paper presented at the XXII Congresso Brasileiro de Entomologia (Uberlândia, BR, 2008-08-24/29). http://www.seb.org.br/eventos/cbe/xxiiicbe/verartigo.asp?cod=P2370&titulo=REGISTRO%20DE%20UMA%20ESP%C9CIE%20EX%D3TICA%20DE%20MOSCA%20BRANCA%20%28HEMIPTERA:%20ALEYRODIDAE%29%20E%20SUA%20DISSEMINA%C7%C3O%20NO%20BRASIL.
Kondo T, Evans G (2012) *Singhiella simplex* (Singh) (Hemiptera: Aleyrodidae), a new aleyrodid invasive species for Colombia. *Boletín del Museo de Entomología de la Universidad del Valle (BHEUV)* **13**(2), 31-33.
Kondo T, Simbaqueba Cortés R (2014) *Sarucallis kahawaluokalani* (Kirkaldy) (Hemiptera: Aphididae), a new invasive aphid on San Andres island and mainland Colombia, with notes on other adventive species. *Insecta Mundi* **0362**, 1-10.
Legaspi JC, Mannion C, Amalin D, Legaspi Jr BC (2011) Life table analysis and development of *Singhiella simplex* (Hemiptera: Aleyrodidae) under different constant temperatures. *Annals of the Entomological Society of America* **104**(3), 451-458.
Myartseva SN, Coronado-Blanco JM, Ruíz-Cancino E (2013) [First records of 'ficus whitefly' *Singhiella simplex* (Singh, 1931) (Hemiptera: Aleyrodidae) for Tamaulipas and Nayarit, México]. *Dugesiana* **20**(2), 81-82 (in Spanish).
NPPO of Cyprus (2014-11).
Serra CA, Cayetano X, Réliz A, Ferreira M, Garcia S, Godoy G, Halpay, Martines RT, Mendes RM, Moya JD, Silverio L, Matos L (2011) Impacts of recently emerged invasive exotic species and major threats to the Dominican agriculture. *Proceedings of the Annual Meeting of the Caribbean Food Crops Society (Bridgetown, Barbados, 2011-07-03/08)*, 146–156.
Velasco DNG, Goularte Moura R, Berti Filho E, Zarate do Couto HT (2011) [Evaluation of the infestation of *Singhiella simplex* (Hemiptera: Aleyrodidae) on *Ficus benjamina* in Sao Paulo city, Brazil]. *Revista de Agricultura* **86**(2), 134-141 (in Portuguese).

EPPO RS 2014/213
Panel review date - Entry date 2014-11

2014/214 First report of *Paraleyrodes minei* in Cyprus

The NPPO of Cyprus recently informed the EPPO Secretariat of the first report of *Paraleyrodes minei* (Hemiptera: Aleyrodidae – nesting whitefly) on its territory. On 2014-07-21, the pest was incidentally found causing defoliation on *Ficus benjamina* and *F. binnendijkii* in Nicosia and Limassol districts. Affected plants were grown outdoors for ornamental purposes. The identity of the whitefly was confirmed by Fera (GB). It is noted that *P. minei* was widespread in the area of Nicosia in public greens and private gardens, as well as in the area of Limassol where it was recorded in a garden centre, public greens and private gardens. No phytosanitary measures were taken.

The pest status of *Paraleyrodes minei* in Cyprus is officially declared as: **Present, seasonally.**

Source: NPPO of Cyprus (2014-11).

