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Enicmus adrianae sp. nov. – a new scavenger beetle (Coleoptera: Latridiidae) from Baltic amber

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Enicmus adrianae sp. nov. (Coleoptera: Latridiidae) from Baltic amber is described and illustrated in the current paper. It is the first described Eocene species of the genus.

Key words: Coleoptera, Latridiidae, *Enicmus adrianae*, new species, Baltic amber, Upper Eocene.

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INTRODUCTION

Latridiidae Erichson, 1842 is a medium sized family of Coleoptera with approximately 800 described species worldwide. There are ca. 170 scavenger beetle species known in Europe (Rücker 2011). The tropical rainforests of Africa and South America are the biggest diversity centers for some genera (*Melanophthalma* Motschulsky, 1866 and other) of the family Latridiidae (Rücker 1981, 1984). The genus *Enicmus* C. G. Thomson, 1859 contains 50 species (Rücker 2010).

Only a few species of Latridiidae are known from fossils (Borowiec 1985; Bukejs et al. 2011; Hawkeswood et al. 2009; Heer 1856; Kirejtshuk & Azar 2008; Kirejtshuk & Nel 2009; Kirejtshuk et al. 2009; Schlechtendal 1894; Wickham 1913, 1914a, 1914b; Zherikhin 1977). Thereby the most indications contain not more than a generic attribution without any descriptions (Grimaldi & Engel 2005; Hieke & Pietrzeniuk 1984; Klebs 1910; Kubisz 2000, 2001; Poinar & Poinar 1999; Rasnitzyn & Ross 2000; Spahr 1981; etc). The detailed review of this family in the fossil records is given in the catalogue by Ponomarenko & Kirejtshuk (2012).

In the current paper a new species of the genus *Enicmus* C.G. Thomson, 1859 is described from Baltic amber, which is usually dated as the Upper Eocene, although sometimes older (even the Lowermost Eocene) (Weitschat & Wichard 2010). It is the first described fossil species of the genus.

MATERIAL AND METHODS

The material examined is deposited in the collection of the Museum of Natural History, Institute of Systematics and Evolution of Animals, Polish Academy of Sciences (Krakow, Poland), in the collection of PAW Museum of the Earth (Warszawa, Poland), and in the private collection of Wolfgang Rücker (Neuwied, Germany.

The photos were taken using a stereomicroscope Nikon SMZ 745T and digital sight camera Nikon DS-FI1. Merging of layers was done with CombineZP.

SYSTEMATIC PALEONTOLOGY

Latridiidae Erichson, 1842
Latridiinae Erichson, 1842
***Enicmus* C.G. Thomson, 1859**

***Enicmus adrianae* sp. nov.**
Figs 1-2.

Material
Holotype – "MP/564", sex unknown, Baltic Amber; deposited in the collection of the Museum of Natural History, Institute of Systematics and Evolution of Animals, Polish Academy of Sciences, Krakow, Poland. A rather well visible complete beetle with indistinctly visible mouthparts and base of antennae. The specimen is included in a small and thin elongate amber piece (with length about 20 mm and width 6 mm, weight 0.2 g).

Paratype – No. 0028/2001, sex unknown, Baltic amber, Yantarny village, Kaliningrad region, Russia; deposited in the collection of Wolfgang Rücker (Neuwied, Germany).

Type strata
Baltic Amber, Upper Eocene.

Etymology
The epithet of the new species is devoted to the first authors' daughter, Adriana Bukeja.

Diagnosis
Enicmus adrianae sp. nov. is most closely related to the recent *E. amici* Lohse, 1981, *E. histrio* Joy & Tomlin, 1910 and *E. transversus* (Olivier, 1790), which have (just like the new species) elytral interspaces smaller than a puncture in diameter and the humeral row of the elytra is convex in the posterior half. However, the new species differs from them in the shape of the first antennomere and the more dense and deep puncture of the first abdominal ventrite.

Some other species of the genus, resp. *Enicmus planipennis* Strand, 1940, *E. fungicola* C. G. Thomson, 1868, *E. testaceus* (Stephens, 1830) and *E. rugosus* (Herbst, 1793) have interspaces between the elytral rows double as wide as the puncture, but in *E. adrianae* sp. nov. elytral interspaces are smaller than a puncture in diameter. The humeral row of the elytrae is slightly convex in the posterior half of the elytrae in *E. adrianae* sp. nov., but in *E. planipennis*, *E. testaceus* and *E. rugosus* it is convex in the anterior half of the elytrae, in *E. fungicola* convex in the posterior half of the elytrae. Further the shape of the scape and the shape of the pronotum differs between the species.

In *E. atriceps* Hansen, 1962 just like in *E. adrianae* sp. nov. elytral interspaces are smaller than a puncture in diameter (except the second interspace), but the shape of the scape and the shape of the pronotum differs between the species.

