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2024/001 New data on quarantine pests and pests of the EPPO Alert List

By searching through the literature, the EPPO Secretariat has extracted the following new data concerning quarantine pests and pests included (or formerly included) on the EPPO Alert List, and indicated in bold the situation of the pest concerned using the terms of ISPM 8.

- **New records**

Atherigona reversura (Diptera: Muscidae - EPPO Alert List) is first recorded from the Republic of Korea. Specimens were identified in 2017 in the city of Daegu. Specimens of *Atherigona miliaceae* (Diptera: Muscidae), a species originating in India were also identified for the first time (Kim *et al.*, 2023).

Aproceros leucopoda (Hymenoptera: Argidae – formerly EPPO Alert List) occurs in Lithuania. The first specimens were found in Pelėdnagiai (Kėdainiai district municipality, Kaunas County) in August 2020 on *Ulmus* sp. (Sinchuk *et al.*, 2021).

In North America, *Aproceros leucopoda* (Hymenoptera: Argidae – formerly EPPO Alert List) was first found in 2020 in Canada, in Québec (EPPO RS 2020/184). In 2021, it was detected for the first time in the USA, in Virginia. In 2022, *A. leucopoda* was also confirmed in the following 4 states: Pennsylvania, North Carolina, Maryland, and New York. Infestations occur on both native and cultivated elms (*Ulmus americana, U. alata, U. parvifolia, U. procera, U. pumila, U. rubra*, and a hybrid *Ulmus* x 'Cathedral'). So far, feeding damage observed in the USA ranged from minor to severe. It is expected that this invasive species will continue to expand its range (Oten *et al.*, 2023).

Corythauma ayyari (Heteroptera: Tingidae – jasmine lace bug) is reported for the first time from Germany. It was found on jasmine plants (*Jasminum* sp.) in Niedersachsen (JKI, 2023).

Megalurothrips usitatus (Thysanoptera: Thripidae) is reported for the first time from Puerto Rico. It was detected in March 2023 throughout the bean growing regions affecting bean (*Phaseolus vulgaris* and *P. acutifolius*), and soybean (*Glycine max*) crops (Cabrera-Asencio & de Jensen, 2023).

Rhynchophorus ferrugineus (Coleoptera: Curculionidae - EPPO A2 List) is first reported from the Caribbean Island of Saint-Martin. The pest was first detected in February 2023 in Les Terres-Basses and in November 2023 in the Baie orientale. The entire territory of Saint-Martin has been demarcated as an infested area and official measures are applied to eradicate the pest (DAAF Guadeloupe, 2023).

- **Detailed records**

In California (US), citrus yellow vein clearing virus (*Potexvirus*, CYVCV – EPPO Alert List) was first found in March 2022 in residential citrus trees in the city of Tulare (Tulare county). In December 2023, CYVCV was also detected in the Hacienda Heights area of Los Angeles county during a survey. Further surveys are being conducted in residential properties where citrus are planted within a 1 mile (1.6 km) radius around the initial finding site in Los Angeles county (Citrus insider, 2024).

The NPPO of the Netherlands (2023) informed the EPPO Secretariat that the pest status of sweet potato chlorotic stunt virus in the Netherlands is officially declared as: **Present, in specific parts of the Member State, where host crop(s) are grown.**

In China, tomato brown rugose fruit virus (*Tobamovirus*, ToBRFV – EPPO A2 List) is first reported from Liaoning province. ToBRFV was detected in April 2023 in tomato (*Solanum lycopersicum*) grown in a greenhouse in Huladao city (Guo *et al.*, 2023).

In Brazil, *Zaprionus tuberculatus* (Diptera: Drosophilidae – formerly EPPO Alert List) was first recorded in 2020 in Brasilia (Distrito Federal) (EPPO RS 2022/096). In 2022-2023, *Z. tuberculatus* was trapped in the states of São Paulo, Rio de Janeiro and Rio Grande do Sul (Jobim *et al.*, 2023), as well as in Minas Gerais. In Rio Grande do Sul the species was recorded from new host fruits: *Butia capitata, Eugenia uniflora, Psidium cattleyanum, Vitis labrusca* (Moreira *et al.*, 2023).

- **Eradication**

In the Czech Republic, *Aleurocanthus spiniferus* (Hemiptera: Aleyrodidae – EPPO A2 List) was first found in 2022 in relation with an infested consignment of potted plants of *Citrofortunella microcarpa* (EPPO RS 2022/102). Infested plants were destroyed. No *A. spiniferus* was detected during the monitoring carried out with sticky traps in the greenhouse where infested plants had been found (NPPO of the Czech Republic, 2023-12).
The pest status of *Aleurocanthus spiniferus* in the Czech Republic is officially declared as: **Absent, pest eradicated**.

In Germany, *Rhagoletis zoqui* (Diptera: Tephritidae, EU Annex II A as '*Rhagoletis* spp.') was first trapped in a nursery in Nordrhein-Westfalen in August 2019 (EPPO RS 2020/032). In 2020 and 2021, surveys were carried out in the nursery and the surroundings. No further specimens were detected. In 2022, the pest was also included in the national survey programme without any further findings (NPPO of Germany, 2023).
The pest status of *Rhagoletis zoqui* in Germany is officially declared as: **Absent, no longer present, confirmed by survey**.

- **Host plants**

Natural infection of medlar (*Mespilus germanica*) by *Hop stunt viroid* (*Pospiviroid*, HSVd – EU RNQP) is reported for the first time. HSVd was detected in asymptomatic samples of *M. germanica* collected in 2021 from a fruit-tree collection orchard in Malatya province, Türkiye (Oksal, 2024).

Tomato brown rugose fruit virus (*Tobamovirus*, ToBRFV – EPPO A2 List) is reported for the first time as naturally infesting the weeds *Convolvulus arvensis* and *Polycarpon tetraphyllum*. In summer 2023 asymptomatic samples of both weeds that were growing in a tomato greenhouse were found to have high-rates of infection with ToBRFV (Cultrona *et al.*, 2024).

Sources: Cabrera-Asencio I, de Jensen CE (2023) First report of the exotic species *Megalurothrips usitatus* (Thysanoptera: Thripidae), pest of Fabaceae, in Puerto Rico. *Florida Entomologist* **106**(4), 267-269. https://doi.org/10.1653/024.106.0410

Citrus Insider. Citrus Pest & Disease Prevention Program (2023-12-22) Citrus yellow vein clearing virus found in Los Angeles County. https://citrusinsider.org/2023/12/22/citrus-yellow-vein-clearing-virus-found-in-los-angeles-county/

Cultrona M, Bonini N, Pacifico D, Tessitori M (2024) First report of *Convolvulus arvensis* and *Polycarpon tetraphyllum* as natural hosts of tomato brown rugose fruit virus. *Plant Disease* (early view) https://doi.org/10.1094/PDIS-11-23-2413-PDN

DAAF Guadeloupe (2023-12-22) Arrêté préfectoral relatif à la lutte contre le charançon rouge du palmier sur le territoire de Saint-Martin du 21 décembre 2023. https://daaf.guadeloupe.agriculture.gouv.fr/arrete-prefectoral-relatif-a-la-lutte-contre-le-charancon-rouge-du-palmier-sur-a1855.html (via https://plateforme-esv.fr/)

Guo H, Dong X, Wang Z, An M, Yang X, Xia Z, Wu Y (2023) First report of tomato brown rugose fruit virus infecting *Solanum lycopersicum* in Northeast China. *Plant Disease* (early view). https://doi.org/10.1094/PDIS-11-23-2395-PDN

JKI (2023) Express-PRA zu *Corythauma ayyari* – Auftreten https://pra.eppo.int/pra/f66f4360-f867-4381-9e10-0bafae1ea011/

Jobim K, Kaster PL, da Rosa BR, Tidon R, Garcia FR (2023) Expansion of the area of occurrence of *Zaprionus tuberculatus* (Diptera: Drosophilidae) in the Americas and registration of new host plants. *Brazilian Journal of Biology* **83**, e273916. https://doi.org/10.1590/1519-6984.273916

Kim YK, Kim D, Suh SJ (2023) Two unrecorded species of the genus *Atherigona* (Diptera: Muscidae) from Korea. *Animal Systematics, Evolution and Diversity* 39(3), 92-98. https://doi.org/10.5635/ASED.2023.39.3.002

Moreira MM, Dias LD, Sena LC, Lino Neto J, Medeiros HF, Yotoko K (2023) First record of *Zaprionus tuberculatus* Malloch, 1932 (Diptera: Drosophilidae) in Minas Gerais, Brazil. *Revista Brasileira de Entomologia* **67**(3), e20230031. https://doi.org/10.1590/1806-9665-RBENT-2023-0031

NPPO of the Czech Republic (2023-12).

