EPPO – FAO-REUFIS – BFW Conference

Safeguarding Forests in Europe:
Emerging Risks of *Agrilus* Wood Borers
(Buprestidae)

# EPPO activities and resources on *Agrilus* species and its Network of experts working on surveillance, monitoring, and control of the emerald ash borer, *Agrilus planipennis*

*Vienna, 21–23 April 2026*

**Dmitrii Musolin (dm@eppo.int)**

# Work of EPPO in plant quarantine

EPPO – FAO-REUFIS – BFW Conference

Safeguarding Forests in Europe:
Emerging Risks of *Agrilus* Wood Borers
(Buprestidae)

**Manage an early warning system (EPPO Alert List)**

**Evaluate the risks presented by emerging pests (Pest Risk Analysis)**

**Make recommendations on pests which should be regulated in the EPPO region**

**Prepare associated Standards (e.g., diagnostics, phytosanitary measures)**

Photos: https://gd.eppo.int

# *Agrilus*: in work of EPPO

EPPO – FAO-REUFIS – BFW Conference

**Safeguarding Forests in Europe: Emerging Risks of *Agrilus* Wood Borers (Buprestidae)**

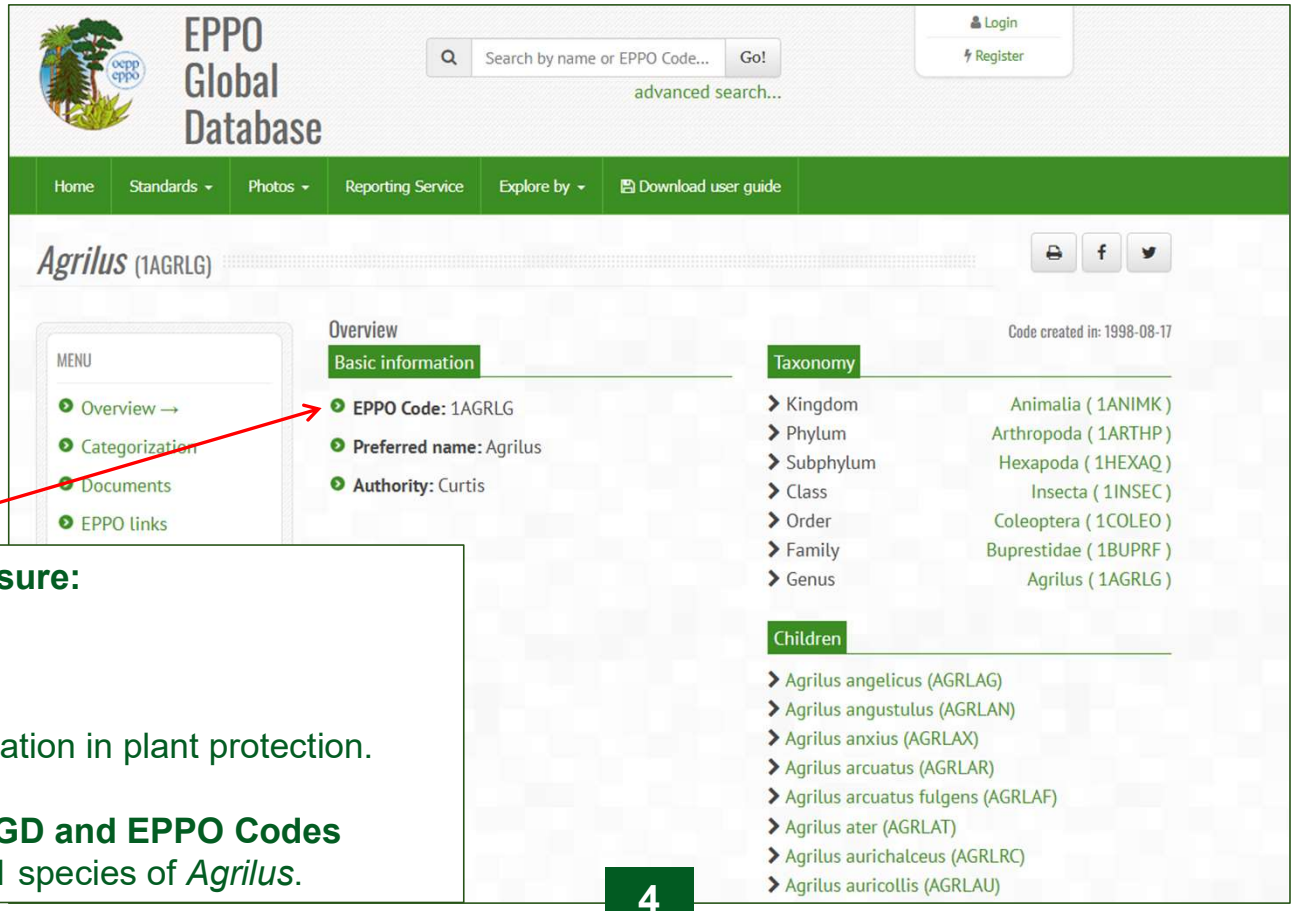

Infestation of *A. planipennis* in Ottawa (Canada). Photo: E. Jendek


Infestation of *A. mali* in China. Photo: Wang Zhi-Yong

| Species | GD page & | Map | Host plants | Host commo-dities | Categorization (EPPO) | Categorization | Reports | EPPO PRA | Non-EPPO PRA | PRA platform docs | Datasheet | EPPO Q-Bank | EPPO Standards | Photos | Communication |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 41 | 8 | 8 | 4 | 6 | 8 | 8 | 5 | 5 | 16 | 6 | 3 | 2 | 6 | 4 |
| ***A. planipennis*** | Y | Y | Y | Y | **A2** | YYY | Y | 2013 | EU, GB, PL | Y | 2021 | Y | PM7/154 (Diag) **(rev.)**, PM9/014, PM3/087, PM 8/011 | Y | Y |
| ***A. anxius*** | Y | Y | Y | Y | **A1** | YYY | Y | 2021 | EU, PL, SE, NO | Y | 2020 | | **PM7/New**, PM3/087, PM 8/006 | Y | Y |
| ***A. s*** | Y | Y | Y | Y | **A2** | Y | Y | 2019 | | Y | 2020 | | | Y | Y |
| *A. angelicus* | Y | | | | | | | | | Y | | | | | |
| *A. angustulus* | Y | | | | | | | | | Y | | | | | |
| *A. arcuatus* | Y | | | | | | | | | | | | | | |
| *A. a. fulgens* | Y | | | | | | | | | | | | | | |
| *A. ater* | Y | | | | | | | | | | | | | Y | |
| *A.* | Y | | | | | | | | | | | | | | |
| *A. auricollis* | Y | | | | | | | | | | | | | | |
| *A. auriventris* | Y | | | | | | | | | Y | | | | | |
| *A.* | Y | Y | Y | | **AL** 2013- | Y | Y | | | Y | 2017 | | | | |
| *A. biguttatus* | Y | | | | | | | | GB | Y | | | | | |
| *A. carpini* | Y | | | | | | | | | | | | | | |
| *A. cephalicus* | Y | | | | | | | | | | | | | | |
| *A.* | Y | | | | | | | | GB | Y | | | | | |
| *A. coxalis* | Y | Y | Y | | | | | | | | | | | | |
| *derasofasciatu* | Y | | | | | | | | | Y | | | | | |
| *A. dimidiatus* | Y | | | | | | | | | Y | | | | | |
| *A. dureli* | Y | | | | | | | | | Y | | | | | |
| *A. fleischeri* | Y | Y | Y | Y | **A2** | Y | Y | 2019 | | Y | 2020 | | | Y | Y |
| *A. horni* | Y | Y | Y | | | Y | | | GB | Y | | | | | |
| *A. hyperici* | Y | | | | | | | | | Y | | | | | |
| *A. integemimus* | Y | | | | | | | | | | | | | | |
| *A. kalshoveni* | Y | | | | | | | | | | | | | | |
| *A. liragus* | Y | | | | | | | | | | | | | | |
| *A. mali* | Y | Y | Y | | **A2** | YYY | Y | 2024 | | Y | 2026 | | | Y | |
| *A. occipitalis* | Y | | | | | | | | | | | | | | |
| *A.* | Y | | | | | | | | | | | | | | |
| *A. politus* | Y | | | | | | | | | | | | | | |
| *A. prionurus* | Y | | | | | | Y | | | | | | | | |
| *A.* | Y | | | | | | Y | | | | | | | | |
| *A. quercicola* | Y | | | | | | | | | | | | | | |
| *A. ruficollis* | Y | | | | | | | | | | | | | | |
| *A. setipes* | Y | | | | | | | | | | | | | | |
| *A. sinuatus* | Y | | | | | Y | | | | | | | | | |
| *A. solieri* | Y | | | | | | | | | | | Y | | | |
| *A. sulcicollis* | Y | | | | | | | | | | | | | | |
| *A. tchitcherini* | Y | | | | | | | | | | | | | | |
| *A. vestitus* | Y | | | | | | | | | | | Y | | | |
| *A. viridis* | Y | | | | | | | | | | | | | | |

# *Agrilus*: EPPO GD and Codes






**EPPO Codes ensure:**
- clarity,
- consistency,
- efficiency,
- global coordination in plant protection.

**Pages in EPPO GD and EPPO Codes** are created for **41** species of *Agrilus*.

# *Agrilus*: EPPO GD and Codes

EPPO – FAO-REUFIS – BFW Conference

Safeguarding Forests in Europe: Emerging Risks of *Agrilus* Wood Borers (Buprestidae)

## *Agrilus planipennis* (AGRLPL)

MENU
- Overview
- Distribution
- Host plants
- Host commodities
- Categorization
- Reporting
- Photos →
- Documents
- Datasheet
- EPPO links

TOOLS
- Propose photos

**Photos**

All photos included on this page can only be used for educational purposes.
For publication in journals, books or magazines, permission should be obtained from the original photographers with a copy to EPPO.

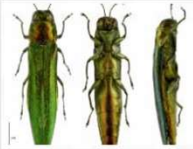
Filter photos by tag: All | Damage | Symptoms | Adult | Larva | Egg

An European ash (Fraxinus exscelsior) with galleries of A. planipennis, Borisoglebsk, Voronezh Region of Russia, 2025.

**Courtesy:** A.V. Petrov (Institute of Forest Science Russian Academy of Science)

A larvae of A. planipennis under the bark of an European ash (Fraxinus exscelsior), Borisoglebsk, Voronezh Region of Russia, 2025.

