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2019/068 Changes made to the EU list of regulated pests

The EU list of regulated pests included in the Annexes I to V of Council Directive 2000/29/EC has recently been modified and published in the Commission Implementing Directive 2019/523 of 21 March 2019. This Directive entered into force on the 31st of March 2019. The EPPO Secretariat has summarized below the main changes.

Additions to Annex I/A1
- *Aromia bungii*
- *Neoleucinodes elegantalis*
- *Oemona hirta*

Additions to Annex I/A2
- *Fusarium circinatum*
- *Geosmithia morbida*
- *Pityophthorus juglandis*

Transfers
- *Ceratocystis platani* is transferred from Annex II/A2 to Annex I/A2
- *Elsinoë* spp. are replaced by *Elsinoë australis*, *Elsinoë citricola*, *Elsinoë fawcettii* and transferred from Annex II/A1 to Annex I/A1
- *Grapholita packardi* (=*Enarmonia packardi*) is transferred from Annex II/A1 to Annex I/A1

Additions to Annex I/B
- *Liriomyza huidobrensis*
- *Liriomyza trifolii*

Other changes made to the EU Annexes mainly relate to the delimitation of protected zones within the EU territory, regulated host plants, and revision of special requirements.

Source: Commission Implementing Directive (EU) 2019/523 of 21 March 2019 amending Annexes I to V to Council Directive 2000/29/EC on protective measures against the introduction into the Community of organisms harmful to plants or plant products and against their spread within the Community.
https://eur-lex.europa.eu/eli/dir_impl/2019/523/oj

Additional key words: EU, quarantine list

Computer codes: AROMBU, CERAFP, ELSIAU, ELSICI, ELSIFA, GEOHMO, GIBBCI, LASPPA, LIRIHU, LIRITR, NEOLEL, OEMOHI, PITOJU, EU

2019/069 Recommendations to policy makers from the Euphresco project VirusCollect II

The following research project has recently been carried out in the framework of Euphresco (network for phytosanitary research coordination and funding – hosted by EPPO). The report presenting the main objectives and results of this project, as well as recommendations made to policy makers, can be viewed on the Internet.

VirusCollect II: building an international network of reference collections for regulated and other important plant viruses and viroids
The aim of the VirusCollect II project was to establish and extend an international network of collections of plant viruses and viroids by making isolates available for reference to diagnostic and research laboratories working in plant health. The transfer of Q-bank to EPPO has been considered crucial for the public accessibility of virus and viroid isolates. The VirusCollect II consortium noted that the implementation of the Nagoya protocol increased

the administrative obligations of both curators and users of collection materials. To enable NPPO laboratories to fulfil their duties, it is recommended that governments strengthen the infrastructure for plant virus and viroid collections by providing allocated budgets for the characterisation and maintenance of virus and viroid isolates.

Authors: Roenhorst A, Gentit P, Visage M, Menzel Wulf, Winter S, Lacomme C, Nisbet, C, Nyerges K, Krizbai L, van der Vlugt R, Shneyder Y, Mehle N, Ravnikar M, Linhartova S.
Duration of the project: from 2016-10-01 to 2018-10-01.
Report: https://zenodo.org/record/2628398#.XKYXLpgzbct

Source: Euphresco (2019-04). https://www.euphresco.net/projects/

Additional key words: research

2019/070 Meeting of the International Pest Risk Research Group - Globalization and pest invasions: emerging risks and vulnerabilities (Poznań, PL, 2019-09-03/06)

EPPO is pleased to be associated with the International Pest Risk Research Group (IPRRG) for the organization of their next annual meeting in the EPPO region. It will be hosted by the Institute of Plant Protection – National Research Institute (IPP-NRI), Poland, from Tuesday 3rd September to Friday 6th September 2019 in Poznań, Poland.

IPRRG consists of a dedicated group of research scientists and pest risk practitioners. This year, the topic will focus on: 'Globalization and pest invasions: emerging risks and vulnerabilities'.

Oral and poster presentations are invited on all aspects of pest risk research (on the meeting theme or those describing advances in modelling and mapping risks, impact assessment, and communicating risks to policy makers).