Additional key words: new record **Computer codes:** PARYMI, CY

2014/215 *Paraleyrodes minei* continues to spread in Italy

Paraleyrodes minei (Hemiptera: Aleyrodidae – nesting whitefly) is a polyphagous whitefly probably originating from Central America but which occurs in several Mediterranean countries (see EPPO Global Database https://gd.eppo.int/taxon/PARYMI/distribution). At the end of 2010, it was reported for the first time in Italy on citrus, in Campania region (see EPPO RS 2011/152). A few specimens were collected on a limited number of ornamental sour orange (*Citrus aurantium*) trees in a park in Portici, near Napoli. After this first detection, no other findings were reported. In mid-June 2014, the presence of *P. minei* was noted for the first time in citrus groves in Sicilia. Inspections were then carried out in most of the citrus-growing areas of Eastern Sicilia, as well as on ornamental citrus in gardens or along roads. Results showed that the pest occurred in a wide area along the coasts of Messina, Catania and Syracuse districts. *P. minei* was detected on lemon (*C. limon*), orange (*C. sinensis*) and sour orange (*C. aurantium*). Almost all findings of *P. minei* in Sicilia were in mixed populations with other whitefly species, mainly *Aleurothrixus floccosus* and to a lesser extent *Dialeurodes citri*. It is noted that considering its rapid spread in Sicilia and its presence in commercial orchards, *P. minei* might present a serious threat for the citrus industry and consequently requires a careful monitoring. For the moment, no damage was specifically reported. Studies have been initiated in Sicilia to identify natural enemies of *P. minei* which could be used to reduce its populations.

Source: Longo S, Rapisarda C (2014) Spread of *Paraleyrodes minei* Iaccarino (nesting whitefly in Italian citrus groves. *Bulletin OEPP/EPPO Bulletin* **44**(3), 529-533.

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

2014/216 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**

Glycaspis brimblecombei (Hemiptera: Psyllidae – formerly EPPO Alert List) is recorded for the first time from Tunisia. During a survey carried out in August 2013, the pest was found along all coastal areas of Northeastern Tunisia (Ariana, Bizerte, Ben Arous, Nabeul, Sousse and Tunis governorates). Eucalyptus trees, in particular *Eucalyptus camaldulensis*, were found to be highly infested (Ben Attia and Rapisarda, 2014). **Present, first found in August 2013 along all coastal areas of Northeastern Tunisia.**

Glycaspis brimblecombei (Hemiptera: Psyllidae – formerly EPPO Alert List) occurs in South Africa. It was first found in 2012 on street and ornamental eucalyptus trees near Pretoria

and in Gauteng province. It was then found in eucalyptus plantations (Mpumalanga, Limpopo and KwaZulu-Natal provinces) (Forestry and Agricultural Biotechnology Institute, 2013). **Present, first found in 2012 near Pretoria and then in several provinces (Gauteng, Limpopo, KwaZulu-Natal, Mpumalanga).**

Glycaspis brimblecombei (Hemiptera: Psyllidae – formerly EPPO Alert List) occurs in Colombia. It was first found in March 2012 in the municipality of Jerico (Antioquia department) (Instituto Colombiano Agropecuario, 2013). **Present locally, under official control.**

During a study carried out in several Mediterranean countries, the presence of *Glycaspis brimblecombei* (Hemiptera: Psyllidae – formerly EPPO Alert List) has been detected in Algeria (near Algiers) and in Greece (Peloponnese). No damage was reported (Reguia and Peris-Felipo, 2013). **Present, no details.**

In Spain, unusual symptoms (interveinal leaf mottling and yellowing, brittleness) were observed in September 2011 in commercial greenhouses of beans (*Phaseolus vulgaris*) in Granada and Almeria provinces (Andalucía). Diseased plants were all observed in glasshouses which were infested by *Bemisia tabaci*. The presence of *Lettuce chlorosis virus* (*Crinivirus*, LCV – formerly EPPO Alert List) was detected in diseased bean plants. Previously, this virus had only been recorded in California (US) infecting lettuce but not beans. Interestingly, the Spanish strain isolated from beans was not able to infect lettuce (Ruiz *et al*., 2014).

Potato spindle tuber viroid (*Pospiviroid*, PSTVd – EPPO A2 List) is reported for the first time from the Dominican Republic. In spring 2013, PSTVd caused a severe disease outbreak in one tomato field. The origin of this infection is unknown (Ling *et al*., 2014). **Present, first found in 2013 in 1 tomato field.**

The occurrence of maize redness (EPPO Alert List), associated with '*Candidatus* Phytoplasma solani', has been confirmed in Bosnia and Herzegovina. From 2010 to 2012, symptoms of reddening followed by desiccation of the whole plant were frequently observed in maize fields in the Semberija region (Northeastern part of the country), causing significant economic losses. Recent studies confirmed the presence of '*Ca*. P. solani' in diseased maize plants as well as in asymptomatic plants of Johnson grass (*Sorghum halepense*) and the insect vector, *Reptalus panzeri* (Kovačević *et al*., 2014). **Present, frequently observed in maize fields since 2010 in the Semberija region.**