**Courtesy:** A.V. Petrov (Institute of Forest Science Russian Academy of Science)



Agrilus planipennis Fairmaire, 1888

**Courtesy:** Alexander Petrov

## *Agrilus quercicola* (AGRLQU)

MENU
- Overview →

**Overview**

Code created in: 2011-08-05

**Basic information**
- **EPPO Code:** AGRLQU
- **Preferred name:** Agrilus quercicola
- **Authority:** Fisher

Propose photo

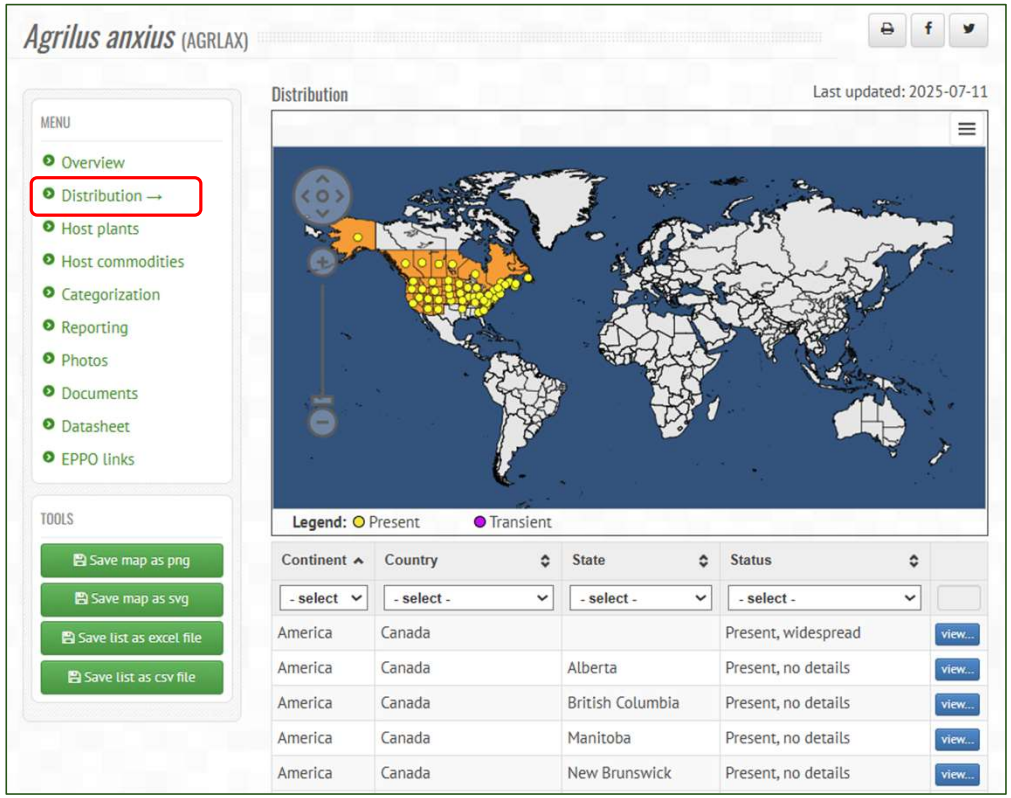
**Taxonomy**

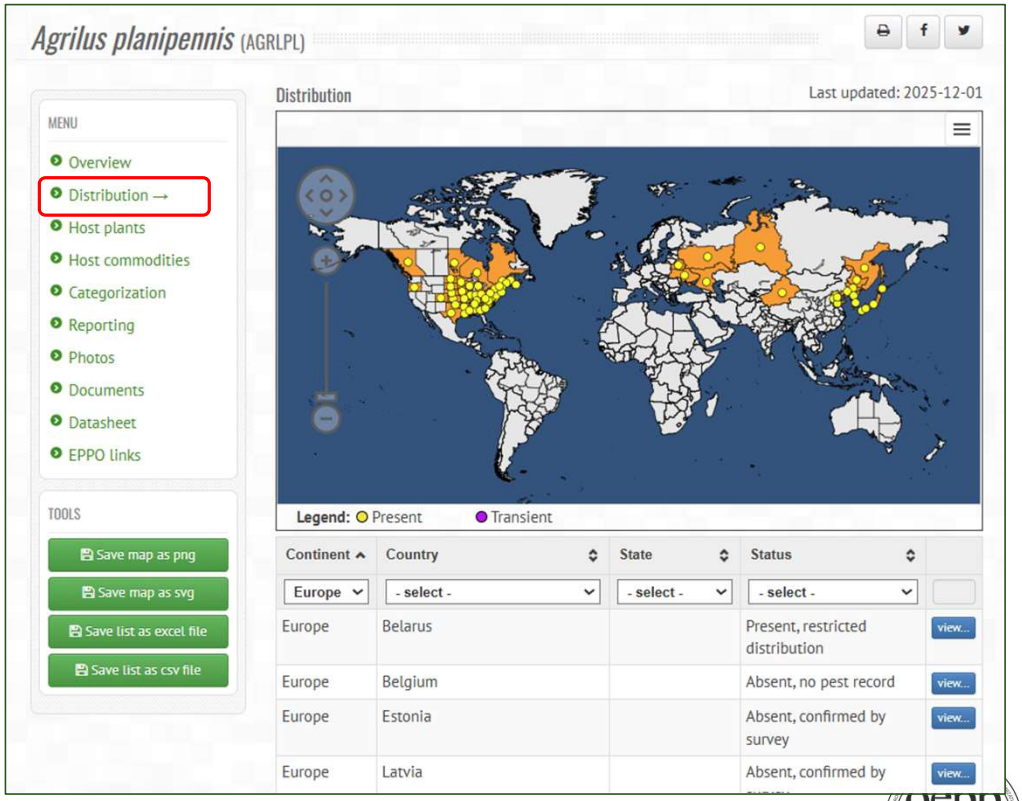
| | |
|---|---|
| Kingdom | Animalia ( 1ANIMK ) |
| Phylum | Arthropoda ( 1ARTHP ) |
| Subphylum | Hexapoda ( 1HEXAQ ) |
| Class | Insecta ( 1INSEC ) |
| Order | Coleoptera ( 1COLEO ) |
| Family | Buprestidae ( 1BUPRF ) |
| Genus | Agrilus ( 1AGRLG ) |
| Species | Agrilus quercicola ( AGRLQU ) |

# *Agrilus*: EPPO GD – maps

EPPO – FAO-REUFIS – BFW Conference

Safeguarding Forests in Europe: Emerging Risks of *Agrilus* Wood Borers (Buprestidae)



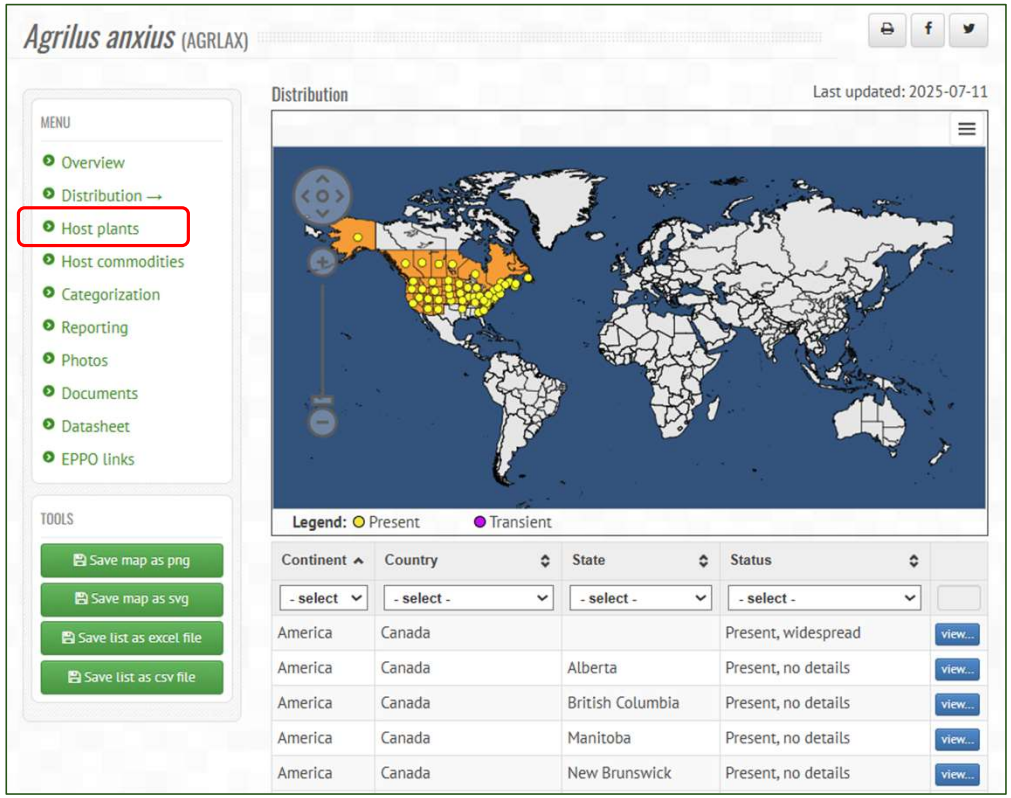



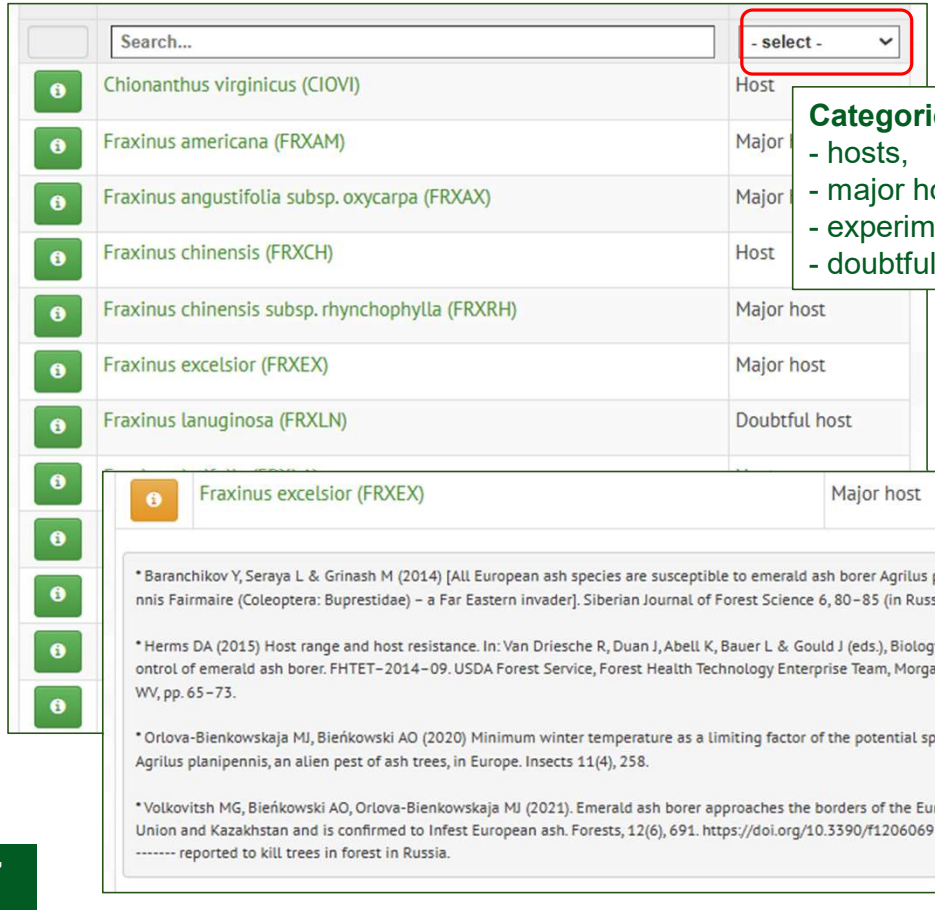

**Maps are available for 8 species of *Agrilus:***

- countries or sub-country units.

# *Agrilus*: EPPO GD – hosts






**Categories:**
- hosts,
- major hosts,
- experimental,
- doubtful.

**Data on hosts are available for 8 species of *Agrilus*.**

# *Agrilus*: EPPO GD and Codes



## *Agrilus planipennis* (AGRLPL)

MENU

- Overview
- Distribution
- Host plants
- Host commodities →
- Categorization
- Reporting
- Photos
- Documents
- Datasheet
- EPPO links

### Host Commodities

| Type | Host |
|---|---|
| - select - | Search... |
| bark | Fraxinus (1FRXG) |
| bark | Juglans ailanthifolia (IUGAI) |
| bark | Juglans mandshurica (IUGMN) |
| bark | Pterocarya rhoifolia (PTFRH) |
| bark | Ulmus davidiana (ULMDA) |
| non-squared wood | Fraxinus (1FRXG) |
| non-squared wood | Juglans ailanthifolia (IUGAI) |
| non-squared wood | Juglans mandshurica (IUGMN) |
| non-squared wood | Pterocarya rhoifolia (PTFRH) |
| non-squared wood | Ulmus davidiana (ULMDA) |
| packaging material | Fraxinus (1FRXG) |
| packaging material | Juglans ailanthifolia (IUGAI) |
| packaging material | Juglans mandshurica (IUGMN) |
| packaging material | Pterocarya rhoifolia (PTFRH) |
| packaging material | Ulmus davidiana (ULMDA) |

**Categories:**
- bark,
- manufactures articles,
- non-squared wood,
- packaging material,
- plants for planting,
- squared wood.

**Available only for 4 species:**
- *A. anxius,*
- *A. bilineatus,*
- *A. fleischeri,*
- *A. planipennis.*

# *Agrilus*: EPPO A1 and A2 Lists

EPPO – FAO-REUFIS – BFW Conference

Safeguarding Forests in Europe: Emerging Risks of *Agrilus* Wood Borers (Buprestidae)

HOME | ABOUT EPPO | MEETINGS | ACTIVITIES | RESOURCES | MEMBERS ONLY

Plant Quarantine

## EPPO A1 List of pests recommended for regulation as quarantine pests

**- version 2025-09 –**

EPPO recommends its member countries to regulate the pests listed below as quarantine pests (A1 pests are absent from the EPPO region). The EPPO A1 List is reviewed every year by the Working Party on Phytosanitary Regulations and approved by Council.

In the tables below, click on the links to access pest-specific information stored in EPPO Global Database (geographical distributions, host plants, pictures, data sheets, PRAs, diagnostic protocols and other EPPO Standards).

Click here to view A2 List >

**A1 List (absent from the EPPO region):** *A. anxius*

**A2 List (locally present in the EPPO region):** *A. bilineatus, A. fleischeri, A. mali, A. planipennis*

# *Agrilus*: EPPO Alert List

EPPO – FAO-REUFIS – BFW Conference

**Safeguarding Forests in Europe: Emerging Risks of *Agrilus* Wood Borers (Buprestidae)**

HOME | ABOUT EPPO | MEETINGS | ACTIVITIES | RESOURCES | MEMBERS ONLY

Calendar

Extranet

Pest reporting

## EPPO Alert List

### Purpose of the EPPO Alert List

The main purpose of the Alert List is to draw the attention of EPPO member countries to certain pests possibly presenting a risk to them and achieve early warning. It can also be used by EPPO to select candidates which may be submitted to a Pest Risk Analysis (PRA). Pests are marked with an asterisk * in the table below when a PRA is planned or under development within EPPO. The entry date corresponds to the date when the pest was added to the Alert List. Read a short introduction to the EPPO Alert List .

