The first fossil record of the Emesinae genus *Emesopsis* Uhler (Hemiptera: Heteroptera, Reduviidae) from Eocene Baltic amber

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Abstract

Two new fossil representatives of the assassin bug family Reduviidae are described as new from Baltic amber (Upper Eocene), belonging to the genus *Emesopsis* of the tribe Ploiariolini (Emesinae): *Emesopsis* putshkovi sp. nov. and *E. similis* sp. nov. These representatives of the Emesinae are the oldest fossil bugs of the genus *Emesopsis* known so far, and reported for the first time. This genus is also briefly diagnosed.

Key words: Reduviidae, Emesinae, *Emesopsis*, new species, Eocene Baltic amber

Introduction

This article is a continuation of a series of works devoted to the taxonomy of fossil assassin bugs (Reduviidae) of the peculiar subfamily Emesinae from the Eocene Baltic amber and the Miocene Dominican and Mexican amber. One should specially note that practically in all the works on both recent and fossil Emesinae the classic monograph of the outstanding hemipterologist of the 20th century Pedro Wygodzinsky (USA) was referenced. This fundamental work “A Monograph of the Emesinae (Reduviidae, Hemiptera)” was published in 1966, and up until now was the basis of all recent emesine research. The peculiar rediviids (Emesinae) described here from Baltic amber are the second record of fossil Reduviidae, or assassin bugs, belonging to the tribe Ploiariolini. The first ploiarioid emesine, *Danzigia christelae* Pop. was described earlier (Popov, 2003) Most fossil rediviid bugs of the subfamily Emesinae that have so far been described are known from Dominican amber (Lower-Middle Miocene). Among them there are two genera and several species (Arillo & Ortuño, 2005), in particular: *Malacopus wygodzinskyi* (Popov, 1987a), *Alumeda nigricans, Alumeda dominicana, Alumeda antilliana* (Popov, 1989), and *Empiploiariola inermis* from Dominican amber (Popov, 1993). Additionally, there is also *Empicoris electrinus* (Thomas, 1992) and *Alumeda solorzanokraemeri* (Popov, in press) from equivalent-aged Mexican (Chiapas) amber. Lastly, *Empicoris copal* was described from subfossil Dominican amber (Popov, 1987b).

In 1993 J. Maldonado Capriles and A. Santiago-Blay also described a ploiarioid bug as *Paleoploiariola venosa* from Dominican amber, the genus of which turned out to be a junior synonym of the genus *Empiploiariola* (Popov, 2003). All of these emesines belong to the cosmopolite tribe Ploiariolini, defined by its small species not more than 11 mm long, head, rostrum and fore coxae without spines, scutellum and metanotum with spines, M inserted on the submarginal vein of hemelytra, the base of discal cell connected to Sc+R by short oblique cross vein, and the tarsi being two-segmented. It was recognized that two undescribed fossil species could belong to the recent genus *Emesopsis*, characterized by having head, and thorax usually with pubescence, the second rostral segment swollen, the hemelytra with a small basal cell situated at inner basal angle of large discal cell, and the fore tarsus at most one-fourth as long as for tibia. In general, these extinct species from the Eocene Baltic amber are easily recognized from all known recent species of the genus *Emesopsis* by apical bifurcate branch of M extending beyond the apex of the discal cell and an apically narrowed discal cell. These two characters are also found in the extinct *Danzigia christelae* Pop. from Baltic amber, however, and cannot be considered autapomorphies.