Meloidogyne enterolobii (EPPO A2 List) was detected for the first time in Mexico in 2012. It was identified in root samples collected at Riachuelos (Veracruz state) from watermelon plants (*Citrullus lanatus* cv. 'Sunsugar') showing yellowing, stunting and root galls (Ramírez-Suárez *et al*., 2014). **Present, first found in 2012 in Veracruz state infecting *Citrullus lanatus*.**

- **Detailed records**

Downy mildew of impatiens (*Plasmopara obducens* – formerly EPPO Alert List) was first found in continental USA in 2004. In 2011 and 2012, it caused severe and widespread outbreaks across continental USA, resulting in considerable economic losses. In 2013, the disease was also found throughout the Hawai'ian Islands (Oahu, Kauai, Maui, Hawai'i) (Crouch *et al*., 2014).

In July 2013, *Ditylenchus dipsaci* (EPPO A2 List) was detected in garlic (*Allium sativum*) bulbs sent by a grower in Lorain county in Ohio (US) for analysis. This is the first time that *D. dipsaci* is reported from Ohio (Testen *et al*., 2014).

In Canada, *Heterodera glycines* (EPPO A2 List) was reported for the first time from Québec in 2014. It was previously only known to occur in Ontario. Second stage juveniles (J2) and cysts were found in St. Anicet in a 10 ha soybean field, close to the border with Ontario (Mimee *et al.*, 2014).

Scaphoideus titanus (Hemiptera: Cidadellidae, vector of flavescence dorée), was caught for the first time in 2013 in Puglia (Italy). In this region, surveys have showed that at present only '*Candidatus* Phytoplasma solani' is associated with grapevine yellows, but the presence of *S. titanus* is a threat to grapevine production in Southern Italy (Digiaro *et al*., 2014).

- **New host plants**

During intensive surveys carried out in France on *Dothistroma* needle blight (associated with *Dothistoma septosporum* and *D. pini*), the presence of *D. pini* was detected on *Pinus radiata* in the Pyrénées-Atlantiques departement (Piou *et al*., 2014).

In Tunisia, *Tomato yellow leaf curl virus* and *Tomato yellow leaf curl Sardinia virus* (*Begomovirus*, both EPPO A2 List) have been detected in *Solanum elaeagnifolium* (EPPO A2 List). This may suggest that, in addition to being an invasive weed, *S. elaegnifolium* could act as a reservoir for tomato yellow leaf curl diseases (Zammouri & Mnari-Hattab, 2014).

- **Diagnostics**

A padlock-probe-based assay has been developed to simultaneously detect *Xanthomonas oryzae* pv. *oryzae* and *Xanthomonas oryzae* pv. *oryzicola* (both EPPO A1 List) in rice seeds (Tian *et al*., 2014).

Real-time PCR tests have been developed in the Netherlands for the identification of four *Spodoptera* species: *Spodoptera eridania, S. frugiperda, S. littoralis* and *S. litura* (Lepidoptera: Noctuidae – A1/A2 Lists). The new tests were found to be suitable for routine identification of all life stages of these four *Spodoptera* species (van de Vossenberg & van der Straten, 2014).

- **Epidemiology**

Pepino mosaic virus (*Potexvirus*, PepMV – EPPO A2 List) had already been shown to be transmitted by unconventional modes through interactions with insects (*Macrolophus caliginosus* and bumble bees), fungus (*Olpidium virulentus*) and hydroponic systems in glasshouses. Recent studies have shown that the whitefly, *Trialeurodes vaporariorum,* could also transmit the virus from tomato to tomato, although with a low efficiency (Noël *et al*., 2014).

Studies conducted in Serbia have confirmed that *Reptalus panzeri* (Hemiptera: Cixiidae) is a vector of bois noir (grapevine yellows associated with '*Candidatus* Phytoplasma solani' – EPPO A2 List) (Cvrković *et al.*, 2014).

Source:

Ben Attia S, Rapisarda C (2014) First record of the red gum lerp psyllid, *Glycaspis brimblecombei* Moore (Hemiptera Psyllidae), in Tunisia. *Phytoparasitica* **42**(4), 535-539.