PEST ALERT

### EPPO Alert List – last updated in 2026-03

**Insects and mites**

| Name | Main host pla |
|---|---|
| *Amrasca biguttula* (Hemiptera: Cicadellidae) – NEW | Polyphagous |
| *Anoplophora horsfieldii* (Coleoptera: Cerambycidae) | Broadleaf tree |
| *Atherigona orientalis* (Diptera: Muscidae) | Capsicum, tor |

https://commons.wikimedia.org/wiki/File:Agrilus_auroguttatus.jpg

### *Agrilus auroguttatus* (AGRLGT)

MENU

- Overview
- Distribution
- Host plants
- Categorization →
- Reporting

Categorization

| Country/NPPO | List | Year addition | Year transfer | Year deletion |
|---|---|---|---|---|
| Europe | | | | |
| Türkiye | A1 list | 2016 | | |
| RPPO/EU | | | | |
| EPPO | Alert list (formerly) | 2013 | | 2017 |

# *Agrilus*: Categorization in countries

EPPO – FAO-REUFIS – BFW Conference

Safeguarding Forests in Europe: Emerging Risks of *Agrilus* Wood Borers (Buprestidae)

## *Agrilus anxius* (AGRLAX)

MENU
- Overview
- Distribution
- Host plants
- Host commodities
- Categorization →
- Reporting
- Photos
- Documents
- Datasheet
- EPPO links

TOOLS
- Save list as excel file
- Save list as csv file

Categorization

| Country/NPPO | List | Year addition | Year transfer | Year deletion |
|---|---|---|---|---|
| Africa | | | | |
| Morocco | Quarantine pest | 2018 | | |
| Asia | | | | |
| Kazakhstan | A1 list | 2017 | | |
| Europe | | | | |
| Norway | Quarantine pest | 2018 | | |
| Serbia | A1 list | 2015 | | |
| Switzerland | A1 list | 2019 | | |
| Türkiye | A1 list | 2016 | | |
| Ukraine | A1 list | 2019 | | |
| United Kingdom | A1 list | 2020 | | |
| RPPO/EU | | | | |
| EAEU | A1 list | 2016 | | |
| EPPO | A1 list | 2011 | | |
| EU | Quarantine pest ((EU) 2019/2072 Annex II A) | 2019 | | |

## *Agrilus mali* (AGRLMA)

MENU
- Overview
- Distribution
- Host plants
- Categorization →
- Reporting
- Photos
- Documents
- EPPO links

TOOLS
- Save list as excel file
- Save list as csv file

Categorization

| Country/NPPO | List | Year addition | Year transfer | Year deletion |
|---|---|---|---|---|
| Asia | | | | |
| Kazakhstan | A1 list | 2017 | | |
| Uzbekistan | A1 list | 2008 | | |
| Europe | | | | |
| Azerbaijan | A1 list | 2024 | | |
| Belarus | Quarantine pest | 1994 | | |
| Moldova, Republic of | Quarantine pest | 2017 | | |
| United Kingdom | Quarantine pest | 2024 | | |
| RPPO/EU | | | | |
| EAEU | A2 list | 2016 | | |
| EPPO | A2 list | 2024 | | |
| EPPO | Alert list (formerly) | 2020 | | 2024 |

**Available for 8 species**

# *Agrilus*: EPPO Reporting Service

EPPO – FAO-REUFIS – BFW Conference

**Safeguarding Forests in Europe: Emerging Risks of *Agrilus* Wood Borers (Buprestidae)**

## *Agrilus planipennis* (AGRLPL)

MENU

- Overview
- Distribution
- Host plants
- Host commodities
- Categorization
- Reporting →
- Photos
- Documents
- Datasheet
- EPPO links

Reporting Service articles

| Num. | Title | year-month |
|---|---|---|
| 2025/261 | Update on the situation of Agrilus planipennis in Belarus | 2025-11 |
| 2025/255 | Update on the situation of quarantine pests in the Russian Federation | 2025-11 |
| 2025/208 | First report of Agrilus planipennis in Belarus | 2025-09 |
| 2025/021 | Pre-emptive biological control of Agrilus planipennis in Europe | 2025-01 |
| 2025/001 | New data on quarantine pests and pests of the EPPO Alert List | 2025-01 |
| 2024/166 | Changes made to the EU list of regulated pests | 2024-08 |
| 2024/097 | New data on quarantine pests and pests of the EPPO Alert List | 2024-05 |
| 2024/028 | New EU Regulations | 2024-02 |
| 2024/007 | Agrilus planipennis found in Kyiv, Ukraine | 2024-01 |
| 2023/175 | New data on quarantine pests and pests of the EPPO Alert List | 2023-08 |
| 2023/081 | EPPO network of experts working on surveillance, monitoring, and control of Agrilus planipennis | 2023-04 |
| 2022/187 | Update of the situation of Agrilus planipennis in Ukraine | 2022-09 |
| 2022/143 | New data on quarantine pests and pests of the EPPO Alert List | 2022-07 |
| 2021/216 | Update on the situation of Agrilus planipennis in Ukraine | 2021-10 |
| 2021/154 | Agrilus planipennis in Russia approaching the borders of the European Union and Kazakhstan | 2021-07 |

## *Agrilus fleischeri* (AGRLFL)

Reporting Service articles

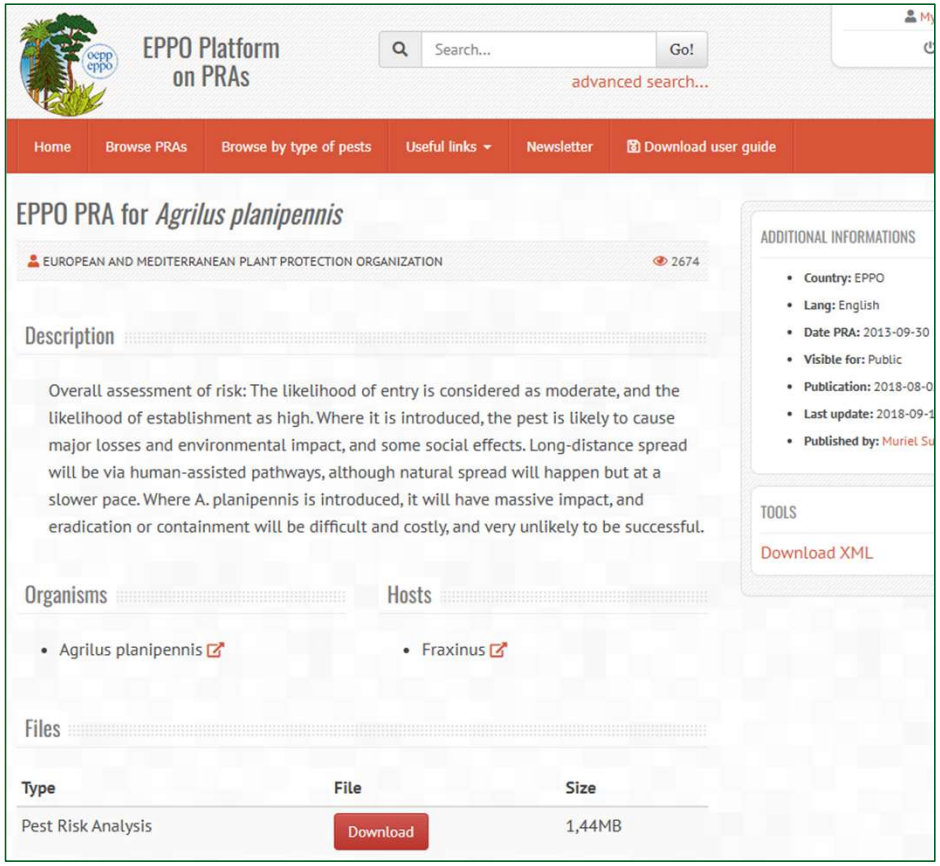
| Num. | Title | year-month |
|---|---|---|
| 2020/065 | New and revised dynamic EPPO datasheets are available in the EPPO Global Database | 2020-04 |
| 2020/028 | New data on quarantine pests and pests of the EPPO Alert List | 2020-02 |
| 2019/176 | New additions to the EPPO A1 and A2 Lists | 2019-09 |
| 2018/051 | Agrilus fleischeri: addition to the EPPO Alert List | 2018-03 |

**Available for 8 species**

# *Agrilus*: EPPO PRA Platform

EPPO – FAO-REUFIS – BFW Conference

Safeguarding Forests in Europe: Emerging Risks of *Agrilus* Wood Borers (Buprestidae)





**EPPO PRAs – for 5 species:**
- *A. anxius* (2021),
- *A. bilineatus* (2019),
- *A. fleischeri* (2019),
- *A. mali* (2024),
- *A. planipennis* (2013).

**Non-EPPO PRAs – 5 species:**
- *A. anxius* (**EU**, PL, SE, NO),
- *A. biguttatus* (GB),
- *A. convexicollis* (GB),
- *A. horni* (GB),
- *A. planipennis* (**EU**, GB, PT).

**Documents on PRA Platform**
– 16 species

# *Agrilus*: EPPO Datasheets

EPPO – FAO-REUFIS – BFW Conference

**Safeguarding Forests in Europe: Emerging Risks of *Agrilus* Wood Borers (Buprestidae)**

EPPO, 2017

Mini data sheet on *Agrilus auroguttatus*

Added in 2013 - Deleted in 2017

Reasons for deletion:
*Agrilus auroguttatus* is perceived as a risk for the EPPO region and surveys have been conducted by several EPPO countries. However, trade from areas where this insect occurs is limited and European species of oak are not considered susceptible. In 2017, the Working Party on Phytosanitary Regulations agreed that it could be deleted, considering that sufficient alert has been given.

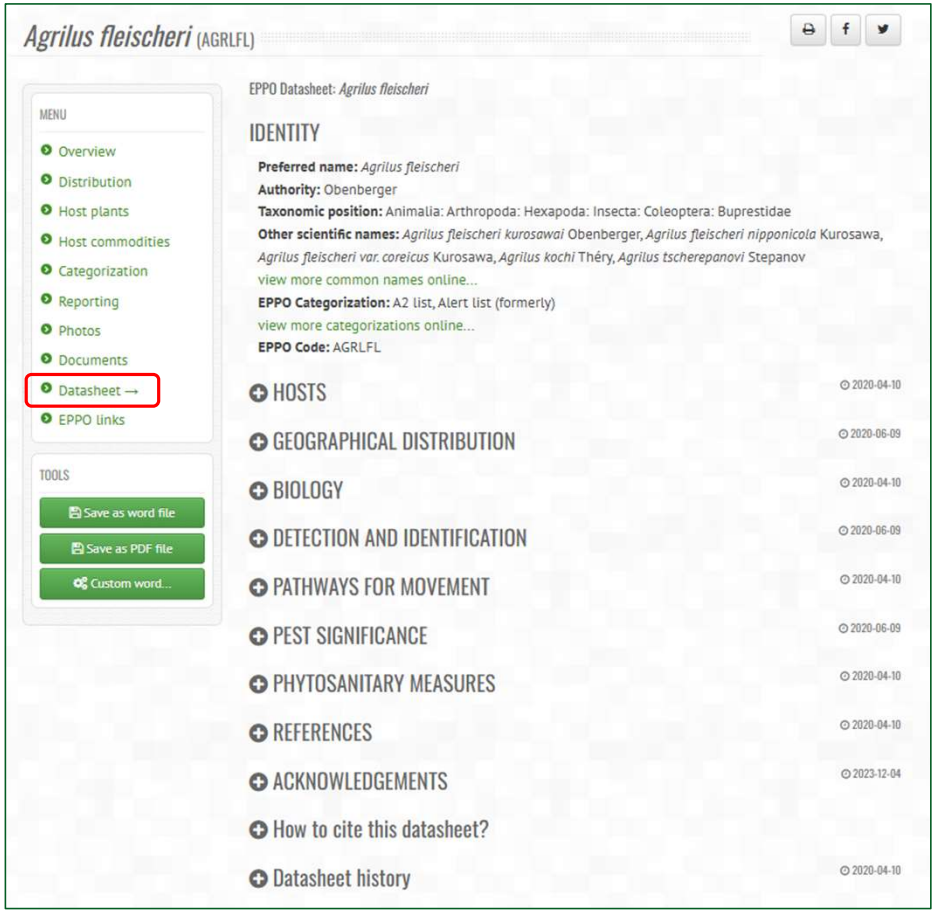
*Agrilus auroguttatus* (Coleoptera: Buprestidae - goldspotted oak borer)
**Why:** *Agrilus auroguttatus* (Coleoptera: Buprestidae - goldspotted oak borer) has recently been introduced into California (US) where it attacks oak trees. Although *A. auroguttatus* is a North American species probably originating from Arizona (US), its introduction into California is considered to be a serious threat to native oak species. Because extensive tree mortality has been observed in California, the Panel on Phytosanitary Measures decided that *A. auroguttatus* should be added to the EPPO Alert List.

**Where:** *A. auroguttatus* is morphologically very similar to *Agrilus coxalis* which ranges from central Mexico to Guatemala. Over the years, several authors have considered that they represented either the same species or subspecies of *A. coxalis* (*A. coxalis coxalis* and *A. coxalis auroguttatus*). At present, it seems accepted that they are distinct species; that the pest introduced into California is *A. auroguttatus*; and that *A. auroguttatus* originates from Southern Arizona (most probably from the Dragoon Mountains area).
In California, the first outbreaks were observed in 2004 in the San Diego county (Descanso, Guatay, Pine Valley), although it is suspected that the pest has probably been present since the early 2000s. In 2009, a satellite infestation was observed near La jolla (Marion Bear Memorial Park - San Diego county). In 2012, the pest was detected in Riverside county (community of Idyllwild), approximately 60 km south of the main outbreak site in San Diego county.
EPPO region: absent.
North America: USA (Arizona, California), Mexico (Baja California Sur).

