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2023/129 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**

In November 2022, a single specimen of *Leptoglossus occidentalis* (Heteroptera: Coreidae – Western conifer seed bug) was found for the first time in Uzbekistan, in Tashkent (van der Heyden, 2023).

Xylosandrus compactus (Coleoptera: Curculionidae: Scolytinae – formerly EPPO Alert List) is reported for the first time from Israel. It was first found in 2020, and currently occurs in large areas of Galilee, as well as in the Misgav district. *X. compactus* has been observed damaging trees including local oak species, *Arbutus unedo, Ceratonia siliqua,* and *Cercis siliquastrum*. It is expected that it will continue to rapidly spread southward (Birnbaum, 2023; Mendel, 2023).

- **Detailed records**

In Australia the root-knot nematode *Meloidogyne enterolobii* (EPPO A2 List) was first reported in October 2022 in the Northern Territory and in December 2022 in one location in North Queensland (EPPO RS 2022/241, RS 2023/001). Following delimiting surveys, it was detected further in six properties in the Northern Territory, and one location in Hervey Bay in Southern Queensland. Due to the pest's biology and geographical distribution, it was determined that *M. enterolobii* is not eradicable from Australia (IPPC, 2023).
The pest status of *Meloidogyne enterolobii* in Australia is officially declared as: **Present: not widely distributed and under official control.**

In Thailand, the nematode *Meloidogyne graminicola* (EPPO Alert List) has been reported causing damage on shallot (*Allium cepa* var. *aggregatum*) in Chiang Rai province since November 2021 (Beesa *et al.*, 2023).

In the USA, the presence of tar spot of maize caused by *Phyllachora maydis* (EPPO Alert List) is confirmed in the Great Plains (Kansas, Nebraska, and South Dakota). It was first reported in South Dakota in autumn 2022. The disease incidence varies over the years, but was generally about 2% (Debacker Moura *et al.*, 2023).

In Mexico, *Ralstonia pseudosolanacearum* (EPPO A2 List) was reported for the first time in February 2022, on tomato (*Solanum lycopersicum*) (EPPO RS 2023/055). It was also found on aubergine (*Solanum melongena*) in a commercial greenhouse located in the same city (Culiacan) in Sinaloa, in May 2022 (Valdez-Morales *et al.*, 2023).

In the USA, *Tomato chlorotic dwarf viroid* (*Pospiviroid*, TCDVd) was detected in 2018 in Idaho on tomato (*Solanum lycopersicum*) grafted on *Solanum sisymbriifolium*. *S. sisymbriifolium* is listed on the EPPO Alert List as potentially invasive for the EPPO region and is also used as a trap crop for potato cyst nematodes (Dahan *et al.*, 2023).

- **Host plants**

Natural infection of chrysanthemum stem necrosis virus (*Orthotospovirus*, CSNV – EPPO A1 list) has been detected in symptomatic fruit of *Capsicum annuum* cv. Pampa and Fulgor which had been harvested in 2019 from greenhouse plants in the state of Sao Paulo, Brazil (Carmo *et al.*, 2023).

Ralstonia solanacearum (EPPO A2 List) is reported for the first time from *Ipomoea hildebrandtii*, a native invasive weed in East Africa (Cellier *et al.*, 2023).

- **Epidemiology**

In a recent review on sweet potato mild mottle virus (*Ipomovirus*, SPMMV, EU A1 quarantine pest), Tugume *et al.* (2023) note that although SPMMV was originally reported as being transmitted by *Bemisia tabaci* (Hemiptera: Aleyrodidae, EPPO A2 List), studies carried out afterward have failed to confirm whitefly transmissibility of SPMMV. They consider that SPMMV may be transmitted by aphids.

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Additional key words: detailed records, epidemiology, host plants, new records

Computer codes: CSNV00, LEPLOC, MELGGC, MELGMY, PHYRMA, RALSPS, RALSSL, SPMMV0, TCDVD0, XYLSCO, AU, BR, IL, MX, TH, US, UZ

2023/130 EU emergency measures for *Spodoptera frugiperda* and tomato brown rugose fruit virus

In the EU, emergency measures to prevent the introduction establishment of *Spodoptera frugiperda* (Lepidoptera: Noctuidae – EPPO A2 List*)* and tomato brown rugose fruit virus (Tobamovirus, ToBRFV – EPPO A2 List) were first adopted in 2018 and 2019 respectively. These measures have been revised and new Commission Implementing Regulations published recently.