Crouch JA, Ko MP, McKemy JM (2014) First report of Impatiens downy mildew outbreaks caused by *Plasmopara obducens* throughout the Hawai'ian Islands. *Plant Disease* **98**(5), p 696.

Cvrković T, Jović J, Mitrović M, Krstić O, Toševski I (2014) Experimental and molecular evidence of *Reptalus panzeri* as a natural vector of bois noir. *Plant Pathology* **63**(1), 42-53.

Digiaro M, Elbeaino T, Valentini F, Cornara D, Percoco A, Guario A, Porcelli F (2014) First record in Apulia of *Scaphoideus titanus*, the vector of flavescence dorée. *Journal of Plant Pathology* **96**(2), p 439.

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-Instituto Colombiano Agropecuario. Sistema de Alerta Fitosanitaria (2013-05-14) Reporte de *Glycaspis brimblecombei* Moore en el Departamento de Antioquia. http://www.ica.gov.co/Alertas-Fitosanitarias/Notificacion-Oficial/Detalle-Notificacion-Oficial/Deteccion-de-Glycaspis-brimblecombei-Moore-en-el-D.aspx

-Foresty and Agricultural Biotechnology Institute. Pest Alert: *Glycaspis brimblecombei* - red gum lerp psyllid. http://src.fabinet.up.ac.za/tpcp/pdf/Glycaspis_Pest_Alert_update.pdf

Kovačević M, Đurić Z, Jović J, Perković G, Lolić B, Hrnčić S, Toševski I, Delić D (2014) First report of stolbur phytoplasma associated with maize redness disease of maize in Bosnia and Herzegovina. *Plant Disease* **98**(3), p 418.

Ling KS, Li R, Groth-Helms D, Assis-Filho FM (2014) First report of *Potato spindle tuber viroid* naturally infecting field tomatoes in the Dominican Republic. *Plant Disease* **98**(5), p 701.

Mimee B, Peng H, Popovic V, Yu Q, Duceppe MO, Tétreault MP, Belair G (2014) First report of soybean cyst nematode (*Heterodera glycines* Ichinohe) on soybean in the province of Quebec, Canada. *Plant Disease* **98**(3), p 429.

Nöel P, Hance T, Bragard C (2014) Transmission of the *Pepino mosaic virus* by whitefly. *European Journal of Plant Pathology* **138**(1), 23-27.

Piou D, Ioos R (2014) First report of *Dothistroma pini*, a recent agent of the Dothistroma needle blight, on *Pinus radiata* in France. *Plant Disease* **98**(6), 841-842.

Ramírez-Suárez A, Rosas-Hernández L, Alcasio-Rangel S, Powers TO (2014) First report of the root-knot nematode *Meloidogyne enterolobii* parasitizing watermelon from Veracruz, Mexico. *Plant Disease* **98**(3), 428-429.

Reguia K, Peris-Felipo FJ (2013) *Glycaspis brimblecombei* Moore, 1964 (Hemiptera Psyllidae) invasion and new records in the Mediterranean area. *Biodiversity Journal* **4**(4), 501-506.

Ruiz ML, Simón A, García MC, Janssen D (2014) First report of *Lettuce chlorosis virus* infecting bean in Spain. *Plant Disease* **98**(6), p 857.

Testen AL, Walsh EK, Taylor CG, Miller SA, Lopez-Nicora HD (2014) First report of bloat nematode (*Ditylenchus dipsaci*) infecting garlic in Ohio. *Plant Disease* **98**(6), 859-860.

Tian Y, Zhao Y, Xu R, Liu F, Hu B, Walcott RR (2014) Simultaneous detection of *Xanthomonas oryzae* pv. *oryzae* and *X. oryzae* pv. *oryzicola* in rice seed using a padlock-probe-based assay. *Phytopathology* **104**(10), 1130-1137.

Van de Vossenberg BTLH, van der Straten MJ (2014) Development and validation of real-time PCR tests for the identification of four species: *Spodoptera eridania, Spodoptera frugiperda, Spodoptera littoralis* and *Spodoptera litura* (Lepidoptera: Noctuidea). *Journal of Economic Entomology* **107**(4), 1643-1654.