Deadline for abstract submission is the 31st of May 2019.
Website: http://www.pestrisk.org/iprrg-2019/

Source: EPPO Secretariat (2019-04)
https://www.eppo.int/MEETINGS/2019_meetings/wk_iprrg_eppo

Additional key words: conference, pest risk analysis **Computer codes:** PL

2019/071 Eradication of *Anoplophora glabripennis* in Marly, Switzerland

The NPPO of Switzerland informed the EPPO Secretariat that the outbreak of *Anoplophora glabripennis* (Coleoptera: Cerambycidae – EPPO A1 List) detected in 2014 in Marly (Canton of Fribourg) was officially declared eradicated in February 2019. Since 2014, intensive monitoring with sniffer dogs, tree climbers, and visual inspections has been carried out. From 2014 to 2019, no signs of *A. glabripennis* activity were detected (i.e. no beetles, larvae, eggs, exit holes, frass, oviposition pits, signs of maturation feeding). Restrictions on the movement of plants and plant material, as well as intensive monitoring measures were lifted on 2019-02-27. Eradication measures are continuing in Berikon (Canton of Aargau) where the pest was found in 2015 (EPPO RS 2015/185)
The pest status of *Anoplophora glabripennis* in Switzerland is officially declared as: **Transient, the infestation in Marly (Canton of Fribourg) is eradicated, surveillance measures continue in Berikon (Canton of Aargau), actionable, under eradication**

Source: NPPO of Switzerland (2019-03).

Pictures: *Anoplophora glabripennis*. https://gd.eppo.int/taxon/ANOLGL/photos

Additional key words: detailed record, eradication **Computer codes:** ANOLGL, CH

2019/072 First report of *Cydalima perspectalis* in Canada

In November 2018, the Canadian Food Inspection Agency (CFIA) confirmed the presence of *Cydalima perspectalis* (Lepidoptera: Crambidae – formerly EPPO Alert List) on boxwood (*Buxus* spp.) at 3 residential locations in Etobicoke (Toronto), Ontario. This is the first time that *C. perspectalis* is reported from Canada and the Americas. Phytosanitary measures have been taken to contain the pest and further studies will be made to determine the extent of the infestation. For the moment, it is not known whether this an isolated occurrence or if the pest is more widely distributed.
The situation of *Cydalima perspectalis* in Canada can be described as follows: **Present, first found in 2018 at 3 locations in Ontario, under containment.**

Source: NAPPO Phytosanitary Alert System. Official Pest Reports. Canada (2019-02-21) Detection of *Cydalima perspectalis* (box tree moth) in Ontario. https://www.pestalerts.org/oprDetail.cfm?oprID=782

Pictures: *Cydalima perspectalis*. https://gd.eppo.int/taxon/DPHNPE/photos

Additional key words: new record **Computer codes:** DPHNPE, CA

2019/073 First report of *Dacus ciliatus* in Turkey

During a survey conducted in September 2018 in South-eastern Anatolia (Turkey), *Dacus ciliatus* (Diptera: Tephritidae – EPPO A2 List) was detected for the first time in Turkey. Damage due to infestations of *D. ciliatus* was detected in the provinces of Diyarbakır, Mardin, Siirt and Şırnak (all in Southeast Anatolia region) in crops of cucumber (*Cucumis sativus*).
The situation of *Dacus ciliatus* in Turkey can be described as follows: **Present, only in some areas (first found in 2018 in Southeast Anatolia region).**

Source: Çalişkan Keçe AF, Özbek Çatal B, Ulusoy MR (2019) A new invasive species in Turkey: *Dacus ciliatus* Loew, 1862 (Diptera: Tephritidae). *Turkish Journal of Entomology* **43**(1), 25–30. https://doi.org/10.16970/entoted.474420

Pictures: *Dacus ciliatus*. https://gd.eppo.int/taxon/DACUCI/photos

Additional key words: new record **Computer codes:** DACUCI, TR

2019/074 First report of *Xylosandrus crassiusculus* in New Zealand

In February 2019, *Xylosandrus crassiusculus* (Coleoptera, Scolytidae - EPPO Alert List) was detected for the first time in New Zealand. Several adult specimens were collected from an oak (*Quercus* sp.) tree in Auckland (North Island) during routine surveillance carried out by the NPPO. As of March 2019, the pest was detected in 5 sites in the Auckland area. Although it is unclear how *X. crassiusculus* arrived in New Zealand, observations suggest that it may have been present in the country for at least 2 years. At one site, the destruction of infested oak trees has been ordered by the NPPO. Surveys are being carried out (visual inspections and use of traps) to delimit the extent of the infestation. The general public has also been invited to report any sightings to the authorities.
The situation of *Xylosandrus crassiusculus* in New Zealand can be described as follows: **Present, only in some areas (first found in 2019 near Auckland), under official control.**

Source: INTERNET
- Biosecurity New Zealand. Fact Sheet. Granulate ambrosia beetle *Xylosandrus crassiusculus*. https://www.mpi.govt.nz/dmsdocument/33451-granulate-ambrosia-beetle
- Biosecurity New Zealand. Media releases (2019-03-25) Public asked to help with beetle surveillance. https://www.mpi.govt.nz/news-and-resources/media-releases/public-asked-to-help-with-beetle-surveillance/