In particular, the emergency measures for *Spodoptera frugiperda* include requirements for fruits of *Capsicum, Momordica, Solanum aethiopicum., Solanum macrocarpon.* and *Solanum melongena* as well as for plants *of Asparagus officinalis, Chrysanthemum, Dianthus, Pelargonium* and *Zea mays.*

Source: 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

Commission Implementing Regulation (EU) 2023/1032 of 25 May 2023 establishing measures to prevent the introduction into and the spread within the Union territory of Tomato brown rugose fruit virus (ToBRFV) and amending Implementing Regulation (EU) 2020/1191, OJ L 139, http://data.europa.eu/eli/reg_impl/2023/1032/oj

Pictures: *Spodoptera frugiperda*. https://gd.eppo.int/taxon/LAPHFR/photos
Tomato brown rugose fruit virus. https://gd.eppo.int/taxon/TOBRFV/photos

Additional key words: regulation

Computer codes: LAPHFR, TOBRFV, EU

2023/131 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 2023/104), the following new and revised EPPO datasheets have been published in the EPPO Global Database:

- '*Candidatus* Phytoplasma aurantifolia'. https://gd.eppo.int/taxon/PHYPAF/datasheet
- '*Candidatus* Phytoplasma pyri'. https://gd.eppo.int/taxon/PHYPPY/datasheet
- Cucurbit yellow stunting disorder virus. https://gd.eppo.int/taxon/CYSDV0/datasheet
- *Gremmeniella abietina*. https://gd.eppo.int/taxon/GREMAB/datasheet
- *Hirschmanniella oryzae*. https://gd.eppo.int/taxon/HIRSOR/datasheet
- *Hishimonus phycitis*. https://gd.eppo.int/taxon/HISHPH/datasheet
- *Xanthomonas fragariae*. https://gd.eppo.int/taxon/XANTFR/datasheet

Source: EPPO Secretariat (2023-06).

Additional key words: publication

Computer codes: CYSDV0, GREMAB, HIRSOR, HISHPH, PHYPAF, PHYPPY, XANTFR

2023/132 First report of *Unaspis citri* in Santa Maria Island (Azores, Portugal)

Unaspis citri (Hemiptera: Diaspididae, EPPO A1 List) was known to occur in Sao Miguel Island in Azores (Portugal) (EPPO RS 1999/037). It was first detected in October 2022 in Santa Maria Island. As a result of the surveys carried out in 2022, *U. citri* was officially confirmed in a symptomatic *Citrus sinensis* tree in a private garden, in the parish of Vila do Porto. Further surveys were conducted in the vicinity of the infested tree and *U. citri* was detected in 2 samples of citrus plants (*C. sinensis* and *Citrus x limonia)*, collected in 2 different private gardens, one contiguous to the first finding and the second one 600 m away. In addition six other citrus plants (3 *C. sinensis*, 1 *C. limon*, 1 *C. x limonia* and 1 *C. deliciosa*) in the second garden showed suspicious symptoms. Investigations are ongoing to gather additional information on the source of these outbreaks. Phytosanitary measures have been taken, including destruction of the infested and suspicious plants by uprooting and incineration.

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 (2023-04, 2023-06).

Pictures *Unaspis citri*. https://gd.eppo.int/taxon/UNASCI/photos

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

2023/133 First record of *Coccotrypes cardamomi* in Denmark

The NPPO of Denmark recently informed the EPPO Secretariat of the first finding of *Coccotrypes cardamomi* (Coleoptera: Scolytinae, EU A1 Quarantine pest as 'non-European Scolytinae') on its territory.

During an inspection in a greenhouse in the municipality of Odense in January 2023, one *Ficus microcarpa* plant showing symptoms of Scolytinae infestation was found and the pest was identified as *Coccotrypes cardamomi*. The lot consisted of 4100 *F. microcarpa* plants imported from China. The infested plant was destroyed. No other infested plants were found after thorough inspection of the lot and eradication measures were initiated.

During additional inspections carried out at the end of May 2023 in a greenhouse in another part of this company, one *F. microcarpa* showing symptoms of Scolytinae infestation in a lot (3900 plants) imported from the same supplier in China was detected. The specimens found were confirmed as being *C. cardamomi*. The infested plant was destroyed. Thorough inspection of the production in the greenhouse revealed no further findings. It may be noted that another *Coccotrypes* species *(C. cyperi)* had been found in similar circumstances in September 2022 (EPPO RS 2022/234).

The pest status of *Coccotrypes cardamomi* in Denmark is officially declared as: T**ransient, actionable, under eradication.**

Note: very little information is available on *C. cardamomi*. It is present in Asia, from India and Sri Lanka to China, Japan, Borneo, and Seychelles and is usually considered as breeding in seeds of trees.

Source: NPPO of Denmark (2023-06).

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

2023/134 Eradication of *Tecia solanivora* in Asturias, Spain

In Spain, the potato pest *Tecia solanivora* (Lepidoptera: Gelechiidae – EPPO A2 List) was first found in Islas Canarias in 1999 (EPPO RS 2001/129). In 2015, it was observed in mainland Spain in Galicia (EPPO RS 2015/202) and later in Asturias (EPPO RS 2017/080). An eradication programme is implemented and includes the prohibition of growing potatoes in the demarcated areas. Regular official surveys are conducted.

The NPPO of Spain recently informed the EPPO Secretariat that *T. solanivora* is considered eradicated from Asturias: the pest has not been detected during the official surveys carried out in the last four years in the demarcated areas. As a consequence, in Asturias, only the municipality of San Tirso de Abres remains delimited as a buffer zone because it is adjacent to an infested zone (municipality of Trabada) in Galicia. Eradication measures continue in Galicia (RS 2023/041).