**On which plants:** *Quercus* spp. with a preference for species belonging to the red oak group. In California, *A. auroguttatus* mainly attacks *Q. agrifolia* (coast live oak), *Q. kelloggii* (California white oak), *Q. chrysolepis* (canyon live oak). In its natural range, *A. auroguttatus* is not considered as a pest, although recent surveys conducted in Southeastern Arizona revealed some injuries on *Q. emoryi* (Emory oak) and *Q. hypoleucoides* (silverleaf oak), but with low levels of infestation and tree mortality. During surveys conducted in 2008/2009, no damage was observed on 'white' oaks in Arizona, or only rarely on *Q. engelmannii* (belonging to the white oak group), in California. No mortality was observed on the latter species.

**Damage:** Symptoms of infestations are wet, dark-coloured stains on the bark surface, D-shaped adult exit holes (3 mm wide), and a reduction of foliage in the tree crown. Larvae feed in the phloem, primarily at the interface of the xylem and phloem, and bore galleries which form dark and sinuous patterns on the wood surface. After several years of continuous infestation, oak trees may die.
In California, it is estimated that since 2002, *A. auroguttatus* has contributed to the mortality of more than 80 000 oak trees over approximately 5 000 km². The infested area continues to increase as the insect population grows and spreads.

**Available for 6 species**



# *Agrilus*: EPPO-Q-Bank

EPPO – FAO-REUFIS – BFW Conference

**Safeguarding Forests in Europe: Emerging Risks of *Agrilus* Wood Borers (Buprestidae)**

## EPPO-Q-bank

A database to support plant pest diagnostic activities

Search by name or EPPO code...

Arthropods | Bacteria | Fungi | Nematodes | Phytoplasmas | Plants | Viruses and Viroids

EPPO Q-BANK

- Arthropods
- Bacteria
- Fungi
- Nematodes
- Phytoplasmas
- Invasive Plants
- Viruses & Viroids

STATISTICS

**Species:** 2336

**Specimens:** 10280

**Sequences:** 26892

## Welcome to EPPO-Q-bank!

*A curated database to support plant pest diagnostic activities*

**Our objective**

The aim of the EPPO-Q-bank is to support diagnostic activities of phytosanitary organizations: national plant protection organizations, general inspection bodies, and private laboratories. The analysis of DNA sequences (e.g. barcodes) is increasingly used for diagnostics in phytosanitary laboratories. Barcoding uses short DNA sequences specific to a well-defined taxon for species identification. A database with reliable sequences generated from vouchered biological material is an indispensable tool to detect and identify harmful quarantine organisms.

EPPO-Q-bank comprises data of properly documented species and strains present in collections. Depending on the collection, these may be obtained for further studies or used as controls in identification and detection tests.

The entries in EPPO-Q-bank are updated by a team of curators with taxonomic, phytosanitary and diagnostic expertise from national plant protection organizations world-wide and institutes with connections to relevant phytosanitary collections. The curators are functioning under the supervision of the EPPO Panel on Diagnostics and Quality Assurance and specialized diagnostic EPPO Panels.

| EPPO Code | Preferred Name | EPPO Categorization | Nb Specimens | Nb Sequences |
|---|---|---|---|---|
| Filter... | Agrilus | - select - | Filter... | Filter... |
| AGRLPL | Agrilus planipennis | A2 list | 8 | 8 |
| AGRLSO | Agrilus solieri | | 1 | 1 |
| AGRLVE | Agrilus vestitus | | 1 | 1 |

## Specimen

General information

**Name:** BCOU00055_0101

Metadata available

| | |
|---|---|
| **General information - specimen description** | |
| Stage of the specimen | adult |
| Sex of the specimen | unknown |
| **Sampling - Origin** | |
| Country of sampling | Russia |
| **Sampling - When** | |
| Sampling/isolation date | 2008-06-26 |
| **Identification - Remarks** | |
| Remarks on molecular methods | leg |

**Available for 3 species**

# *Agrilus*: EPPO Standards (D)

EPPO – FAO-REUFIS – BFW Conference

**Safeguarding Forests in Europe: Emerging Risks of *Agrilus* Wood Borers (Buprestidae)**

## *Agrilus planipennis* (AGRLPL)

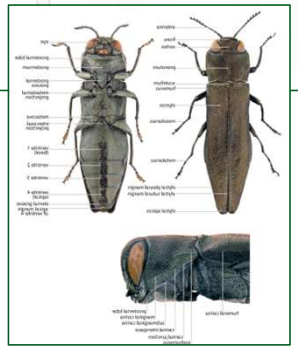
MENU

- Overview
- Distribution
- Host plants
- Host commodities
- Categorization
- Reporting
- Photos
- Documents →
- Datasheet
- EPPO links

Associated EPPO Standards

| Number | Title | Download |
|---|---|---|
| PM1/002(34) | EPPO A1 and A2 Lists of pests recommended for regulation as quarantine pests (2025) | Download |
| PM3/087(1) | Monitoring and consignment inspection of wood chips, hogwood and bark for quarantine pests | Download |
| PM7/154(1) | *Agrilus planipennis* | Download |
| PM8/011(1) | *Fraxinus* | Download |
| PM9/014(1) | *Agrilus planipennis*: procedures for official control | Download |

**Available for 2 species**



| Primer name | Sequence | Primer description |
|---|---|---|
| EABI_F3 | 5′-CTCCCTCCCTCTTT AACATTAC-3′ | External primer set |
| EABI_B3 | 5′-GATCAGACTAGTAG AGGTGT-3′ | |
| EABI-FIP[a] | 5′-ATATTAGCCGC TAATGGTGG GAATAGTCGAAA GAGGAGCAG-3′ | Internal primer set |
| EABI-BIP[b] | 5′-GGCTCTGTTGA CTTAGCAAA GGTTATTCC TATTGCTCGC-3′ | |



DOI: 10.1111/epp.12926

EPPO STANDARD ON DIAGNOSTICS

## PM 7/154 (1) *Agrilus planipennis*

**Specific scope:** This Standard describes a diagnostic protocol for *Agrilus planipennis*.
This Standard should be used in conjunction with PM 7/76 Use of EPPO diagnostic protocols[1]
**Specific approval and amendment:** First approved in 2023–04.
Authors and contributors are given in the Acknowledgements section.

### 1 | INTRODUCTION

The emerald ash borer, *Agrilus planipennis* Fairmaire, 1888 has recently established in the EPPO region and represents a threat to ash forest stands in many European countries. The native distribution range of *A. planipennis* includes East Asia, more specifically China, the Russian Far East, the Korean peninsula and under the assumption that *A. marcopoli ulmi* is synonymous to *A. planipennis*, also parts of Japan (EFSA, 2020; Orlova-Bienkowskaja & Volkovitsh, 2018). Following its recent introduction and detection in 2002 in the United States, *A. planipennis* has quickly established and rapidly spread across the eastern states of the USA and in some of the Canadian provinces. The emerald ash borer was first detected within the EPPO region in the European part of Russia in 2003, initially in Moscow (Orlova-Bienkowskaja et al., 2020; Volkovitsh & Mozolevskaya, 2014). This was then followed by detections in Eastern Ukraine in 2019 (Drogvalenko et al., 2019) and also in St Petersburg (Russia) in 2020 (Volkovitsh & Suslov, 2020). Depending on latitude and local temperatures, adult emergence usually begins in May or June, peaks in late May to early July, and adult activity can persist into September. Females lay eggs individually onto or in the crevices of tree bark. Eggs hatch within 2 weeks and larvae chew their way through the outer bark and develop in the nutritious layer between the phloem and the cambium.

able to fly over long distances especially in the spring and summer months when searching for mates and host plants. Especially when local hosts and mates are abundant, *A. planipennis* tend to attack trees in the vicinity of their original host and may colonize host trees in groups (EFSA, 2020). Passive dispersal takes place by the transportation of infested timber and firewood.

While primary host plants of the emerald ash borer are *Fraxinus* species, such as *F. mandshurica* in its native range in Asia, other *Fraxinus* species have been attacked in the US. European congeners such as *F. excelsior*, *F. angustifolia*, and *F. ornus* are all suitable hosts with a distribution across the entire European region (Baranchikov et al., 2014). Moreover, native *Fraxinus* stands are often interspersed with North American *Fraxinus* species across North – Eastern European cities, which may facilitate spread and transfer to novel hosts (see also EFSA, 2020; EPPO, 2013). In addition to the preferred *Fraxinus* species, the white fringe tree (*Chionanthus virginicus*), native to the US and an exotic ornamental in the EU, is also noted as a suitable albeit suboptimal host plant. *Olea europaea* has been found to be susceptible but in laboratory trials only (Cipollini et al., 2017). Although *Juglans mandshurica* var. *sieboldiana* as well as *Ulmus davidiana* var. *japonica*, and *Pterocarya rhoifolia* are indicated as hosts for *A. marcopoli ulmi* (Akiyama & Ohmomo, 1997 – see Chamorro et al., 2015; Jendek & Grebennikov, 2011), there is no evidence of successful larval development on these plants so far. Further details on the biology of *A. planipennis* are available in the EPPO Datasheet (EPPO, 2022).

*Agrilus* is regarded to be the most speciose genera in the animal kingdom with more than 3000 recorded species (Kelnarova et al., 2019). According to Jendek (2016), 87 species are reported in Europe: identification of *Agrilus* species thus is difficult and confirmation by a specialist is highly recommended in case of first identification (see Section 8). A flow diagram describing the diagnostic procedure for *Agrilus planipennis* is presented in Figure 1.

# *Agrilus*: EPPO Standards (PM)

EPPO – FAO-REUFIS – BFW Conference

**Safeguarding Forests in Europe: Emerging Risks of *Agrilus* Wood Borers (Buprestidae)**

## *Agrilus planipennis* (AGRLPL)

MENU

- Overview
- Distribution
- Host plants
- Host commodities
- Categorization
- Reporting
- Photos
- Documents →
- Datasheet
- EPPO links

### Associated EPPO Standards

| Number | Title | Download |
|---|---|---|
| PM1/002(34) | EPPO A1 and A2 Lists of pests recommended for regulation as quarantine pests (2025) | Download |
| PM3/087(1) | Monitoring and consignment inspection of wood chips, hogwood and bark for quarantine pests | Download |
| PM7/154(1) | *Agrilus planipennis* | Download |
| PM8/011(1) | *Fraxinus* | Download |
| PM9/014(1) | *Agrilus planipennis*: procedures for official control | Download |

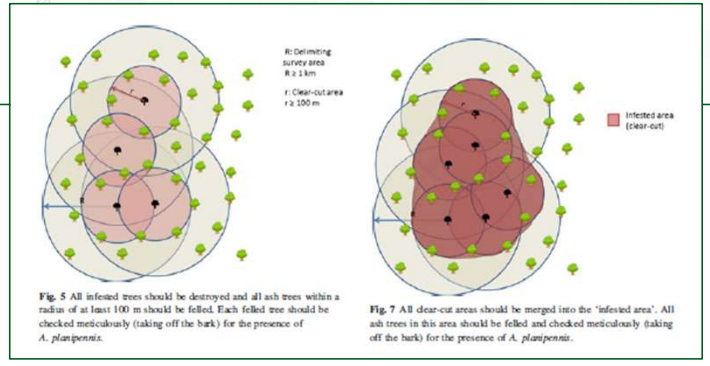


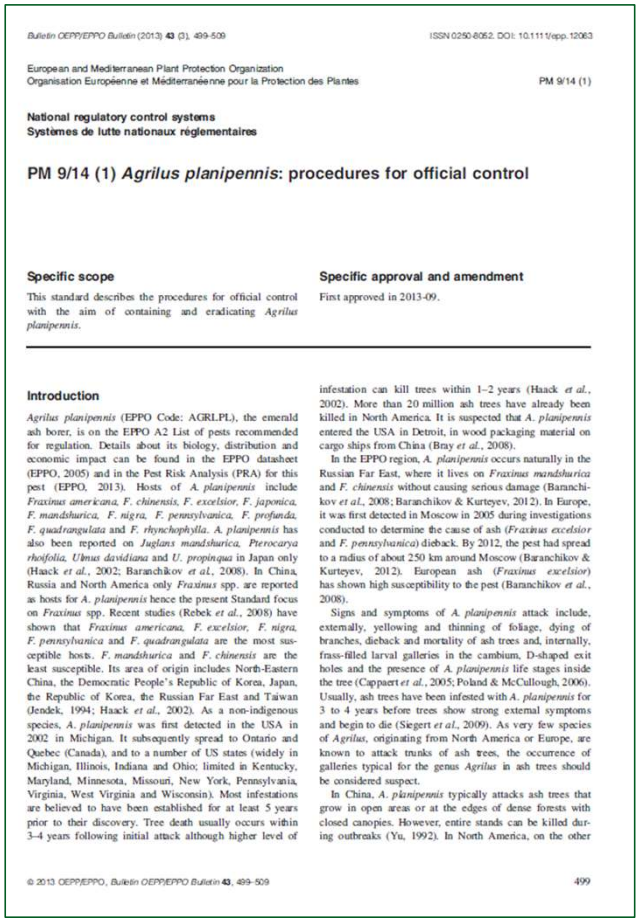
Fig. 5 All infested trees should be destroyed and all ash trees within a radius of at least 100 m should be felled. Each felled tree should be checked meticulously (taking off the bark) for the presence of *A. planipennis*.