Pictures: *Xylosandrus crassiusculus*. https://gd.eppo.int/taxon/XYLBCR/photos

Additional key words: new record **Computer codes:** XYLBCR, NZ

2019/075 First report of *Takahashia japonica* in Italy

Takahashia japonica (Hemiptera: Coccidae) was reported for the first time in Italy (and in Europe) in 2017. In May 2017, an outbreak of an unknown soft scale species was first observed on the trunk and branches of *Morus nigra* trees growing in the communal park of Cerro Maggiore (Milano province, Lombardia region). The species was identified morphologically as *T. japonica*. Further investigations detected the pest in other municipalities in the Milano province (Legnano, Rescaldina, San Giorgio su Legnano and Canegrate), in 3 municipalities in Varese province (Castellanza, Busto Arsizio and Saronno), and one in Monza e Brianza province (Monza). Infestations are easily observed when females produce characteristic long, string-like, looped ovisacs, hanging from the bark (hence its common names 'cotton stringy scale', 'string cottony scale'). *T. japonica* is native to the Far East. It was described from Japan on *Morus* sp. It is now also recorded in China (Hunan, Shanxi), India (Uttar Pradesh), and South Korea. It is polyphagous on deciduous woody plants. In Italy, *T. japonica* was collected on the following host plants: *Acer pseudoplatanus, Albizia julibrissin, Carpinus betulus, Celtis australis, Liquidambar styraciflua* and *Morus nigra*. Of these, the first four

plant species are new hosts of *T. japonica* compared to its native range. First observations suggest that the scale has been present for several years and may have been introduced with new tree plantations. Further studies will be conducted to clarify the biology of this species and its impact.

Source: Limonta L, Pellizzari G (2018) First record of the string cottony scale *Takahashia japonica* in Europe and its establishment in Northern Italy. *Bulletin of Insectology* **71**(1), 159-160. http://www.bulletinofinsectology.org/pdfarticles/vol71-2018-159-160limonta.pdf
Defra (2019-03-05) Plant Pest Factsheet. Cotton stringy scale insect *Takahashia japonica*, 3 pp.

Pictures: *Takahashia japonica*. https://gd.eppo.int/taxon/TAKAJA/photos

Additional key words: new record **Computer codes:** TAKAJA, IT

2019/076 First report of *Takahashia japonica* in the United Kingdom

In the EPPO region, *Takahashia japonica* (Hemiptera: Coccidae - string cottony scale) was reported for the first time in Italy (see EPPO RS 2019/075) in 2017. In December 2018, it was first recorded in the United Kingdom (Berkshire) infesting a *Magnolia* that had been imported and planted in a private garden in 2015.
T. japonica was added to the UK plant health risk register shortly after it was first reported from Europe. At that time, a decision was made that statutory action should be taken against interceptions on recently imported plants, but not against findings on established plants. This approach was taken to reduce the risk of the pest being introduced to the UK and being spread rapidly through trade, but also reflected the relatively low threat the pest is thought to pose. In this specific case, the *Magnolia* tree was considered to be an established plant, so no statutory action was taken.

Source: INTERNET
Defra (2019-03-05) Plant Pest Factsheet. Cotton stringy scale insect *Takahashia japonica*, 3 pp.
Defra. UK Risk Register Details for *Takahashia japonica* https://secure.fera.defra.gov.uk/phiw/riskRegister/viewPestRisks.cfm?cslref=27909
RHS (2019-01-17) RHS confirms first new garden pest of 2019. https://www.rhs.org.uk/press/releases/RHS-confirms-first-new-garden-pest-of-2019
Tuffen M, Salisbury A, Malumphy C (2019) Cotton stringy scale insect, *Takahashia japonica* (Hemiptera: Coccidae), new to Britain. *British Journal of Entomology and Natural History* **32**, 5 pp.

Pictures: *Takahashia japonica*. https://gd.eppo.int/taxon/TAKAJA/photos

Additional key words: new record **Computer codes:** TAKAJA, GB

2019/077 Incursion of *Opogona sacchari* in Poland

During an official survey carried out in Poland, *Opogona sacchari* (Lepidoptera: Tineidae – EPPO A2 List) was found in February 2019 on a 'ficus ginseng' plant (*Ficus macrocarpa* bonsai) showing signs of infestation in a 'do-it-yourself' shop in the city of Racibórz. Investigations showed that in this shop, 9 plants were infested and that they belonged to a lot which had been purchased from the Netherlands at the end of January 2019. All shops to which plants of the infested lot have been delivered are currently being inspected. The pest status of *O. sacchari* in Poland has not yet been determined.

