

FOSSIL ICHNEUMONIDAE (HYMENOPTERA) OF CENOZOIC

Andrey I. Khalaim

Zoological Institute of the Russian Academy of Sciences, St. Petersburg, Russia.
hymenopt@zin.ru

Ichneumonidae is one of the largest animal families, which includes over 30,000 recent described species. Real number of species is much greater. Oldest representatives of Ichneumonidae are recorded from uppermost Jurassic or Lower Cretaceous, and belong to the fossil subfamily Tanychorinae. In Eocene and Oligocene the family began to flourish, fossil subfamilies Townesitinae and Pherhombinae, and recent subfamilies and genera appeared. Cenozoic Ichneumonidae are studied poorly and unevenly, and many described previously taxa deserve revision. Florissant (Brues, 1910) and Baltic amber (Kasparyan, 1994) ichneumonid faunas are more or less well represented and reviewed among Cenozoic deposits and data on these faunas is used in following comparison.

Fossil Oligocene Ichneumonidae from Bembridge (Isle of Wight, England) and Biamo assemblages (Primorskiy reg., Far East of Russia) are studied. In both assemblages dominant subfamilies are Cryptinae and Pimplinae. Orthocentrinae and fossil subfamily Townesitinae are also well represented in Bembridge material; Paxylommatinae and some others taxa are recorded by a single specimens only.

Bembridge ichneumonid fauna is generally closest to the Baltic amber fauna, both being dominated by Cryptinae and Townesitinae with presence of Paxylommatinae. Cryptinae are abundant in many Cenozoic sites, but Townesitinae and Paxylommatinae are known from the Bembridge Marls and Baltic amber only. However, these two assemblages differ strikingly in two respects. The first, the extinct subfamily Pherhombinae is rather common in Baltic and Rovno ambers but not recorded in Bembridge (nor anywhere else in Cenozoic). The second, the subfamily Pimplinae dominates in the Bembridge assemblage and rather common in others Cenozoic deposits, but not registered in Baltic amber. Lack of Pherhombinae in the Bembridge may testify that it is somewhat younger than the Baltic amber.

Bembridge Marls and Baltic amber are apparently older than the Florissant and Biamo beds. This inference is based on the fact that Biamo and Florissant deposits lack any fossil subfamilies which constitute an appreciable part of Bembridge and Baltic amber ichneumonid assemblages. Additionally, subfamily Ichneumoninae,

a relatively progressive group of Ichneumonidae which is abundant in Florissant (Gokhman, 1992), recorded neither in Bembridge nor in Baltic amber. Many recent subfamilies are recorded from Florissant which are absent from the Bembridge, but that material deserves revision before using in more detailed comparison.