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

Source: NPPO of Spain (2023-06).

Pictures: *Tecia solanivora*. https://gd.eppo.int/taxon/TECASO/photos

Additional key words: detailed record, eradication **Computer codes:** TECASO, ES

2023/135 New finding of *Thaumetopoea processionea* in Ireland

In Ireland *Thaumetopoea processionea* (Lepidoptera: Notodontidae – EU Annexes) was first detected in June 2020 in a public park in Dublin and subsequently eradicated (EPPO RS 2020/184, RS 2021/001). Ireland has a Protected Zone status under the EU Plant Health legislation for *T. processionea*.
The NPPO of Ireland recently informed the EPPO Secretariat that four nests of *T. processionea* have been detected on four adjacent oak trees (*Quercus robur)* in the municipality of Castleknock in June 2023. The nests were reported by a member of the public in a green square in a housing development and an official inspection confirmed the identity of the pest. Trees had been planted in 2019. Official measures were taken to eradicate the pest: both the nests and the trees were immediately removed and destroyed.

Source: NPPO of Ireland (2023-06).

Picture *Thaumetopoea processionea*. https://gd.eppo.int/taxon/THAUPR/photos

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

2023/136 *Xylotrechus pyrrhoderus* (Coleoptera: Cerambycidae): addition to the EPPO Alert List

Why: *Xylotrechus pyrrhoderus* (Coleoptera: Cerambycidae) originates from Asia and is a borer of grapevine (*Vitis* spp.) and other Vitaceae. In 2020, it was detected for the first time in North America, in Massachusetts (US) on wild grapes. In its native range, *X. pyrrhoderus* is a pest of grapevine. Considering the economic importance of grapevine in the EPPO region, and the fact that this insect has recently been introduced into another continent, the EPPO Secretariat thought that *X. pyrrhoderus* could usefully be added to the EPPO Alert List.

Where:
EPPO region: absent.
Asia: China (Anhui, Beijing, Chongqing, Fujian, Gansu, Guangdong, Guangxi, Guizhou, Henan, Hubei, Jiangsu, Jiangxi, Jilin, Liaoning, Neimenggu, Shaanxi, Shandong, Shanghai, Shanxi, Sichuan, Zhejiang), Japan (Honshu, Kyushu), Korea Democratic People's Republic, Korea (Republic of), Mongolia.
North America: USA (Massachusetts).

On which plants: *Ampelopsis brevipedunculata, Parthenocissus tricuspidata, Vitis vinifera.*

Damage: Larvae feed inside vines and branches, preferring healthy and robust shoots. As a consequence of larval feeding and boring activities, the shoot beyond the feeding point withers and dies. Dark sap may be observed oozing from infestation sites. In Japan, *X. pyrrhoderus* has one generation per year. Adults emerge in August and September and live during approximately a week. Mating behaviour has been studied and sex pheromones have been identified. Eggs are laid in the bark, or between the buds and the leaf petiole. After 5 days, newly hatched larvae penetrate twigs through the buds. Larvae overwinter within shoots and resume feeding in spring.
In its native range, *X. pyrrhoderus* is considered to be a major pest of grapevine, which can reduce grape production by 10 to 20%. In Massachusetts, it has been found on wild grapes and at present, no particular damage has been reported but growers have been invited to report any sightings.
Pictures of *X. pyrrhoderus* can be viewed on the Internet:
https://massnrc.org/pests/blog/?p=3142
http://www.gorodinski.ru/view_cerambycidae.php?id_cerambyx=277
https://www.ipmimages.org/browse/subthumb.cfm?sub=76914

Dissemination: No data is given on the flight capacities of *X. pyrrhoderus*. Over long distances, the insect can be transported on planting material. As it is an attractive insect, beetles may be traded as such. The pathway of introduction into the USA is unknown.

Pathways: Plant for planting of *Ampelopsis brevipedunculata, Parthenocissus tricuspidata,* and *Vitis vinifera, grapevine wood?* from countries where *X. pyrrhoderus* occurs.

Possible risks: Grapevine is a crop of major economic importance in the EPPO region. *X. pyrrhoderus* is considered to be a pest in its native range, although there is little data available in the literature on this insect. Given its hidden mode of life, *X. pyrrhoderus* is difficult to detect on infested plants. For the moment, it seems that no particular damage is observed in Massachusetts. Nevertheless, recent experience with a similar species, *X. chinensis* (EPPO Alert list) which has been introduced from Asia into the EPPO region, causing mortality on *Morus* species, suggests a cautious approach may be needed. Imports of *Vitis* planting material from outside the EPPO region are usually prohibited, but this is not

necessarily the case for the other hosts, *Ampelopsis brevipedunculata*, and *Parthenocissus tricuspidata* which are ornamental plants.

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EPPO RS 2023/136

Panel review date – Entry date 2023-06

2023/137 First record of *Globodera pallida* in Latvia

The NPPO of Latvia recently informed the EPPO Secretariat of the first record of the nematode *Globodera pallida* (EPPO A2 List) on its territory. During the official survey in 2023, *G. pallida* was detected in a field (10.33 ha) intended for potato growing in the municipality of Jelgava, Cena parish. The identity of pest was confirmed in the laboratory on May 23, 2023. Phytosanitary measures will be applied in accordance with EU Regulation 2022/1192.

