



13th International Symposium on Syrphidae

22 – 27 June 2026

Primiero San Martino di Castrozza, Italy

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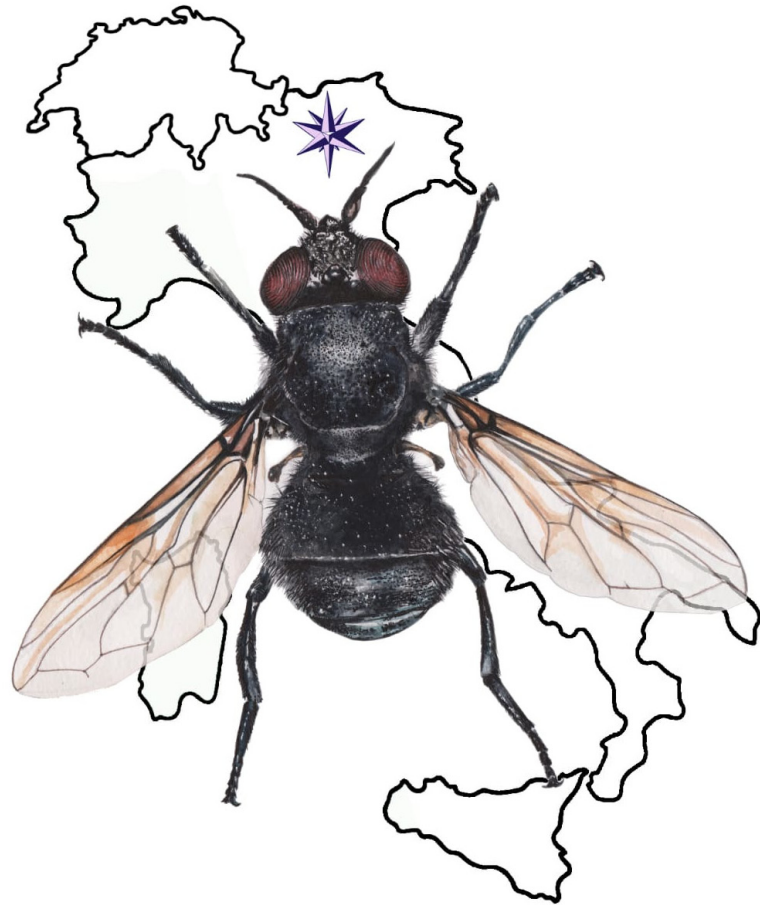
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PANEVEGGIO
PALE DI SAN MARTINO
Parco Naturale



BOOK OF ABSTRACTS

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Taxonomic problems in the genus *Chrysotoxum* (Diptera: Syrphidae) in Europe

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Keywords: integrative taxonomy, hoverflies, mtDNA COI gene, nuclear ITS2 region

The genus *Chrysotoxum* (Diptera, Syrphidae) represents a widely distributed group of hoverflies, with 20 species recorded in Europe. Some currently recognized names likely encompass more than one species. The aim of this presentation is to highlight these taxa and address key taxonomic issues. The previously observed variability in *C. lunulatum* Brullé, 1833 suggests the presence of more than one species. Furthermore, as the result of our recent research, morphological differences have been observed between populations of *Chrysotoxum festivum* (Linnaeus, 1758), *C. vernale* Loew, 1841, and *C. elegans* Loew, 1841 from the Iberian Peninsula and those from the rest of Europe. Additionally, the Balkan endemic *C. orthostylus* Vujić in Nedeljković et al., 2015 shows variability across different parts of the peninsula. A similar pattern is found in *C. montanum* Nedeljković & Vujić in Nedeljković et al., 2015, when comparing populations from the Balkan Mountains, the Alps, and Central Europe. However, the previously published morphological diagnostic characters between *C. bicinctum* (Linnaeus, 1758) and *C. volaticum* Séguy, 1961 remain unclear. Thus, in order to gain a more comprehensive understanding of the diversity within this genus, molecular data including both 3' and 5' ends of the mitochondrial COI gene as well as the nuclear ITS2, were incorporated into cluster analyses, particularly addressing taxonomic challenges associated with *C. festivum*, *C. vernale*, *C. elegans*, *C. lunulatum*, and *C. bicinctum*.

Acknowledgements: This work was funded by the by the Ministry of Science, Technological Development and Innovation of the Republic of Serbia (Grants No. 451-03-33/2026-03/ 200125, 451-03-34/2026-03/ 200125, and 451-03-33/2026-03/ 200358), as well as by the Balkan Pollinator Digital Survey (Balkan Pollis) project, supported through the Third Party Project (3PP) Grant Contract of the TETTRIs initiative funded under the Horizon Europe framework.