Fig. 7 All clear-cut areas should be merged into the 'infested area'. All ash trees in this area should be felled and checked meticulously (taking off the bark) for the presence of *A. planipennis*.

pm9-014-1-en.pdf

pm9-014-1-ru.pdf

**Available for 2 species**



*Bulletin OEPP/EPPO Bulletin* (2013) **43** (3), 499-509 ISSN 0250-8052. DOI: 10.1111/epp.12063

European and Mediterranean Plant Protection Organization
Organisation Européenne et Méditerranéenne pour la Protection des Plantes PM 9/14 (1)

**National regulatory control systems**
**Systèmes de lutte nationaux réglementaires**

## PM 9/14 (1) *Agrilus planipennis*: procedures for official control

**Specific scope**

This standard describes the procedures for official control with the aim of containing and eradicating *Agrilus planipennis*.

**Specific approval and amendment**

First approved in 2013-09.

**Introduction**

*Agrilus planipennis* (EPPO Code: AGRLPL), the emerald ash borer, is on the EPPO A2 List of pests recommended for regulation. Details about its biology, distribution and economic impact can be found in the EPPO datasheet (EPPO, 2005) and in the Pest Risk Analysis (PRA) for this pest (EPPO, 2013). Hosts of *A. planipennis* include *Fraxinus americana, F. chinensis, F. excelsior, F. japonica, F. mandshurica, F. nigra, F. pennsylvanica, F. profunda, F. quadrangulata* and *F. rhynchophylla*. *A. planipennis* has also been reported on *Juglans mandshurica, Pterocarya rhoifolia, Ulmus davidiana* and *U. propinqua* in Japan only (Haack *et al.*, 2002; Baranchikov *et al.*, 2008). In China, Russia and North America only *Fraxinus* spp. are reported as hosts for *A. planipennis* hence the present Standard focus on *Fraxinus* spp. Recent studies (Rebek *et al.*, 2008) have shown that *Fraxinus americana, F. excelsior, F. nigra, F. pennsylvanica* and *F. quadrangulata* are the most susceptible hosts. *F. mandshurica* and *F. chinensis* are the least susceptible. Its area of origin includes North-Eastern China, the Democratic People's Republic of Korea, Japan, the Republic of Korea, the Russian Far East and Taiwan (Jendek, 1994; Haack *et al.*, 2002). As a non-indigenous species, *A. planipennis* was first detected in the USA in 2002 in Michigan. It subsequently spread to Ontario and Quebec (Canada), and to a number of US states (widely in Michigan, Illinois, Indiana and Ohio; limited in Kentucky, Maryland, Minnesota, Missouri, New York, Pennsylvania, Virginia, West Virginia and Wisconsin). Most infestations are believed to have been established for at least 5 years prior to their discovery. Tree death usually occurs within 3–4 years following initial attack although higher level of infestation can kill trees within 1–2 years (Haack *et al.*, 2002). More than 20 million ash trees have already been killed in North America. It is suspected that *A. planipennis* entered the USA in Detroit, in wood packaging material on cargo ships from China (Bray *et al.*, 2008).

In the EPPO region, *A. planipennis* occurs naturally in the Russian Far East, where it lives on *Fraxinus mandshurica* and *F. chinensis* without causing serious damage (Baranchikov *et al.*, 2008; Baranchikov & Kurteyev, 2012). In Europe, it was first detected in Moscow in 2005 during investigations conducted to determine the cause of ash (*Fraxinus excelsior* and *F. pennsylvanica*) dieback. By 2012, the pest had spread to a radius of about 250 km around Moscow (Baranchikov & Kurteyev, 2012). European ash (*Fraxinus excelsior*) has shown high susceptibility to the pest (Baranchikov *et al.*, 2008).

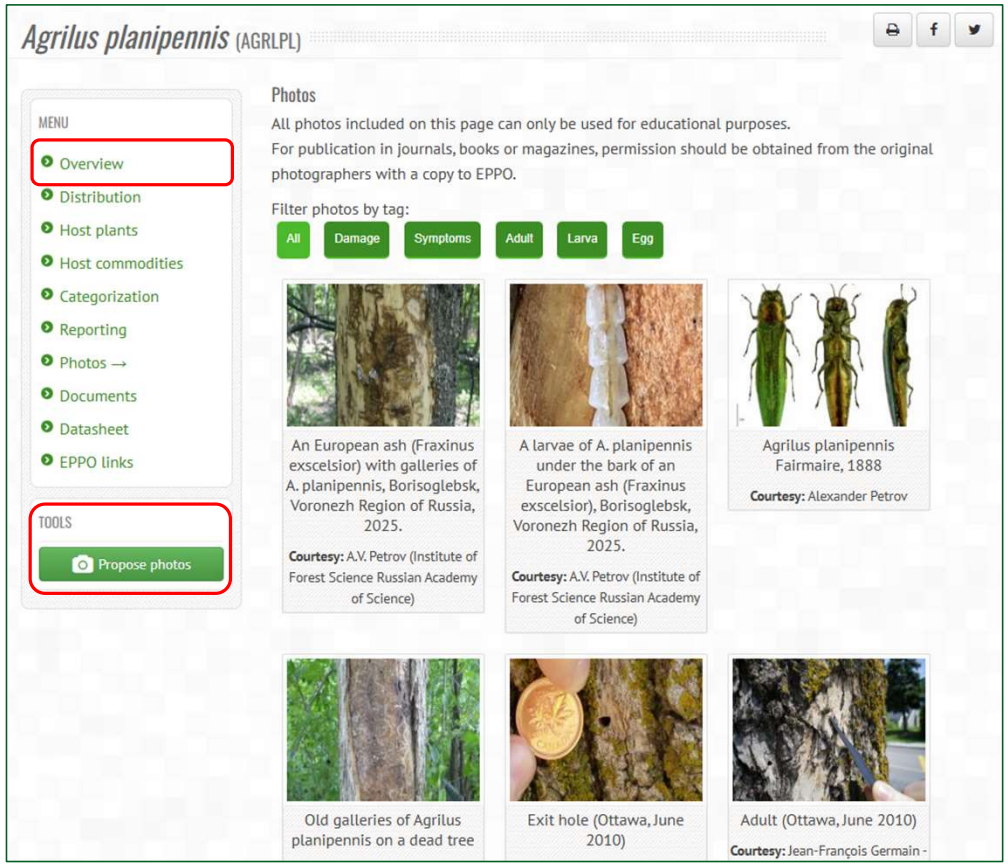
Signs and symptoms of *A. planipennis* attack include, externally, yellowing and thinning of foliage, dying of branches, dieback and mortality of ash trees and, internally, frass-filled larval galleries in the cambium, D-shaped exit holes and the presence of *A. planipennis* life stages inside the tree (Cappaert *et al.*, 2005; Poland & McCullough, 2006). Usually, ash trees have been infested with *A. planipennis* for 3 to 4 years before trees show strong external symptoms and begin to die (Siegert *et al.*, 2009). As very few species of *Agrilus*, originating from North America or Europe, are known to attack trunks of ash trees, the occurrence of galleries typical for the genus *Agrilus* in ash trees should be considered suspect.

In China, *A. planipennis* typically attacks ash trees that grow in open areas or at the edges of dense forests with closed canopies. However, entire stands can be killed during outbreaks (Yu, 1992). In North America, on the other

© 2013 OEPP/EPPO, *Bulletin OEPP/EPPO Bulletin* **43**, 499–509 499

# *Agrilus*: GD photos






*Agrilus fleischeri* and *Agrilus ater*
(Photo: E. Endek)

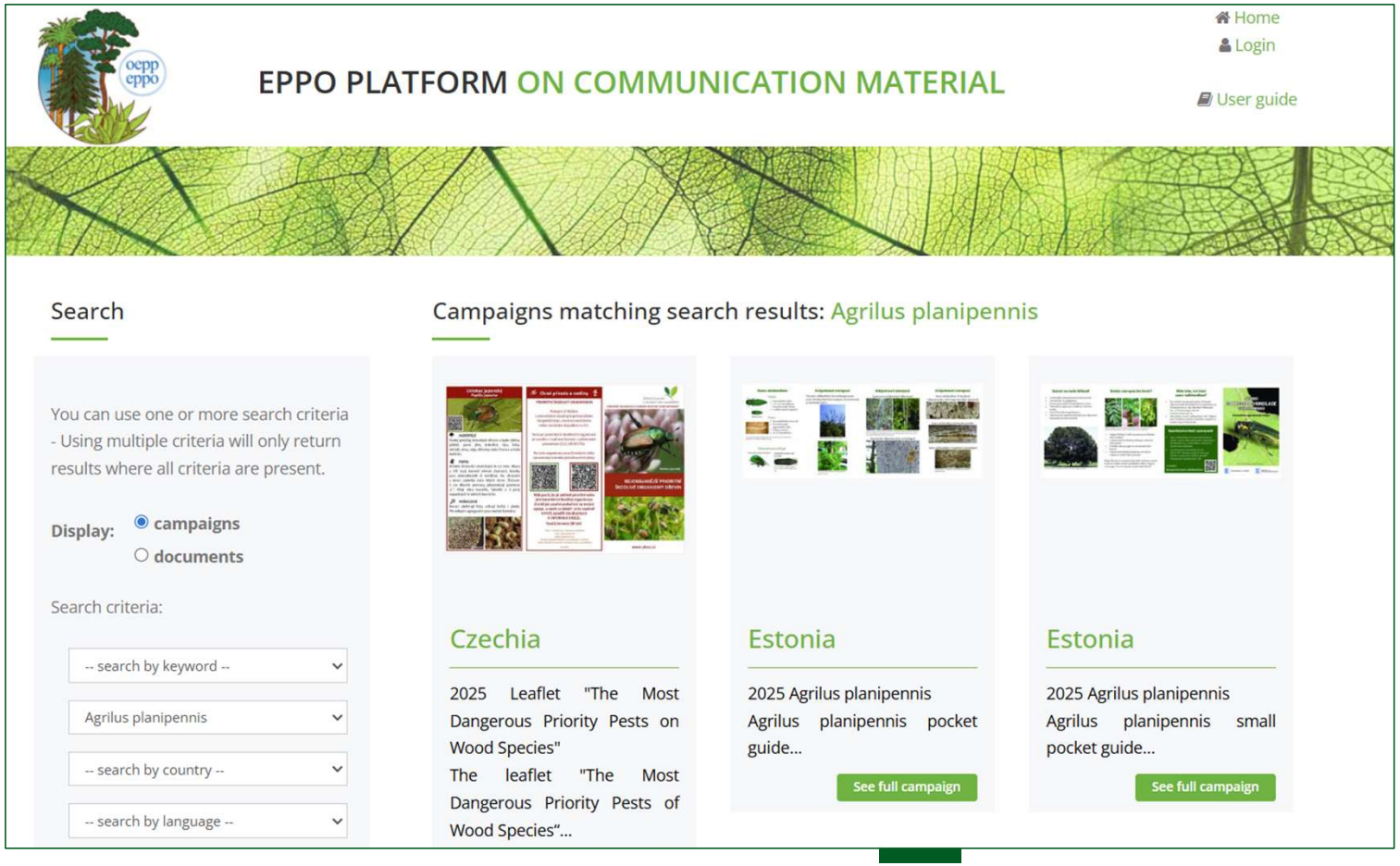

*A. bilineatus*
(Photo: S. A. Katovich)

**Available for 6 species:**
- *A. anxius,*
- *A. bilineatus,*
- *A. ater,*
- *A. fleischeri,*
- *A. mali,*
- *A. planipennis.*

# *Agrilus*: Communication materials

EPPO – FAO-REUFIS – BFW Conference

**Safeguarding Forests in Europe: Emerging Risks of *Agrilus* Wood Borers (Buprestidae)**





**Available only for 4 species:**
- *A. anxius,*
- *A. bilineatus,*
- *A. fleischeri,*
- *A. planipennis.*

# *Agrilus*: Support from experts

EPPO – FAO-REUFIS – BFW Conference

Safeguarding Forests in Europe: Emerging Risks of *Agrilus* Wood Borers (Buprestidae)

**Information resources** of EPPO are **widely used** by **NPPOs, practitioners** and **researchers** in EPPO member countries and beyond.

**EPPO** always **welcomes contribution** and **support** from experts:

- new **country** and **host** records,
- good and verified **photos** of pests: larvae, adults, signs and symptoms of damage, commodities with symptoms, etc.,
- national **PRAs**,
- **sequences** for EPPO-Q-Bank,
- proposals and data for **new Standards** (diagnostic or others) or for **revisions of Standards**,
- **communication material**, etc.