Source: NPPO of Poland (2019-02).

Pictures: *Opogona sacchari*. https://gd.eppo.int/taxon/OPOGSC/photos

Additional key words: detailed record, incursion **Computer codes:** OPOGSC, PL

2019/078 Incursion of *Opogona sacchari* in France

In France, *Opogona sacchari* (Lepidoptera: Tineidae – EPPO A2 List) was reported in 2 ornamental palm trees (*Trachycarpus fortunei*) in a garden centre located in Muzillac (Morbihan department). The two palm trees have been destroyed according to the current national legislation. No other infestations were detected, but on the infested site, quarantine is applied for 4 months to all host plants. No pest status was provided.

Source: NPPO of France (2019-03).

Pictures: *Opogona sacchari*. https://gd.eppo.int/taxon/OPOGSC/photos

Additional key words: detailed record, incursion **Computer codes:** OPOGSC, FR

2019/079 Incursion of *Opogona sacchari* in Germany

In Germany, *Opogona sacchari* (Lepidoptera: Tineidae – EPPO A2 List) was found in an exhibition greenhouse (300 m²) which displayed different palms, ferns, orchids and foliage plants. The pest was found on 1 *Cyathea* spp. (Cyatheaceae) and 1 *Grammatophyllum* spp. (Orchidaceae).
The pest status of *Opogona sacchari* in Germany is officially declared as: **Transient in some areas, actionable, under eradication.**

Source: NPPO of Germany (2018-09).

Pictures: *Opogona sacchari*. https://gd.eppo.int/taxon/OPOGSC/photos

Additional key words: detailed record, incursion **Computer codes:** OPOGSC, DE

2019/080 *Tetropium gracilicorne* occurs in European Russia

Tetropium gracilicorne (Coleoptera: Cerambycidae – EPPO A2 List) is native in Siberia and the Far East. The species was recorded in Central European Russia: in the Udmurtia Republic in 2003, as well as in the Moscow region in 2005 near Lishnjagi (Serebrjannye Prudy district - southmost area of Moscow region) in a planted *Larix* forest. It may be noted that *Larix* does not occur naturally in the Moscow region, and is not an abundant species in forests in Udmurtia. Danilevsky (2019) also considers that the records of *T. gabrieli* for the North-East of European Russia (Pechora river valley) in the Komi Republic should be attributed to *T. gracilicorne*.
The situation of *Tetropium gracilicorne* in Russia can be described as follows: **Present, only in some areas (native in the Asian part, introduced in Central European Russia).**

Source:
Danilevsky M (2019) A check-list of longicorn beetles (Coleoptera, Cerambycoidea) of Europe. https://www.zin.ru/animalia/coleoptera/rus/danlists.htm
Dedyukhin SV, Nikitsky NB, Semenov VB (2005) Checklist of the beetles (Insecta, Coleoptera) of Udmurtia. *Euroasian Entomologial Journal* **4**(4), 293-315 [in Russian].
Nikitsky NB (2005) Addition to the fauna Coleoptera of the Moscow district (with notes about some new find of the beetles in territory former USSR and Caucasus). *Byulleten' Moskovskogo Obshchestva Ispytatelei Prirody Otdel Biologicheskii* **110**(1), 21-27 [in Russian].

Additional key words: detailed record **Computer codes:** TETOGR, RU

2019/081 First report of *Meloidogyne mali* in the United Kingdom

Meloidogyne mali (EPPO A2 List), the apple root-knot nematode, was recently reported for the first time in the United Kingdom following a targeted survey. Following the detection of *M. mali* in the Netherlands and Italy (EPPO RS 2014/102) and in France (EPPO RS 2017/043), as well as the recommendations outlined in the EPPO Pest Risk Analysis for *M. mali*, investigations have been carried out in the United Kingdom. In December 2018, *M. mali* populations were isolated from the rhizosphere of elm trees (*Ulmus* sp.) located at two sites in southern England. Host roots exhibited the typical large galls, with small cavities, associated with this species. The pest was identified by morphological and molecular methods.
The situation of *Meloidogyne mali* in the United Kingdom can be described as follows: **Present, only in some areas (first found in 2018 in 2 sites in southern England).**

Source:
Prior T, Tozer H, Yale R, Jones EP, Lawson R, Jutson L, Correia M, Stubbs J, Hockland S, Karssen G (2019) First report of *Meloidogyne mali* causing root galling to elm trees in the UK. *New Disease Reports* **39**, *10*. http://dx.doi.org/10.5197/j.2044-0588.2019.039.010.
EPPO, 2017. Pest risk analysis for *Meloidogyne mali*, apple root-knot nematode. https://gd.eppo.int/download/doc/1262_pra_exp_MELGMA.pdf

