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2023/031 New data on quarantine pests and pests of the EPP0 Alert List

By searching through the literature, the EPP0 Secretariat has extracted the following new data concerning quarantine pests and pests included (or formerly included) on the EPP0 Alert List, and indicated in bold the situation of the pest concerned using the terms of ISPM 8.

- **New records**

Diaphorina citri (Hemiptera: Liviidae, EPP0 A1 List), one of the vectors of huanglongbing, is first reported from Benin. A survey was conducted in December 2021 in five of the 12 departments of Benin. *D. citri* was only observed on residential citrus trees in Southern Benin, but not in residential areas or commercial groves in the central and northern parts of the country. The sampled specimens tested negative for '*Candidatus Liberibacter africanus*', '*Ca. Liberibacter americanus*' and '*Ca. Liberibacter asiaticus*' (Sétamou *et al.*, 2023).

Fusarium oxysporum f. sp. *cubense* Tropical race 4 is first reported from Venezuela in the states of Aragua, Carobobo and Cojedes. The identity of the pathogen was confirmed in January 2023. Emergency measures are being taken to limit its spread (IPPC, 2023).

The pest status of *Fusarium oxysporum* f. sp. *cubense* in Venezuela is officially declared as: **Present: not widely distributed and under official control.**

Citrus black spot caused by the fungus *Phyllosticta citricarpa* (EPP0 A1 List) is first reported from Benin. The presence of a disease causing spots on orange fruits (*Citrus sinensis*) has been observed for a decade. In July 2021, 15 orchards in four different districts were randomly selected and samples taken. Between 50 to 100 % of trees were affected by the disease. The fungus isolated from the diseased orange fruits was identified as *P. citricarpa*. Management methods and strategies are being developed to control and limit the spread of the disease in the country (Toessi *et al.*, 2023).

Neopestalotiopsis rosae causing leaf spot and crown rot of strawberry was first reported in Türkiye in Mersin province (Erdurmuş *et al.*, 2022).

In a review article, Chaerani (2022) lists the first reports of the following nematodes in Indonesia: *Aphelenchoides fragariae* (EU Annexes), *Ditylenchus dipsaci* (EPP0 A2 List), *Heterodera zae* (formerly EPP0 Alert List), and *Meloidogyne fallax* (EPP0 A2 List).

Thrips parvispinus (Thysanoptera: Thripidae - formerly EPP0 Alert List) is first reported from Ghana causing damage on ridged gourd (*Luffa acutangula*), *Solanum aethiopicum*, and okra (*Abelmoschus esculentus*) (Fening *et al.*, 2022)

In Türkiye, the ambrosia beetle, *Xylosandrus compactus* (Coleoptera: Curculionidae: Scolytinae, formerly EPP0 Alert List) was found for the first time in 2021 in Istanbul on *Lonicera ligustrina* var. *yunnanensis* (syn. *Lonicera pileata* var. *yunnanensis*). Surveys were conducted in 2022 in parks and gardens of Istanbul on both sides of the Bosphorus Strait, and the insect was found in several other plant species: *Cercis siliquastrum*, *Crataegus monogyna*, *Fagus sylvatica* f. *pendula*, *Laurus nobilis*, *Magnolia grandiflora*, *Quercus ilex* (Hızal *et al.*, 2023).

- **Detailed records**

In Russia, *Trichoferus campestris* (Coleoptera: Cerambycidae) has been detected for the first time in the Republic of Komi (Northern European Russia). In August 2021, an adult female specimen was collected during a survey conducted in tree plantations in the city of

Syktyvkar. It is noted that a warehouse of imported fruit and vegetables with packing material (wooden boxes, pallets) was located 600 m away from the finding site. The identity of the insect has been confirmed by the All-Russian Center for Plant Quarantine (VNIIKR). Subsequent inspection of trees near the finding site did not detect any further specimens or signs of infestation. The establishment of *T. campestris* in the Republic of Komi remains to be confirmed (Lukin *et al.*, 2022).

In India *Thrips parvispinus* (Thysanoptera: Thripidae - formerly EPPO Alert List) was first reported in 2015 in Karnataka on papaya (*Carica papaya*). It is now also reported in Andhra Pradesh, Chhattisgarh, Haryana, Karnataka, Kerala, Madhya Pradesh, Tamil Nadu, Uttar Pradesh, and Telangana. It causes severe damage on chilli (*Capsicum annum*) and mango (*Mangifera indica*) as well as on a number of ornamentals (Shashank *et al.*, 2022; Timmanna *et al.*, 2023).

- **Eradication**

In Germany isolated outbreaks of *Curtobacterium flaccumfaciens* pv. *poinsettia* (formerly EPPO Alert List) occurred in 2016 and 2018 and were eradicated (EPPO RS 2017/014, 2019/104). Another outbreak was detected on *Euphorbia pulcherrima* in September 2021 in Baden-Württemberg. Trace-back investigations showed that the young plants originated in Ethiopia. However, no information could be found to confirm that *Curtobacterium flaccumfaciens* pv. *poinsettiae* is present in Africa and therefore the origin of the outbreak remains unknown. The symptomatic plants were destroyed on a voluntary basis by the grower and further inspections did not detect the bacterium.

The pest status of *Curtobacterium flaccumfaciens* pv. *poinsettia* in Germany is officially declared as: **Absent, pest eradicated.**

In Germany *Phytophthora chrysanthemi* was found in a production site of *Chrysanthemum* cut flowers in Hesse in 2015 (EPPO RS 2017/021). The infested plants were destroyed, and disinfection measures applied in the production site. Since then, the operator has stopped producing *Chrysanthemum* and switched to the production of culinary herbs. Therefore, the outbreak is considered eradicated. No other cases of *P. chrysanthemi* have occurred in Germany.

The pest status of *Phytophthora chrysanthemi* in Germany is officially declared as: **Absent, pest eradicated.**

In Germany *Sirococcus tsugae* (formerly EPPO Alert List) was reported in 2014 on 2 trees of *Cedrus atlantica* in Niedersachsen (EPPO RS 2015/076). The trees were destroyed in 2014 and there are no indications that *S. tsugae* is still present in Niedersachsen. Furthermore, there have been no inquiries from nurseries, private individuals, or public green spaces that might indicate problems with *S. tsugae*.

The pest status of *Sirococcus tsugae* in Germany is officially declared as: **Absent, pest eradicated.**

In Denmark, *Scirtothrips dorsalis* (Thysanoptera: Thripidae - EPPO A2 List) was first found on one *Begonia* sp. plant in a nursery in October 2022. Eradication measures were applied (EPPO RS 2022/238) and no further infestation was detected. The outbreak is now considered eradicated (NPPO of Denmark, 2023).

