

The moths from the Vasile Vicol Collection at the Zoological Museum of Babeş-Bolyai University

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Abstract: The Lepidoptera collection of Professor Vasile Vicol, preserved at the Zoological Museum of Babeş-Bolyai University, represents a valuable scientific legacy for the study of moth biodiversity in Romania. Compiled between 1975 and 2001, the collection comprises 3,247 specimens of moths belonging to 491 species, with strong representation from Mureş County and adjacent regions. In this study, the authors present the continuation of digitization efforts of the collection, following previous work on the butterflies. This assemblage complements an earlier collection (1957–1973, ~13,000 specimens) currently housed at the Museum of Natural Sciences in Târgu Mureş, reflecting more than four decades of dedicated entomological activity.

The collection covers a wide ecological and zoogeographical range, from mesophilous and mesohygrophilous species to xerothermophilous taxa recorded on the southern slopes near Sânmărghita and Iernut. Zoogeographically, Eurasian, West Asian–Mediterranean, and Holarctic elements are predominant, with additional representation from Ponto-Mediterranean taxa. Several rare and protected species are included, such as *Eriogaster catax* (LINNAEUS, 1758), *Proserpinus proserpina* (PALLAS, 1772), *Conisania poelli ostrogovich* (DRAUDT, 1933), *Drasteria caucasica* (MÉNÉTRIÉS, 1832), *Watsonarctia deserta* (BARTEL, 1906), and *Periphanes cora* (EVERSMANN, 1837), some of which were collected in habitats with particular ecological sensitivity.

The development of the collection reflects both Professor Vicol's lifelong dedication to entomology and the broader trends of faunistic research in Romania during the late 20th century. Safeguarded today within an academic institution, it continues to serve as a key reference for taxonomy, ecology, and conservation.

This study highlights the significance of legacy entomological collections as both cultural heritage and essential resources for contemporary biodiversity research, bridging historical data with present-day conservation needs.

Keywords: Lepidoptera, moths, entomological collections, biodiversity, taxonomy, digitization, Romania.

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