Pictures: *Meloidogyne mali*. https://gd.eppo.int/taxon/MELGMA/photos

Additional key words: new record **Computer codes:** MELGMA, GB

2019/082 First report of '*Candidatus* Liberibacter asiaticus' in Oman

Diaphorina citri, the vector of '*Candidatus* Liberibacter asiaticus' (Hemiptera: Liviidae - EPPO A1 List) was first recorded in Oman in 2005 (EPPO RS 2008/120). A survey was conducted from September 2014 to January 2016 on acid lime (*Citrus aurantifolia*) in six governorates of Oman: Batinah (North and South), Sharqiya, Dakhiliya, Wusta and Dhofar. Symptoms of Huanglongbing were observed in 4 regions: Batinah, Sharqiya, Dakhiliya, and Dhofar and molecular analysis detected the presence of '*Ca.* L. asiaticus' in 40-71.8% of samples depending on the regions. '*Candidatus* Liberibacter africanus' (present in neighbouring countries) was not detected but the authors considered that surveys should be extended to other regions and other citrus species.
The situation of '*Candidatus* Liberibacter asiaticus' in Oman can be described as follows: **Present, only in some areas (first reported in 2018 in different regions).**

Source: Al Fahdi A, Al-Mamari A, Shahid MS, Maharachchikumbura SSN, Carvalho CM, Elliot SL, Al-Sadi AM (2018) Characterization of Huanglongbing disease associated with acid lime (*Citrus aurantifolia* Swingle) in Oman. *Journal of Plant Pathology* **100**(3), 419–427. https://doi.org/10.1007/s42161-018-0088-9

Pictures: '*Candidatus* Liberibacter asiaticus'. https://gd.eppo.int/taxon/LIBEAS/photos

Additional key words: new record **Computer codes:** LIBEAS, OM

2019/083 Beech leaf disease and its potential causal agent (*Litylenchus crenatae*): addition to the EPPO Alert List

Why: A new disease of beech trees (*Fagus* spp.) called 'Beech leaf disease' (BLD) has increasingly been observed in forest areas in Eastern USA and Canada (EPPO RS 2018/178) and is raising serious concerns among foresters and local communities in affected areas. The disease was first reported on *Fagus grandifolia* in Ohio (Lake county) in 2012, and it rapidly spread to other counties in Ohio, as well as to Pennsylvania, New York, and Ontario (Canada). The disease has mainly been observed in forests but also in landscaped areas. The cause of this emerging disease remains to be elucidated, but a nematode species, *Litylenchus crenatae* n. sp., newly described from Japan on *Fagus crenata*, is now suspected to be at least one of the causal agents of BLD. Considering the threat that this new disease of uncertain etiology represents to beech trees, the NPPO of the United Kingdom has added it to the UK Plant Health Risk Register and also suggested to add it to the EPPO Alert List. This proposal was supported by the Panel on Phytosanitary Measures.

Where: As it is still unclear whether *L. crenatae* is the causal agent of BLD, distribution data is presented separately for the disease in North America and the nematode in Japan.
North America (BLD): Canada (Ontario), USA (New York, Ohio, Pennsylvania).
Asia (*L. crenatae*): Japan (Hokkaido, Honshu).

On which plants: In North America, BLD mainly affects *F. grandifolia* (American beech). However, it was also observed in 2016 on *F. sylvatica* (European beech) and *F. orientalis* (Oriental beech) in a tree collection (Holden Forests and Gardens in Geauga county, Ohio), as well as in 2017 on *F. sylvatica* in commercial nursery stock (Lake county, Ohio). *F. engleriana* (Chinese beech) is considered to be a potential host. In Japan, *Litylenchus crenatae* has been described from leaves of *F. crenata* (Japanese beech).

Damage: In North America, early symptoms of BLD include dark-green striped bands between lateral veins of leaves and reduced leaf size. Banded areas usually become leathery-like, and leaf curling is also observed. As symptoms progress, aborted buds, reduced leaf production, and premature leaf drop lead to an overall reduction in canopy cover, ultimately resulting in death of sapling-sized trees within 2-5 years and of large trees within 6 years. In areas where the disease is established, the proportion of symptomatic trees can reach more than 90%. However, it is noted that some variability in susceptibility has been observed among beech trees.
In Japan, *L. crenatae* has been described on *F. crenata* displaying leaf galls and interveinal striped areas.
Pictures of symptoms observed can be viewed on the Internet:
In the USA: http://forestry.ohiodnr.gov/portals/forestry/pdfs/BLDAlert.pdf
In Japan: https://brill.com/view/journals/nemy/21/1/15685411_021_01_s002_i0013.jpg

Dissemination: Until now, *L. crenatae* has only been confirmed to be present within leaf tissues (mesophyll) of infected *F. crenata* in Japan. If this nematode is the main cause of BLD, plants for planting and cut foliage could be potential pathways for long distance transport. However, how the nematode spreads among forest trees is currently unknown. In particular, it is not known whether the nematode can survive in other plant parts or in the soil during winter after beech leaves have fallen.