The pest status of *Scirtothrips dorsalis* in Denmark is officially declared as: **Absent, pest eradicated.**

- Host plants

In Japan, *Chrysanthemum stem necrosis virus* (*Tospovirus*, CSNV - EPPO A1 List) was detected in cyclamen (*Cyclamen persicum*), cineraria (*Senecio cruentus*), tuberous begonia (*Begonia tuberhybrida*), zinnia (*Zinnia elegans*), and globe amaranth (*Gomphrena globosa*) plants grown in a commercial glasshouse in Nara Prefecture, Japan. Infected plants showed chlorotic and necrotic spots on leaves and stems, followed by wilting (Asano *et al.*, 2022).

Spinach (*Spinacia oleracea*) is first recorded as a host plant for the root knot nematode *Meloidogyne chitwoodi* (EPPO A2 List) based on pot and field experiments (Taning *et al.*, 2022).

In New Zealand, *Phytophthora pluvialis* (EPPO Alert List) was identified as causing needle lesions on stone pine (*Pinus pinea*) in Nelson (South Island) (McLay *et al.*, 2023)

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

Computer codes: APLOFR, CORBPO, CSNV00, DIAACI, DITYDI, FUSAC4, GUIGCI, HESOCA, HETDZE, MELGCH, MELGFA, NPESRS, PHYTKR, PHYTUV, SCITDO, SIROTS, THRIPV, XYLSKO, BJ, BJ, DE, DK, GH, ID, IN, NZ, RU, TR, VE

2023/032 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 2023/002), the following new and revised EPPO datasheets have been published in the EPPO Global Database:

- Andean potato mottle virus. <https://gd.eppo.int/taxon/APMOV0/datasheet>
- *Cacoecimorpha pronubana*. <https://gd.eppo.int/taxon/TORTPR/datasheet>
- *Colletotrichum gossypii*. <https://gd.eppo.int/taxon/GLOMGO/datasheet>
- *Coniferiporia weirii*. <https://gd.eppo.int/taxon/INONWE/datasheet>
- *Pissodes terminalis*. <https://gd.eppo.int/taxon/PISOTE/datasheet>
- *Potato black ringspot virus*. <https://gd.eppo.int/taxon/PBRV0/datasheet>
- *Xanthomonas citri* pv. *fuscans*. <https://gd.eppo.int/taxon/XANTFF/datasheet> and *Xanthomonas phaseoli* pv. *phaseoli*. <https://gd.eppo.int/taxon/XANTPH/datasheet>

Source: EPPO Secretariat (2023-02).

Additional key words: publication

Computer codes: APMOV0, GLOMGO, INONWE, PBRV0, PISOTE, TORTPR, XANTFF, XANTPH

2023/033 Eradication of *Aleurocanthus spiniferus*, cotton leaf curl Gezira virus and *Ripersiella hibisci* from Belgium

The NPPO of Belgium recently informed the EPPO Secretariat of the successful eradication of three quarantine pests detected in 2021 and 2022.

- *Aleurocanthus spiniferus* (Hemiptera: Aleyrodidae - EPPO A2 List) had been detected in April 2022 (EPPO RS 2022/101). Eradication measures were applied. A survey confirmed that the pest is no longer present.

The pest status of *Aleurocanthus spiniferus* in Belgium is officially declared as: **Absent, pest eradicated.**

- Cotton leaf curl Gezira virus (*Begomovirus*, CLCuGV, EU A1 Quarantine pest as 'Begomovirus') had been detected in August 2022 in *Lavatera* plants (EPPO RS 2022/196). Eradication measures were applied.

The pest status of cotton leaf curl Gezira virus in Belgium is officially declared as: **Absent, pest eradicated.**

- *Ripersiella hibisci* (Hemiptera: Pseudococcidae - EPPO A1 List) had been detected in June 2021 in *Callistemon* plants (EPPO RS 2021/125). Eradication measures were applied. A survey confirmed that the pest is no longer present.

The pest status of *Ripersiella hibisci* in Belgium is officially declared as: **Absent, pest eradicated.**

Source: NPPO of Belgium (2023-01).

Pictures: *Aleurocanthus spiniferus*. <https://gd.eppo.int/taxon/ALECSN/photos>
Ripersiella hibisci. <https://gd.eppo.int/taxon/RHIOHI/photos>

Additional key words: eradication, absence

Computer codes: ALECSN, CLCUGV, RHIOHI, BE

2023/034 First report of *Spodoptera frugiperda* in Cyprus

The NPPO of Cyprus recently informed the EPPO Secretariat of the first record of the fall armyworm *Spodoptera frugiperda* on its territory. Three moths were trapped by an amateur entomologist with a light trap in January 2023 in a private garden in Pissouri Village (Limassol district). The identity of the pest was confirmed by the National reference laboratory of Cyprus as well as by the EU reference laboratories based on morphology and molecular tests. Official surveys are planned to delimit the extend of the infestation. It is noted that in the area around the trap, there are no maize (*Zea mays*) crops. The other major host plants, rice (*Oryza sativa*) and sugarcane (*Saccharum officinarum*) are not cultivated in Cyprus whilst *Sorghum bicolor* is cultivated only in a few areas.

The pest status of *Spodoptera frugiperda* in Cyprus is officially declared as: **Present, under eradication.**

Source: NPPO of Cyprus (2023-02).

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

Additional key words: new record

Computer codes: LAPHFR, CY

2023/035 First report of *Spodoptera frugiperda* in Türkiye

The fall armyworm, *Spodoptera frugiperda* (Lepidoptera: Noctuidae - EPPO A2 List) is reported for the first time from Türkiye. The pest was found in Adana province during surveys conducted in maize (*Zea mays*) fields during 2022. *S. frugiperda* was identified based on morphological characteristics of collected larvae. In addition, typical damage was observed on young maize plants. In September/October 2022, further surveys were carried out in the province of Adana in 4 maize fields and all of them were found to be infested. It is noted that further work is needed on the distribution, host plants, damage, and potential natural enemies of *S. frugiperda* in Türkiye.

The situation of *Spodoptera frugiperda* in Türkiye can be described as follows: **Present, not widely distributed.**

Source: Pehlivan S, Atakan E (2022) First record of the fall armyworm, *Spodoptera frugiperda* (J.E. Smith, 1797) (Lepidoptera: Noctuidae) in Türkiye. *Çukurova Journal of Agricultural and Food Sciences* 37(2), 139-145.

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

Additional key words: new record

Computer codes: LAPHFR, CY

2023/036 First report of *Scirtothrips aurantii* in Portugal

The NPPO of Portugal recently informed the EPPO Secretariat of the first report of the South African citrus thrips *Scirtothrips aurantii* (Thysanoptera: Thripidae - EPPO A1 List) on its territory. As a result of official surveys carried out in 2022, *S. aurantii* was detected in Algarve and Alentejo regions. In both cases, official phytosanitary measures will be taken to eradicate the pest in accordance with Regulation (EU) 2016/2031. It can be recalled that in the EPPO region, *T. aurantii* was first recorded in Spain in September 2020 in the province

of Huelva (Andalucia), in an area bordering the Algarve region where it is under eradication (EPPO RS 2022/084).