Symptoms on intercepted wood dunnage (2015, Ontario): galleries and D-shaped exit holes

**Courtesy:** S. Cecchini, Canadian Food Inspection Agency

Adult on Populus, Jilin province (China, 2017)

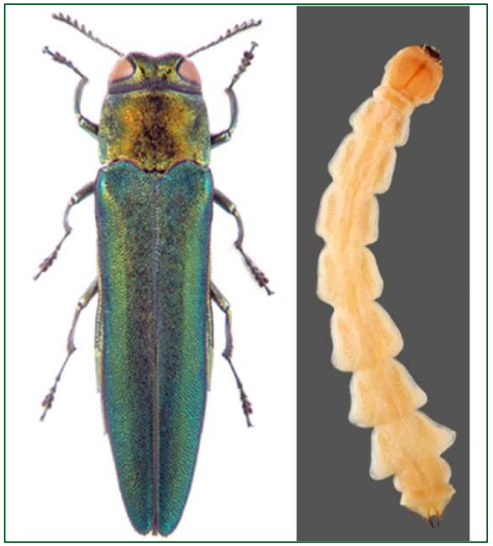
**Courtesy:** E. Jendek

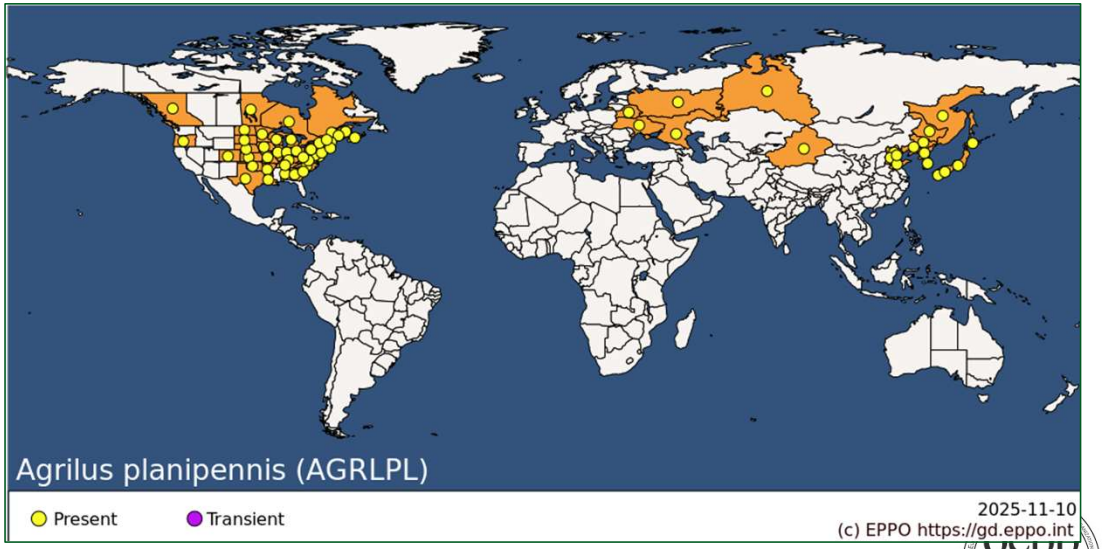

# *Agrilus*: EPPO *Agrilus* Network

EPPO – FAO-REUFIS – BFW Conference

Safeguarding Forests in Europe:
Emerging Risks of *Agrilus* Wood Borers
(Buprestidae)

## In 2022, the EPPO Panel on Quarantine Pests for Forestry proposed to organize a Network of experts working on surveillance, monitoring, and control of *Agrilus planipennis* in Europe



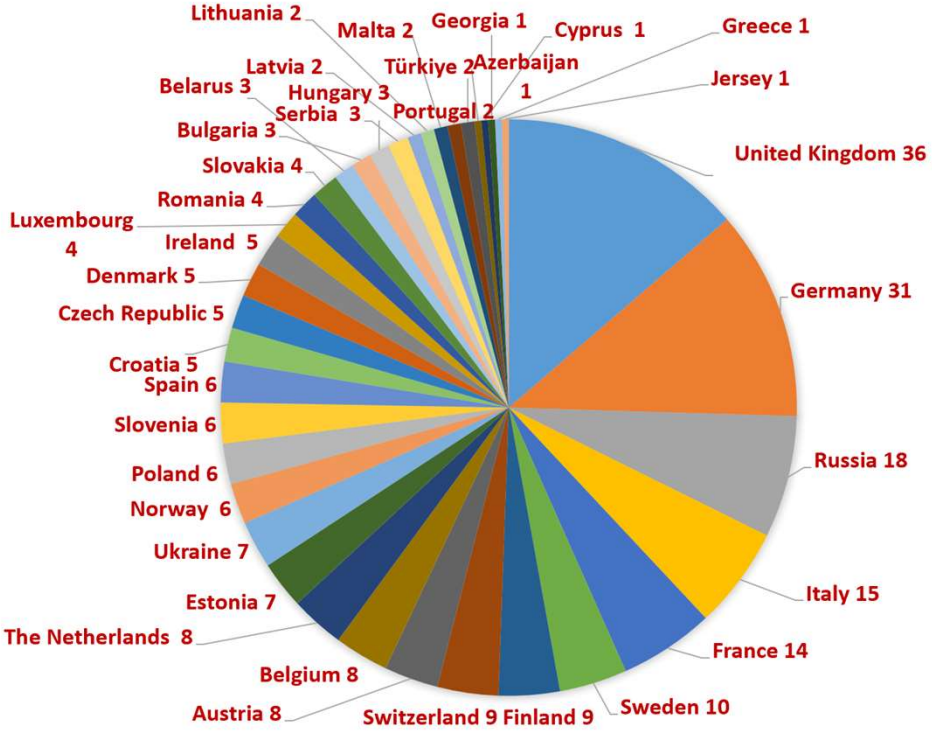


# *Agrilus*: EPPO *Agrilus* Network

EPPO – FAO-REUFIS – BFW Conference

Safeguarding Forests in Europe: Emerging Risks of *Agrilus* Wood Borers (Buprestidae)

By now, in the Network there are **320+ members** from **47 countries** including **40 EPPO member countries.**






**To subscribe:**
**https://forms.office.com/e/7GxvJkS0YT**
**or email dm@epp.int**

# *Agrilus*: EPPO *Agrilus* Network

EPPO – FAO-REUFIS – BFW Conference

**Safeguarding Forests in Europe: Emerging Risks of *Agrilus* Wood Borers (Buprestidae)**

HOME | ABOUT EPPO | MEETINGS | ACTIVITIES | RESOURCES | MEMBERS ONLY

**Network of experts working on surveillance, monitoring, and control of the Emerald ash borer, *Agrilus planipennis***

**REGISTER NOW** for the the **EPPO-REUFIS-BFW Conference on 'Safeguarding Forests in Europe: Emerging Risks of *Agrilus* Wood Borers (Buprestidae)'** (Vienna, 2026-04-21/23).

In October 2022, the EPPO Panel on Quarantine Pests for Forestry decided to establish a network of experts working on surveillance, monitoring, and control of *Agrilus planipennis* (Coleoptera: Buprestidae – Emerald ash borer).

This network was established in association with an EPPO-EU project (Grant agreement SANTE/2020/G1/EPPO/SI2.823766).

On the 5th of December 2024, EPPO held a webinar **'Emerald ash borer (*Agrilus planipennis*) in the EPPO region: preparedness of countries for its further spread'.**
**View presentations:** /MEETINGS/2024_meetings/wk_agrilus_planipennis

Adult – Courtesy: Eduard Jendek

Larva– Courtesy: Eduard Jendek

Exit hole – Courtesy: Eduard Jendek

Trap – Courtesy: Dominic Eyre

FORSAID

**The Network is supported by the EU Horizon Europe Research and Innovation programme (grant # 101134200 "*FORSAID: Forest surveillance with artificial intelligence and digital technologies*".**

# *Agrilus*: EPPO *Agrilus* Network

EPPO – FAO-REUFIS – BFW Conference

**Safeguarding Forests in Europe: Emerging Risks of *Agrilus* Wood Borers (Buprestidae)**

## Newsletters of the Network


**2023**

- Newsletter # 1 (July 2023)
- Newsletter # 2 (September 2023)
- Newsletter # 3 (December 2023)

**2024**

- Newsletter # 4 (March 2024)
- Newsletter # 5 (June 2024)
- Newsletter # 6 (September 2024)
- Newsletter # 7 (December 2024)

**2025**

- Newsletter # 8 (April 2025)

## Useful links

**EPPO Standards and documents on *Agrilus planipennis***

- EPPO Standards. Phytosanitary procedures. PM 3/87 (1) Monitoring and consignment inspection of wood chips, hogwood and bark for quarantine pests [2019]
- EPPO Standards. Diagnostics. PM 7/154(1) *Agrilus planipennis* [2023]
- EPPO Standards. Commodity-specific phytosanitary measures. PM 8/11 (1) *Fraxinus* [2020]
- EPPO Standards. National regulatory control systems. PM 9/14 (1) *Agrilus planipennis*: procedures for official control [2013]
- EPPO Pest Risk Analysis for *Agrilus planipennis* [2013]
- EPPO Datasheet on *Agrilus planipennis* [revised in 2021]
- EPPO Reporting Service articles on *Agrilus planipennis*

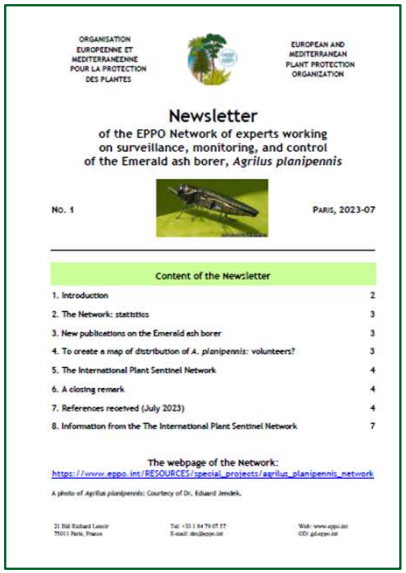
FORSAID

# *Agrilus*: EPPO *Agrilus* Network

EPPO – FAO-REUFIS – BFW Conference

**Safeguarding Forests in Europe: Emerging Risks of *Agrilus* Wood Borers (Buprestidae)**

## In 2023–2025, 9 issues of the Newsletter were published



ORGANISATION EUROPEENNE ET MEDITERRANEENNE POUR LA PROTECTION DES PLANTES

EUROPEAN AND MEDITERRANEAN PLANT PROTECTION ORGANIZATION

**Newsletter**
of the EPPO Network of experts working on surveillance, monitoring, and control of the Emerald ash borer, *Agrilus planipennis*

No. 1 PARIS, 2023-07

Content of the Newsletter



The webpage of the Network:
https://www.eppo.int/RESOURCES/special_projects/agrilus_planipennis_network

A photo of *Agrilus planipennis*: Courtesy of Dr. Eduard Jendek.


21 Bld Richard Lenoir 75011 Paris, France Tel: +33 1 84 79 07 57 E-mail: dm@eppo.int Web: www.eppo.int GD: gd.eppo.int


ORGANISATION EUROPEENNE ET MEDITERRANEENNE POUR LA PROTECTION DES PLANTES

EUROPEAN AND MEDITERRANEAN PLANT PROTECTION ORGANIZATION

**Newsletter**
of the EPPO Network of experts working on surveillance, monitoring, and control of the Emerald ash borer, *Agrilus planipennis*

No. 3 PARIS, 2023-12

Content of the Newsletter



The webpage of the Network:
https://www.eppo.int/RESOURCES/special_projects/agrilus_planipennis_network

Photo of *Agrilus planipennis* above: Courtesy of Dr. Eduard Jendek.


21 Bld Richard Lenoir 75011 Paris, France Tel: +33 1 84 79 07 57 E-mail: dm@eppo.int Web: www.eppo.int GD: gd.eppo.int


ORGANISATION EUROPEENNE ET MEDITERRANEENNE POUR LA PROTECTION DES PLANTES

EUROPEAN AND MEDITERRANEAN PLANT PROTECTION ORGANIZATION

**Newsletter**
of the EPPO Network of experts working on surveillance, monitoring, and control of the Emerald ash borer, *Agrilus planipennis*

No. 5 PARIS, 2024-06

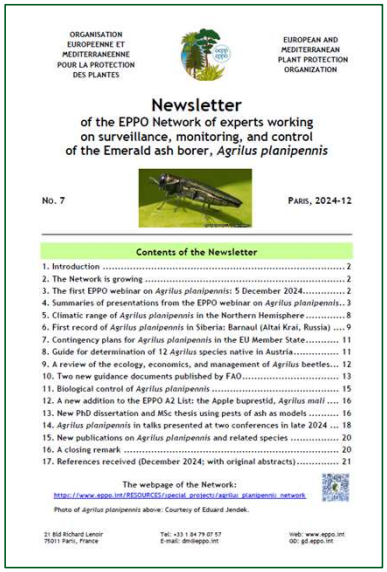
Contents of the Newsletter



The webpage of the Network:
https://www.eppo.int/RESOURCES/special_projects/agrilus_planipennis_network

Photo of *Agrilus planipennis* above: Courtesy of Eduard Jendek.