Pathways: Plants for planting, cut branches of *Fagus* spp. from countries where the disease occurs?

Possible risks: *Fagus* spp. are widely planted in the EPPO region for forestry and amenity purposes. In particular, *F. sylvatica* is an important deciduous forest tree in Western and Central Europe (e.g. used for wood production). Many aspects remain to be clarified, in particular, it is still unclear whether *L. crenatea* is the sole causal agent of BLD or if the disease is associated with a complex of pathogens (e.g. fungi, bacteria, viruses or phytoplasmas). If *L. crenatea* is the main causal agent of BLD, its biology and epidemiology also need to be further studied to better assess its potential risk. However, considering, the rapidity of spread and the severity of damage (i.e. tree decline and mortality) observed on *Fagus* species in North America, it was felt that the attention of NPPOs should be drawn to this emerging disease and the potential risks it may present to the forestry and ornamental sectors of the EPPO region.

Sources

Ewing CJ, Hausman CE, Pogacnik J, Slot J, Bonello P (2018) Beech leaf disease: an emerging forest epidemic. *Forest Pathology* e12488. DOI: 10.1111/efp.12488
INTERNET
- Center for Invasive Species Prevention (2018-05-17) Invasive Species. Update on Beech Leaf Disease, a threat lacking adequate funding and official action. http://www.nivemnic.us/update-on-beech-leaf-disease-a-threat-lacking-adequate-funding-and-official-action/
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- Don't move firewood. Beech leaf disease. https://www.dontmovefirewood.org/pest_pathogen/beech-leaf-disease/
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- Ohio Department of Natural Resources Forestry Division (2018-08-20) ODNR urges Ohioans to report Beech Leaf Disease. http://forestry.ohiodnr.gov/news/post/odnr-urges-ohioans-to-report-beech-leaf-disease
- USDA. We need your help. Look for signs of Beech Leaf Disease. http://files.constantcontact.com/3eb6bf61101/a51df273-005c-4330-88eb-e4ea5294ea0d.pdf

Kanzaki N, Ichihara Y, Aikawa T, Ekino T, Masuya H (2019) *Litylenchus crenatae* n. sp. (Tylenchomorpha: Anguinidae), a leaf gall nematode parasitizing *Fagus crenata* Blume. *Nematology* **21**(1), 5-22. DOI: https://doi.org/10.1163/15685411-00003190

Pogacnik J, Macy T (2016-07) Forest Health Pest Alert. Beech Leaf Disease. http://forestry.ohiodnr.gov/portals/forestry/pdfs/BLDAlert.pdf

EPPO RS 2018/178, 2019/083

Panel review date –

Entry date 2019-04

Additional key words: Alert List

Computer codes: LITYCR

2019/084 First report of *Cylindropuntia fulgida* in Spain

Cylindropuntia fulgida (Cactaceae), commonly known as the coral cactus, is native to Southwestern US and Mexico. There are at least two varieties of the species which are invasive: *C. fulgida* var. *mamillata* and *C. fulgida* var. *fulgida*. *C. fulgida* var. *mamillata* has become established in inland dry regions of Australia where it threatens native biodiversity of semi-arid plant communities. *C. fulgida* var. *mamillata* is also an invasive alien plant species in South Africa along with *C. fulgida* var. *fulgida*. In the case of the latter, vast areas of pasture land and areas of conservation value were invaded causing negative impacts to livestock and native biodiversity until its control was achieved using the classical biological control agent *Dactylopius tomentosus*. In Spain, *C. fulgida* was recorded for the first time in Alcanar (municipality of Montsiá, province of Tarragona) at the edge of an urban area where a number of individuals were recorded growing up to 30 cm in height. The population extends approximately 3 m along the roadside. The authors highlight that this is the first record of a casual population of *C. fulgida* in Europe. The plants collected in Spain have taxonomic attributes which correspond to *Cylindropuntia fulgida* var. *mamillata*. The authors detail that the species could become invasive in the region in the near future.