- In Algarve, *S. aurantii* was found in the municipality of Conceição e Cabanas de Tavira, in July 2022. The identification of the species was confirmed by the national reference laboratory, INIAV in December 2022. The pest was detected in a *Myoporum* sp. hedge around production tunnels for raspberry, avocado, blackberry, mango and pitaya fruits. Further surveys detected *S. aurantii* in 11 additional locations, in 7 municipalities of the Algarve region (Conceição e Estoi, Vila Nova de Cacela, Altura, Quelfes, Luz de Tavira e Santo Estêvão, Tavira, Castro Marim). The pest was detected in citrus orchards, on *Malus domestica* plants located in an official experimental centre (collection of varieties), and on *Myoporum* sp. hedges in private gardens/urban areas. Demarcated areas related to these findings will be established.
- In Alentejo, *S. aurantii* was detected in *Vaccinium myrtillus* plants located in the municipality of São Teotónio, in November 2022. The infested plants had been introduced from another EU Member State in October 2022. There is no connection between this finding and the one in Algarve.

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 (2023-01).

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

Additional key words: new record

Computer codes: SCITAU, PT

2023/037 First report of *Bactrocera latifrons* in France

The NPPO of France recently informed the EPPO Secretariat of the first occurrence of the solanum fruit fly *Bactrocera latifrons* (Diptera: Tephritidae - EPPO A1 List) on its territory. An adult of *B. latifrons* was caught and frozen by an arboriculturist in November 2022 in Rhône department (Auvergne-Rhône-Alpes region). The regional phytosanitary services were informed of this detection in January 2023. This is the first time that *B. latifrons* is found in France.

Investigations are ongoing at sites considered ‘at risk’ in the vicinity of the detection site (e.g. fruit and vegetable retailers, fresh produce wholesale market, composting sites). Until now, no symptoms have been observed and no larvae of *B. latifrons* have been found. The NPPO considers that this isolated finding is most likely linked to the import of infested exotic products, and not linked to an outbreak. In addition, it is very likely that the cold weather prevailing in January in the Rhone department has killed any other specimens.

The pest status of *Bactrocera latifrons* in France is officially declared as: **Transient, isolated finding, not linked to an outbreak.**

Source: NPPO of France (2023-02).

Pictures: *Bactrocera latifrons*. <https://gd.eppo.int/taxon/DACULA/photos>

Additional key words: new record, incursion

Computer codes: DACULA, FR

2023/038 New incursions of *Bactrocera dorsalis* and *B. zonata* in France

During official surveys in 2022, *Bactrocera dorsalis* (Diptera: Tephritidae - EPPO A1 List) was trapped in several sites:

- In Alsace region, 1 adult was caught in a peach plot mid-July (EPPO RS 2022/189). Additional traps were installed in a radius of 7.5 km and only one other adult was caught in early September.
- In Auvergne-Rhône-Alpes region, 1 adult (male) was caught in a trap on a peach plot in Soucieu-en-Jarrest (Rhône department) in October 2022. No symptoms were observed, no larvae were found. Mandatory preventive measures will be implemented in the place of production and survey activities will be reinforced in the place of production and its vicinity.
- in Ile-de-France region: 90 adults (only males) were caught in 49 different traps in urban areas, close to Orly and Charles de Gaulle airports, to a wholesale fresh produce market and/or to sites of companies working with fruits originating from countries where the pest is present.

The pest status of *Bactrocera dorsalis*. in France is officially declared as: **Transient, isolated findings in traps near points of entry, not linked to an outbreak.**

During official surveys, *Bactrocera zonata* (Diptera: Tephritidae - EPPO A1 List) has been trapped close to Orly airport (Ile-de-France region): 1 adult in 2020, 3 adults in 2021 and 3 adults in 2022.

The pest status of *Bactrocera zonata*. in France is officially declared as: **Transient, isolated findings in traps near points of entry, not linked to an outbreak.**

Source: NPPO of France (2023-02).

Pictures: *Bactrocera dorsalis*. <https://gd.eppo.int/taxon/DACUDO/photos>
Bactrocera zonata. <https://gd.eppo.int/taxon/DACUZO/photos>

Additional key words: new record, incursion

Computer codes: DACUZO, DACUDO, FR

2022/039 Interceptions of fruit flies of the subfamilies Phytalmiinae and Tephritinae (Diptera: Tephritidae) in Japan

An illustrated key and annotated list of fruit flies intercepted in Japan has been recently published. This study focuses on species belonging to the subfamilies Phytalmiinae and Tephritinae (Diptera: Tephritidae).

One species of Phytalmiinae (*Themarictera flaveolata*) and 17 species of Tephritinae have been intercepted on commodities imported into Japan in the period 2008-2019: *Actinoptera* sp., *Campiglossa sororcula*, *Campiglossa* sp., *Euaesta bellula*, *Euaesta stigmatica*, *Eurosta solidaginis solidaginis* (EU A1 quarantine pest), *Metasphenisca nigricans*, *Neotephritis finalis*, *Spathulina arcucineta*, *Spathulina hessii*, *Terellia* sp. near *longicauda*, *Terellia vectensis*, *Trupanea californica*, *Trupanea jonesi*, *Trupanea nigricornis*, *Trupanea radifera* and *Trupanea signata*.

The paper also lists the species intercepted before-2008. A summary is presented in the table below.

Species	Interception	Comment
<i>Themarictera flaveolata</i>	Larvae detected in fruit of <i>Capparis</i> sp. from Kenya.	African species.
<i>Acanthiophilus helianthi</i>	Larva intercepted on bud of <i>Cynara scolymus</i> from France.	Distribution: Africa, Asia, Europe, Middle East. Hosts: flowers of Asteraceae.
<i>Actinoptera schnabeli</i>	Consignment unknown.	Host: <i>Helichrysum</i> sp. (Asteraceae)
<i>Actinoptera</i> sp.	Adult detected on cut flowers of <i>Metalasia</i> sp. from South Africa.	Distribution/hosts unknown.
<i>Campiglossa sororcula</i>	Adult detected on leaves of <i>Lactuca sativa</i> from Taiwan.	Hosts: flowers of Asteraceae.
<i>Campiglossa</i> sp.	Adult detected on stems of <i>Asparagus</i> sp. from USA.	Distribution/hosts unknown.
<i>Dacopsis holoxantha</i>	Adult detected in consignment of fruit of <i>Citrus paradisi</i> from USA.	Species only known from Papua New Guinea; grapefruit not considered host fruit.
<i>Dirioxa pornia</i> (EU A1 quarantine pest)	Larvae detected in fruit of <i>Citrus sinensis</i> from Australia.	Australian species attacking overripe, damaged or fallen fruit.
<i>Ensina sonchi</i>	Adult detected on dry flowers from Italy.	Distribution: Africa, Asia, Europe, Oceania. Hosts: flowers of Asteraceae.
<i>Euaresta bellula</i>	Adult detected on leaves of <i>Lactuca sativa</i> from USA.	North American species. Hosts: flowers of Asteraceae.
<i>Euaresta stigmatica</i>	Adult detected on leaves of <i>Lactuca sativa</i> from USA.	North American species. Hosts: flowers of Asteraceae.
<i>Eurosta solidaginis solidaginis</i> (EU A1 quarantine pest)	Adult detected on cut flowers of <i>Solidago</i> sp. (Asteraceae) from Canada.	North American species. <i>Solidago</i> spp. are the only host plants.
<i>Metasphenisca nigricans</i>	Adult detected on seeds of Acanthaceae from Sri Lanka.	Distribution. India and Sri Lanka. Hosts: seeds of <i>Barleria</i> sp.
<i>Neotephritis finalis</i>	Adult detected on leaves of <i>Lactuca sativa</i> from USA.	North American species. Hosts: flowers of Asteraceae.
<i>Oxyaciura tibialis</i>	Adult detected on leaf of <i>Rosmarinus officinalis</i> from Italy.	Distribution: Africa, Asia, Europe, Middle East. Host: flowers of Lamiaceae.
<i>Ptilona persimilis</i> (EU A1 quarantine pest)	Consignment unknown.	Host plant unknown. Larvae of other <i>Ptilona</i> spp. are