The pest status of *Globodera pallida* in Latvia is officially declared as: **Present, under eradication.**

Source: NPPO of Latvia (2023-06).

Commission Implementing Regulation (EU) 2022/1192 of 11 July 2022 establishing measures to eradicate and prevent the spread of *Globodera pallida* (Stone) Behrens and *Globodera rostochiensis* (Wollenweber) Behrens. OJL 185, 12-26. ELI: http://data.europa.eu/eli/reg_impl/2022/1192/oj

Pictures: *Globodera pallida*. https://gd.eppo.int/taxon/HETDPA/photos

Additional key words: new record **Computer codes:** HETDPA, LV

2023/138 First report of *Heterodera zeae* in Spain

Heterodera zeae (formerly EPPO Alert List) is recorded for the first time from Spain. The nematode was detected in a commercial maize (*Zea mays*) field in Talavera de la Reina (province of Toledo, Castilla-La Mancha) in autumn 2022 during a survey on maize parasitic nematodes in the central-western part of Spain. Maize plants in the infested field were stunted. The identity of the pest was confirmed by morphological and molecular tests.

Source: Palomares-Rius JE, Clavero-Camacho I, Cantalapiedra-Navarrete C, Roca-Castillo LF, Archidona-Yuste A, Castillo P (2023) First report of *Heterodera zeae* Koshy, Swarup & Sethi, 1971 (corn cyst nematode) infecting corn (*Zea mays*) in Spain. *Plant Disease* (early view). https://doi.org/10.1094/PDIS-02-23-0362-PDN

Additional key words: new record **Computer codes:** HETDZE, ES

2023/139 Eradication of *Meloidogyne enterolobii* in Italy

In Italy, *Meloidogyne enterolobii* (EPPO A2 List) was first found in March 2023 on imported potted *F. microcarpa* in the municipality of Piancastagnaio (Toscana region) (EPPO RS 2023/085). The entire lot was destroyed and nematicides applied on plants of the same species throughout the production site. An intensive monitoring programme was carried out in the production site. All samples tested negative. The pest is declared eradicated from the site.

The pest status of *Meloidogyne enterolobii* in Italy is officially declared as: **Absent, pest eradicated.**

Source: NPPO of Italy (2023-06).

Pictures: *Meloidogyne enterolobii*. https://gd.eppo.int/taxon/MELGMY/photos

Additional key words: eradication, absence **Computer codes:** MELGMY, IT

2023/140 First report of *Meloidogyne enterolobii* in Egypt

Meloidogyne enterolobii (EPPO A2 List) is reported for the first time from Egypt. The nematode was found on guava (*Psidium guajava*) trees in two orchards located in El Beheira governorate. Affected trees showed decline and root galls, and egg masses and females root-knot nematodes were found inside the galls. Nematodes were also extracted from soil samples. The identity of the nematode was confirmed by morphological and molecular methods. This is the first time that *M. enterolobii* is reported from Egypt, as well as from Northern Africa.

The situation of *Meloidogyne enterolobii* in Egypt can be described as follows: **Present, not widely distributed.**

Source: Ibrahim DS, Zawam HS, El-Deriny MM, Riad SN, Castillo P, Palomares-Rius JE (2023) First report of *Meloidogyne enterolobii* (guava root-knot nematode) infecting guava *(Psidium guajava*) in Egypt. *Plant Disease* **107**(5), 1637. https://doi.org/10.1094/PDIS-09-22-2171-PDN

Pictures: *Meloidogyne enterolobii*. https://gd.eppo.int/taxon/MELGMY/photos

Additional key words: new record **Computer codes:** MELGMY, EG

2023/141 Update on the situation of *Meloidogyne chitwoodi* and *Meloidogyne fallax* in Sweden

In Sweden, *Meloidogyne chitwoodi* (EPPO A2 List) was first found in October 2017 (EPPO RS 2018/031, RS 2018/195), and *Meloidogyne fallax* (EPPO A2 List) in 2018 (RS 2019/038). Official phytosanitary measures have been taken to reduce the nematode populations and avoid any further spread. Regular monitoring is conducted. The NPPO of Sweden has provided updates on the situation of these nematodes and reported new outbreaks. In all cases, phytosanitary measures are applied and include restrictions on movements of soil and machinery, as well as cropping restrictions, monitoring of the fields during 2023, and tracing back and tracing forward analysis.

- ***Meloidogyne chitwoodi***

In the initial outbreak in Sölvesborg (Blekinge county), soil sampling did not detect the pest in 2019 and 2020, but 1 larva was detected in 2021. Black fallow was applied to the field and no second stage juvenile (J2) larvae were detected in 2022. In the neighbouring municipality of Kristianstad (Skåne county), as soil sampling did not detect the pest for 3 years (2019-2022) all cropping restrictions were lifted.
New outbreaks were found in 2022 and 2023. *M. chitwoodi* was detected in the municipality of Skara (Västra Götaland county, about 300 km north of Sölvesborg and Kristianstad) in November 2022, in the framework of soil sampling done before planting seed potatoes. Trace-back investigations showed that the seed potatoes which had been used in that field had been produced in Hörby (Skåne county). Sampling in the field in Hörby detected the presence of both *M. chitwoodi* and *M. fallax*. In addition, *M. chitwoodi* was detected in another field in Hörby.