Source: Gómez-Bellvier, C, Alvarez H, Nualart N, Ibánez N, Sáez L, López-Pujol J (2019) New records of alien vascular plants in Catalonia (NE Iberian Peninsula). *Collectanea Botanica* **38,** e004. https://doi.org/10.3989/collectbot.2019.v38.004

Additional key words: new record **Computer codes:** DACLTO, OPUFU, AU, ES, MX, ZA

2019/085 *Artemisia verlotiorum* in Ukraine

Artemisia verlotiorum (Asteraceae) is native to China and established in Africa, west Asia, South America, Australia and New Zealand. Within the EPPO region, it is a widespread species. In Switzerland, it has been listed as an invasive alien plant since 2013, and it is considered invasive in Croatia, Spain, Italy (including Sardinia), Slovenia and in the Mediterranean part of France. The first known record of *A. verlotiorum* in Ukraine was in the 1920s. The species has been recorded from the Crimea region and from Transcarpathia and Lviv. In 2018, *A. verlotiorum* was discovered in Kyiv (north central part of the country) in the Syrets Arboretum (Syretskiy Dendropark) and in a nearby abandoned plant nursery and associated greenhouses. At present, three clonal colonies have been revealed. The authors suggest that the most probable pathway of spread into these areas was through rhizomes as a contaminant of soil or soil attached to plants. However, one colony (along the wall of the administrative building of the arboretum) most probably emerged from seeds dispersed by wind from the main colony in the abandoned nursery.

Source: Mosyakin SL, Boiko GV, Glukhova SA (2019) *Artemisia verlotiorum* (*Asteraceae*) in the continental part of Ukraine: now in Kyiv. *Plant taxonomy, Geography and Floristics* **76**(1), 3-8. https://doi.org/10.15407/ukrbotj76.01.003

Additional key words: invasive alien plant, detailed record **Computer codes:** ARTVE, UA

2019/086 The spread of invasive knotweed species in Kampinos National Park Poland

Fallopia japonica, *F. sachalinensis* and *F.* x *bohemica* (Polygonaceae: EPPO List of Invasive Alien Plants) are widespread within the EPPO region and can cause negative impacts on native biodiversity, ecosystem services and economic impacts in habitats where they invade. The three species are still reported to be spreading within the EPPO region. A detailed survey was carried out in the Kampinos National Park (Poland) and the surrounding area (33 villages) between 2012 and 2018. The park was established in 1959 and is the second largest national park in Poland. Different *Fallopia* species were recorded on 176 sites. *F. japonica* was recorded in 118 sites of which 64 sites were within the national park and 54 sites were in the buffer zone surrounding the park. *F. x bohemica* was recorded in 54 sites (6 in the national park and 48 in the buffer zone) and *F. sachalinensis* was recorded in 4 sites all within the buffer zone. Most of the populations of *Fallopia* species recorded from outside the national park were close to urban areas along roads or close to gardens where sometimes the species can be grown. These urban populations have the potential to spread into the national park and thus, these populations, especially those within the buffer zone should be controlled.

Source: Kirpluk I, Bomanowska A, Otręba A (2019) The spread of *Reynoutria* species (Polygonaceae) in Kampinos National Park and its vicinity (Central Poland). *Chornomorski Botanical Journal* **15**, 17-25.

Pictures: *Fallopia japonica*. https://gd.eppo.int/taxon/POLCU/photos
Fallopia sachalinensis. https://gd.eppo.int/taxon/REYSA/photos

Additional key words: invasive alien plant **Computer codes:** POLCU, REYSA, REYBO, PL

2019/087 *Impatiens glandulifera* reduces soil fungi biomass in deciduous forests

Impatiens glandulifera (Balsaminaceae: EPPO List of Invasive Alien Plants) has been shown to have a number of negative effects on the ecosystems it invades, including outcompeting native plant species, and thereby reducing the associated invertebrate population. It also has negative impacts on ecosystem services, e.g. by restricting access to water bodies and increasing the amount of sediment intake into river systems. The potential impact of invasive alien plants on the soil mycobiota has received increased attention in recent years, particularly the effect of alien invasive plant species on arbuscular mycorrhizal fungi – where the effect can be both positive and negative depending on the species and system studied. The impact of *I. glandulifera* on the ectomycorrhizal (fungi which colonize around the root structure) community was studied in deciduous forests in Switzerland. Areas of the forest invaded by *I. glandulifera* were compared with areas where the species was removed, and the ectomycorrhizal biomass was estimated by placing mesh bags within the soil and measuring the ectomycorrhizal community which colonised the bags. Fungal genetic diversity was measured using terminal restriction fragment length polymorphism (T-RFLP). *I. glandulifera* reduced ectomycorrhizal biomass by between 30 – 80 % and the largest negative effect was in the centre of invaded stands. Fungal genetic diversity was not affected by *I. glandulifera* but the composition of the fungal community was and is most likely an effect of decreased ectomycorrhizal fungi and an increase of saprotrophic fungi. Such changes in biomass and community composition of the soil mycobiota could potentially have effects on forest nutrient and carbon cycling and therefore, can impact on forest ecosystem functioning.