Species	Interception	Comment
		associated with bamboo shoots.
<i>Spathulina arcucincta</i>	Adult detected on cut flowers of <i>Phaenocoma</i> sp. from USA	African species.
<i>Spathulina hessii</i>	Adult detected on cut flowers of <i>Helichrysum</i> sp. from South Africa.	African species. Hosts: flowers of Asteraceae.
<i>Tephritis impunctata</i>	Consignment unknown.	Distribution: Taiwan.
<i>Terellia fuscicornis</i>	Adult detected on cut flowers of <i>Centaurea</i> sp. from Italy.	Hosts: flowers and seeds of Asteraceae.
<i>Terellia</i> sp. near <i>longicauda</i>	Adult detected on bud of <i>Cynara scolymus</i> from Spain.	Hosts: flowers of <i>Cynara cardunculus</i> .
<i>Terellia vectensis</i>	Adult detected on cut flowers of <i>Centaurea</i> sp. from Italy.	Hosts: flowers and seeds of Asteraceae.
<i>Trupanea californica</i>	Adult detected on leaves of <i>Lactuca sativa</i> from USA.	North American species. Hosts: flowers of Asteraceae.
<i>Trupanea jonesi</i>	Adult detected on leaves of <i>Lactuca sativa</i> from USA.	North American species. Hosts: flowers of Asteraceae.
<i>Trupanea nigricornis</i>	Adult detected on leaves of <i>Lactuca sativa</i> from USA.	North American species. Hosts: flowers of Asteraceae.
<i>Trupanea signata</i>	Adult detected on stems of <i>Apium graveolens</i> from USA.	North American species. Hosts: flowers of Asteraceae.

Source: Kamiji T, Matsuura H (2022) An illustrated key and annotated list of species of the subfamilies Phyltalmiinae and Tephritinae (Diptera: Tephritidae) detected in Japanese quarantine. *Journal of Asia-Pacific Biodiversity* 15(2), 196-217.

Additional key words: diagnostics, interception

Computer codes, 1CAMGG, 1EUARG, 1TEREG, 1TRUPG, ACAIHE, ENSISO, EUOSSO, NTPRFI, PTIOPE, TRYEMU, JP

2023/040 Incursion of *Thaumatotibia leucotreta* in the Czech Republic

During a faunistic study on lepidoptera conducted in the Czech Republic, 1 female specimen of *Thaumatotibia leucotreta* (Lepidoptera: Tortricidae - EPP0 A2 List) was collected in July 2017 near Dobroměřice (Louny district) in Bohemia. This is the first time that this insect is detected in the Czech Republic (Šumpich *et al.*, 2021 and 2022).

Following the publication of this isolated finding, the NPPO of the Czech Republic explained that the annual official surveys for *T. leucotreta* which have been carried out since 2016 in protected crops had not detected it. It is hypothesized that the pest had escaped from a facility where it had been introduced. It is also noted that *T. leucotreta* is not expected to

survive the winter conditions of Central Europe, and that its establishment outdoors is considered most unlikely. However, a specific survey will be carried out in 2023 in the area where the specimen of *T. leucotreta* was collected, both in protected and field conditions, to verify the absence of the pest.

The situation of *Thaumatotibia leucotreta* in the Czech Republic can be described as follows: **Transient.**

Source: NPPO of the Czech Republic (2023-02).

Šumpich J, Liška J, Laštůvka A, Sitek J, Skyva J, Vávra J, Maršík L, Dvořák I, Žemlička M, Kabátek P, Laštůvka Z, Marek J, Marek S, Mikát M, Vacula D, Křivan V, Elsner G, Volf M, Jirgl T, Krejčík P, Hromádková V, Richter I (2022) Faunistic records from the Czech Republic - 530: Lepidoptera. *Klapalekiana* **58**, 121-140.

Šumpich J, Žemlička M, Liška J, Skyva J (2021) [On the lepidopteran fauna (Lepidoptera) of northern Bohemia - II]. *Sborník Severočeského Muzea, Přírodní Vědy* **39**, 37-166 (in Czech).

EPPO PRA for *Thaumatotibia leucotreta*. <https://pra.eppo.int/pra/9305d7ed-2788-46dc-882d-b4641fa24fff>

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

Additional key words: incursion, new record

Computer codes: ARGPLE, CZ

2023/041 Update on the situation of *Tecia solanivora* in Spain

In Spain, the potato moth *Tecia solanivora* (Lepidoptera: Gelechiidae - EPPO A2 List) was first found in Islas Canarias (EPPO RS 2001/129) in 1999. 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 provided an update on the situation of *T. solanivora* in Galicia.

Since the last update (RS 2020/117), one new infested zone was demarcated after 6 specimens were detected in one trap in the municipality of Moeche (A Coruña province). Several municipalities of A Coruña and Lugo provinces are no longer considered to be infested zones and have become buffer zones, since *T. solanivora* has not been detected in them for 2 consecutive years. The infested zone now includes 5 parishes belonging to 4 municipalities in the province of A Coruña (Artiexo, Cariño, A Laracha and Moeche) and 2 parishes in 2 municipalities (Burela and Trabada) in the province of Lugo. The eradication programme continues in the remaining infested areas.

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

Source: NPPO of Spain (2023-01).

A map of the demarcated areas is available in Resolución do 28 de decembro de 2022, da Dirección Xeral de Gandaría, Agricultura e Industrias Agroalimentarias, pola que se prorrogan todas as medidas fitosanitarias establecidas na Resolución do 8 de

marzo de 2017 pola que se establecen as zonas infestadas e as zonas tampón e se implementan as medidas para a erradicación e control con respecto ao organismo de corentena *Tecia solanivora* Povolny, ou couza guatemalteca da pataca, na Comunidade Autónoma de Galicia. DOG 5, 2495.

https://www.xunta.gal/dog/Publicados/2023/20230109/AnuncioG0426-291222-0003_es.html

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

Additional key words: detailed record

Computer codes: TECASO, ES

2023/042 Update of the situation of *Blissus insularis* in Portugal

The southern chinch bug *Blissus insularis* (Hemiptera: Blissidae) was first reported in Portugal and in Europe in 2019 in the area of Lisbon (EPPO RS 2021/055).

