







Helicoverpa armigera (EPPO Global Database, courtesy Regina Sugayama)

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EURL Activities

Three-level virtual training - 2022: save the dates!

A comprehensive agenda for the training on *Thaumatotibia leucotreta* is planned to increase the expertise of the NRLs on this pest. The training is offered in a well-proven manner with two virtual workshops and with a practical training in-between. In the first workshop general information on the pest and basics of pest-specific identification methods are presented. Training samples will give the opportunity for the participating NRLs to establish and/or test the introduced methods and moreover to offer a first check of their proficiency. In the second virtual workshop the results of the practical training will be discussed including a tailor-made feedback and support for the NRLs, so that they are well-prepared for the following proficiency test.

First virtual workshop: September 14th, 2022

Practical training: September 21st - October 7th, 2022

Second virtual workshop: October 12th, 2022

Proficiency Tests and validation of diagnostic tests for Thaumatotibia leucotreta

The false codling moth *Thaumatotibia leucotreta* was chosen as the main focus of the EURL's activities in 2022. In addition to the three-level virtual training preceding the molecular proficiency test in the second half of the year, the proficiency test on the morphological identification of *T. leucotreta* larvae (22TLM) has been launched already. Unlike previous years, this year EURL is experimenting with a new PT format. Instead of producing a large number of sample sets to be sent to the participants at the same time, this time it was decided to prepare a more limited number of sample sets to be circulated among the participants. This format allows organizers to overcome the problem of obtaining a large number of specimens, especially non-target specimens, which is often the bottleneck in organizing a

PT for a large number of participants. The sample sets have been prepared in a number of six and they will be sent sequentially to six participants at a time. A number of four subsequent shipments is planned from May to September to cover a maximum number of 30 participants. After each round of analysis, each sample set will return to organizer to be checked and recoded. Each participant will be randomly assigned to a PT round of analysis. Therefore, participants are kindly requested to be flexible in order to adapt to the allocated timeframe and to adhere strictly to deadlines. A delay in returning samples may affect the entire organization of the PT as the samples are intended to be used for other









participants, too. The shipment date (and consequently the deadline for carrying out the analysis, communicating the results to the organizer and returning the sample set) has been communicated to each participants by e-mail. No sample shipments will be made in the period from July 18th to August 26th. Since the PT items are soft-bodied larvae, extreme care in handling the samples is required of the participants so that the samples can be used for subsequent shipments to other participants. The use of blunt/rounded tip forceps is strongly recommended to limit the risk of piercing and damaging the larvae.

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For the molecular identification of *Thaumatotibia leucotreta* a proficiency test will be organized from October 25 till November 17. Samples for this PT will not only include DNA, but it is also planned to include homogenized insect tissue of targets and non-targets. NRLs are encouraged to perform DNA extraction on these additional samples proving their capability of dealing with this additional important step in the process of molecular diagnosis of Lepidoptera.

In addition, the EURL team is currently carrying out a validation study on morphological and molecular tests for the identification of *T. leucotreta* with the aim of producing performance characteristics for the EPPO Diagnostic Protocol PM7/137(1), the EPPO PM7/129(2) and more. Stay tuned!

EURL Slack workspace: an interface for faster exchanges

During our latest annual workshop, some NRLs requested a more efficient tool to get punctual assistance for identifications. Tephritidae, more especially larvae, are a common example of this kind of need. This tool should ideally keep a fluent and quick contact between NRL members, and also enable to share files and general information.



We selected Slack to develop an EURL workspace. The free version of this platform might match our demand. After an initial internal trial period, the workspace was proposed to all NRL members and several external guests. Everyone was invited to create an account with a specially designed display name. The name actually provides other members with the name, the country and the entomological abilities of the account owner. It therefore enables the requester to address his question to the relevant recipient(s).

More than discussions about a precise topic (e.g. the identification of a pictured sample), we also may share identification tools (keys, articles...). However, Slack is not intended to be a storage cloud. For long term purposes, files are hence better housed on the EURL website. We will set up a link between the EURL Slack workspace and the EURL website.