NPPO of Germany (2023-12).

NPPO of the Netherlands (2023-12).

Oksal HD (2024) Medlar (*Mespilus germanica*), a novel natural host for Hop stunt viroid (HSVd). *Plant Protection Science* (online). https://doi.org/10.17221/93/2023-PPS

Oten KL, Day E, Dellinger T, Disque HH, Barringer LE, Cancelliere J, Somers L, Bertone MA (2023) First records of elm zigzag sawfly (Hymenoptera: Argidae) in the United States. *Journal of Integrated Pest Management* **14**(1), 1-7. https://doi.org/10.1093/jipm/pmad009

Sinchuk A, Vaicekauskaitė K, Sinchuk N (2021) First record of *Aproceros leucopoda* Takeuchi, 1939 (Hymenoptera: Argidae) in Lithuania. *Bulletin of the Lithuanian Entomological Society* **5**(33), 111-113.

Additional key words: detailed records, eradication, host plant, new record

Computer codes: ALECSN, APRCLE, ATHEMI, ATHERE, COTMAY, HSVD00, MEGTUS, RHAGZO, RHYCFE, SPCSV0, TOBRFV, TOBRFV, ZAPRTU, BR, CN, CZ, DE, GP, KR, LT, NL, PR, TR, US

2024/002 New and revised dynamic EPPO datasheets are available in the EPPO Global Database

The EPPO Secretariat is in the process of revising the EPPO datasheets on pests recommended for regulation and creating new datasheets. This project is also supported by an EU grant agreement. This revision provides the opportunity to create dynamic datasheets in the EPPO Global Database in which the sections on pest identity, host range and geographical distribution are automatically generated by the database. It is planned that these dynamic datasheets will progressively replace the PDF documents that are currently stored in the database. Since the previous report (EPPO RS 2023/267), the following new and revised EPPO datasheets have been published in the EPPO Global Database:

- Citrus leprosis disease. https://gd.eppo.int/taxon/CILV00/datasheet
- *Clavibacter insidiosus*. https://gd.eppo.int/taxon/CORBIN/datasheet
- *Euwallacea fornicatus sensu stricto*. https://gd.eppo.int/taxon/EUWAWH/datasheet
- *Liriomyza bryoniae*. https://gd.eppo.int/taxon/LIRIBO/datasheet
- *Liriomyza huidobrensis*. https://gd.eppo.int/taxon/LIRIHU/datasheet
- *Liriomyza sativae*. https://gd.eppo.int/taxon/LIRISA/datasheet
- *Liriomyza trifolii*. https://gd.eppo.int/taxon/LIRITR/datasheet
- *Tomato mild mottle virus*. https://gd.eppo.int/taxon/TOMMOV/datasheet

Source: EPPO Secretariat (2024-01).

Additional key words: publication

Computer codes: CILV00, CORBIN, EUWAWH, LIRIBO, LIRIHU, LIRISA, LIRITR, TOMMOV

2024/003 First report of *Spodoptera frugiperda* in Romania

The NPPO of Romania recently informed the EPPO Secretariat of the first report of *Spodoptera frugiperda* (Lepidoptera: Noctuidae – EPPO A2 List) on its territory. The pest was found in the south of the country, in Calarasi county (region of Sud-Muntenia). Several specimens were caught in pheromone traps at the National Institute of Agricultural Research and Development – Fundulea. The identity of the pest was confirmed in November 2023 by the National Phytosanitary laboratory and the EU Reference Laboratory for Insects and Mites. Official phytosanitary measures are being applied according to Commission Implementing Regulation (EU) 2023/1134.

The pest status of *Spodoptera frugiperda* in Romania is officially declared as: **Transient, actionable, under surveillance.**

Source: NPPO of Romania (2023-11).

Commission Implementing Regulation (EU) 2023/1134 of 8 June 2023 as regards measures to prevent the introduction into, establishment and spread within the Union territory of *Spodoptera frugiperda* (Smith) and repealing Commission Implementing Decision (EU) 2018/638. OJ L 149.
http://data.europa.eu/eli/reg_impl/2023/1134/oj

Pictures: *Spodoptera frugiperda*. https://gd.eppo.int/taxon/LAPHFR/photos

Additional key words: new record **Computer codes:** LAPHFR, RO

2024/004 First report of *Pseudips mexicanus* in Ireland

The NPPO of Ireland recently informed the EPPO Secretariat of the first occurrence of *Pseudips mexicanus* on its territory. *Pseudips mexicanus* (Coleoptera: Scolytinae) is regulated by the EU as a non-European Scolytinae (Annex II A) and was recently added to the A1 quarantine list of the Eurasian Economic Union. This bark beetle is native to the western part of North and Central America.

P. mexicanus beetles were found in bark beetle pheromone traps in a localised area in conifer plantations in the municipality of Shannon (Clare county, Mid-West region). A total of 93 beetles were captured from six traps between late August and mid-October 2023. *Pinus* is the host genus for this beetle in its native range but no infested trees or breeding populations of *P. mexicanus* have been found in the area. Official measures are being applied: a demarcated area is being established, as well as intensive surveillance and restrictions on movement of host material.

The pest status of *Pseudips mexicanus* in Ireland has not yet been determined.

Source: NPPO of Ireland (2023-12).

DAFM Plant Pest Factsheet *Pseudips mexicanus*
https://assets.gov.ie/278961/c303d207-032d-4854-89c9-4fa7d0c17da2.pdf

Additional key words: new record **Computer codes:** IPSXRA, IE

2024/005 First report of *Xylosandrus compactus* in Switzerland

The NPPO of Switzerland recently informed the EPPO Secretariat of the first report of *Xylosandrus compactus* (Coleoptera: Scolytidae – formerly EPPO Alert List) on its territory. The pest was found in the municipalities of Brissago and Ascona (Ticino) on a *Laurus nobilis* hedge in a private garden and on a *Argyrocytisus battandieri* plant. The infested plants have been removed.

The pest status of *Xylosandrus compactus* in Switzerland is officially declared as: **Present, only in some parts of the Member State concerned, at low prevalence.**

Source: NPPO of Switzerland (2023-11).

Pictures: *Xylosandrus compactus*. https://gd.eppo.int/taxon/XYLSCO/photos

Additional key words: new record **Computer codes:** XYLSCO, CH

2024/006 First report of *Polygraphus proximus* in Kazakhstan

Polygraphus proximus (Coleoptera: Curculionidae: Scolytinae – EPPO A2 List) is first reported from Kazakhstan. The pest was detected by scientists during a survey carried out in July 2023 in North-Eastern Kazakhstan. *P. proximus* was found in a forest in the Glubokovskiy district (East Kazakhstan Region) on symptomatic fir trees (*Abies sibirica*). This forest is located about 43 km away from the Russian village of Novoaleiskoye (Altai territory) where the pest was detected in 2016. Considering the number of trees colonized and killed by the pest, the authors considered that *P. proximus* has likely been present in the forest in the Glubokovskiy district for about ten years. A survey in another forest near Chernaya Uba village (located about 110 km away from Novoaleiskoye) did not detect the pest.