A nation-wide survey was conducted, and further outbreaks were found. Conspicuous symptoms and numerous insects were observed on *Stenotaphrum secundatum* lawns in private and public gardens in the following areas:

- Área Metropolitana de Lisboa: in the municipalities of Cascais, Sintra, Almada, Seixal, Palmela and Olivai.
- Alentejo region: in the municipalities of Alcácer do Sal, Porto Covo and Sines.
- Algarve region: in the municipalities of Aljezur (1 site), Vila Real de Santo António (1 site), Faro (1 site), Loulé (2 sites)

An awareness campaign has been initiated and emergency authorization of several insecticides has been approved to control *B. insularis* in January 2023.

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

Source: NPPO of Portugal (2022-12).

Circular n.º 5/2022 Uma nova praga dos relvados: *Blissus insularis* Barber, 1918 (Hemiptera: Lygaeidae), percevejo-do-sul-americano.

<http://www.draplvt.mamaot.pt/alimentacao/avisos-agricolas/Pages/Avisos-Agricolas.aspx>

Autorização excecional de emergência ao abrigo do Art.º 53 do Regulamento (CE) n.º 1107/2009, de 21 de outubro, para utilização de produtos fitofarmacêuticos com base em óleo de laranja, spinosade, deltametrina, cipermetrina e acetamiprida, para o controlo de *Blissus insularis*, vulgarmente conhecido por percevejo-do-sul, para utilizadores profissionais e uso não profissional https://www.dgav.pt/wp-content/uploads/2023/01/AEE-No_2023_Blissus.pdf

Additional key words: detailed record

Computer codes: BLISIN, PT

2023/043 *Blissus insularis* (Hemiptera: Blissidae, southern chinch bug): addition to the EPPO Alert List

Why: The southern chinch bug *Blissus insularis* (Hemiptera: Blissidae) is a damaging pest of turf and pasture grass in Southern USA. As it was recently introduced in Portugal where it is spreading and causing damage, the EPPO Secretariat considered that it should be added to the EPPO Alert List.

Where: *B. insularis* is reported from Southern USA as well as the Caribbean, and parts of South and Central America.

EPPO Region: Portugal (mainland).

North America: USA (Alabama, Arizona, Arkansas, California, Florida, Georgia, Hawaii, Louisiana, Mississippi, New Mexico, Oklahoma, South Carolina, Texas).

Central America and Caribbean: Antigua and Barbuda, Bahamas, Cuba, Dominica, Grenada, Haiti, Jamaica, Martinique, Panama, Puerto Rico, St Vincent and the Grenadines, Trinidad and Tobago, Turks and Caicos Islands.

South America: Colombia.

Oceania: Guam.

On which plants: *B. insularis* is only reported from St. Augustine grass, *Stenotaphrum secundatum* (Poaceae). In experiments, it could also develop on other grasses such as *Cynodon* spp. or *Zoysia* spp. *S. secundatum* is a perennial grass that is used for turf and pasture. It is considered invasive in some countries.

Damage: Chinch bugs are sap-sucking species that feed on phloem tissues above and below the soil surface, causing gradual yellowing and eventual death of damaged plants. At first, damage is limited to small patches of dead grass, but eventually entire lawns can be destroyed.

Adults are small, elongated insects, measuring 2.0 to 4.0 mm long and 1.0 mm wide, black with white patches on wings which are folded over the back. A female can lay over 250 eggs in her lifetime. Young nymphs are reddish-orange with a white band across the back. Body colour darkens and becomes black as nymphs reach adult size. The life cycle varies between 10 to 70 days and 3 to 10 overlapping generations are reported annually. *B. insularis* remains active all year long, even if it may become dormant in winter in the Northern part of its range.

Control is based on a combination of cultural practices (mowing, fertilization, irrigation, use of tolerant varieties) and chemical control with insecticides. *B. insularis* has shown some resistance to insecticides.

Dissemination: Adults can fly or walk short distances. As the pest was introduced in Portugal, it can be seen that long distance spread can occur but the pathway for introduction is not clear.

Pathways: plants for planting? Soil?

Possible risks: In the Southern USA, *B. insularis* is a very damaging pest. Considering its current distribution, *B. insularis* may only establish in the warmer part of the EPPO region.

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EPPO RS 2021/055, 2023/042, 2023/043

Panel review date -

Entry date 2023-02

Additional key words: Alert List

Computer codes: BLISIN

2023/044 New records of *Hishimonus* species in the EPPO region

The genus *Hishimonus* (Hemiptera: Cicadellidae) includes approximately 70 species, distributed in the temperate and subtropical regions of Asia, Africa and Australia. Recent studies have suggested that the greatest diversity is in the Oriental region, and in particular in China. *Hishimonus* species are usually collected on herbs and trees, and some are of concern because of their capacity to transmit phytoplasma diseases. For example, *H. phycitis* (EU Annex IIA) is a vector of lime witches' broom (associated with 'Candidatus Phytoplasma aurantifolia' - EU Annex IIA), as well as of brinjal little leaf and sesame phyllody phytoplasmas. Recent studies have shown that at least three species of *Hishimonus* have been introduced and are spreading in the EPPO region, namely *H. hamatus*, *H. sellatus* and *H. diffractus*.

H. hamatus originates from Eastern Asia and was first found in the EPPO region in 2012 in Slovenia (EPPO RS 2014/025). It was then recorded in Switzerland, Italy, Germany, Corsica (France), Austria (in a garden centre), and most recently in Spain and mainland France. Its host range includes: *Chamaecyparis lawsoniana*, *Cupressus sempervirens*, *Euonymus japonicus*, *Ilex crenata*, *Lagerstroemia indica*, *Ligustrum japonicum*, *L. lucidum*, *L. ovalifolium*, *Sambucus javanica*, *Serissa japonica*, *Vitis vinifera*.

H. sellatus also originates from Eastern Asia and was first found in the EPPO region in 2007 in Russia (Krasnodar). This species is also recorded in Armenia and Georgia. *H. sellatus* is considered to be a vector of a phytoplasma disease observed in Southern Russia and Georgia on mulberry plants (*Morus* spp.) called 'mulberry small leaf curl'. In the Republic of Korea it is also reported to be a vector of several phytoplasma diseases (jujube witches' broom, sumac witches' broom and mulberry dwarf). It is a polyphagous species whose host range includes *Morus alba*, *Rosa* spp. and *Ziziphus jujuba*.

