

9TH EUROPEAN HEMIPTERA CONGRESS

Kurdějov, Czechia, 25.6.–1.7.2023

Book of abstracts



Editors:

Petr KMENT & Igor MALENOVSKÝ

Organising institutions

Department of Botany and Zoology, Faculty of Science, Masaryk University, Brno
Moravian Museum, Brno
National Museum of the Czech Republic, Prague

Congress venue: Hotel Kurdějov, Kurdějov, Czechia

Date: 25 June–1 July 2023

Organising Committee

Igor Malenovský (Masaryk University & Moravian Museum, Brno, Czechia)
Petr Baňář (Moravian Museum, Brno, Czechia)
Petr Kment (National Museum of the Czech Republic, Prague, Czechia)
Ilija Gjonov (Sofia University "St. Kliment Ohridski", Sofia, Bulgaria)
Monika Pramatarova (Sofia University "St. Kliment Ohridski", Sofia, Bulgaria)

Scientific Committee

Thierry Bourgoïn (Museum national d'Histoire naturelle, Paris, France)
Jolanta Brożek (University of Silesia, Katowice, Poland)
Daniel Burckhardt (Naturhistorisches Museum, Basel, Switzerland)
Attilio Carapezza (University of Palermo, Italy)
Dmitry Dmitriev (Illinois Natural History Survey, Champaign, USA)
Alvin Jonathan Helden (Anglia Ruskin University, Cambridge, UK)
Werner Holzinger (Oekoteam, Graz, Austria)
Dalva Luiz de Queiroz (Embrapa Florestas, Colombo, PR, Brazil)
Jacek Szwedo (University of Gdańsk, Poland)
Attila Torma (University of Szeged, Hungary)

Recommended reference to an abstract

BIESZCZAD B. & SZWEDO J. 2023: Hemiptera of the European Jurassic World – unique and informative. P. 9. In: KMENT P. & MALENOVSKÝ I. (eds.): *9th European Hemiptera Congress, Kurdějov, Czechia, 25.6.–1.7.2023. Book of abstracts*. National Museum of the Czech Republic, Prague, 50 pp.

Publisher: National Museum of the Czech Republic, Prague

Published on-line: <https://eurohemiptera.eu/abstract-book>

Issued as a non-periodical special purpose publication.

The abstract book is not issued for the purposes of the zoological nomenclature.

The authors are responsible for the language editing and content of the contributions.

e-ISBN 978-80-7036-770-4

Diversity of aphids (Hemiptera: Aphidomorpha) landing on nectarine trees in the orchards in Serbia [P]

JOVIČIĆ I. (1), MASSIMINO COCUZZA G. E. (2) & PETROVIĆ-OBRADOVIĆ O. (3)

(1) Institute of Pesticides and Environmental Protection, Belgrade – Zemun, Serbia; (2) Department of Agriculture, Food and Environment, University of Catania, Catania, Italy; (3) University of Belgrade, Faculty of Agriculture, Belgrade – Zemun, Serbia

Several aphid species (Hemiptera: Aphididae) can cause direct feeding damage to nectarines. Many winged aphid species fly over from other plants, making short feeding trials on nectarine in search of a host plant. Some of them play an important role in the transmission of plant viruses and cause indirect damage to this plant. This study aimed to evaluate the diversity of aphids landing on nectarine trees, with particular reference to the species described in the literature as known vectors of Plum Pox Virus (PPV). The study was conducted in important nectarine growing areas in Serbia, at Topola and Sr. Mitrovica sites, during the three-year study (2020–2022). The sticky shoot method was used to capture winged aphids that landed on the nectarine leaves during the growing season. Every 10–15 days, two shoots on five randomly selected trees were sprayed with glue. The aphids from the shoots were treated with turpentine and soapy water and preserved in 70% ethanol. Aphids were identified morphologically and molecularly through PCR techniques. During the study, 388 aphid specimens were collected (286 in Topola and 102 in Sr. Mitrovica). The highest total number of aphids was caught in 2020 (309). In the two following years, a much lower number of aphids was recorded (18 in 2021 and 61 in 2022). Aphid population dynamics fluctuated greatly during the growing season. Maximum population density of aphids and maximum potential vector activity were detected in May–June at both sites in all three years. The highest density (5.2 specimens per shoot) was detected at the Topola site on 10th May 2020. The collected specimens were classified into 43 different taxa. The most abundant species belong to the genera *Aphis*, *Rhopalosiphum*, and *Therioaphis*. One of the most abundant species at the Topola sites was *Viteus vitifoliae* (Phylloxeridae). The identification of this species was confirmed by molecular techniques. Several species collected in this study (*Aphis craccivora*, *A. fabae*, *A. gossypii*, *A. pomi/spiraecola*, *Hyalopterus pruni*, *Macrosiphum rosae*, *Myzus persicae*, *Phorodon humuli*, *Rhopalosiphum maidis*, *R. padi*) are potential vectors of PPV. The proportion of known PPV vectors in the total number of detected aphids on nectarine was 8.03, 33.33 and 20.75% in Topola, and 17.60, 33.33, and 50% in Sr. Mitrovica in 2020, 2021 and 2022, respectively.

Going north: Morphology, new records of *Cinara cedri* (Hemiptera, Aphididae: Lachninae) in Europe and its potential distribution in future [P]

KANTURSKI M. (1), BUGAJ-NAWROCKA A. (1) & PETROVIĆ-OBRADOVIĆ O. (2)

(1) Institute of Biology, Biotechnology and Environmental Protection, Faculty of Natural Sciences, University of Silesia, Katowice, Poland; (2) Faculty of Agriculture, University of Belgrade, Belgrade, Serbia

The genus *Cinara* Curtis, 1835 is the largest in Lachninae and one of the largest genera in Aphididae as a whole. Species of this genus are very characteristic and specialized to feed on green or woody parts of coniferous trees and shrubs. *Cinara cedri* Mimeur, 1936 is a well-known *Cedrus* pest native to the Mediterranean. Apterous viviparous females of this species are dark bronze or reddish-brown with darker segmental markings and a distinctive but variable pattern of white wax, usually comprising a spinal stripe and paired dorsolateral segmental patches, as well as a ventral dusting of wax powder. They live on branches between needles in