Zammouri S, Mnari-Hattab M (2014) First report of *Solanum elaeagnifolium* as natural host of Tomato yellow leaf curl virus species (TYLCV and TYLCSV) in Tunisia. *Journal of Plant Pathology* **96**(2), 431-439.

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

Computer codes: DITYDI, DOTSPI, GLYSBR, HETDGL, LAPHFR, LCV000, MELGMY, PEPMV0, PHYPSO, PLASOB, PRODER, PRODLI, PSTVD0, REPTPA, SCAPLI, SOLEL, SPODLI, TRIAVA, TYLCSV, TYLCV0, XANTOR, XANTTO, BA, CA, CO, DO, DZ, ES, FR, GR, IT, MX, TN, TN, US

2014/217 The 'non-EU trade alert list': a new tool to protect the EU territory against the introduction of plant pests from third countries

The first version of the 'non-EU trade alert list' has been published on the European Commission website. This alert list results from a detailed analysis of the interceptions that have been made by EU Member States and Switzerland on plants and plant products imported from third countries. These interceptions have been notified via EUROPHYT, a computerized notification system, during a one-year period (from 2013-11-01 to 2014-10-31). This list shows the main pathways (commodity/exporting country combinations) on which plant pests have repeatedly been intercepted. The criteria that have been used to generate the alert list are presented in detail on the EU Commission website.
The aim of the 'non-EU trade alert list' is to draw the attention of the relevant plant health authorities and other stakeholders to the risks presented by certain pathways so that these risks can be addressed. The repeated findings of the same pests from the same origins may trigger the implementation of additional EU phytosanitary measures with the aim of protecting the EU territory against those pests. The 'non-EU trade alert list' will be updated monthly.

Source: European Commission. Health and consumers. Plants. Non-EU trade alert list. http://ec.europa.eu/food/plant/plant_health_biosafety/alert_list_trade_non_eu/index_en.htm

Additional key words: interceptions

Computer codes: EU

2014/218 A new EPPO Standard on the eradication and containment of invasive alien aquatic plants

In the December 2014 issue of the EPPO Bulletin EPPO will publish a new Standard in its PM9 series 'National regulatory control systems' on 'Invasive alien aquatic plants'. In this Standard, guidelines will be provided on the monitoring, eradication and containment of invasive alien aquatic plants. Guidance was written taking examples from several species into account. This new Standard will be freely available on the EPPO website.

Source: EPPO (2014) EPPO Standards. PM9 Invasive alien aquatic plants. *Bulletin OEPP/EPPO Bulletin* **44**(3), 457-471.

EPPO Website, National regulatory control systems. http://archives.eppo.int/EPPOStandards/regulatorysystems.htm

Additional key words: invasive alien plants, management

2014/219 Preventing *Parthenium hysterophorus* from entering and spreading in the EPPO region

Parthenium hysterophorus (Asteraceae) has been recommended for regulation to EPPO member countries since September 2014 and is listed in the EPPO A2 List. A Pest Risk Analysis (PRA) record and a PRA report (consisting of a summarized version of the PRA record) are available on the EPPO website and a datasheet on the species will also be published in the December 2014 issue of the EPPO Bulletin.
In addition to these documents, an article summarizing the main elements of the PRA will be published in the December 2014 issue of the EPPO Bulletin. This article informs the readers about the probability of entry of the species via the different pathways within the EPPO region (i.e. as a contaminant of used machinery, grain, seed, growing media attached to plants for planting, travelers), the probabilities of establishment and spread and the magnitude of its potential agricultural, environmental and social impacts.

Source: EPPO webpage on lists of invasive alien plants. https://www.eppo.int/INVASIVE_PLANTS/ias_lists.htm

Brunel S, Panetta D, Fried G, Kriticos D, Prasad R, Lansink AO, Shabbir A, Yaacoby T (2014) Preventing a new invasive alien plant from entering and spreading in the Euro-Mediterranean region: the case study of *Parthenium hysterophorus*. *Bulletin OEPP/EPPO Bulletin* **44**(3), 479-489.