H. diffractus was first described in 2013 in China and Thailand and is also recorded in Australia. In the EPPO region, re-examination of collected specimens showed that it has been present in Spain since 2007 (i.e. several years before its taxonomic description). Studies conducted from 2007 to 2020 on specimens collected from urban environments, gardens and agricultural areas showed that *H. diffractus* occurs in France, Portugal (Madeira), Sicily (Italy), Spain, and Gibraltar. Its presence has also been detected on imported jasmine plants in a garden centre in the United Kingdom. In Europe, *H. diffractus* has been found on *Citrus* spp. (in orchards), *Buddleia saligna*, *Jasminum* sp., *Nerium oleander*, *Pittosporum tobira*, and it has been trapped in vineyards.

Geographical distributions and lists of host plants have been added to the EPPO Global Database:

- *Hishimonus diffractus*. <https://gd.eppo.int/taxon/HISHDI>
- *Hishimonus hamatus*. <https://gd.eppo.int/taxon/HISHHA>
- *Hishimonus sellatus*. <https://gd.eppo.int/taxon/HISHSE>

Source: Bella S, Aguin-Pombo D, Aguiar AM, Kunz G, Miralles-Nunez A, Foster S, Sanchez-Garcia I, Wilson MR, D'Urso VE (2022) Discovery of *Hishimonus diffractus* Dai, Fletcher & Zhang, 2013 (Hemiptera: Auchenorrhyncha: Cicadellidae) in Europe, with remarks on previously recorded species of the genus. *Zootaxa* **5159**(4), 558-570. <https://doi.org/10.11646/zootaxa.5159.4.5>

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Additional key words: new record, detailed record

Computer codes:

2023/045 New species and new records of exotic Scolytinae (Coleoptera, Curculionidae) in Europe

In the EU, non-European Scolytinae spp. are A1 quarantine pests. During field investigations conducted by Marchioro *et al.* (2022) between 2019 and 2021, the following exotic Scolytinae species were recorded for the first time in Europe or found in new European countries:

Species	Record in Europe	Area of origin	Comments
<i>Amasa</i> sp. near <i>A. truncata</i>	Undescribed species trapped in France (Alpes maritimes, Bouches-du-Rhône, Var départements, all in Provence-Alpes-Côte d'Azur region), Portugal (Lisbon area).	Australia	In Portugal, traps were located on <i>Eucalyptus</i> trees or in their vicinity.
<i>Cnestus mutilatus</i>	Considered established in Italy.	Oriental and Eastern Palearctic Regions	See EPPO RS 2022/147.
<i>Dryoxylon onoharaense</i>	First record in Europe. Trapped in the provinces of Padova and Belluno (Veneto region, Italy). Considered established.	China, Japan and South Korea	Recently introduced in North America (now present in 14 states). Breeding host plants in Europe are unknown. Recorded in Italy from <i>Acer saccharum</i> , <i>Liriodendron tulipifera</i> , <i>Populus deltoides</i> .
<i>Hypothenemus eruditus</i>	First record in Portugal (Lisbon area). Introduced and established in Croatia, France, Italy, Malta, Portugal (Azores), Spain (inc. Canarias), Russia and Ukraine.	Tropical and subtropical origin	Also recently found in Switzerland (see below).

Species	Record in Europe	Area of origin	Comments
<i>Xyleborinus attenuatus</i>	First record in Italy. Introduced and established in most of Europe and North America.	China, Japan, Korea, Russia (Far East), Taiwan	
<i>Xylosandrus germanus</i>	First record Portugal. Widely established in Europe and North America.	Oriental and Eastern Palearctic Regions	

In Switzerland, during a bark beetle monitoring survey in forests, the following species were detected in traps:

Species	Record in Europe	Area of origin	Comment
<i>Cyclorhipidion pelliculosum</i>	Recorded in Germany in 2014. First record in Switzerland: caught in eight municipalities of the canton of Ticino.	Asia	Established in North America.
<i>Cyclorhipidion distinguendum</i>	Recorded in France in 2018. First record in Switzerland: caught in 9 municipalities of the canton of Ticino.	Asia	See EPPO RS 2021/156. Established in North America.
<i>Hypothenemus eruditus</i>	First record in Switzerland: caught in 3 municipalities of the canton of Ticino	Tropical and subtropical origin	See table above.

Source: Marchioro M, Faccoli M, Dal Cortivo M, Branco M, Roques A, Garcia A, Ruzzier E (2022) New species and new records of exotic Scolytinae (Coleoptera, Curculionidae) in Europe. *Biodiversity Data Journal* 10, e93995.

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NPPO of Switzerland (2022-10, 2023-02).

Additional key words: new record

Computer codes: CYCRFU, DRYXON, HYOTEU, XYBIAL, XYLBTR, XYLBPL, CH, FR, IT, PT

2023/046 First record of *Meloidogyne enterolobii* in the Netherlands

The NPPO of the Netherlands recently informed the EPPO Secretariat of the first finding of the root knot nematode *Meloidogyne enterolobii* (EPPO A2 List) on its territory.

M. enterolobii was detected in January 2023 on ornamental *Ficus microcarpa* plants at one production site (greenhouse) of a retail company. As part of an export inspection of 320 *Ficus* plants destined to a non-EU country, one root sample tested positive for the presence of the pest. No obvious damage was observed on the upper parts of the plants. In total 576 *Ficus* plants coming from the same lot had been recently distributed to warehouses in EU Member States. Relevant Member States will be informed of these deliveries.

The plants concerned originated from one production site in the Netherlands where approximately 3500 plants of *F. microcarpa* are still present. These plants are considered to

be infested with *M. enterolobii* and will be destroyed. Another production site of the same operator, where *F. microcarpa* were grown in the preceding year, will also be surveyed. The original plants had been imported as rooted potted plants in early 2022.

The pest status of *Meloidogyne enterolobii* in the Netherlands is officially declared as: **Transient: actionable, under eradication.**

Source: NPPO of the Netherlands (2023-01) <https://english.nvwa.nl/topics/pest-reporting/documents/plant/plant-health/pest-reporting/documents/pest-report-meloidogyne-enterolobii-2023>

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

Additional key words: new record

Computer codes: MELGMY, NL

2023/047 First record and eradication of *Hirschmanniella caudacrena* in Denmark

The NPPO of Denmark recently informed the EPPO Secretariat of the first finding of the nematode *Hirschmanniella caudacrena* on its territory. *Hirschmanniella* spp. (except *H. behningi*, *H. gracilis*, *H. loofi* and *H. zostericola*) are A1 quarantine pests for the EU.

H. caudacrena was found in January 2023 in the municipality of Aarhus (region of Midtjylland) in a nursery growing aquatic plants. The nematode was detected in plants in the genus *Vallisneria* and the genus *Aponogeton*. The *Vallisneria* plants were grown in aquaculture in a greenhouse with recirculating water. All plants have been destroyed and the production site has been disinfected. Several small lots of aquatic plants from the infested production site, had been delivered to other EU Member States which have been informed.