The situation of *Polygraphus proximus* in Kazakhstan can be described as: **Present: not widely distributed and not under official control.**

Source: Kirichenko NI, Rudoi VV, Efremenko AA, Petrov AV, Baranchikov YN (2023) First record of the invasive bark beetle *Polygraphus proximus* Blandford (Coleoptera: Curculionidae, Scolytinae) in the Republic of Kazakhstan. *Acta Biologica Sibirica*. **9**, 1003-1022. https://doi.org/10.5281/zenodo.10199570

Pictures: *Polygraphus proximus*. https://gd.eppo.int/taxon/POLGPR/photos

Additional key words: new record **Computer codes:** POLGPR, KZ

2024/007 *Agrilus planipennis* found in Kyiv, Ukraine

The NPPO of Ukraine recently informed the EPPO Secretariat that *Agrilus planipennis* (Coleoptera: Buprestidae – EPPO A1 List) has been found in Kyiv. During official surveys conducted in parks and gardens of Kyiv city by phytosanitary inspectors, an outbreak of *A. planipennis* has been found in a park along Solomianska Street on ash (*Fraxinus* sp.) trees. An infested area of 27.12 ha has been delimited, and phytosanitary measures are being implemented to eradicate the pest. As of November 2023, the NPPO stated that quarantine measures are now applied in the districts of Luhansk and Kharkiv, as well as in Kyiv. Results

of inspections conducted across the territory of Ukraine have shown that other regions are free from *A. planipennis*.

The situation of *Agrilus planipennis* in Ukraine can be described as follows: **Present, not widely distributed and under official control.**

Source: NPPO of Ukraine (2023-11).

See also the December 2023 Newsletter of the EPPO Network of experts working on surveillance, monitoring, and control of the Emerald ash borer, *Agrilus planipennis*. https://www.eppo.int/media/uploaded_images/RESOURCES/special_projects/eab_newsletters/EAB_Newsletter-003-2023_12.pdf

Pictures *Agrilus planipennis*. https://gd.eppo.int/taxon/AGRLPL/photos

Additional key words: detailed record **Computer codes:** AGRLPL, UA

2024/008 *Trachymela sloanei* (Coleoptera: Chrysomelidae): addition to the EPPO Alert List

Why: *Trachymela sloanei* (Coleoptera: Chrysomelidae - Australian tortoise beetle) is a eucalyptus leaf feeder originating from Australia, which has been introduced into other parts of the world during the last decades. Outside its native range, *T. sloanei* was first detected in New Zealand (1976) and later in California (1998), where it rapidly spread to areas where eucalyptus are grown. Since the 2010s, its spread seems to have accelerated and new records of *T. sloanei* have made in several countries on different continents: Spain (2014), China (2018), Chile (2020), Portugal (2022), Taiwan (2023) and Greece (2023). Considering its rapid spread and invasive behaviour, the EPPO Secretariat considered that *T. sloanei* could usefully be added to the EPPO Alert List.

Where:
EPPO region: Greece, Portugal, Spain.
Asia: China (Fujian, Guangdong, Hong Kong), Taiwan.
North America: USA (Arizona, California, Hawaii).
South America: Chile.
Oceania: Australia (New South Wales, Queensland, South Australia, Victoria, Western Australia), New Zealand.
In the EPPO region, the first specimens of *T. sloanei* were collected in 2014 in Spain, in Jerez de la Frontera (province of Cádiz, Andalucía). Further studies (field surveys and consultation of citizen science platforms) conducted in the Iberian Peninsula detected the insect in other locations in Andalucía, Extremadura (Cáceres) and Madrid, as well as in Southern Portugal. *T. sloanei* was mainly found in eucalyptus plantations and isolated trees in the natural environment, but also in ornamental trees in urban environments. On Internet fora and citizen science platforms, there are indications that *T. sloanei* has recently been observed in other areas in Spain, in Comunidad Valenciana and Canary Islands. Finally, the most recent record was made in Greece in 2023, where insect specimens were collected from the city of Piraeus (Attica) on *E. camaldulensis* trees in a park.

On which plants: *T. sloanei* feeds on numerous species of eucalyptus (e.g. *Corymbia citriodora, C. ficifolia, C. maculata, E. camaldulensis, E. crenulata, E. globulus, E. grandis, E. propinqua, E. robusta*), with a preference for *Eucalyptus camaldulensis*.

Damage: Adults and larvae feed on eucalyptus leaves and young stems, usually at night. Signs of infestations are irregular notches and semicircular holes along leaf edges, leaving the midvein. Heavy infestations can lead to defoliation, but no tree mortality has been reported in the invaded range.
Adults (6-7 mm long) have a hemispherical brown body with black spots and red wings. The presence of a row of fine hairs on the outer margin in the distal half of the mid- and hind-tibia is a distinctive characteristic for this species. Female lay 5 to 40 eggs (or more) on leaves or under loose bark. Larvae are dark green to reddish brown and develop through 4 stages before pupation takes place beneath loose bark or in the soil/litter around the base of host trees. The insect has several generations per year. In California, development time from egg to adult could be as short as 5 weeks under warm weather conditions.
Pictures can be viewed on the Internet:
https://www.nzffa.org.nz/farm-forestry-model/the-essentials/forest-health-pests-and-diseases/Pests/trachymela-sloanei/

Dissemination: Adults can fly, but data is generally lacking about their flight capacity. However, this insect seems to be able to spread rather rapidly. Although the introduction pathways from one continent to the other have not been identified, human activities (e.g. travel, trade) are probably playing an important role.

Pathways: Plants for planting, cut foliage of *Corymbia* and *Eucalyptus* species from countries where *T. sloanei* occurs.

Possible risks: Eucalyptus are grown in the EPPO region for forestry, amenity, paper industry and ornamental purposes, in particular around the Mediterranean Basin. *T. sloanei* is difficult to observe in the field or on consignments as all its life stages are cryptic. Beetles and larvae typically remain hidden on or in the bark of eucalyptus trees during the day. Little information is available about control measures, but natural enemies could probably play an important role in limiting pest populations. In New Zealand, following its introduction extensive defoliation and tree damage were observed before its populations were brought under control by natural enemies. Both adults and larvae are voracious leaf feeders and defoliation exerts significant tree stress, but its impact on tree growth and the resulting economic impact on eucalyptus production remain to be clarified. Finally, it can be noted that *T. sloanei* is another addition to an already long list of alien pests of eucalyptus recently introduced into the EPPO region (e.g. *Blastopsylla occidentalis, Ctenarytaina eucalypti, C. spatulata, Glycaspis brimblecombei, Leptocybe invasa, Ophelimus maskelli, Thaumastocoris peregrinus*).

Sources

Bain J (2009) New records. Forest Health News no. 194.
https://www.scionresearch.com/__data/assets/pdf_file/0009/3897/fhnewsNo194-April09.pdf
Gastouniotis G, Kakiopoulos G, Gastouniotis P (2023) First records of *Trachymela sloanei* (Blackburn, 1896) (Coleoptera, Chrysomelidae) in Greece. *Parnassiana Archives* **11**, 77-79.
https://doi.org/10.1111/jen.13086
INTERNET
- Atlas of Living Australia. *Trachymela sloanei* (Blackburn, 1896).
https://bie.ala.org.au/species/https://biodiversity.org.au/afd/taxa/152eaba4-489e-4155-ab31-687b49116d6a
- Los Angeles County Agricultural Commissioner's Office. Australian tortoise beetle (*Trachymela sloanei*) by N. von Ellenrieder (dated September 2023).
https://www.sandiegocounty.gov/content/dam/sdc/common_components/images/awm/Docs/ipd_austtortbeetle.pdf

- TaiCOL (online database) Catalogue of Life in Taiwan. *Trachymela sloanei*. https://taicol.tw/en-us/taxon/t0099217#taxon-status
- University of California Agriculture and Natural Resources. U. IPM. Eucalyptus tortoise beetles. https://ipm.ucanr.edu/PMG/PESTNOTES/pn74104.html

Matsunaga JN, Howarth FG, Kumashiro BR (2019) New state records and additions to the alien terrestrial arthropod fauna in the Hawaiian Islands. *Proceedings of the Hawaiian Entomological Society* **51**(1), 1-71. https://scholarspace.manoa.hawaii.edu/server/api/core/bitstreams/f57fe030-c574-4cb9-91d3-548c993b5b3d/content

Millar JG, Paine TD, Bethke JA, Garrison RW, Campbell KA, Dreistadt SH (2009) Eucalyptus tortoise beetles. Pest Notes Publication 74104. University of California Agriculture and Natural Resources, 5 pp. https://ipm.ucanr.edu/PMG/PESTNOTES/pn74104.html

Millar JG, Paine TD, Hoddle M (2000) Biological control of a newly introduced pest, the eucalyptus tortoise beetle, *Trachymela sloanei*. Slosson Report 1999-2000 (University of California), 1-7. https://slosson.ucdavis.edu/newsletters/Millar_200029040.pdf

Pérez-Gómez Á, Robla J, Barreda JM, Rodríguez G, Amarillo JM (2022) Updating new invasions: The Australian tortoise beetle *Trachymela sloanei* (Blackburn, 1897) (Coleoptera: Chrysomelidae) in the Iberian Peninsula. *Journal of Applied Entomology* **146**, 1217–1223.

