

### **Ichneumon wasp (Ichneumonidae) faunistics, taxonomy and evolution (Zoltán Vas)**

Ichneumon wasps (Hymenoptera: Ichneumonidae) are one of the most diverse families in the animal kingdom. The number of described species exceeds 30,000, while the true species richness of the family is estimated about 60,000. In Hungary, there are at least 3,000 species; however, the number of the unrecognised ones could be more hundred. Although they are particularly important for biological control against insect pests, not many experts study them due to the difficulties inherent within their identification.

Ichneumon wasps represent one of the most scarcely known groups of the Hungarian fauna. Since the death of the last Hungarian specialist, E. Bajári in 1963, a huge amount of unidentified ichneumon wasp has been accumulated in the Hymenoptera Collection. The items mainly come from Hungary and other parts of the Carpathian Basin; nevertheless, the material from various collecting trips abroad is also remarkable. The ongoing process of the unidentified items is expected to bring several faunistical and taxonomical results.

Additionally, their huge diversity and parasitoid life history enable them to be excellent subjects for macroevolutionary comparative studies.



*Rynchobanchus flavopictus*: an ichneumon wasp new to the Hungarian fauna. The specimen was collected in 1959 but it hid amongst the unidentified material until 2013. (Photo: Tamás Németh, Hungarian Natural History Museum.)



*Brachycyrtus ornatus*: an ichneumon wasp species new the Hungarian fauna collected by Ottó Merkl in 2013 in Budapest. (Photo: Tamás Németh, Hungarian Natural History Museum.)

### **Hymenoptera faunistics in Hungary (Zoltán Vas)**

Besides Ichneumonidae, the identification of the material is continuous in the following taxa: Vespidae, Pompilidae, Spheciformes, Scoliidae, Gasteruptiidae, Symphyta (except for Cephidae, Tenthredinidae). The faunistically interesting records (e.g. species new to the Hungarian fauna) are to be published.



*Sceliphron caementarium*: a new mud-dauber wasp species in the Hungarian fauna. It is basically an American species that was accidentally introduced to Western Europe. By expansion, it has already appeared in Hungary. (Photo: Tamás Németh, Hungarian Natural History Museum.)