The pest status of *Hirschmanniella caudacrena* in Denmark is officially declared as: **Absent, pest eradicated.**

Source: NPPO of Denmark (2023-02).

Pictures: *Hirschmanniella caudacrena*. <https://gd.eppo.int/taxon/HIRSCA/photos>

Additional key words: new record

Computer codes: HIRSCA, DK

2023/048 Role of infested sawdust in the spread of *Bursaphelenchus xylophilus*

The pinewood nematode *Bursaphelenchus xylophilus* (EPPO A2 List) is the causal agent of pine wilt disease. It is spread in coniferous forests by beetles of the genus *Monochamus*. Long distance spread of the nematode can occur from transport of coniferous commodities such as plants for planting, round wood, sawn wood, wood chips, wood residues, bark, and wood packaging material. A recent study by Arbuza *et al.* (2023) suggests that sawdust could also play a role if used near host plants (e.g. used as mulch).

In an experiment in controlled conditions, 4-year-old seedlings of *Pinus sylvestris* became infested with *B. xylophilus* when injured stems or roots were in contact with infested sawdust.

Source: Arbuzova EN, Kulinich OA, Chalkin AA, Kozyreva NI, Gorbach VV, Ryss AY (2023) Infestation of pine (*Pinus sylvestris* L.) seedlings with the pinewood nematode *Bursaphelenchus xylophilus* Steiner and Buhner (Nickle) through wood sawdust. *Annals of Forest Science* **80**, 6. <https://doi.org/10.1186/s13595-023-01174-y>

Pictures: *Bursaphelenchus xylophilus*. <https://gd.eppo.int/taxon/BURSXY/photos>

Additional key words: pathway

Computer codes: BURSXY

2023/049 First record of tomato brown rugose fruit virus in Slovakia

The NPPO of Slovakia recently informed the EPPO Secretariat of the first finding of the tomato brown rugose fruit virus (*Tobamovirus*, ToBRFV - EPPO A2 List) on its territory. The virus was detected in the municipality of Levice (Western Slovakia) in a greenhouse (2.5 ha) producing tomato (*Solanum lycopersicum*) fruit. The seed originated in the Netherlands and the seedlings were grown by an Austrian company. Official measures have been taken: a demarcated area was defined, infested plants will be incinerated at the end of the harvest of tomato, and the greenhouse and its associated equipment will be disinfected.

The pest status of tomato brown rugose fruit virus in Slovakia is officially declared as: **Transient: actionable, under eradication.**

Source: NPPO of Slovakia (2023-02).

Pictures: Tomato brown rugose fruit virus. <https://gd.eppo.int/taxon/TOBRFV/photos>

Additional key words: new record

Computer codes: TOBRFV, SK

2023/050 Invasive alien plants in the Canary Islands (ES)

The Canary Islands (Tenerife, Gran Canaria, Fuerteventura, Lanzarote, La Palma, La Gomera and El Hierro) are a volcanic archipelago situated in the North-Eastern Atlantic Ocean and are one of the most biodiverse oceanic insular systems of plants on the planet. They are a hotspot of plant biodiversity. Since the 1950s, the number of naturalised records of non-native plant species has steadily increased with the increase of trade, tourism and changes of land use. An up-to-date check list of invasive alien plant species in the Canary Islands was obtained by searching the current literature and online databases. The updated list comprises of 149 alien species: 101 invasive and 48 naturalized plant species. The families with the highest number of invasives in the Canary Islands are Cactaceae (18 species), Poaceae (18), Asparagaceae (13) and Fabaceae (11), which represent 38.5% of the alien flora. Genera such as *Agave*, *Opuntia* and *Cylindropuntia* had the highest number of species. Around 39.4% of the alien species were herbaceous species, while 61.6% were woody species, with only 16 tree species. The highest number of invasive alien species is found on Gran Canaria (79 species) and Tenerife (78), while the lowest on Lanzarote (35) and El Hierro (31) respectively. The greatest number of invasive alien species originated from the Neotropics (39 species), with Cape Region in South Africa (12), tropical Africa (8) and the Mediterranean Basin (7) being important sources of invasive plants for Canary Islands.

Source: Morente-López J, Arjona Y, Salas-Pascual M, Reyes-Betancort JA, del Arco-Aguilar MJ, Emerson BC, García-Gallo A, Jay-García LS, Naranjo-Cigala A, Patiño J (2023) Biogeographic origins and drivers of alien plant invasions in the Canary Islands. *Journal of Biogeography*, 1-15.

Additional key words: invasive alien plants

Computer codes: ES

2023/051 Difference in phenology of *Lupinus polyphyllus* over a latitudinal gradient

Lupinus polyphyllus (Fabaceae: EPPO Observation List) is a short-lived perennial nitrogen-fixing herb, native to North America. It is invasive in a number of EPPO countries as well as Australia and New Zealand. *L. polyphyllus* occurs from the north to the south of Europe except for the Mediterranean areas of the Iberian Peninsula and Italy. The timing of flowering, temperature dependency of flowering and fruiting, and the performance (canopy height, seed production) was studied across a 2 000 km latitudinal gradient from Luxembourg to Umeå in Northern Sweden (49°38' N - 63°49' N). Twenty-two sites were sampled, and parameters were estimated from 220 individual plants in total. The variation in phenology of flowering and fruiting was estimated using >1600 digital images of inflorescences taken weekly at each site. The day of the year at which different phenological phases (first open flower; half the length of the inflorescence has open flowers; first black ripe pod appears) were reached, increased by 1.3-1.8 days per degree latitude, whereas the growing degree days (GDD) required for these phenological phases decreased 5-16 GDD per degree latitude. It is expected that the invasion of *L. polyphyllus* will further increase in the northern part of Europe over the next decades due to climate warming. For the control of *L. polyphyllus* in countries with a large latitudinal extent, the mowing date should shift by approximately one week per 500 km at sites with similar elevations. Therefore, lower latitude populations should be mowed earlier to prevent dispersal of ripened seed.

Source: Ludewig K, Klinger YP, Donath TW, Bärman L, Eichberg C, Thomsen JG, Görzen E, Hansen W, Hasselquist EM, Helminger T, Kaiskog F, Karlsson E, Kirchner T, Knudsen C, Lenzeński N, Lindmo S, Milberg P, Pruchniewicz D, Richter E, Sandner TM, Sarneel JM, Schmiede R, Schneider S, Schwarz K, Tjäder Å, Tokarska-Guzik B, Walczak C,

Weber O, Żotnierz L, Eckstein RL (2022) Phenology and morphology of the invasive legume *Lupinus polyphyllus* along a latitudinal gradient in Europe. *NeoBiota* 78, 185-206.