21 Bld Richard Lenoir 75011 Paris, France Tel: +33 1 84 79 07 57 E-mail: dm@eppo.int Web: www.eppo.int GD: gd.eppo.int

ORGANISATION EUROPEENNE ET MEDITERRANEENNE POUR LA PROTECTION DES PLANTES

EUROPEAN AND MEDITERRANEAN PLANT PROTECTION ORGANIZATION

**Newsletter**
of the EPPO Network of experts working on surveillance, monitoring, and control of the Emerald ash borer, *Agrilus planipennis*

No. 7 PARIS, 2024-12

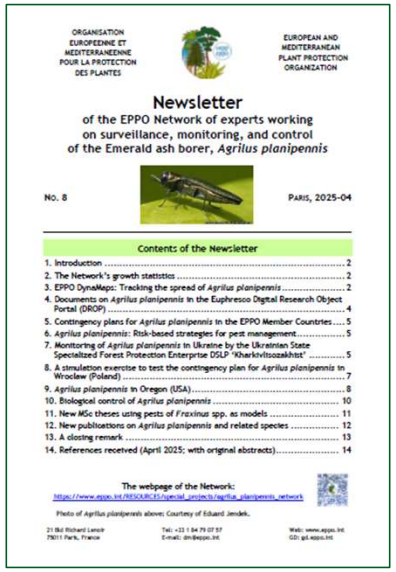
Contents of the Newsletter



The webpage of the Network:
https://www.eppo.int/RESOURCES/special_projects/agrilus_planipennis_network

Photo of *Agrilus planipennis* above: Courtesy of Eduard Jendek.


21 Bld Richard Lenoir 75011 Paris, France Tel: +33 1 84 79 07 57 E-mail: dm@eppo.int Web: www.eppo.int GD: gd.eppo.int

ORGANISATION EUROPEENNE ET MEDITERRANEENNE POUR LA PROTECTION DES PLANTES

EUROPEAN AND MEDITERRANEAN PLANT PROTECTION ORGANIZATION

**Newsletter**
of the EPPO Network of experts working on surveillance, monitoring, and control of the Emerald ash borer, *Agrilus planipennis*

No. 8 PARIS, 2025-04

Contents of the Newsletter



The webpage of the Network:
https://www.eppo.int/RESOURCES/special_projects/agrilus_planipennis_network

Photo of *Agrilus planipennis* above: Courtesy of Eduard Jendek.


21 Bld Richard Lenoir 75011 Paris, France Tel: +33 1 84 79 07 57 E-mail: dm@eppo.int Web: www.eppo.int GD: gd.eppo.int

# *Agrilus*: EPPO *Agrilus* Network

EPPO – FAO-REUFIS – BFW Conference

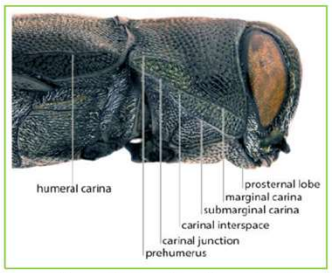
**Safeguarding Forests in Europe: Emerging Risks of *Agrilus* Wood Borers (Buprestidae)**

## 6. A new EU Commission Implementing Regulation on measures to prevent the establishment and spread of *Agrilus planipennis* within the Union territory

European Commission

The European Commission prepared a draft of the Commission Implementing Regulation (EU) on measures to prevent the establishment and spread of *Agrilus planipennis* Fairmaire within the Union territory (https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/14026-Plant-health-measures-to-eradicate-prevent-the-spread-of-the-emerald-ash-borer-Agrilus-planipennis-_en). This document, after adoption, will regulate how to carry out risk-based surveys to detect *A. planipennis*, establish demarcated areas, perform annual surveys in demarcated areas, prepare and apply eradication measures, prepare contingency plans and annual reporting. The draft considers *Chionanthus*

## 4. New EPPO Diagnostic Standard PM 7/154 (1) for *Agrilus planipennis*




In August 2023, EPPO published a new **Diagnostic Standard PM 7/154 (1) for *Agrilus planipennis***. This Standard covers identity, symptoms, detection methods (both morphological and molecular), remarks on possible confusion with adults of other native Buprestidae species, keys and diagnostic tables for larvae and adults. The protocol contains 40 figures and figure plates. This new Standard was originally drafted by: Dr. M. de Groot (Department of Forest Protection, Slovenian Forestry Institute), Dr. E.O. Campbell (Canadian Food Inspection Agency, Government of Canada), Dr. T. Bukovinszky (Netherlands Food and Consumer

## 6. EABRACE: A new project focused on *Agrilus planipennis*

**Iryna Matsiakh** (Swedish University of Agricultural Sciences) obtained financial support from the Svenska Institute (https://si.se/) to study the invasion of *A. planipennis*. The project **'EABRACE: Emerald ash borer invasion: exploring spread patterns and xylobiont beetle biodiversity dynamics for strategic conservation measures'** will run for two years - from November 2024 to November 2026.

**The aim of the project** is to monitor the spread of *A. planipennis* towards the EU border and to assess the dynamics of the xylobiont beetles' biodiversity during the invasion of *A. planipennis*.

## 12. New publications on *Agrilus planipennis* and related species

After the release of the previous Newsletter, information on **29 new publications** on *A. planipennis* and on other relevant species (taxonomically related *Agrilus* species and key pests of *Fraxinus* spp.) have been received (24 journal papers, 3 conference abstracts, 1 guideline, and 1 book chapter; in addition to the data on new theses - see Section 11).

## 13. New PhD dissertation and MSc thesis using pests of ash as models

Recently, a PhD dissertation and a MSc thesis, in which *A. planipennis* and ash dieback caused by another important pest of ash trees - *Hymenoscyphus fraxineus* respectively were used as models, were presented in the USA and the United Kingdom:

FORSAID

oepp eppo

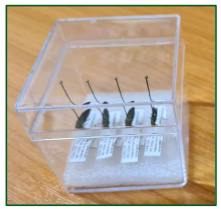
# *Agrilus*: EPPO *Agrilus* Network

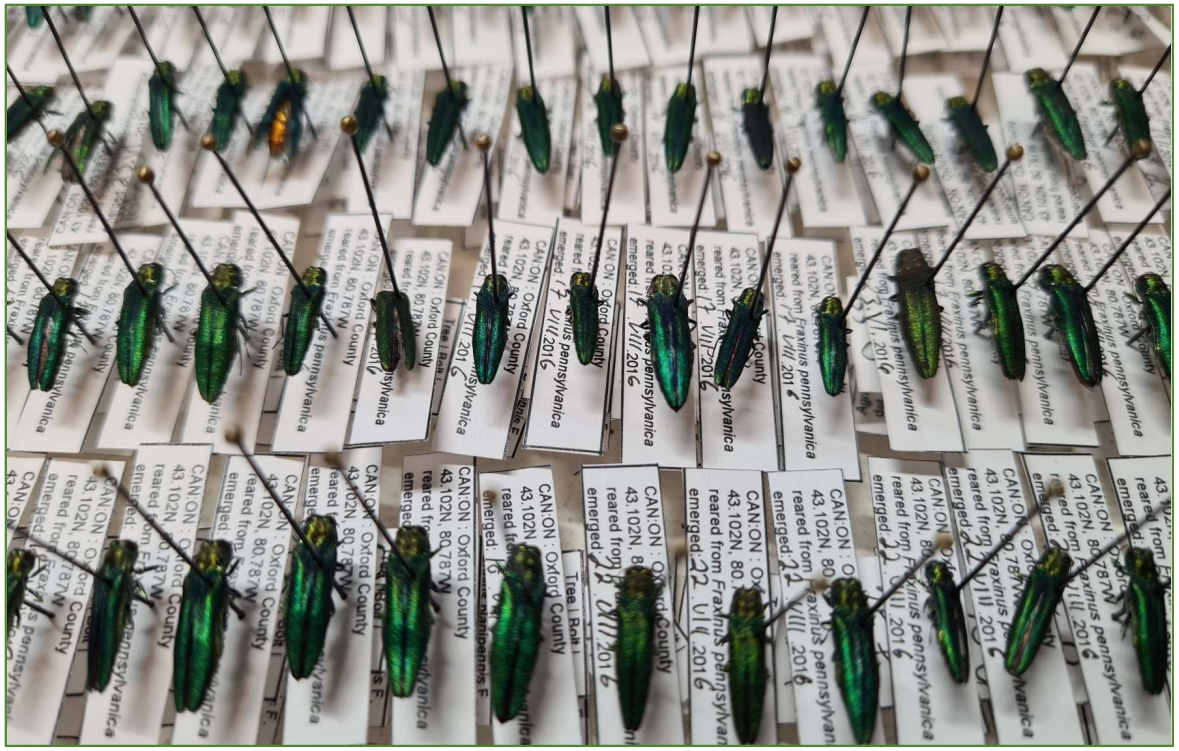
EPPO – FAO-REUFIS – BFW Conference

Safeguarding Forests in Europe: Emerging Risks of *Agrilus* Wood Borers (Buprestidae)

## A call to share reference specimens

Ukraine to Sweden
United Kingdom to Sweden
United Kingdom to Estonia
United Kingdom to Romania
Russia to EPPO
Canada to EPPO
EPPO to Malta
EPPO to Latvia
EPPO to EURL
EPPO to Poland





FORSAID



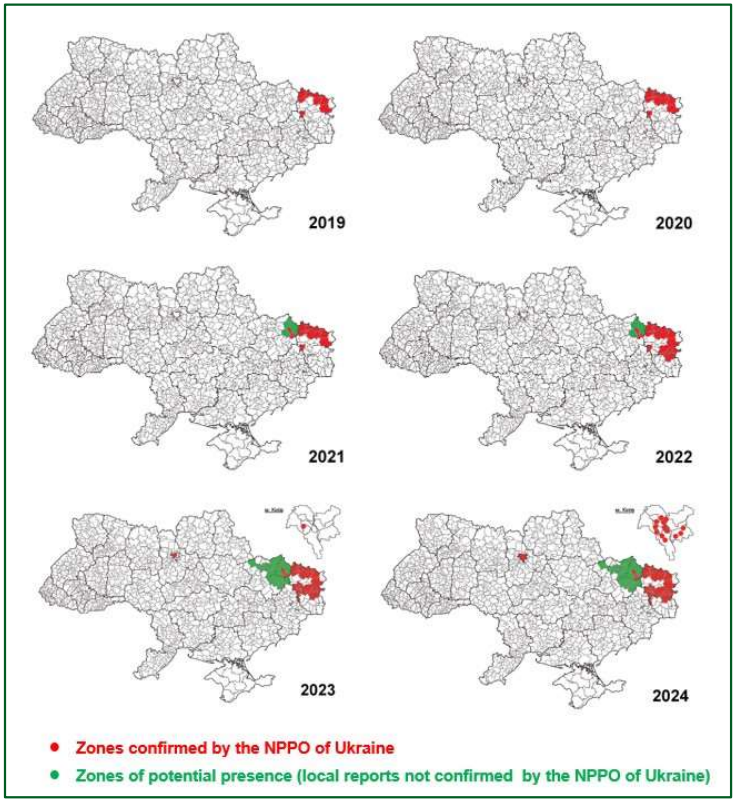
oepp eppo

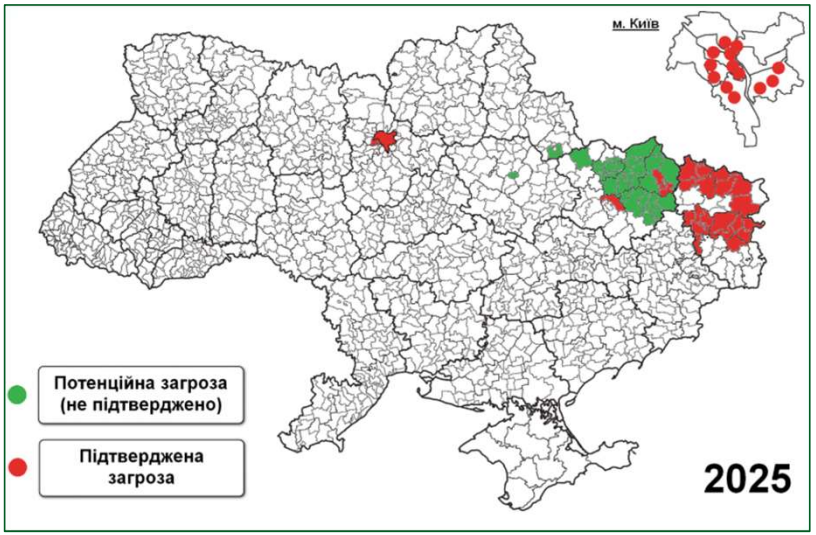
# *Agrilus*: EPPO *Agrilus* Network

EPPO – FAO-REUFIS – BFW Conference

Safeguarding Forests in Europe: Emerging Risks of *Agrilus* Wood Borers (Buprestidae)

## A call to create a dynamic map of spreading in Europe




**The Ukrainian State Specialized Forest Protection Enterprise DSLP "Kharkivlisozakhist"** publishes on its webpage a dynamic map showing the change of the range of *A. planipennis* in Ukraine in 2019-2025 (https://lisozahyst.at.ua/index/agrilus-planipennis/0-17).