Riley EG, Clark CM, Gilbert AJ (2001) New records, nomenclatural changes, and taxonomic notes for select North American leaf beetles (Coleoptera: Chrysomelidae). *Insecta Mundi*, 176. http://digitalcommons.unl.edu/insectamundi/176

Sánchez I, Amarillo JM, Molina D (2015) [First records of *Trachymela sloanei* (Blackburn, 1897) (Coleoptera, Chrysomelidae) in Europe]. *Revista gaditana de Entomología* **6**(1), 127-130 (in Spanish).

Villablanca J, Villablanca-Miranda V (2022) First record of *Trachymela sloanei* (Blackburn, 1897) (Coleoptera: Chrysomelidae) in Chile. *Revista Chilena de Entomología* **48**(3), 525-529. https://www.biotaxa.org/rce/article/view/76385

Zhang M, Chen X, Ruan Y, Jiang S, Yang J, Jiang M, Ruan X, Li Y (2020) First report of the invasive Australian tortoise beetle *Trachymela sloanei* (Coleoptera: Chrysomelidae: Chrysomelinae) in Asia. *Journal of Asia-Pacific Entomology* **23**, 442-444.

EPPO RS 2016/101, 2024/008

Panel review date – Entry date 2024-01

2024/009 First report of *Scirtothrips dorsalis* in Islas Canarias (Spain) and new findings in continental Spain

In Spain, *Scirtothrips dorsalis* (Thysanoptera: Thripidae – EPPO A2 List) was first reported in 2017 on the mainland in Comunidad Valenciana (EPPO RS 2017/129) and in 2019 in Andalucia (RS 2019/183).

The NPPO of Spain recently informed the EPPO Secretariat of the first findings of *S. dorsalis* in the region of Murcia. The pest was detected in October 2023 in 3 citrus plots planted with (in total) 4 *Citrus* species; *Citrus limon, C. sinensis, C. reticulata, C. paradisi* and covering a combined area of 8.62 ha, located in the municipalities of Murcia, Molina de Segura and Torre Pacheco.

The pest was also found in a new province in Andalucia (Almería) following trace back investigations following an interception of *S. dorsalis* on *Citrus meyeri* plants from a Spanish operator by another EU Member State. The pest was found in November 2023 in a nursery producing *Citrus meyeri* plants under a mesh-covered structure in the municipality of Pulpí.

In both cases, demarcated areas have been established and official phytosanitary measures will be taken.

The pest status of *Scirtothrips dorsalis* in Spain is officially declared as: **Present, under eradication, only in some parts of the Member State concerned.**

A recent article reports that *S. dorsalis* was first detected in 2016 on the island of Tenerife (Islas Canarias) in a mango (*Mangifera indica)* orchard in Guía de Isora. Identification was based on morphological characteristics. Individuals of *S. dorsalis* were found again in 2021 in Güímar in a bean crop (*Phaseolus vulgaris*). In February 2022 a high level of infestation and damage were found on mango in the initial location in Guía de Isora, co-occurring with *S. inermis* (native thrips species). Molecular studies confirmed the identification of *S. dorsalis* South Asia 1. A survey is planned to evaluate the spread of the pest within the island of Tenerife and on the neighbouring islands.

Source: Mouratidis A, Bastin S, Pomposo M, Marrero E, Goldarazena A, Hernández-Suárez E (2023) First report of *Scirtothrips dorsalis* Hood in the Canary Islands. *EPPO Bulletin* (early view). https://doi.org/10.1111/epp.12968

NPPO of Spain (2023-12).

Pictures: *Scirtothrips dorsalis*. https://gd.eppo.int/taxon/SCITDO/photos

Additional key words: new record, detailed record **Computer codes:** SCITDO, ES

2024/010 Update on the situation of *Scirtothrips aurantii* in Portugal

In Portugal, *Scirtothrips aurantii* (Thysanoptera: Thripidae – EPPO A1 List) was first reported in 2022 in Algarve and Alentejo regions (EPPO RS 2023/036).

The NPPO of Portugal recently provided an update of the situation based on the surveys carried out in 2023 in Algarve. The presence of *S. aurantii* was detected and confirmed by analysis at the national reference laboratory, in 14 additional locations (mainly orchards, but also in private gardens and public sites) in 10 counties. Six of these counties had no previous record of the pest: Albufeira, Aljezur, Lagoa, Loulé, Portimão, São Brás de Alportel.

Official phytosanitary measures are applied and include treatments with plant protection products, restriction on the movement of plant material (except fruit and seeds) out of the infested area. Intensive monitoring is conducted in the buffer zones of 100 m around the infested areas.

The pest status of *Scirtothrips aurantii* in Portugal is officially declared as: **Present, under eradication, only in some parts of the Member State concerned.**

Source: NPPO of Portugal (2023-12).

Pictures: *Scirtothrips aurantii*. https://gd.eppo.int/taxon/SCITAU/photos

Additional key words: detailed record **Computer codes:** SCITAU, PT

2024/011 Update on the situation of *Unaspis citri* in the Azores islands (Portugal)

In Portugal, *Unaspis citri* (Hemiptera: Diaspididae, EPPO A1 List) was known to occur in Sao Miguel Island in Azores (EPPO RS 1999/037) and was first detected in October 2022 in Santa Maria Island (EPPO RS 2023/132).

The NPPO of Portugal recently provided an update of the situation based on the surveys carried out in 2023. The presence of *U. citri* was first detected on Faial and Graciosa islands. On Faial island, the pest was detected in July 2023 on citrus plants (*Citrus limonia, C. sinensis*), collected in small orchards, in 5 parishes of the only county in Faial island, Horta. On Graciosa island, the pest was detected in November 2023 in several citrus plants *(Citrus deliciosa, C. limonia, C. reticulata, C. sinensis*) collected in small orchards, in 2 parishes of the only county in Graciosa island, Santa Cruz.

In São Miguel island, surveys carried out in 2022 showed that the pest was present in all the 6 counties of the island. It was detected in 27 out of the 80 locations surveyed.

The origin of the infestations is unknown. Surveys will be intensified in the islands.

The pest status of *Unaspis citri* in Portugal is officially declared as: **Present: only in some parts of the Member State concerned**.

Source: NPPO of Portugal (2023-12).

Pictures: *Scirtothrips aurantii*. https://gd.eppo.int/taxon/SCITAU/photos

Additional key words: detailed record **Computer codes:** UNASCI, PT

2024/012 *Thaumatotibia leucotreta* does not occur in Morocco

In November 2023 the EU reported the interception of a consignment of pomegranates (*Punica granatum*) from Morocco infested by *Thaumatotibia leucotreta* (Lepidoptera: Tortricidae – EPPO A2 List).

T. leucotreta is a quarantine pest for Morocco and is not known to occur in Morocco. Measures are applied to prevent its introduction from countries where the pest occurs.

The NPPO of Morocco carried out investigations on the shipment concerned and conducted a survey in the production site from where the consignment originated, including laboratory analysis. *T. leucotreta* was not found. However larvae of a native pest, *Cryptoblabes gnidiella* (Lepidoptera: Tortricidae), were found.

The NPPO of Morocco also underlined that large quantities of pomegranate fruits, and other host fruits of *T. leucotreta*, are exported every year from Morocco and the pest has never been detected in consignments at export or by importing countries.

The pest status of *Thaumatotibia leucotreta* in Morocco is officially declared as: **Absent: pest not recorded.**

Source: NPPO of Morocco (2024-01).

