SCIENTIFIC AND TECHNICAL REPORT

Contract no 82PCE/2025

Stage no 1/2025: Exploring the diversity of the model parasitoid genera

Project code: PN-IV-P1-PCE-2023-1971

Title: An integrative taxonomic approach to parasitic wasps: how frequent are the cryptic species within an economically important group?

Acronym: PARACRYS

Résumé of the activities

In the first stage of the project, we sampled in 5 localities in the Suceava, Neamț and Iași counties. We could collect only from the end of July to August, when the studied groups are present as adults.

In parallel, we selected specimens with associated DNA extracts from the collection of the Research Group for Diversity and Phylogeny of Invertebrates at the Faculty of Biology. Approximately 270 specimens from the genera *Eupelmus* (83 specimens), *Spalangia* (130 specimens) and *Trissolcus* (54 specimens) were identified. A number of 13 samples were sorted to morphospecies (families Eupelmidae and Encyrtidae).

Reagents, consumables and equipment were purchased: a 3-channel Azure Cielo qPCR system, a Leica M80 stereomicroscope, a DELL workstation for phylogenetic analyses, a NAS (network attached storage) for the sequencing and genomic data, etc.

We finalized the competition for the employment of two master's students (contracts will be signed starting January 1, 2026).

Conferences

Fusu L. (2025). The Role of Integrative Taxonomy of Microhymenopterans in Plant Protection. The 5th International Conference on Mountainous Agriculture and Green Plant Protection, Guiyang, China, August 8-12, 2025. Invited speaker.
https://www.gzu.edu.cn/en/2025/0930/c11084a258841/page.htm

Jugariu Vicoleanu A., Fusu L. (2025). Utilitatea markerului molecular its în delimitarea speciilor genului Ooencyrtus (Hymenoptera, Encyrtidae): pseudogene. A cincea ediție a Sesiunii științifice *Tendințe în biologie: de la molecule la sisteme complexe*, Iaşi, Romania, 23-26 octombrie 2025. Poster. http://ssfb.bio.uaic.ro/2025/10/23/fbss-2025-program/

Jugariu Vicoleanu A., Tudosie P.M., Fusu L. (2025) Optimising the use of COI and ITS2 markers for molecular delimitation of *Ooencyrtus* (Hymenoptera, Encyrtidae). 27th Young Systematists' Forum, UK, November 14. Online presentation.

Project director,

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