The pest status of *Meloidogyne chitwoodi* in Sweden is officially declared as: **Present, under eradication.**

- ***Meloidogyne fallax***

The first outbreak was detected in the municipality of Kristianstad (Skåne county) in 2018. Since then, several other outbreaks have been found in the demarcated area. *M. fallax* was also detected in the municipality of Laholm in 2020 (RS 2020/172) and further investigation also detected *M. chitwoodi* in that field.
in 2021 *M. fallax* was also detected in the municipalities of Sölvesborg (Blekinge county), Höganäs (Skåne county), and Skara (Västra Götaland county). Measures were applied and soil sampling did not detect second stage juvenile (J2) larvae in 2022.

The pest status of *Meloidogyne fallax* in Sweden is officially declared as: **Present, under eradication.**

Source: NPPO of Sweden (2023-01, 2023-06).

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

Additional key words: detailed record **Computer codes:** MELGCH, MELGFA, SE

2023/142 First report of *Bretziella fagacearum* in Canada

In June 2023, the Canadian Food Inspection Agency (CFIA) confirmed the presence of *Bretziella fagacearum* (EPPO A1 List – oak wilt) in oak trees (*Quercus* spp.) in an urban area in Niagara Falls, Ontario, Canada. In the infected property, restrictions on the movements of plant material have been put in place and a delimiting survey will be carried out. In addition, an eradication plan is being developed by CFIA. This is the first time that *B. fagacearum* is reported from Canada. So far, it was only known to occur in the Eastern USA.

The pest status of *Bretziella fagacearum* in Canada is officially declared as: **Present but not widely distributed and under official control.**

Source: NAPPO Phytosanitary Alert System. Official Pest Reports. Canada (2023-06-16) Report of oak wilt (*Bretziella fagacearum*) in Niagara Falls, Ontario, Canada (2023). https://www.pestalerts.org/official-pest-report/report-oak-wilt-bretziella-fagacearum-niagara-falls-ontario-canada-2023

Government of Canada. CFIA Oak wilt. https://inspection.canada.ca/plant-health/invasive-species/plant-diseases/oak-wilt/eng/1325624048625/1325624535106

Pictures: *Bretziella fagacearum*. https://gd.eppo.int/taxon/CERAFA/photos

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

2023/143 Eradication of chrysanthemum stem necrosis virus in Belgium

Chrysanthemum stem necrosis virus (*Tospovirus*, CSNV – EPPO A1 List) was recently found in Belgium in *Chrysanthemum x morifolium* cultivated in a greenhouse in the province of West-Vlaanderen (EPPO RS 2023/094). Phytosanitary measures were applied: the whole lot of plants from which the infected plants came was destroyed. Further sampling and testing in the greenhouse did not detect CSNV. Official monitoring was conducted on the vectors, but no thrips were detected. CSNV is considered eradicated.

The pest status of chrysanthemum stem necrosis virus in Belgium is officially declared as: **Absent, pest eradicated.**

Source: NPPO of Belgium (2023-06).

Picture Chrysanthemum stem necrosis virus. https://gd.eppo.int/taxon/CSNV00/photos

Additional key words: detailed record, eradication, absence **Computer codes:** CSNV00, BE

2023/144 Finding of tomato ringspot virus in the Netherlands

In the Netherlands, tomato ringspot virus (*Nepovirus*, ToRSV – EPPO A2 List) was first found in 2018 in one sample of *Iris germanica* cv. Swahili (EPPO RS 2018/228). In March 2023, it was reported again by an operator in *Phlox stolonifera* in Aalsmeer. ToRSV was detected in 11 asymptomatic plants for planting of *P. stolonifera*. All infected plants of the lot were destroyed. The possible source of the infection is probably related to vegetative propagation of the plants since the vectors (nematode species within the *Xiphinema americanum*

complex) are absent from the Netherlands (based on specific surveys). As this is the second finding on symptomless plants in the Netherlands, it is presumed that ToRSV has a wider distribution than is currently known, both in terms of geographic distribution and host plants.

In the event of future findings, measures will be taken, and infected lots will be destroyed. Following a finding the Netherlands will no longer test all other (potential) host plants at a company.

The pest status of tomato ringspot virus in the Netherlands is officially declared as: **Present, findings in species of *Iris germanica* and *Phlox stolonifera* ornamental plants for planting.**

Source: NPPO of the Netherlands (2023-04, 2023-06).

