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The first fossil Dufoureillini (Hemiptera: Heteroptera: Anthocoridae: Lyctocorinae) from the Eocene Baltic amber

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Abstract

The paper presents description of new anthocorid taxa from the inclusions in the Upper Eocene Baltic amber: *Xyloesteles parvulus* **gen.nov** and **sp. nov**. and *Xyloesteles kerneggeriorum* **sp. nov**. They are described and illustrated here. These fossil flower bugs of the family Anthocoridae (s.l.) belong to the tribe Dufouriellini Van Duzee (Lyctocorinae) are reported for the first time.

Key words: Heteroptera, Anthocoridae, Lyctocorinae, Dufoureillini, new genera, new species, Baltic amber, fossil flower bugs

Introduction

The heteropteran family that is most frequently met with in amber is the modern family of Anthocoridae (the flower bugs), including about 100 recent genera and 600 species (Pericart 1996) among which about 10 genera and 100 species belong to the tribe Dufouriellini mainly found in the tropical and subtropical areas. Their representatives are widespread in all zoogeographical regions. The majority of these family members are predatory, feeding on other small insects e.g., thrips, psocids, psyllids, springtails, bark beetles, and mites in decaying vegetable matter or under bark; sometimes they feed on pollen. Among bugs, Anthocoridae are probably not rare in amber resins, although as concerns Baltic amber they have been mentioned only once by Menge (1856), of the modern genus *Anthocoris*. The first representatives of the subfamily Lyctocorinae were recorded from the Saxonian (Bitterfeld) amber and referred to the extant genus *Xylocoris* (Barthel & Hetzer 1982). Recently some members of the Lyctocorinae were described from Baltic and Ukrainian (Rovno) ambers: the first *Persephonocoris kulickae* Popov & Herczek (2001) and six others of the genus *Lyctoferus* Popov (2003). Another specimen from the Baltic amber also belongs to a new genus of the tribe Dufouriellini (Popov *et al.* 2011, in press). Examined were also ca.100 other anthocorid specimens from different collections, among them members of the tribes Lyctocorini, Lyctoferini, Dufouriellini (Lyctocorinae), Anthocorini, and Oriini (Anthocorinae) from Baltic, Ukrainian, and Saxonian (Bitterfeld) ambers (Popov, pers. comm.).

The earliest Anthocoridae are known from the Middle and Late Jurassic of north-eastern China (Jiulongshan and Yixian Formations). Most of them were placed in the new family Vetanthocoridae (Hong 1983; Yao *et al.* 2006). Others were reported from the Early Cretaceous of the Eastern Transbaikalia (Popov 1990) and from north-eastern China (Hong & Wang 1990)**.** There are some undescribed Early Cretaceous anthocorids from Central Mongolia (Popov 2003) and a single hemelytron from the Lower Cretaceous of Australia (Jell & Duncan 1986). Some undescribed flower bugs have been recorded from the Late Cretaceous (Campanian) amber of Canada (McAlpine & Martin 1969), North-Western Siberia, Taimyr Peninsula (Zherikhin & Sukatshova 1973), and also from the Lower Cretaceous Lebanese amber from the tribe Lyctoferini (Popov, pers. com.). In addition, Anthocoridae were also reported in Lebanese amber by Whalley in 1981 (Poinar & Milki 2001). Most probably almost all Mesozoic anthocorids belong to the ancient Lyctocorinae. In the Earliest Miocene (Aquitanian) of Rott (near Bonn), Ger-

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