There are no described fossil species of the genus *Enicmus*. From the other 4 fossil species of the subfamily Latridiinae (*Archelatrius marinae* Kirejtshuk & Azar, 2009, *Latridius kulickae* Borowiec, 1985, *L. jantaricus* Borowiec, 1985, *L. alexeevi* Bukejs, Kirejtshuk, Rücker 2011) *Enicmus adrianae* sp. nov. clearly differs in convex (but not carinate) elytral interstriae, antennal structure and some other characters.

Description
Holotype. Length 1.5 mm, max. width 0.59 mm. Dorsal surface brown, glabrous; legs and anten-

nae rufous. Elongate, strongly convex dorsally and moderately convex ventrally.

Head transverse, evenly convex dorsally, covered with dense and moderately large punctures markedly larger than eye facets in diameter, interspaces between them smooth and distinctly less than a puncture diameter. Head with broad and distinct median sulcus at its base. Eyes large, convex with moderately large and distinct facets; distance between them about 5 times as long as width of one eye. Tempora are not larger than the width of one eye. Neck markedly separated. Anterior part of head and mouthparts invisible because of milky cover. Antennal insertions located slightly before anterior edge of eyes. Antennae 11-segmented, moderately long, reaching posterior 1/3 of pronotum. Scape is not distinctly visible, subtriangular, larger than antennomere 2; antennomere 2 larger than antennomere 3; antennomeres 3-8 slightly (1.3-1.7 times) longer than wide, widened apically. Antennal club loose, distinctly 3-segmented; antennomere 11 widely suboval and acute apically; antennomeres 9-10 subequally large, slightly slender and about 1.8 times shorter than ultimate antennomere.

Pronotum transverse, approximately 1.2 times wide as long; slightly narrowed anterior and more posterior; widest in anterior 1/3; lateral margins in anterior half rounded and in basal 1/3 subparallel; covered with dense and moderately large punctures (as on the head). Anterior angles slightly acute, weakly prominent anteriorly; posterior angles subrectangular, weakly rounded. Disc convex and moderately steeply sloping to sides. Basal, anterior and lateral sides completely bordered. Pronotum with transverse impression at the base, oval impression near each posterior angle, and two longitudinal subelongate impressions on the disc. Scutellum small, subtriangular.

Elytra broadly oval, combined about 1.5 times as long as wide, widest behind the middle; strongly convex at disc and rather steeply sloping to sides, lateral sides slightly explanate. Base of elytra distinctly wider than the base of the pronotum. Humeri distinct. Punctures in elytral rows dense, large, becoming smaller in posterior half, in basal 1/3 of the elytra punctures distinctly larger than punctures on the pronotum; interspaces between punctures smaller than a puncture diameter (especially in the basal half). Punctures are forming 8 regular rows. All interstriae smooth, convex, interstriae 6, 7 and 8 stronger convex than other interstriae.

Pro-, meso- and metathorax covered with moderately dense and large punctures (approximately as punctures on the head), interspaces between punctures smaller than a puncture in diameter. Procoxae separated by a prosternal process; process narrow and prominent beyond posterior margin of procoxae. Procoxal cavities broadly closed posteriorly. Pro- and mesocoxae suboval, metacoxae transversely oval. Distance between mesocoxae distinctly greater than that between procoxae; and between metacoxae about twice as great as that between mesocoxae. Metasternum flattened in the middle. Epipleura of elytra wide and weakly narrowed in apical part; with distinct punctures. The first abdominal ventrite is the longest one, with dense and moderately large punctures (comparable with the puncture on the thorax); ventrites 2-5 covered with finer and sparser punctures.

Legs moderately long and narrow. Trochanters slightly elongate. Femora spindle-shaped, thickest at the middle and about 2-3 times as wide as tibiae. Tibiae slender, tibiae and femora approximately comparable in length. Tarsi with three simple subcylindrical tarsomeres, about 2/3 as long as tibiae; tarsomeres 1 and 2 approximately comparable in length; tarsomere 3 markedly, about 1.5 times longer than both previous ones combined. Claws simple, small and thin.

Variation

Body size of paratype – length 1.6 mm, width 0.63 mm.

NOMENCLATURAL NOTE

Figs 1-2. *Enicmus adrianae* sp. nov., holotype: 1 – habitus, lateralo-dorsal view, 2 – habitus, lateralo-ventral view.

Latridius jantaricus Borowiec, 1985 was placed into the genus *Stephostethus* Le Conte, 1878 by Kubisz (2000). According to the characters of the holotype (deposited in the collection of PAW Museum of the Earth) of this species it belongs to the genus *Latridius* Herbst, 1793 and it is necessary to replace this species back – *Latridius jantaricus* Borowiec, 1985 stat. rev.

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