Source: Gaggini L, Rusterholz HR, Baur B (2019) The annual invasive plant *Impatiens glandulifera* reduces hyphal biomass of soil fungi in deciduous forests. *Fungal Ecology* **39**, 242-249.

Pictures: *Impatiens glandulifera*. https://gd.eppo.int/taxon/IPAGL

Additional key words: invasive alien plant **Computer codes:** IPAGL, CH

2019/088 Evaluating the invasiveness of *Eucalyptus globulus* in Portugal

Eucalyptus globulus (Myrtaceae) is native to Australia and has been introduced into several regions globally as a plantation species used for wood production. In California (US), where the species has been planted, it has escaped and become invasive along the coast. It is also invasive in Hawaii (US) and South Africa. Within the EPPO region, studies conducted in Spain have also shown that the species can show invasive behaviour. Portugal grows more *E. globulus* by area than any other country. A survey was conducted in Portugal along the edges of *E. globulus* plantations (aged between 4 and 42 years) to record escaped individuals. In total, 1 630 *E. globulus* individuals were recorded occurring outside of 67 plantations in 129 survey plots (10 x 10 m). More than 50 % of the individuals were taller than 1.3 m and 8 % of these were reproductive. Soil cover, the age of the mother trees and their reproductive output were factors most associated with the presence of established wild individuals. The distance of establishment from plantations was associated with natural drainage lines and the main wind direction. The authors highlight that more research is needed to assess the reproductive capacity of *E. globulus* escaping from plantations.

Source: Deus E, Silva JS, Larcombe M, Catry FX, Queirós L, Santos P, Matias H, Aguas A, Rego FC (2019) Investigating the invasiveness of *Eucalyptus globulus* in Portugal: site-scale drivers, reproductive capacity and dispersal potential. *Biological Invasions*, https://doi.org/10.1007/s10530-019-01954-6

Additional key words: invasive alien plant **Computer codes:** EUCGL, PT

2019/089 Trans-national modelling for invasive alien plants

To protect vulnerable habitats, agricultural systems and native biodiversity from the negative impacts of invasive alien plant species, studies are required to predict the spread of species at an international scale. Predicting and subsequently managing invasive plant species across international borders can incur several problems which can be categorized as (1) political – one country is not as concerned with the spread compared to others, (2) ecological – habitats and their resilience to invasion differ across borders, and (3) geographical – landscape structures can be different between neighbouring countries giving different levels of natural barriers or providing corridors for spread. One tool that has been utilised to predict the spread of invasive alien plants are species distribution models (SDMs). The potential distribution of *Acacia dealbata* (Fabaceae: EPPO List of Invasive Alien Plants) was predicted using SDMs in the northwest Iberian Peninsula (Portugal and Spain) under current and future climatic conditions. Presence data for the species was collected along with environmental data. The model was

then run under three different scenarios (1) the model was run for each country separately and spatially combined to obtain the final output, (2) the model was run for the whole area using the occurrence data separately for Portugal and Spain, and (3) a model for both countries (transnational occurrence data) was used. The SDM using the transnational occurrence data and the model using just the Portugal occurrence data presented similar patterns but the distribution prediction was higher with the former. The model using the transnational occurrence data was considered to capture a more complete and accurate representation of the species ecological niche. Therefore, the authors suggest that this type of model is more suitable and appropriate to inform decision-makers when considering species with the potential of spreading trans-nationally.

Source: Fernandes RF, Honrado JP, Guisan A, Roxo A, Alves P, Martins J, Vicente JR (2019) Species distribution models support the need of international cooperation towards successful management of plant invasions. *Journal for nature Conservation* **49**, 85-94.

Pictures: *Acacia dealbata*. https://gd.eppo.int/taxon/ACADA/photos

Additional key words: invasive alien plants **Computer codes:** ACADA, PT

2019/090 16th International Symposium on aquatic plants (Denmark, 2020-06-14/19)

The 16th International Symposium on aquatic plants will be held at Aarhus University, Denmark between 14th and 19th June 2020. The aim of the conference is to promote debate on all issues relating to the science and management of aquatic vegetation. Interest in aquatic plants has been growing and diversifying and to reflect this, there will be a wide scientific programme, which will appeal to scientists and managers. A call for sessions will open 2019-05-01.

Source: Conference website. http://www.internationalaquaticplantsgroup.com

Additional key words: conference **Computer codes:** DK