EU (2023-11) Interceptions of harmful organisms in imported plants and other objects https://food.ec.europa.eu/plants/plant-health-and-biosecurity/europhyt/interceptions_en

Pictures: *Thaumatotibia leucotreta*. https://gd.eppo.int/taxon/ARGPLE/photos

Additional key words: absence **Computer codes:** ARGPLE, MA

2024/013 First report of *Meloidogyne chitwoodi* in Denmark

The NPPO of Denmark recently informed the EPPO Secretariat of the first report of the root knot nematode *Meloidogyne chitwoodi* (EPPO A2 List) on its territory. The nematode was detected in October 2023 as part of the annual pest detection survey on ware potato tubers (*Solanum tuberosum)* grown for starch production. The infested field (3.6 ha) is located in the municipality of Viborg (region of Midtjylland). Preliminary phytosanitary actions include restriction on movement of soil and plant material, and cleaning of machinery if moved from the infested area. Further sampling to determine the extent of the infestation is planned in 2024 and will be followed by cropping restrictions and additional monitoring in the years to come.

The pest status of *Meloidogyne chitwoodi* in Denmark is officially declared as: **Present.**

Source: NPPO of Denmark (2024-01).

Pictures: *Meloidogyne chitwoodi*. https://gd.eppo.int/taxon/MELGCH/photos

Additional key words: new record **Computer codes:** MELGCH, DK

2024/014 First report of '*Candidatus* Phytoplasma palmicola' in Equatorial Guinea

'*Candidatus* Phytoplasma palmicola', one of the phytoplasmas causing lethal palm yellowing disease (EPPO A1 List), is first reported from Equatorial Guinea.

During the past two decades, a high mortality of coconut palms (*Cocos nucifera)* has been observed in the coastal areas of Equatorial Guinea, dramatically decreasing coconut production. A survey was carried out in 2021 to identify the cause of this mortality in the Litoral Province. Symptomatic coconut palms were sampled, as well as two oil palms (*Elaeis guineensis*) showing skirting of the older leaves. Molecular analyses and sequencing were conducted and '*Ca*. P. palmicola' was detected in the two palm species. Phylogenetic analyses showed that the strain present in Equatorial Guinea is identical to the strains from Mozambique, but different to the strains in Ghana and Côte d'Ivoire, confirming the presence of a geographic differentiation among phytoplasma strains in the coastal areas of Western and Central Africa.

Source: Bertaccini A, Contaldo N, Feduzi G, Andeme AM, Yankey EN, Rovesti L (2023) Molecular identification of '*Candidatus* Phytoplasma palmicola' associated with coconut lethal yellowing in Equatorial Guinea. *Annals of Applied Biology* **183**(3), 262-270. https://doi.org/10.1111/aab.12854

Additional key words: new record **Computer codes:** PHYPPL,PHYP56, GQ

2024/015 First report of pepper ringspot virus in South Africa, damaging potato

Pepper ringspot virus (*Tobravirus*, PepRSV) is a virus species that has so far only been reported in Brazil where it causes diseases on tomato (*Solanum lycopersicum*), pepper (*Capsicum annuum*) and artichoke (*Cynara scolymus*).

According to the NPPO of South Africa, PepRSV was detected in October 2022 in a field of potatoes (commercial production) in Polokwane, Capricorn District Municipality, Limpopo Province. From April 2023, it was detected in four other provinces:

- Free State Province (district municipalities of Thabo Mofutsanyane, Lejweleputswa, and Fezile Dabi);
- North West Province (district municipalities of Dr Ruth Segomotsi Mompati and Bojanala Platinum);
- Northern Cape Province (district municipalities of Francis Baard and Pixley Ka Seme);
- Kwa-Zulu Natal Province (district municipalities of Umgungundlovu).

PepRSV is not known to occur in the Mpumalanga, Eastern Cape, Gauteng, and Western Cape Provinces.

PepRSV was found to cause brown arcs and flecks in potato tubers, which is referred to as spraing, similar to the related species, tobacco rattle virus (*Tobravirus*, TRV). In South Africa, PepRSV was detected by RT-PCR both in seed and ware potatoes. Delimiting surveys are conducted in production areas to determine the extent of its spread, as well as the pest status in other parts of South Africa. Phytosanitary measures are implemented to restrict the movement of host material from infected to non-infected areas.

The pest status of pepper ringspot virus in South Africa is officially declared as: **Present, except in specified pest free areas.**

Source: IPPC website. Official Pest Reports- South Africa (ZAF-57/2 of 2023-12-21) Notification on the detection of Pepper ringspot virus (PepRSV) in the Republic of South Africa. https://www.ippc.int/fr/countries/south-africa/pestreports/2023/12/notification-of-the-detection-of-pepper-ringspot-virus-peprsv-in-the-republic-of-south-africa/

ARC (undated) Pepper ringspot virus testing, Ensure that your seed potatoes are virus free. https://www.arc.agric.za/Agricultural%20Sector%20News/Pepper%20ringspot%20virus%20testing.pdf

Additional key words: new record, new host plant **Computer codes:** PEPRSV, ZA

2024/016 Tomato fruit blotch virus (*Blunervirus solani*): addition to the EPPO Alert List

Why: Tomato fruit blotch virus (ToFBV - *Blunervirus solani*) is an emerging virus of tomato. ToFBV was first described from symptomatic tomato samples collected in Lazio (Italy) in 2018 on tomato plants showing fruit dimpling and irregular ripening. However, stored samples collected in 2012 were found to be infected by ToFBV, showing that ToFBV has been present in Italy at least since this date. A distinct isolate of the same virus was also detected in samples from Australia. The complete genome of ToFBV has been sequenced, but until now, Koch's postulates have not been completed. Following this initial description, ToFBV has been detected in other European countries and other continents, suggesting that it might be already more widespread than originally thought and that it would be necessary to better understand its distribution, biology and epidemiology, as well as its impacts on tomato fruit production. The EPPO Panel on Diagnostics in Virology and Phytoplasmology suggested that ToFBV should be added to the EPPO Alert List.

Where: ToFBV is an emerging virus and its geographical distribution remains uncertain. In particular, records in Canary Islands and Tunisia would need to be confirmed. The NPPO of the Netherlands has intercepted in trade symptomatic tomato fruits originating from the Canary Islands (Spain), but for the moment, the presence of ToFBV has not been confirmed in tomato crops on these islands. Sequences of ToFBV isolates from Tunisia have been deposited in NCBI but were collected from potato (*Solanum tuberosum*), and there is no indication from other sources that ToFBV can infect potato plants.
EPPO region: Greece (mainland and Kriti), Italy, Portugal, Slovenia, Spain, Switzerland.
South America: Brazil (Distrito Federal).
Oceania: Australia (no further details).

On which plants: symptoms associated with ToFBV have been observed on field and glasshouse tomatoes (*Solanum lycopersicum*). If confirmed, the detection of ToFBV in potato samples (see above) would enlarge the host range of ToFBV to another economically important crop.

Damage: ToFBV affects tomato fruits, and no leaf symptoms have been reported to date. Affected fruit show irregular and blotchy ripening, dimpling and dark spots. Using transmission electron microscopy (TEM), enveloped and bacilliform virus particles (approximately 25 nm wide × 100 nm long) could be observed in samples prepared from blotched areas of the pericarp of ToFBV-infected tomato fruits. When studying fruit tissues, the highest virus concentration was found in the pericarp. In tomato seeds, ToFBV could be

detected on their external tegument, but not in emerging seedlings, thus suggesting that it is not seed transmitted. In some cases ToFBV has been detected with other tomato viruses (e.g. tomato brown rugose fruit virus, pepino mosaic virus, Southern tomato virus). For the moment, the economic impact of ToFBV on tomato production remains unknown.

Transmission: mechanical transmission tests on ToFBV in tomatoes have failed to produce infected plants and no seed transmission could be obtained. Although no vectors are known, it is suspected that the tomato russet mite (*Aculops lycopersici*) is involved in the disease transmission, as it has often been observed on ToFBV-infected tomato plants. Over long distances, trade of infected plants seems to be the most likely pathway.