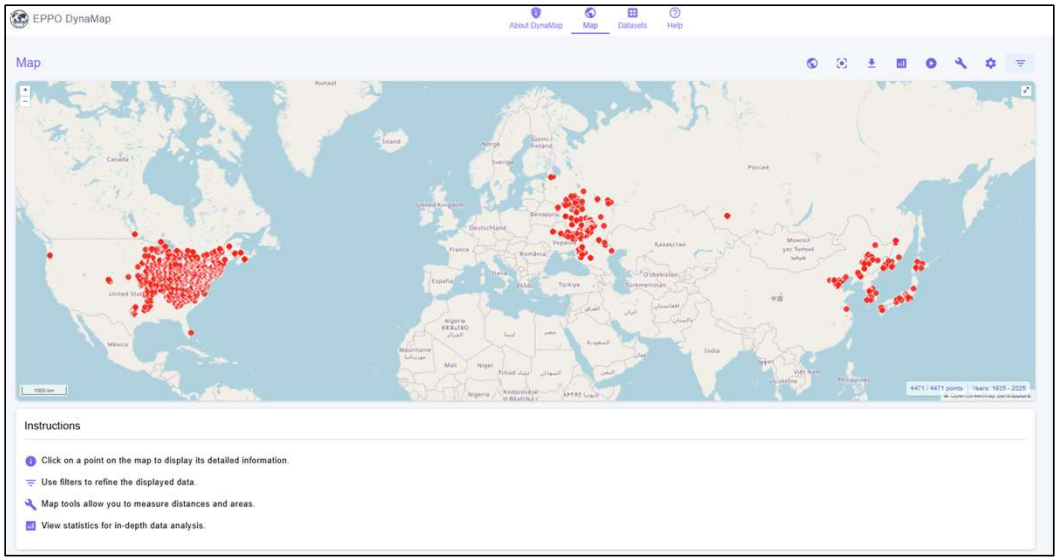
# *Agrilus*: EPPO *Agrilus* Network

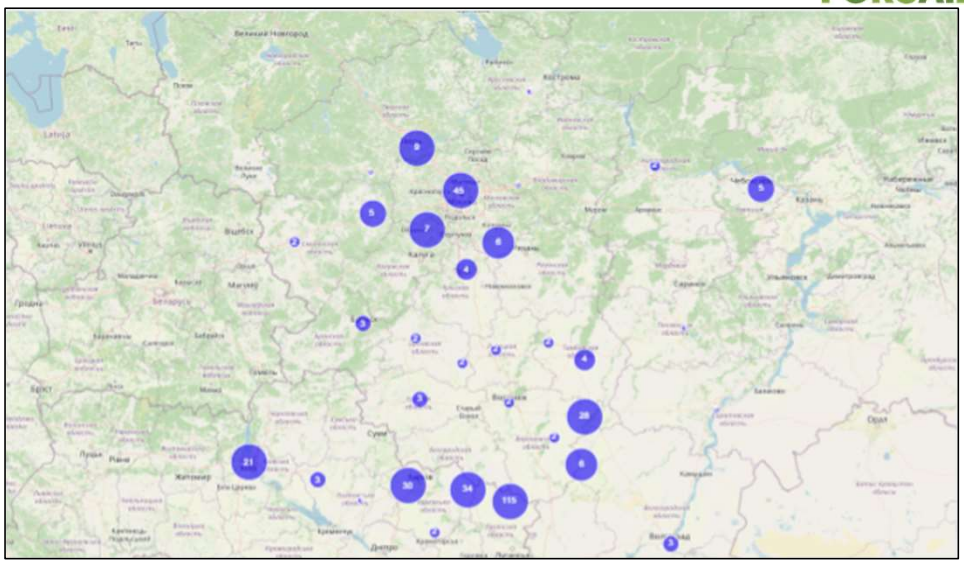
EPPO – FAO-REUFIS – BFW Conference

Safeguarding Forests in Europe: Emerging Risks of *Agrilus* Wood Borers (Buprestidae)

## EPPO dynamic map of spread of the emerald ash borer

FORSAID



**Currently** there are approximately **4500 records** of *A. planipennis* from native (Asia) and invasive ranges (North America, the Russian Federation, Ukraine, and Belarus).

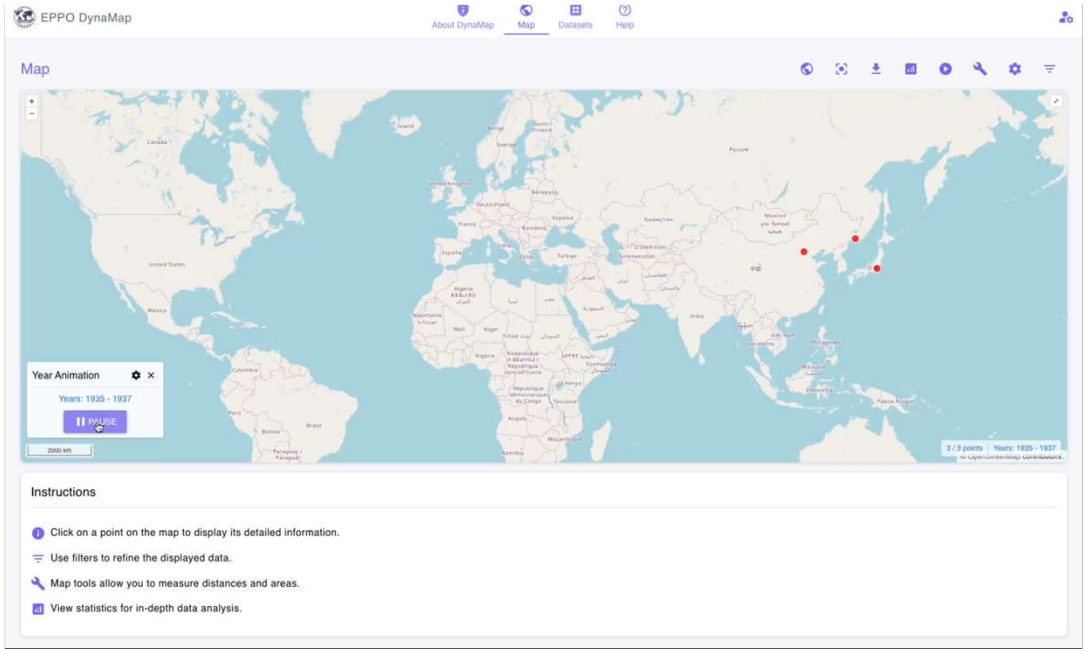
**Verification of data is needed**

# *Agrilus*: EPPO *Agrilus* Network

EPPO – FAO-REUFIS – BFW Conference

Safeguarding Forests in Europe: Emerging Risks of *Agrilus* Wood Borers (Buprestidae)

## EPPO dynamic map of spread of the emerald ash borer




animation

# *Agrilus*: EPPO *Agrilus* Network

EPPO – FAO-REUFIS – BFW Conference

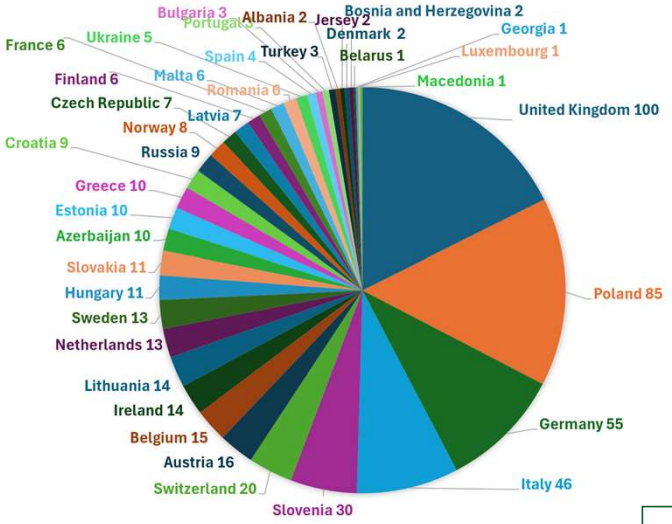
Safeguarding Forests in Europe: Emerging Risks of *Agrilus* Wood Borers (Buprestidae)

FORSAID

A webinar (12-2024): **'Emerald ash borer (*Agrilus planipennis*) in the EPPO region: preparedness of countries for its further spread':**

Presentations from **Belarus, Estonia, Finland, Latvia, Russian Federation, 600+** attendees from **55** countries registered.

| Continent | Countries | Attendees |
|---|---|---|
| Europe | 39 | 574 |
| Asia | 8 | 9 |
| Africa | 4 | 5 |
| Americas | 3 | 9 |
| Australia | 1 | 3 |
| TOTAL | 55 | 600 |
| | | |
| EPPO MC | 42 | 578 |




*eppo.int/MEETINGS/2024_meetings/wk_agrilus_planipennis*

Download the program and summaries of presentations

# *Agrilus*: New resources

EPPO – FAO-REUFIS – BFW Conference

Safeguarding Forests in Europe: Emerging Risks of *Agrilus* Wood Borers (Buprestidae)

## What can we do together?

**EPPO welcomes contribution from experts:**

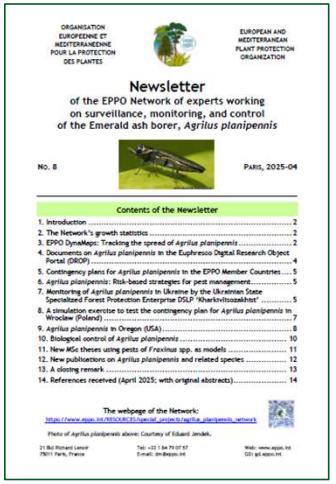
- new **country** and **host** records,
- good and verified **photos** of pests, signs and symptoms of damage, etc.,
- national **PRAs**,
- **sequences** for EPPO-Q-Bank,
- proposals and data for **new Standards** (diagnostic or others) or for **revisions of Standards**,
- **communication material**, etc.

**To join the Network** and **subscribe** to its **Newsletter:** https://forms.office.com/e/7GxvJkS0YT

or **email** dm@epp.int

We will be happy to **publish** in Newsletter your notes, highlight your news, projects, publication focused on *Agrilus planipennis.*

FORSAID



Newsletter
of the EPPO Network of experts working on surveillance, monitoring, and control of the Emerald ash borer, *Agrilus planipennis*

No. 8 PARIS, 2025-04

Contents of the Newsletter

# *Agrilus*: New resources

EPPO – FAO-REUFIS – BFW Conference

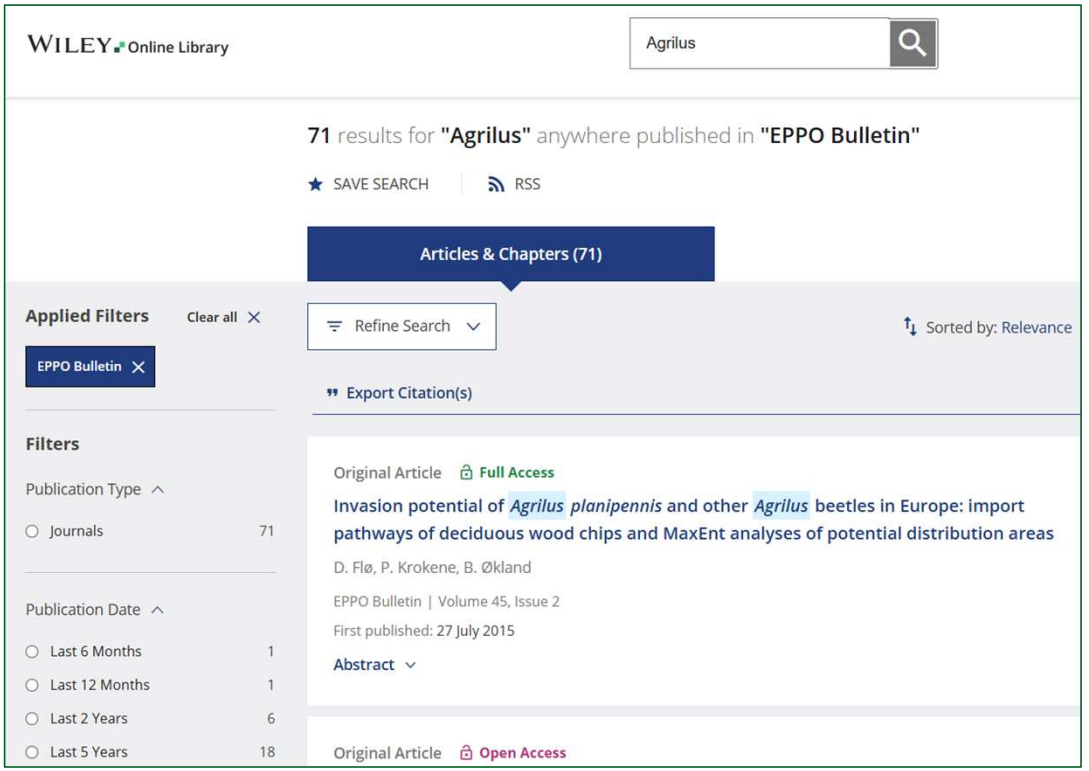
Safeguarding Forests in Europe: Emerging Risks of *Agrilus* Wood Borers (Buprestidae)

## What can we do together?

### We can create new resources:

**(1) presentations** and **posters** from this conference in a pdf format (*if approved by the authors*) and a **video record** can be **stored online** at the Network' web page,

**(2)** a **virtual issue** of the ***EPPO Bulletin*** on ***Agrilus*** wood borers could be organized if we have *at least 5* full size original research or review papers; it is also possible to **link** all past papers and Standards relevant to *Agrilus* spp. to this **virtual issue**.



Thank you for attention, participation and contribution (*past and future*)!


linkedin.com/company/eppo-oepp/

bsky.app/profile/epponews.bsky.social

www.facebook.com/EPPOsecretariat/

youtube.com/@eppoparis2849