The workspace is thus freshly starting to reinforce the communication within EURL network. We all need to use it in order to fully grasp its potential. A user's guide is available on the workspace (read-me-first channel), it shall be amended with our experience. On 15th of April, we were 119 registered users. If you're still not one of them... please push the door: https://eurlnetwork.slack.com/







Training: morphological identification of *Thrips palmi*

This year we propose a training course focused on thrips. The first goal is the morphological identification of *Thrips palmi*, but it actually ambitions a wider scope providing an overview of the order and a methodological guidance for the preparation of samples. Here is a pre-program, which might still evolve according to the participants' expectations:



- Introduction to Thysanoptera (ecology, taxonomy, economical importance... etc.)
- Overview of classification (suborders and main families)
- Sampling and slide mounting
- Initiation to the morphology of adult Terebrantia
- Identification of adult *Thrips palmi* and morphologically close species (*T. alni, T. tabaci, T. flavus, T. nigropilosus...*): keys and practice

The course is planned on **October 20**th-**21**st, **2022 in Montpellier**. It is free with all transport and accommodation expenses taken in charge by Europe for NRL members. <u>If you are interested, you may apply now</u>. However, please notice that we may welcome only seven participants. According to the number of applications, this session might be repeated next year.

Workshop 2022: Vienna, November 29th

We are very pleased to announce the next EURL workshop for Entomology. This year's event will take place in-person at AGES, Vienna on November 29. Due to the uncertainties of the Covid pandemic, it will be possible to participate vitually also!









Focus: Eurytoma plotnikovi reported in France

In late 2020, fifty or so surprisingly small pistachio nuts were collected during a routine agronomical survey in an orchard of South-Eastern France. After opening, the nuts showed aborted seeds: this was suspected to be caused by drought. The seeds were however maintained under artificial conditions to allow for potential pest emergence. In July 2021, twenty adult wasps emerged and were identified by ANSES as *Eurytoma plotnikovi* Nikol'skaya, 1934 (Hymenoptera: Eurytomidae). The species is reported from France for the first time.

Eurytoma plotnikovi is a specialized seed-feeder of pistachio trees, with four host plants reported in the genus *Pistacia*. It is currently reported from 10 countries in Central Asia, and Mediterranean area (Tunisia, Greece, Iran, Turkey, Israel and Italy). Its distribution range is increasing: in Sicily, the first damages were reported in 2009. We hypothesize that the introduction in France is some years old: the high level of infestation found in the sample suggests indeed a well-established population, while the locality of detection is more



than 200 km far from the Italian border. An artificial introduction through the importation of green and untreated seeds is also possible though less probable than natural spread.

Eurytoma plotnikovi is generally considered as one of the most harmful pests for untreated crops, with for example major yield losses reported in Tunisia and Turkey. Conversely, in Iran, where it used to be considered as a major pest, it has now only a minor impact in managed crops though it is abundant on wild trees. This suggests that it is highly susceptible to chemical protection. As alternative control measures, sanitation is of critical importance.

An official report was issued in France. *Eurytoma plotnikovi* cannot yet be considered as a significant pest there because pistachio trees are hardly cultivated so far. This crop is however often organically grown and developed in Southern France as an alternative in response to global warming. More, *Pistacia terebinthus* is very common in the wild and could therefore favor the natural spread of the wasp. Third, as a spreading pest *E. plotnikovi* could also become an emerging threat in Spain, where pistachio crops are more common.

Rousse P, Reynaud P. (*In press*). First report of the pistachio-seed pest wasp *Eurytoma plotnikovi* in France. EPPO bulletin.







News about EU Priority Pests

Anoplophora chinensis (update on situation in Italy, management strategy)

- A Pistoia vinta la battaglia contro il tarlo asiatico, insetto dannoso per le piante
- Testing trapping protocols for detecting the Citrus Longhorn Beetle, *Anoplophora chinensis* (Coleoptera: Cerambycidae)

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Agrilus planipennis (potential spread)

• <u>Invasive populations of the Emerald Ash Borer Agrilus planipennis Fairmaire, 1888</u> (Coleoptera: Buprestidae) in Saint Petersburg, Russia: a hitchhiker?