Pathways: plants for planting of tomatoes from countries where ToFBV occurs, fruit? viruliferous mite vector(s)?

Possible risks: Tomato is an economically important crop which is grown indoors and/or outdoors across the EPPO region. The emergence of a new virus directly affecting the fruit could potentially represent a serious threat to tomato fruit production. As many aspects of the biology, epidemiology, geographical distribution, host range, and economic impact of ToFBV are unknown, it is difficult to assess the risk it might present to the EPPO region. Nevertheless, it is useful that NPPOs should be made aware of the emergence of this new virus of tomato.

Sources

Beris D, Galeou A, Kektsidou O, Varveri C (2023) First report of Tomato fruit blotch fruit virus infecting tomato in Greece. *New Disease Reports* **48**, e12219. https://doi.org/10.1002/ndr2.12219

Blouin AG, Dubuis N, Brodard J, Apothéloz-Perret-Gentil L, Altenbach D, Schumpp O (2023) Symptomatic, widespread, and inconspicuous: new detection of tomato fruit blotch virus. *Phytopathologia Mediterranea* **62**(3), 349-354. https://doi.org/10.36253/phyto-14463

Ciuffo M, Kinoti WM, Tiberini A, Forgia M, Tomassoli L, Constable FE, Turina M (2020) A new blunervirus infects tomato crops in Italy and Australia. *Archives of Virology* **165**, 2379-2384.

Kitajima EW, Nakasu YET, Inoue-Nagata AK, Salaroli RB, Ramos-Gonzales PL (2023) Tomato fruit blotch virus cytopathology strengthens evolutionary links between plant blunerviruses and insect negeviruses. *Scientia Agricola* **80**, e20220045. https://doi.org/10.1590/1678-992X-2022-0045

Maachi A, Torre C, Sempere RN, Hernando Y, Aranda MA, Donaire L (2021) Use of high-throughput sequencing and two RNA input methods to identify viruses infecting tomato crops. *Microorganisms* **9**(5), 1043. https://doi.org/10.3390/microorganisms9051043

Nakasu EY, Nagata T, Inoue-Nagata AK (2022) First report of tomato fruit blotch virus infecting tomatoes in Brazil. *Plant Disease* **106**(8), 227. https://doi.org/10.1094/PDIS-07-21-1392-PDN

Rivarez MP, Pecman A, Bačnik K, Maksimović O, Vučurović A, Seljak G, Mehle N, Gutiérrez-Aguirre I, Ravnikar M, Kutnjak D (2023) In-depth study of tomato and weed viromes reveals undiscovered plant virus diversity in an agroecosystem. *Microbiome* **11**, 60. https://doi.org/10.1186/s40168-023-01500-6

Tiberini A, Hafsa AB, Kazuko A, Gentili A, Taglienti A, Haegeman A, Manglli A, Maachi A, Torre C, Kutnjak D, Kitajima EW *et al*. (2022)Tomato fruit blotch virus: an update on epidemiology, cytopathology and molecular features. Abstract of a poster presented at the Conference on Advances in Plant Virology (Ljubljana, SI, 2022-10-05/07).

EPPO RS 2020/184, 2022/143, 2022/152, 2023/221, 2023/243, 2024/016

Panel review date – Entry date 2024-01

2024/017 Update on the situation of *Geosmithia morbida* and *Pityophthorus juglandis* in France

The bark beetle *Pityophthorus juglandis* (Coleoptera: Curculionidae: Scolytinae, EPPO A2 List) and the fungus *Geosmithia morbida* (EPPO A2 List) are associated with the thousand cankers disease of walnuts.

In France *P. juglandis* was first detected in September 2022 in the Lyon metropolitan area (Rhône department, Auvergne-Rhône-Alpes region) (EPPO RS 2022/232), and the presence of *G. morbida* was first confirmed in November 2022 on 3 walnut (*Juglans regia*) trees in the same area. Official surveys were carried out in 2023 to delimit the presence of the pests.

Several specimens of *P. juglandis* were caught in a trap in the Isère department, and in a trap in the Ain department (both in Auvergne-Rhône-Alpes region), respectively 12 and 4 adults in June and July 2023. In Ain, one *J. regia* tree was found to be infected by *G. morbida*. In Isère, tree samples were taken but none were positive for *G. morbida*. Surveys conducted in the Rhône department detected *G. morbida* in one *J. nigra* tree in September 2023. The infested trees were cut down and destroyed, and a demarcated area of 2 km defined around them, according to the national decree.

The pest status of *Geosmithia morbida* in France is officially declared as: **Present, only in some parts of the Member State concerned, at low prevalence**.

The pest status of *Pityophthorus juglandis* in France is officially declared as: **Present, only in some parts of the Member State concerned, at low prevalence.**

Source: NPPO of France (2023-12).

Arrêté du 28 juin 2023 relatif à la lutte contre *Pityophthorus juglandis* (PITOJU) et *Geosmithia morbida* (GEOHMO), agents pathogènes responsables de la maladie des mille chancres. Journal officiel de la République française n°0161, texte 15. https://www.legifrance.gouv.fr/eli/arrete/2023/6/28/AGRG2235717A/jo/texte

Pictures: *Geosmithia morbida*. https://gd.eppo.int/taxon/GEOHMO/photos

Additional key words: detailed record **Computer codes:** GEOHMO, FR

2024/018 Biological control of *Lygodium microphyllum* in the USA

Lygodium microphyllum (Schizaeaceae) is native to tropical Africa, and Asia, and is an invasive alien plant in North America, in particular southern and central Florida. *L. microphyllum* is a climbing fern species which can have negative impacts on native plant diversity by forming thick mats that block sunlight to native shrubs and trees. A number of biological control agents have been released in North America to control *L. microphyllum*, including, *Austromusotima camptozonale* (Lepidoptera) which was released in 2004 and *Neomusotima conspurcatalis* (Lepidoptera) and *Floracarus perrepae* (Acari), both released in 2008. *A. camptozonale* failed to establish and although the other two biocontrol agents established, they have not had the desired level of impact on the invasive population. The defoliating moth *Callopistria exotica* (Lepidoptera) was collected in Hong Kong and examined in quarantine to determine if it was safe for release. Climate modelling analysis was performed to predict the potential climate suitability of *C. exotica* in the invaded range. The results of the host range testing indicate that *C. exotica* is highly specific to *L. microphyllum* and the congener *L. japonicum* (EPPO A1 List). The results of the climate modelling suggest that *C. exotica* could establish in southern Florida though it has a low suitability in other areas of North America. These results combined, suggest that the release of *C. exotica* could contribute to the control of *L. microphyllum* in North America.

Source: Wheeler GS, Lake EC, Mattison E, Sutton GF (2024) Host range, biology, and climate suitability of *Callopistria exotica*, a potential biological control agent of Old World climbing fern (*Lygodium microphyllum*) in the USA. *Biological Control* **188**, 105410. https://doi.org/10.1016/j.biocontrol.2023.105410

Additional key words: biological control **Computer codes:** LYFMI, LYFJA, US

2024/019 New EPPO PM 6 Standard on host range testing

A new EPPO Standard in the PM 6 Series (Safe use of biological control) has been published in the EPPO Bulletin. The Standard, PM 6/5 *Host specificity testing of non-indigenous (classical) biological control agents used against invasive alien plants*, describes the procedure for evaluating the host specificity of non-indigenous classical invertebrate and fungal biological control agents for use against invasive alien plants. The Standard covers guidance and best practise on the essential elements of this procedure, including taxonomic confirmation, life cycle studies, the optimal conditions to maintain biological control agents, selection and maintenance of test plants, and host specificity testing.

Source: EPPO (2023) PM 6/5 (1) Host specificity testing of non-indigenous (classical) biological control agents used against invasive alien plants. *EPPO Bulletin* **53**(3), 480-490. https://doi.org/10.1111/epp.12954

Additional key words: biological control, EPPO, publication

2024/020 Newly revised PM 6 Standard on first import of a biological control agent

A revised EPPO Standard in the PM 6 Series (Safe use of biological control) has been published in the EPPO Bulletin. The Standard, PM 6/1 *First import of non-indigenous biological control agents for research under confined condition*, was first approved in 1999 and the revision was published in 2023. The Standard provides guidelines for the first import of non-indigenous biological control agents for research under confined conditions. It provides guidance on the information that a research organisation should supply in a notification to the national authority, and guidance on how the national authority should review and respond to the notification. In addition, the Standard provides a list of general safeguards that should be followed.