Additional key words: invasive alien plants **Computer codes:** PTNHY

2014/220 Second generation biofuels and risks of invasiveness in the United States and Canada

Second generation biofuels are derived from ligno-cellulosic plant material (e.g. perennial rhizomatous grasses and woody plant species) and are expected to be more efficient (i.e. have higher energy yields) than the first generation biofuel crops. A review has been published and the authors stated that the scale of biofuel cultivation which is estimated to reach 1.5 billion ha by 2050 worldwide (thus equaling all agricultural areas now under production) will increase the propagule pressure of potentially invasive plant crops.

However, the risk of plant invasions and the subsequent economic and ecological negative impacts are rarely considered in the appraisal, development and regulation of different biofuel crops. Many of the traits that make ideal biofuel crops are common to invasive alien plants (rapid growth, high yields, perennial growth form, adaptability to a variety of habitats and climates, resistance to natural enemies, etc.). Numerous potentially invasive alien plants are therefore being considered for biofuel production in the US and Canada, yet the risk that these invasive alien plants may represent receives little attention in these countries' biofuel policies. The authors consider that policy options to minimize biological invasions, such as banning the use of known invasive alien plants, ongoing monitoring of approved species, and using of buffer zones around cultivated areas, should be envisaged.

Source: Smith AL, Klenk N, Wood S, Hewitt N, Henriques I, Yan N, Bazely DR (2013) Second generation biofuels and bioinvasions: an evaluation of invasive risks and policy responses in the United States and Canada. *Renewable and Sustainable Energy Reviews* **27**, 30-42.

Additional key words: invasive alien plants, biofuels **Computer codes:** CA, US

2014/221 Elimination of plants at the site scale: implications for eradication programmes

The literature about plant eradication has been reviewed and factors commonly cited as influencing eradication success were listed. The authors of this review considered that the most commonly cited factors influencing eradication success could be classified into 2 groups: those related to the 'organization' of the management operations, and those related to the 'site/species' which were beyond the control of the management agency. Detectability period, search distance, monitoring rate, infestation size, propagule longevity, time to reproductive maturity and previous eradication success all influenced the elimination of the plant at the site scale. Conversely, climate suitability, land use and general accessibility were relatively unimportant. By relating the influential site/species factors to a time-dependent model, managers and policy makers can estimate the probability of successful elimination at a site, given a particular time scale. These estimates can then be aggregated up to the scale they are interested in (e.g. national or regional) to allow managers to set realistic goals regarding eradication timeframes and resource requirements.

Source: Dodd A, Ainsworth N, Burgman MA, McCarthy MA (2014) Plant extirpation at the site scale: implications for eradication programmes. *Diversity and Distributions*, DOI 10.1111/ddi.12262.

Additional key words: invasive alien plants, eradication

2014/222 A smartphone application to report *Ambrosia artemisiifolia* in Europe

In the framework of the COST SMARTER project the University of Freiburg (DE) has launched a smartphone application to allow the public to report the occurrence of *Ambrosia artemisiifolia* (Asteraceae, EPPO List of Invasive Alien Plants) throughout Europe. The application provides pictures of the plant at different stages to help ensure accurate identification. Information on the location, the habitat type and the abundance of *A. artemisiifolia* have to be provided to create a report. The application is available in English, German, French and Italian.

Source: SMARTER, a new iPhone App 'The SMARTER Ambrosia Reporter'. http://ragweed.eu/app/

Additional key words: invasive alien plants, citizen science **Computer codes:** AMBEL

2014/223 Invasive alien plants in China

A book listing invasive alien plants in China has recently been published. The alien plants considered to be the most invasive according to the authors are listed in the table below with their origin, presence in the EPPO region (according to the DAISIE database) and overall distribution in China:

Species	Origin	Present in the EPPO region	Distribution in China
Ageratum conyzoides (Asteraceae)	S-Am.	Only reported in Madeira (PT)	Widespread in the Southern provinces
Amaranthus paniculatus (Amaranthaceae)	Am.	Yes	Very limited distribution
Alternanthera philoxeroides (Amaranthaceae, EPPO List of Invasive Alien Plants)	S-Am.	Yes	Widespread in Southern and Eastern provinces
Amaranthus retroflexus (Amaranthaceae)	N-Am.	Yes	Very widespread
Amaranthus spinosus (Amaranthaceae)	Am.	Yes	Widespread
Ambrosia artemisiifolia (Asteraceae, EPPO List of Invasive Alien Plants)	N-Am.	Yes	Widespread, except in Central and Western China
Ambrosia trifida (Asteraceae, EPPO Alert list)	N-Am.	Yes	Moderately widespread, present in Northern and Eastern provinces
Ageratina adenophora (Asteraceae)	N-Am.	Yes	Moderately widespread, present in South-Western provinces
Bidens frondosa (Asteraceae)	N-Am.	Yes	Limited, present in Eastern provinces
Bidens pilosa (Asteraceae)	Am.	Yes	Widespread, except in Northern provinces
Cenchrus echinatus (Poaecae)	Am.	Not recorded	Limited to Southern provinces
Conyza bonariensis (Asteraceae)	S-Am.	Yes	Widespread, except in Northern provinces