Pictures: *Lupinus polyphyllus*. <https://gd.eppo.int/taxon/LUPPO/photos>

Additional key words: invasive alien plants

Computer codes: LUPPO

2023/052 Mislabelling of *Salvinia* plants in trade in the EPPO region

Incorrect labelling of plants in trade and misidentification are widespread and may be caused by negligence or wilful disrespect of regulations. Mislabelling may consist of simple misspelling of names or considering a variety as a true species, using synonyms or preferring a name that sounds nice or a name that customers are familiar with. *Salvinia molesta* (Salviniaceae: EPPO A2 List), is a good example of an aquatic plant that has long been traded in the EPPO region and is often labelled as the more pleasant-sounding *Salvinia natans* or just simply *Salvinia*. The plant can be traded as an individual species/commodity by itself or in a mixture of decorative floating plants. In the more temperate areas of the EPPO region which experience cold winters, *S. molesta* is considered unlikely to cause important negative effects; however, it is known to be a serious invasive species in tropical regions, clogging waterways and entire irrigation systems. Inspections and a targeted survey of *Salvinia* plants in trade in the Netherlands were performed and additional material was obtained from wild sources in South Africa, Hungary and the USA. Specimen identification was verified by comparison with the herbarium collection at Naturalis Biodiversity Center in Leiden and with the sequences available in NCBI GenBank database. Results showed that there are reliable tools to distinguish these *Salvinia* species and avoid mislabelling. Sterile samples of *S. molesta* and *S. auriculata* can be reliably distinguished based on cpDNA data, thereby enabling the identification of mislabelled *Salvinia* plants that are difficult to distinguish on macromorphological criteria. Mislabelled plants of *S. minima* and *S. natans* can be easily distinguished by the macromorphological features of the hairs on the upper side of the floating leaves.

Source: Van Valkenburg JLCH, Piet LF, Boer E (2023) *Salvinia* plants in trade: what species are we actually talking about? *EPPO Bulletin* (early view), <https://doi.org/10.1111/epp.12909>

Pictures: *Salvinia molesta*. <https://gd.eppo.int/taxon/SAVMO/photos>

Additional key words: invasive alien plants

Computer codes: SAVRO, SAVMO, SAVNA NL

2023/053 Inspections for regulated aquatic plants in the Netherlands

Inspectors from NVWA (Netherlands Food and Consumer Product Safety Authority) have recently visited production facilities and traders of aquatic plants in the Netherlands to follow-up on a request by the Spanish authorities concerning on-line availability of invasive alien species regulated under the EU regulation 1143/2014. The focus of these dedicated inspections was the suspected trade of *Salvinia molesta* (Salviniaceae: EPPO A2 List), a regulated species of Union concern that is not traded in the Netherlands under its proper name (see EPPO RS 2023/052). The findings of the inspections were quite variable. At some localities plants were no longer available and could not be inspected, some had incorrect labelling but were selling *S. minima* (which is permitted) and others had incorrect labelling

and were selling *S. molesta* (which is not permitted). Upon the request of the Dutch NPPO, catalogues of plants displayed on commercial websites have been corrected and *S. molesta* plants have been withdrawn from sale. Available stock of *S. molesta* in production facilities has been destroyed, including one production facility where 500 000 plants were destroyed.

Source: Netherlands Food and Consumer Product Safety Authority (2023-02-10) NVWA has half a million aquatic plants destroyed (in Dutch). See link [here](#)

Pictures: *Salvinia molesta*. <https://gd.eppo.int/taxon/SAVMO/photos>

Additional key words: invasive alien plants

Computer codes: SAVMO, SAVRO, NL

2023/054 New records for alien plants in Slovakia: 2008-2021

Since 2008, 25 alien plant taxa have been recorded as new additions to the flora of Slovakia. This number includes 21 transient and 4 locally naturalised species (Table 1), with ornamental plants predominating significantly. The locally naturalised species *Cenchrus flaccidus*, *Cotoneaster zabelii*, *Doronicum pardalianches* and *Panicum virgatum* are able to spread to native habitats and represent the greatest risk to native plant species in Slovakia.

Table 1. 25 alien taxa recorded in Slovakia between 2008-2021

Taxa	Family	Status	Origin
<i>Achillea filipendulina</i>	Asteraceae	transient	Asia
<i>Anemone hupehensis</i>	Ranunculaceae	transient	Asia
<i>Baldellia ranunculoides</i>	Alismataceae	transient	N Africa, Europe, W Asia
<i>Calocedrus decurrens</i>	Cupressaceae	transient	N America
<i>Cenchrus flaccidus</i>	Poaceae	locally naturalized	Asia
<i>Centranthus ruber</i>	Caprifoliaceae	transient	Mediterranean region
<i>Cotoneaster zabelii</i>	Rosaceae	locally naturalized	Asia
<i>Darmera peltata</i>	Saxifragaceae	transient	N America
<i>Doronicum pardalianches</i>	Asteraceae	locally naturalized	Europe
<i>Geranium macrorrhizum</i>	Geraniaceae	transient	Europe
<i>Helleborus foetidus</i>	Ranunculaceae	transient	Europe, N Africa
<i>Hylotelephium</i> ‘Herbstfreude’	Crassulaceae	transient	Garden hybrid
<i>Jacobaea maritima</i> subsp. <i>maritima</i>	Asteraceae	transient	Mediterranean
<i>Kniphofia ×praecox</i>	Asphodelaceae	transient	Garden hybrid
<i>Ligularia dentata</i>	Asteraceae	transient	SE Asia
<i>Panicum virgatum</i>	Poaceae	locally naturalized	N America
<i>Perilla frutescens</i>	Lamiaceae	transient	Central and E Asia
<i>Prunus incisa</i>	Rosaceae	transient	Japan
<i>Psilurus incurvus</i>	Poaceae	transient	N Africa, Europe, Asia
<i>Rodgersia podophylla</i>	Saxifragaceae	transient	Asia
<i>Salvia hispanica</i>	Lamiaceae	transient	Central America
<i>Soleirolia soleirolii</i>	Urticaceae	transient	Mediterranean islands
<i>Tetragonia tetragonoides</i>	Aizoaceae	transient	Asia, Oceania

Taxa	Family	Status	Origin
<i>Vincetoxicum rossicum</i>	Apocynaceae	transient	Russia and Ukraine
<i>Viola jooi</i>	Violaceae	transient	Europe

Source: Eliáš P Jr, Májeková J, Hegedúšová K, Dudáš M, Letz DR, Mered'a P Jr., Bakay L, Čejka T, Dítě D, Dítě Z, Ďurišová Ľ, Gregorek R, Király G, Mártonfiová L, Mártonfi P, Spanyol F, Svitková I, Hrivnák R (2023) New alien vascular plants of Slovakia: records from 2008-2021. *BioInvasions Records* 12 (in press)

Additional key words: invasive alien plants

Computer codes: ACHFI, ANMHU, BLJRA, CCDDE, CNERU, CTTZA, DAQPE, DORPA, GERMR, HLLFO, 1HJOG, SENBI, KNIPR, LGLDE, PANVI, PRJFR, PRNIC, PUUIN, RODPO, SALHI, SQLSO, VNCRO, VIOJQ, SK