Picture Tomato ringspot virus. https://gd.eppo.int/taxon/TORSV0/photos

Additional key words: detailed record **Computer codes:** TORSV0, NL

2023/145 Citrus bright spot virus (*Dichorhavirus australis*), a new virus associated with Citrus leprosis disease in Brazil

Citrus leprosis (EPPO A1 List) is a viral disease of citrus crops associated with a number of viruses (EPPO RS 2017/152): citrus leprosis virus C (*Cilevirus*, CiLV-C), citrus leprosis virus C2 (*Cilevirus*, CiLV-C2), citrus leprosis virus N (*Dichorhavirus leprosis*, CiLV-N), citrus necrotic spot virus (*Dichorhavirus*, CiNSV), Hibiscus green spot virus 2 (*Higrevirus*, HGSV-2), the citrus strain of *Orchid fleck virus*, and citrus chlorotic spot virus (*Dichorhavirus citri*).

A new virus species was detected in three orchards of sweet orange (*Citrus sinensis*) trees in Southern Brazil (states of Santa Catarina and Rio Grande do Sul). Symptoms were large bright yellow chlorotic spots, mostly rounded and similar to the symptoms induced by CiCSV. Necrotic lesions were frequently found on the fruits but not on the affected leaves.

The virus was characterized as a *Dichorhavirus* and named citrus bright spot virus (CiBSV), and the species was tentatively named *Dichorhavirus australis*.

Preliminary tests of transmission showed that *Brevipalpus azores* could act as a vector to transmit CiBSV from *Citrus sinensis* to *Arabidopsis thaliana*.

Source: Chabi-Jesus C, Ramos-González PL, Tassi AD, Rossetto Pereira L, Bastianel M, Lau D, Canale MC, Harakava R, Novelli VM, Kitajima EW, Freitas-Astúa J (2023) Citrus bright spot virus: a new dichorhavirus, transmitted by *Brevipalpus azores*, causing Citrus leprosis disease in Brazil. *Plants* **12**(6), 1371. https://doi.org/10.3390/plants12061371

Additional key words: new record, new pest **Computer codes:** CIBSV0, BRVPAZ, BR

2023/146 First report of *Erysiphe corylacearum* in Slovenia

Native to East Asia, *Erysiphe corylacearum* is a new powdery mildew of hazelnuts (*Corylus* spp.) which was first observed in Türkiye in 2013 and has since rapidly extended its distribution range in the Middle East, the Caucasus, the Mediterranean Basin, as well as some countries in Eastern and Central Europe (EPPO RS 2021/042, RS 2021/049, RS 2021/249, RS 2022/218).

In Slovenia, an unusual powdery mildew was observed in three intensive *Corylus avellana* plantations in the Drava region in September 2020 and subsequently in numerous other plantations across Slovenia. In October 2022, the same powdery mildew was observed on *C. avellana* in forests, first in Central Slovenia and then in forests throughout the country. It was also observed on an ornamental *C. colurna* tree in a park in Ljubljana. The fungus was then identified as *Erysiphe corylacearum* by morphological studies and sequencing.

Source: Zajc J, Rot M, Snoj D, Žerjav M, Schroers HJ, Piškur B, Ogris N, Brglez A (2023) First report of *Erysiphe corylacearum* on *Corylus avellana* and *C. colurna* in Slovenia. *New Disease Reports* **47**(1), e12160. https://doi.org/10.1002/ndr2.12159

Picture *Erysiphe corylacearum*. https://gd.eppo.int/taxon/ERYSCY/photos

Additional key words: new record **Computer codes:** ERYSCY, SI

2023/147 Update on the situation of *Elsinoë fawcettii* in the Azores (Portugal)

Elsinoë fawcettii (EU Annexes) was first detected in the Azores in July 2021 in the island of São Miguel (EPPO RS 2020/021) in 3 small citrus orchards in the counties of Lagoa, Ponta Delgada and São Vicente Ferreira. Eradication measures were taken, and further surveys were conducted in the Azores. As a result of the official monitoring, new outbreaks were found in different islands.

- In São Miguel Island, the presence of *E. fawcettii* was detected and confirmed in 13 different locations (small orchards and private gardens) in 5 new parishes: Água de Pau, Caloura, Lomba da Fazenda, Furnas and Rabo de Peixe. In addition to the findings on *Citrus deliciosa, C. reticulata, C. limon*, the pathogen was also detected in *C. aurantiifolia, C.* x *limonia, C. sinensis* and *Citrus* x *clementina*, all in the island of São Miguel, Azores. Investigations are ongoing to gather additional information on the source of these outbreaks.
- In Faial Island, the presence of *E. fawcettii* was confirmed in March 2023 in 8 *Citrus* sp. plants (*Citrus* sp., *C. limon* and *C. x limonia*), in 8 parishes of the county Horta.
- In Santa Maria Island the presence of *E. fawcettii* was confirmed in October 2022 in one sample of *C. limon* collected in one small orchard in the county of Vila do Porto, parish of Almagreira. It was later also found on a *C. aurantium* tree in another small orchard in the parish Santo Espírito.

In all cases official phytosanitary measures have been taken to eradicate the pest, and restrictions on the movement of *Citrus* plants have been applied.

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

Source: NPPO of Portugal (2023-06).