Species	Origin	Present in the EPPO region	Distribution in China
Conyza canadensis (Asteraceae)	N-Am.	Yes	Widespread, except in Southern and Western provinces
Conyza sumatrensis (Asteraceae)	S-Am.	Yes	Widespread, except in Northern provinces
Dysphania ambrosiodes (Dysphaniaceae)	Am.	Yes	Widespread
Eichhornia crassipes (Pontederiaceae, EPPO List of IAP)	S-Am.	Yes	Widespread
Eupatorium odoratum (Asteraceae) (= *Chromolaeana odorata*)	Am.	Not recorded	Moderately widespread, present in Southern provinces
Erigeron annus (Asteraceae)	N-Am.	Yes	Very widespread
Flaveria bidentis (Asteraceae)	S-Am.	Transient in ES, FR, HU	Limited, only in Eastern Central provinces
Galinsoga parviflora (Asteraceae)	Am.	Yes	Widespread, except in Eastern provinces
Gaura parviflora (Onagraceae)	N-Am.	Not recorded	Limited to the Eastern provinces
Ipomoea cairica (Convolvulaceae)	Af., As., Australasia	Not recorded	Limited distribution in Southern provinces
Ipomoea purpurea (Convolvulaceae)	S-Am.	Yes	Widespread
Leucaena leucocephala (Fabaceae)	Am.	Only recorded in Spain (including Islas Canarias) and Madeira (PT)	Moderately widespread in Southern provinces
Lolium temulentum (Poaceae)	Eur.	Yes	Widespread
Mikania micrantha (Asteraceae)	Am.	Not recorded	Very limited, only present in the South
Mimosa diplotricha (Fabaceae)	Am.	Not recorded	Limited distribution in Southern provinces
Mimosa sepiaria (Fabaceae)	S-Am.	Not recorded	Limited distribution in Southern provinces
Parthenium hysterophorus (Asteraceae, EPPO A2 List)	Am.	Only recorded in IL	Limited distribution in Southern provinces
Paspalum conjugatum (Asteraceae)	Am.	Not recorded	Moderately widespread in Southern and Eastern provinces
Pistia stratiotes (Araceae, EPPO List of IAP)	Cosmop.	Yes	Widespread
Praxelis clematidea (Asteraceae)	S-Am.	Not recorded	Very limited, only present in the South
Solanum aculeatissimum (Solanaceae)	Af., S-Am.	Not recorded	Moderately widespread in the Southern provinces
Solanum rostratum (Solanaceae)	N-Am.	Yes	Limited distribution
Solanum rudepannum (= S. torvum) (Solanaceae)	Am.	Only recorded in Sicilia (IT)	Limited distribution in the Southern provinces
Solidago canadensis (Asteraceae, EPPO List of IAP)	N-Am.	Yes	Widespread, except in Central and Northern provinces
Sorghum halepense (Poaceae)	Af., As.	Yes	Moderately widespread in Southern and Eastern provinces
Symphyotrichum subulatum (Asteraceae)	Am.	Yes	Widespread in Southern provinces

Species	Origin	Present in the EPPO region	Distribution in China
Spartina alterniflora (Poaceae)	Am.	Yes	Limited to Eastern provinces
Spartina anglica (Poaceae)	Eur.	Yes	Limited to Eastern provinces
Tithonia diversifolia (Asteraceae)	Am.	Not recorded	Limited to Southern provinces
Tridax procumbens (Asteraceae)	Am.	Yes	Limited to Southern provinces
Xanthium orientale subsp. *italicum* (Asteraceae)	Cosmop.	Yes	Limited distribution