Source: EPPO (2023) PM 6/1(2) First import of non-indigenous biological control agents for research under confined condition. *EPPO Bulletin* **53**, 477-479. https://onlinelibrary.wiley.com/doi/epdf/10.1111/epp.12953

Additional key words: biological control, EPPO, publication

2024/021 3rd International Congress of Biological Control (San José, Costa Rica, 2024-06-24/27)

The 3rd International Congress on Biological Control (ICBC3) will be held on 2024-06-24/27 in San José, Costa Rica. It will provide a platform for multi and inter-disciplinary biological control research and applications for scientists and practitioners from universities, research institutes, governmental, non-governmental and private-sector organizations. Session subjects will encompass various cross-cutting issues: pre-release studies, post-release evaluation, socio-economic studies, the Nagoya Protocol and biological control, the role of gene editing in biological control, community engagement prior release, long-term impact/cost savings of biocontrol, regulatory issues hindering market accessibility, uptake of biological control, the role of digital tools to promote the uptake of knowledge.

The deadline for abstract submission is 2024-01-31.

Source: Congress website: https://www.iobc-icbc.com/

Additional key words: conference, biological control **Computer codes:** CR

2024/022 First report of *Lespedeza cuneata* in the EPPO region

Lespedeza cuneata (Fabaceae: EPPO A1 pest) is an erect semi-woody forb which can reach 2 m in height. Native to Asia and Australia, *L. cuneata* was first introduced into the USA in 1896 where it invades grasslands and open forest communities often forming dense monocultures which compete with native species for light and nutrients. In 2022, *L. cuneata* was recorded on the bank of the Vesdre river in Goffontaine in Eastern Belgium. A single non-flowering individual was observed and subsequently removed. It is not known how the species has entered the EPPO region, although the EPPO Pest Risk Analysis notes pathways for entry include trade for ornamental use and a less likely pathway as a contaminant in hay and straw imports. The location of the single plant is downstream from a former industrial facility that processed wool up to the first half of the 20th century. The seeds of *L. cuneata* have been shown to be dispersed by mammals (via epizoochory) and most wool was imported from countries were the pest occurs. Wool waste was also historically used as a fertilizer in orchards, fields and private gardens and potentially, seed exposed on the bank may be the source of this individual plant. Seed of *L. cuneata* has been shown to germinate after 27 years when stored at 5°C and 40 years when stored at -18°C.

Source: Verloove F, Gonggrijp S, Valentini S, Dana ED (2023) The first European record of *Lespedeza cuneata* (Fabaceae), an invasive alien species of Union concern. *BioInvasions Records* **12**(4), 899-908. https://www.reabic.net/journals/bir/2023/4/BIR_2023_Verloove_etal.pdf

EPPO (2018) Pest risk analysis for *Lespedeza cuneata*. EPPO, Paris. Available at https://gd.eppo.int/taxon/LESCU/documents

Additional key words: invasive alien plants, new record **Computer codes:** LEXCU, BE

2024/023 First report of *Amaranthus palmeri* in Morrocco

Amaranthus palmeri (Amaranthaceae - EPPO A2 List) is a dioecious summer annual species native to North America. In the EPPO region, it is established in a few countries and transient in several others. In 2020 several plants of *A. palmeri* were observed in Morocco (Rabat) in an irrigated maize (*Zea mays*) field. These *A. palmeri* plants were flowering and seeding, with stems between 2 and 3 m tall. In 2024, EPPO will develop a PM 9 Standard (National Regulatory Control Systems) which will provide guidance on the control procedures aiming to monitor, contain and eradicate *A. palmeri* and *A. tuberculatus* (EPPO A2 List). In addition, the authors report a new record for *Chenopodium ficifolium* subsp. *ficifolium* (Amaranthaceae) in Morrocco. *C. ficifolium* subsp. *ficifolium* has a wide native distribution from Europe to East Asia. Two individual plants were found in a public garden in Berrechid in 2022. This taxa can be considered as a casual alien plant in Morocco.

Source: Tanji A (2023) Two new annual weeds in Morocco: *Amaranthus palmeri* and *Chenopodium ficifolium* subsp. *ficifolium* (Amaranthaceae). *Flora Mediterranea* **33** 91-99.

Pictures *Amaranthus palmeri*. https://gd.eppo.int/taxon/AMAPA/photos

Additional key words: invasive alien plants, new record **Computer codes:** AMAPA, CHEFI, MA

2024/024 Best management guide for invasive alien aquatic and riparian plant species

The EU LIFE funded project RIPARIAS has produced a best management guide for the control and eradication of invasive alien aquatic and riparian plant species. The guide details methods for the control of specific alien plant species and the methods presented have been shown to have an acceptable level of effectiveness at the local scale (Table 1). The management guide also includes case studies for some of the species where such management actions have taken place against specific species in Belgium. These case studies describe both success stories and failed management actions.

Table 1. Invasive alien plants with best management practices recommended.

Species	Family	EPPO Status	Best management practises
Aponogeton distachyos	Aponogetonaceae		Manual removal
Cabomba caroliniana	Cabombaceae	List IAP	Manual removal, mechanical removal, substrate removal, light deprivation
Crassula helmsii	Crassulaceae	A2 List	Light deprivation, environmental management
Egeria densa	Hydrocharitaceae	List IAP	Manual removal, mechanical removal, light deprivation
Erythranthe guttata	Phrymaceae		Manual removal
Heracleum mantegazzianum	Apiaceae	List IAP	Manual removal, mechanical removal, grazing
Heracleum persicum	Apiaceae	A2 List	Manual removal, mechanical removal, grazing
Heracleum sosnowskyi	Apiaceae	A2 List	Manual removal, mechanical removal, grazing
Houttuynia cordata	Saururaceae	Alert List	Manual removal
Hydrocotyle ranunculoides	Araliaceae	A2 List	Manual removal, mechanical removal
Impatiens glandulifera	Balsaminaceae	List IAP	Manual removal, mechanical removal, grazing
Koenigia polystachya	Polygonaceae	List IAP	Manual removal, light deprivation
Lagarosiphon major	Hydrocharitaceae	List IAP	Manual removal, mechanical removal, light deprivation
Ludwigia grandiflora	Onagraceae	A2 List	Manual removal, mechanical removal, substrate removal, light deprivation
Ludwigia peploides	Onagraceae	A2 List	Manual removal, mechanical removal, substrate removal, light deprivation
Lysichiton americanus	Araceae	List IAP	Manual removal
Myriophyllum aquaticum	Haloragaceae	List IAP	Manual removal, substrate removal, light deprivation, environmental management
Myriophyllum heterophyllum	Haloragaceae	A2 List	Manual removal, substrate removal, light deprivation
Petasites japonicus var. *giganteus*	Asteraceae		Manual removal
Pontederia cordata	Pontederiaceae	Alert List	Manual removal, mechanical removal
Saururus cernuus	Saururaceae	Alert List	Manual removal, substrate removal
Zizania latifolia	Poaceae	List IAP	Manual removal, mechanical removal

Source: Patinet M, Branquart E, Monty A (2023). Invasive alien aquatic and riparian plant species – Best management practice guide. LIFE RIPARIAS project, 188 pp. https://www.riparias.be/359/

Project website: https://www.riparias.be/

Additional key words: invasive alien plants, publication

Computer codes: CABCA, HYDRA, LGAMA, LUDUR, LUDPE, MYPBR, MYPHE, APGDI, CSBHE, ELDDE, POFCO, SUACE, ZIZLA, HERMZ, HERPE, HERSO, IPAGL, POLPS, LSYAM, MIUGU, HOTCO, PEDJG, BE

2024/025 *Prunus cerasifera* occurrence in a temperate primeval forest

In the EPPO region, *Prunus cerasifera* (Rosaceae) is native to some countries (e.g. Bulgaria, Greece, Romania) and is an economically important plant, both for its fruit and as an ornamental species. However, in Poland, *P. cerasifera* is considered an invasive alien plant in some areas, in particular in forest environments. A study was conducted in the Strict Reserve of the Białowieża National Park located in North-East Poland. An area which has been protected from human impacts since 1921. *P. cerasifera* has been recorded in the national park since the 1960s with a recent increase in the abundance of the species on abandoned farmland. To address two aspects (1) whether the ecological success of *P. cerasifera* depends on the distance from the propagule source and (2) whether its success is influenced by understory vegetation characteristics of a recipient forest, plant occurrence parameters and habitat variables were modelled. The results of the model showed that within the reserve, the probability of *P. cerasifera* occurrence decreased with increasing distance from the propagule source; reaching about 30 % at a distance of > 400 m. This is different to outside the reserve where 75 % of *P. cerasifera* occurrence is predicted to be at a distance of 1.2 km from the source population. These differences may be explained by large mammals feeding on the fruit outside the national park. In the reserve, the occurrence of *P. cerasifera* was related to high species richness in the understory. This may be due to the higher level of disturbance and canopy gap formations compared to species poor understory vegetation.