Picture *Elsinoë fawcettii*. https://gd.eppo.int/taxon/ELSIFA/photos

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

2023/148 *Coreopsis grandiflora* in Switzerland

Coreopsis grandiflora (Asteraceae) is a perennial species native to North America and it is utilised as an ornamental species in the EPPO region. In Europe, it is established in Belgium and Germany, and it is reported as an invasive alien plant in Australia and China. In Switzerland, it has previously been reported in the wild, but these reports were of individuals, possibly escaped from gardens. A recent extensive assessment of *C. grandiflora* in Southern Switzerland highlights that the species can be regarded as a species with potentially invasive behaviour. It has been reported from Southern Switzerland since 2019 from several different habitats including meadows, ruderal habitats, riverbanks and other riparian habitats. It has been reported from environmentally important habitats in floodplains along the Maggia River in the Canton Ticino, Switzerland. In areas where it occurs, dense stands of the species can produce a high number of seeds which are spread naturally over short distances. Human mediated spread can act to spread propagules over longer distances. Further research is required to assess any negative impacts on habitats and the species within. To prevent further spread, management measures should be implemented especially in vulnerable habitats.

Source: Marazzi B, Mangili S, Gygax A, Jousson A (2022) Biology and spread of the new alien species *Coreopsis grandiflora* (Asteraceae) in southern Switzerland. *Bollettino della Società ticinese di scienze naturali* **110**, 57-70.

Pictures: *Coreopsis grandiflora*. https://gd.eppo.int/taxon/CRLGR/photos

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

2023/149 Impacts of *Neltuma velutina* in South Africa

Neltuma velutina (Fabaceae: EPPO List of Invasive Alien Plants) is native to North America and occurs in Israel, Jordan, Morrocco, and Spain. It has been planted around the world as a fodder plant, for shade, and for erosion control. Seeds are sometimes available via mail order and via horticultural suppliers. Negative impacts can include impacts on biodiversity and ecosystem services. In South Africa, *N. velutina* is considered an invasive alien species and is common along the Molopo River in the North-West Province. To evaluate its impact, three study sites were selected in a semi-arid area of the Savana biome where *N. velutina* was dominant. Each site was compared to an adjacent area where *N. velutina* was absent or in such low numbers that its presence could not have an effect on the composition of native vegetation. Five quadrats (20 x 20 m) were set up in each site and in each quadrat all native woody plant species were identified. The results showed that the density of native woody plants was significantly lower in invaded stands compared to non-invaded ones. In addition, overall, species diversity, species evenness and species richness were lower in invaded sites compared to non-invaded sites. The vigorous and rapid growth of *N. velutina* can have detrimental impacts on native plant species but *N. velutina* can also have indirect impacts with a higher utilisation of valuable resources. It has a deep and extensive root system that can deplete groundwater causing water shortages to native tree species.

Source: Tiawoun MAP, Malan PW, Comole AA, Moshobane MC (2023) Impact of *Prosopis velutina* Wooton on the composition and diversity of native woody species in a semi-arid zone along the Molopo River, South Africa. *Plants* **12**, 1561. https://doi.org/10.3390/plants12071561

Pictures: *Neltuma velutina*. https://gd.eppo.int/taxon/PRCJV/photos

Additional key words: invasive alien plants **Computer codes:** PRCIV, ZA

2023/150 *Robinia pseudoacacia* invasion in *Castanea sativa* forests

Robinia pseudoacacia (Fabaceae) is native to North America and is found in the EPPO region where it has been planted for afforestation, wood provisioning and erosion control along mountain slopes. In the Mediterranean region, *R. pseudoacacia* can invade *Castanea sativa* (Fagaceae) forests which are common man-made forests covering approximately two million hectares in Italy. In Southern Switzerland and Northern Italy, *R. pseudoacacia* has replaced entire valleys of *C. sativa* coppice forests. In the Vesuvius National Park (Italy), *R. pseudoacacia* has colonised unmanaged *C. sativa* coppice forests following disturbance in 2017 by forest fires. In 5 plots (300 x 600 m), the competitive functional traits (including regeneration strategies) of each species were assessed. The production of basal sprouts and root-suckers in *R. pseudoacacia* was stimulated by fire disturbance. This double vegetative regeneration strategy gives *R. pseudoacacia* a competitive advantage over *C. sativa*. The abundance of root suckers and their regeneration and spread, up to 10 m from the parent plant, acts to colonise areas of *C. sativa* stands. When considering management measures, control options for *R. pseudoacacia* tree sprouting are required to maintain a continuous canopy cover of *C. sativa*.

