

New Early Cretaceous pentatomorph bugs from China and the systematic position of Kobdocoridae

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Acta Palaeontologica Polonica 70 (1), 2025: 17-24 doi:doi.org/10.4202/app.01186.2024

Kobdocoridae is an extinct family of the infraorder Pentatomomorpha, mainly distributed in the Eurasia and currently comprise only nine species from seven genera in three locations. But, the systematic position of the Kobdocoridae has long been debated. Here we describe a new genus and species *Maculocris yixiani* Dai, Yao, & Ren, from the Lower Cretaceous Yixian Formation in Northeastern China. This new genus is characterized by eyes relatively small, contiguous with pronotum; triangular scutellum, clavus with margins converging towards apex and large rounded patterns on the hemelytra, distinguishing it from other genera within the family. Based on the discovery of new specimens, Kobdocoridae are characterized by having slender antennal segments with the first segment partially concealed dorsally on the head; an elongated labium reaching at least the hind legs; initially rounded scutellum, with some genera possessing large scutellum covering the hemelytra; a clavus reduced to a rod-like structure; the claval commissure absent; and a tarsus with three segments. These features are proposed to be closely related to Pentatomoidea, possibly as a stem group or sister taxon.

Key words: Insecta, Aradoidea, Pentatomoidea, fossil, Yixian Formation, Mesozoic.

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