Source: Czortek P, Adamowski W, Kamionka-Kanclerska K, Karpińska O, Zalewski A, Dyderski MK (2023) Patterns of *Prunus cerasifera* early invasion stages into a temperate primeval forest. *Biological Invasions*. https://doi.org/10.1007/s10530-023-03188-z

Pictures *Prunus cerasifera*. https://gd.eppo.int/taxon/PRNCF/photos

Additional key words: invasive alien plants, detailed record **Computer codes:** PRNCF, PL

2024/026 Updated checklist of invasive plant taxa in Bosnia and Herzegovina

An updated checklist of invasive plants of Bosnia and Herzegovina has been published (Table 1). The list includes 66 taxa where the majority are native to the Americas. The taxa include 46 genera and 28 families. Most of the taxa have been introduced accidentally (43 taxa) and 19 taxa have been introduced deliberately and 4 taxa have been introduced both accidentally and deliberately.

Table 1. Checklist of invasive plants in Bosnia and Herzegovina.

Species	Family	Introduced	Native range
Abutilon theophrasti	Malvaceae	Acc.	Asia
Acer negundo	Sapindaceae	Del.	N. & C. America
*Ailanthus altissima**	Simaroubaceae	Del.	Asia
Amaranthus albus	Amaranthaceae	Acc.	N. America
Amaranthus blitoides	Amaranthaceae	Acc.	N. America
Amaranthus deflexus	Amaranthaceae	Acc.	S. America
Amaranthus hybridus	Amaranthaceae	Acc.	Americas
Amaranthus retroflexus	Amaranthaceae	Acc.	N. & C. America
*Ambrosia artemisiifolia**	Asteraceae	Acc.	N. America

Species	Family	Introduced	Native range
*Amorpha fruticosa**	Fabaceae	Del.	N. America
Artemisia annua	Asteraceae	Del.-Acc.	Asia
Artemisia verlotiorum	Asteraceae	Acc.	Asia
*Asclepias syriaca**	Apocynaceae	Acc.	N. America
*Bidens frondosa**	Asteraceae	Acc.	N. America
*Bidens subalternans**	Asteraceae	Acc.	S. America
*Broussonetia papyrifera***	Moraceae	Del.	Asia
*Buddleia davidii**	Scrophulariaceae	Del.	Asia
Bromus catharticus	Poaceae	Del.-Acc.	S America
Commelina communis	Commelinaceae	Del.	Asia
Cuscuta campestris	Convolvulaceae	Acc.	Americas
Datura stramonium	Solanaceae	Acc.	N. & C. America
Dysphania ambrosioides	Amaranthaceae	Acc.	N. & C. America
Echinocystis lobata	Cucurbitaceae	Acc.	N. America
Eleusine indica	Poaceae	Acc.	Africa
Elodea canadensis	Hydrocharitaceae	Acc.	N. America
Erigeron annuus	Asteraceae	Acc.	N. America
Erigeron bonariensis	Asteraceae	Acc.	Americas
Erigeron canadensis	Asteraceae	Acc.	Americas
*Erigeron sumatrensis**	Asteraceae	Acc.	C. & S. America
Euphorbia maculata	Euphorbiaceae	Acc.	N. & C. America
Euphorbia nutans	Euphorbiaceae	Acc.	Americas
Euphorbia prostrata	Euphorbiaceae	Acc.	Americas
Galinsoga parviflora	Asteraceae	Acc.	Americas
Galinsoga quadriradiata	Asteraceae	Acc.	Americas
*Helianthus tuberosus**	Asteraceae	Del.	Americas
*Heracleum mantegazzianum**	Apiaceae	Acc.	Europe
Impatiens balfourii	Balsaminaceae	Del.	Asia
*Impatiens glandulifera**	Balsaminaceae	Del.	Asia
Impatiens parviflora	Balsaminaceae	Acc.	Asia
Juncus tenuis	Juncaceae	Acc.	N. & C. America
Lepidium virginicum	Brassicaceae	Acc.	N. & C. America
Matricaria discoidea	Asteraceae	Acc.	N. America
Oenothera biennis	Onagraceae	Del.	N. America
Oenothera glazioviana	Onagraceae	Del.	Origin from cultigen
Opuntia humifusa	Cactaceae	Del.	N. America
Panicum capillare	Poaceae	Acc.	N. America
Panicum dichotomiflorum	Poaceae	Acc.	Americas
Parthenocissus quinquefolia	Vitaceae	Del.	N. America
Paspalum dilatatum	Poaceae	Acc.	S. America
*Paspalum distichum**	Poaceae	Acc.	Americas
Phytolacca americana	Phytolaccaceae	Del.-Acc.	N. America
Potentilla indica	Rosaceae	Acc.	Asia
Pueraria montana var. *lobata****	Fabaceae	Del.	Asia

Species	Family	Introduced	Native range
*Fallopia japonica**	Polygonaceae	Del.	Asia
Fallopia × *bohemica**	Polygonaceae	Del.-Acc.	Hybrid
Robinia pseudoacacia	Fabaceae	Del.	N. America
Rudbeckia laciniata	Asteraceae	Del.	N. America
*Senecio inaequidens**	Asteraceae	Acc.	Africa
*Solidago canadensis**	Asteraceae	Acc.	N. America
*Solidago gigantea**	Asteraceae	Acc.	N. America
Sorghum halepense	Poaceae	Acc.	Africa/Asia
*Sporobolus vaginiflorus***	Poaceae	Acc.	N. America
Symphyotrichum squamatum	Asteraceae	Acc.	S. America
Veronica persica	Plantaginaceae	Acc.	Asia
Xanthium orientale subsp. *italicum*	Asteraceae	Acc.	Americas
Xanthium spinosum	Asteraceae	Acc.	Americas

* = List Invasive Alien Plants; ** EPPO Observation List; *** EPPO A2 List; **** Alert List; Acc= accidental; Del = deliberate

Source: Maslo S (2023) A proposal for updating the list of invasive alien plant species in Bosnia and Herzegovina. *Phytologia Balcanica* **29**, 405-420.

Additional key words: invasive alien plants

Computer codes: ABUTH, ACRNE, AILAL, AMAAL, AMABL, AMADE, AMACH, AMARE, AMBEL, AMHFR, ARTAN, ARTVE, ASCSY, ASTSQ, BIDFR, BIDSU, BRNPA, BUDDA, BROCA, COMCO, CVCCA, DATST, CHEAM, ECNLO, ELEIN, ELDCA, ERIAN, ERIBO, ERICA, ERISU, EPHMA, EPHNU, EPHPT, GASPA, GASCI, HELTU, HERMZ, IPABF, IPAGL, IPAPA, IUNTE, LEPVI, MATMT, OEOBI, OEOER, OPUHU, PANCA, PANDI, PRTQU, PASDI, PASDS, PHTAM, DUCIN, PUELO, POLCU, REYBO, ROBPS, RUDLA, SENIQ, SOOCA, SOOGI, SORHA, SPZVA, VERPE, XANSI, XANSP, BA