It appears that most invasive alien plants in China originate from the Americas and that some species may represent emerging invasive alien species for the EPPO region: *Ageratum conyzoides, Cenchrus echinatus, Eupatorium odoratum, Flaveria bidentis, Gaura parviflora, Ipomoea cairica, Leucaena leucocephala, Mikania micrantha, Mimosa diplotricha, Mimosa sepiaria, Paspalum conjugatum, Praxelis clematidea, Solanum aculeatissimum, Solanum rudepannum* and *Tithonia diversifolia.*

Source: Delivering Alien Invasive Species Inventories in Europe. http://www.europe-aliens.org/

Wan F, Liu Q, XIE M (2012) Biological Invasions: Color Illustrations of Invasive Alien Plants in China. China Science Publishing Group, 303 pp.

Additional key words: invasive alien plants

Computer codes: AGECO, AMAPN, AMARE, AMASP, AMBEL, AMBTR, ALRPH, ASTSU, BIDFR, BIDPI, CCHEC, EICCR, ERIBO, ERICA, ERISU, EUPAD, FLABI, GAAPA, GASPA, IPOCA, LUAGL, MIKMI, MIMIN, MIMSP, PHBPU, PTNHY, PXJCL, SOLAC, SOLRS, SOOCA, SORHA, SPTAL, SPTAN, TITDI, TRQPR, XANSI, CN

2014/224 The International Plant Protection Convention joins the Liaison Group of the Biodiversity-related Conventions

The International Plant Protection Convention (IPPC) became the 7th member of the Biodiversity-related Conventions during the 9th ordinary meeting of the Liaison Group held in Switzerland in August 2014. The Liaison Group is composed of the Convention on Biological Diversity (CBD), the Convention on the Conservation of Migratory Species of Wild Animals (CMS), the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA), the Ramsar Convention on Wetlands and the World Heritage Convention (WHC). The Liaison Group seeks to enhance coherence and cooperation in the implementation of Biodiversity-related Conventions by providing a platform to exchange information and to enhance implementation.

Source: International Plant Protection Convention Website, IPPC Recognized as a Biodiversity-related Convention. https://www.ippc.int/fr/news/ippc-secretariat/ippc-recognized-biodiversity-related-convention

Convention on Biological Diversity Website, Liaison Group of Biodiversity-related Conventions. http://www.cbd.int/blg/

Additional key words: invasive alien species

2014/225 International Indigenous Forum on Biodiversity statement on invasive alien species

During the 12th Conference of the Parties of the Convention on Biological Diversity (CBD), the International Indigenous Forum on Biodiversity (IIFB) made a statement on invasive alien species. The statement highlights that Indigenous People and Local Communities are highly vulnerable to invasive alien species and suggests considering further work on this issue.
The IIFB suggested the preparation of a note on social, cultural and livelihood issues related to the direct and indirect impacts of invasive alien species; on the pathways of introduction of invasive alien species; on the contribution of traditional knowledge, innovation and practices in the detection and monitoring and management of invasive alien species. This note will be drafted with a view to developing a draft programme of work to be considered during the 13th meeting of the COP.

Source: International Indigenous Forum on Biodiversity, Statement on Invasive Alien Species, COP 12, Republic of Korea, 2014-10-07.
http://iifb.indigenousportal.com/2014/10/08/cop-12-iifb-statement-on-invasive-alien-species/?__scoop_post=62b1f110-5180-11e4-843f-001018304b75&__scoop_topic=819004#__scoop_post=62b1f110-5180-11e4-843f-001018304b75&__scoop_topic=819004

Additional key words: invasive alien species

2014/226 A dance to raise awareness about 'Invasive alien species'

As part of the implementation of the IUCN Commission on Ecosystem management Thematic Group 'Ecosystems and Invasive Species' communication strategy, a newly choreographed dance piece to raise awareness about Marine Invasive Species will be presented at the World Parks Congress in Sydney in November 2014. The project is looking for sponsors and donors.

Source: Indie Gogo Website, Presentation at World Parks Congress 2014. https://www.indiegogo.com/projects/presentation-at-world-parks-congress-2014

Additional key words: invasive alien plants, communication