Bactericera cockerelli (first reports in Peru and Colombia)



- EPPO Reporting Service no. 3 2022 Num. article: 2022/054
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- Reporte de Bactericera cockerelli (Šulc) (Hemiptera: Triozidae) en el departamento de Nariño
- SENASA: 'Zebra chip', plaga de la papa, no está presente en el Perú

Popillia japonica (update on situation in Italy, diagnostics)

- La *Popillia japonica* invade il Vercellese
- EPPO Reporting Service no. 04 2022 Num. article: 2022/081
- SYBR Green-based real-time PCR test for the identification of adults and larvae of the Japanese beetle *Popillia japonica* Newman (Coleoptera Scarabaeidae)

Upcoming events on Insects and Mites

- First International Day of Plant Health, worldwide on May 12th, 2022.
- XXII European Congress of Lepidopterology, Laulasmaa, Estonia, June 06th-11th, 2022.
- EFSA's ONE Health, Environment, Society, Brussels, Belgium, June 21st-24th, 2022.
- 26th International Congress of Entomology (ICE), Helsinki, Finland, July 18th-23rd, 2022.
- 11th International Symposium on Aphids, Katowice (Poland), September 12th-17th, 2022.
- 11th International Symposium on Fruit Flies of Economic Importance (ISFFEI), Sidney, Australia, November 14th-18th, 2022.







News about other EU regulated/non regulated invasive species

Name	Order: Family	Status*	Data
Anisandrus maiche	Coleoptera: Curc. Scolytinae	IIA	First report in Italy
Apriona sp.	Coleoptera: Cerambycidae	A1	Outbreak eradication Netherlands
Arboridia kakogawana	Hemiptera: Cicadellidae	А	First report in Ukraine
Aleurocanthus woglumi	Hemiptera: Aleyrodidae	IIA	Potential distribution
Cacyreus marshalli	Lepidoptera: Lycaenidae	A2	<u>Update on distribution in Europe</u>
Cnestus mutilatus	Coleoptera: Curc. Scolytinae	IIA	First report in Italy
Draeculacephala robinsoni	Hemiptera: Cicadellidae	IIA	First reports in France and Spain
Elachiptera decipiens	Diptera: Chloropidae	NL	<u>Update on pest status</u>
Eotetranychus lewisi	Acari: Tetranychidae	IIA	Outbreak eradication Netherlands
Euwallacea fornicatus	Coleoptera: Curc. Scolytinae	A2	<u>Update on situation in Netherlands</u>
Garella musculana	Lepidoptera: Noctuidae	A2	First report in Italy
Hercinothrips dimidiatus	Thysanoptera: Thripidae	NL	First report in Italy
Monochamus alternatus	Coleoptera: Cerambycidae	A1	Interception report in Denmark
Myzus mumecola	Hemiptera: Aphididae	NL	First report in Germany, Hungary and Serbia
Opogona sacchari	Lepidoptera: Tineidae		Outbreak eradication in Poland
Pochazia shantungensis**	Hemiptera: Ricaniidae	Α	<u>Update on distribution in France</u> <u>First report in Germany</u>
Pomacea maculata	Gastropoda: Pomaceae	A2	<u>Update on situation in Spain</u>
Rhagoletis merzi	Diptera: Tephritidae	NL	New pest description
Rhagoletis cingulata	Diptera: Tephritidae	A2	First report in Slovakia
Ripersiella hibisci	Hemiptera: Pseudococcidae	A1	<u>Update on situation in Italy</u> <u>First report in Spain</u>
Scirtothrips aurantii	Thysanoptera: Thripidae		Update on situation in Spain
Sophonia orientalis	Hemiptera: Cicadellidae	NL	First report in Portugal
Thrips parvispinus	Thysanoptera: Thripidae	Ex A	Interception report in Germany
Toumeyella parvicornis	Hemiptera: Coccidae	Α	Update on situation in Italy
Xylotrechus chinensis	Coleoptera: Cerambycidae	Α	<u>Update on situation in France</u>

^{*} IIA, IIB, III: EU 2019/2072 Annex number --- A: EPPO alert lists number --- ex A: formerly EPPO alert list --- NL: not listed

^{**} Debated specific identity. The invasive populations might actually be *Ricania sublimata* (Jacobi, 1916). The verifications are in progress.







CONTACT US

Dear colleagues, the aim of this newsletter is to be a means of disseminating information within the EU National Reference Laboratory network. Therefore, if you wish to contribute by sharing information about your laboratory activities and research projects on regulated/invasive arthropod pests (especially focused on identification), feel free to send us a proposition of short article! Contact us and we will include your article in the next issue. In this way, we will be able to increase the frequency of publication of the newsletter and make it more helpful and coparticipatory.

EURL Website:

https://eurl-insects-mites.anses.fr/

EURL email:

eurl-insects-mites@anses.fr