Source: Saulino L, Rita A, Stinca A, Liuzzi G, Silvestro R, Rossi S and Saracino A (2023) Wildfire promotes the invasion of *Robinia pseudoacacia* in the unmanaged Mediterranean *Castanea sativa* coppice forests. *Frontiers in Forest and Global Change* **6**, 1177551. https://doi.org/10.3389/ffgc.2023.1177551

Pictures: *Robinia pseudoacacia*. https://gd.eppo.int/taxon/ROBPS/photos

Additional key words: invasive alien plants **Computer codes:** CSNSA, ROBPS, IT

2023/151 Misidentification of *Gunnera* plants

Misidentification and incorrect labelling of ornamental plants can lead to the movement of invasive alien plants (RS 2022/094). The genus *Gunnera* (Gunneraceae) comprises 63 species mostly distributed in the Southern Hemisphere. In the EPPO region, two species have been present in horticulture: *Gunnera tinctoria* (EPPO List of Invasive Alien Plants) which is regulated as a species of Union concern (EU Regulation 1143/2014) and banned from sale, and *G. manicata* which is not regulated, and it is traded. Both species are similar in form and flower only after numerous years therefore major distinguishing characters to tell the two species apart are missing when in trade. Molecular and morphological studies were undertaken on *Gunnera* plants in trade, from botanical gardens and from wild populations (native populations and invasive populations from New Zealand and Ireland). The results showed that the plants in Western Europe and New Zealand which are considered to be *G. manicata* are hybrids with the mother plant being *G. manicata* and the father plant *G. tinctoria*. *Gunnera* plants in horticulture in Western Europe are predominantly mislabelled as *G. manicata* but many are actually *G. tinctoria*.

Source: van Valkenburg JLCH, Osborne BA, WestenbergM (2023) The large *Gunnera's (G. tinctoria* and *G. manicata)* in Europe in relation to EU regulation 1143/2014. *PLoS ONE* **18**(4), e0284665. https://doi.org/10.1371/journal.pone.0284665

Pictures: *Gunnera tinctoria*. https://gd.eppo.int/taxon/GUATI/photos
Gunnera sp. https://gd.eppo.int/taxon/GUASS/photos

Additional key words: invasive alien plants **Computer codes:** GUAMA, GUATI

2023/152 Alien trees and shrubs of Latvia

An updated list of invasive alien trees and shrubs has been published for Latvia. The list includes 178 taxa of which those in table 1 are considered the highest risk species. Most of the 178 alien taxa introduced in Latvia are native to North America (46 taxa, 26%), and Europe (39 taxa, 22%). The results showed that 89 % of the identified invasive plants dispersed from horticulture, 6 % as edible plants, including herbs and plant seeds, fruits and other plant parts, 3 % human food and 2 % wood production (timber).

Table 1. Trees and shrubs which are threatening or likely to threaten natural habitats in Latvia.

Species	Family	Native range	Status in Latvia
Acer negundo	Sapindaceae	N. America	Invasive
Acer pseudoplatanus	Sapindaceae	Eurasia	Invasive
Acer pseudoplatanus 'Purpurascens'	Sapindaceae		Invasive
Acer tataricum subsp. *ginnala*	Sapindaceae	Eurasia	Casual
*Amelanchier x spicata**	Rosaceae		Invasive
Caragana arborescens	Fabaceae	East Asia	Invasive
*Celastrus orbiculatus***	Celastraceae	East Asia	Casual
Cornus alba	Cornaceae	Asia	Invasive
Cotoneaster lucidus	Rosaceae	Asia	Invasive
Elaeagnus commutata	Elaeagnaceae	N. America	Invasive
Hippophae rhamnoides	Elaeagnaceae	Eurasia	Invasive
Parthenocissus quinquefolia	Vitaceae	N. America	Invasive
Physocarpus opulifolius	Rosaceae	N. America	Invasive
Populus laurifolia	Salicaceae	Asia	Invasive
Populus trista	Salicaceae	N. America	Invasive
Prunus cerasifera var. *divaricata*	Rosaceae	Europe/Asia	Invasive
Prunus cerasus	Rosaceae	Europe/N. America	Invasive
Prunus domestica var. *instititia*	Rosaceae	Europe	Invasive
Prunus tomentosa	Rosaceae	East Asia	Casual
Rosa pendulina	Rosaceae		Invasive
Rosa rugosa	Rosaceae	East Asia	Invasive
Rosa spinosissima	Rosaceae	Europe	Invasive
Salix alba	Salicaceae	Europe	Native & introduced
Salix daphnoides	Salicaceae	Europe	Established
Salix × fragilis	Salicaceae		Established
Salix x fragilis f. *vitellina*	Salicaceae		Casual/Established?
Spiraea alba	Rosaceae	N America	Invasive
Spiraea × billardii	Rosaceae		Invasive
Spiraea × rosalba	Rosaceae		Invasive
Symphoricarpos albus var. *laevigatus*	Caprifoliaceae	N America	Invasive

* EPPO List of Invasive Alien Plants; ** EPPO A2 List

Source: Evarte-Bundere G, Evarts-Bunders P, Mežaka A, Bojāre A (2022) Alien trees and shrubs of Latvia - evaluation of current status and invasiveness. *Forest studies Metsanduslikud Uurimused* **76**, 1-20.

Additional key words: invasive alien plants

Computer codes: ACRNE, ACRPP, ACRTA, AMESP, CRAAR, CELOR, PRNTO, PRNCE, CTTLU, ELGCO, HIORH, PRTQU, PHPOP, POPLF, PRNCG, ROSPP, ROSRG, SAXAL, SAXDA, SPVAB, CRWAL, SYPRI, LV