Cartodere (*Aridius*) *succinobaltica* sp. nov. (Coleoptera: Latridiidae) from Baltic amber

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Abstract

Cartodere (*Aridius*) *succinobaltica* sp. nov. (Coleoptera: Latridiidae) from Eocene Baltic amber is described and illustrated in the current paper. It is the first fossil species of the genus.

Key words

Coleoptera, Latridiidae, *Cartodere* (*Aridius*) *succinobaltica*, new species, Eocene, Baltic amber.

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 (e. g. *Melanophthalma* MOTSCHULSKY, 1866 and other) of the family Latridiidae (RÜCKER 1981, 1984). The genus *Cartodere* THOMSON, 1859 contains 39 species in two subgenera (RÜCKER 2010).

Not numerous papers were published on the fossil Latridiidae. Only few of them contain descriptions of taxa from Baltic amber (BOROWIEC 1985; BUKEJS et al. 2011; HAWKESWOOD et al. 2009). In two additional papers data on the fossil *Cartodere* are given. LESNE (1920) reported *Cartodere* (*Aridius*) *nodifer* WESTWOOD, 1839 [as Lathridius] from Castle Eden, England (Pliocene). This species is also known in the recent fauna. KUBISZ (2000) mentioned *Cartodere* (*Aridius*) sp. from Baltic amber in the collection of the Museum of Natural History of ISEA in Kraków. The detailed review of this family in the fossil records is given in the catalogue by PONOMARENKO & KIREJTSHUK (2011).

In the current paper a new species of the genus *Cartodere* C. G. THOMSON, 1859, subgenus *Aridius* MOTSCHULSKY, 1866 is described from Baltic amber, which is usually dated as the Upper Eocene, although sometimes older (even the Lowermost Eocene) (WEITSCHAT & WICHARD 2010).

Systematic part

Family. Latridiidae ERICHSON, 1842
Subfamily. Latridiinae ERICHSON, 1842
Genus. *Cartodere* C. G. THOMSON, 1859
Subgenus. *Aridius* MOTSCHULSKY, 1866

Cartodere (*Aridius*) *succinobaltica* sp. nov. (Figs. 1–7)

Material

Holotype: "MP/1400", sex unknown; deposited in the collection of the Museum of Natural History, Institute of Systematics and Evolution of Animals, Polish Academy of Sciences, Krakow, Poland. The rather clear complete beetle with partly missing segments of mesotarsi, and with the following uncharacteristic deformation: head, pronotum and elytra more or less depressed along the middle and a median depression on the metaventrite made it somewhat asymmetric. The beetle is included in a small and thin nearly quadrangular piece of amber (length: about 9 mm, width: 8 mm). Some small dark pieces of organic matter and small cracks are also included.

Type strata

Baltic Amber, Upper Eocene.

Diagnosis

Cartodere (*Aridius*) *succinobaltica* sp. nov. is most similar to *C.* (*Aridius*) *nodifer* (Westwood, 1839) and differs from it in the structure of its wider head and elytral interstriae 3 and 5. Interstriae 3 with a carina rounded at the apex of the elytra and with

sharp little distal elevation in *C. succinobaltica* sp. nov. (Fig. 7), while the elytra of *C. nodifer* show a more abrupt ending of this interstriae with distinct large gibbosity (Fig. 8). Besides, the interstriae 5 on the elytra of the new species have a carina gradually rounded at the apex of the elytra, but that of *C. nodifer* is characterized by the more abrupt ending of this carina which is not rounded.

Description

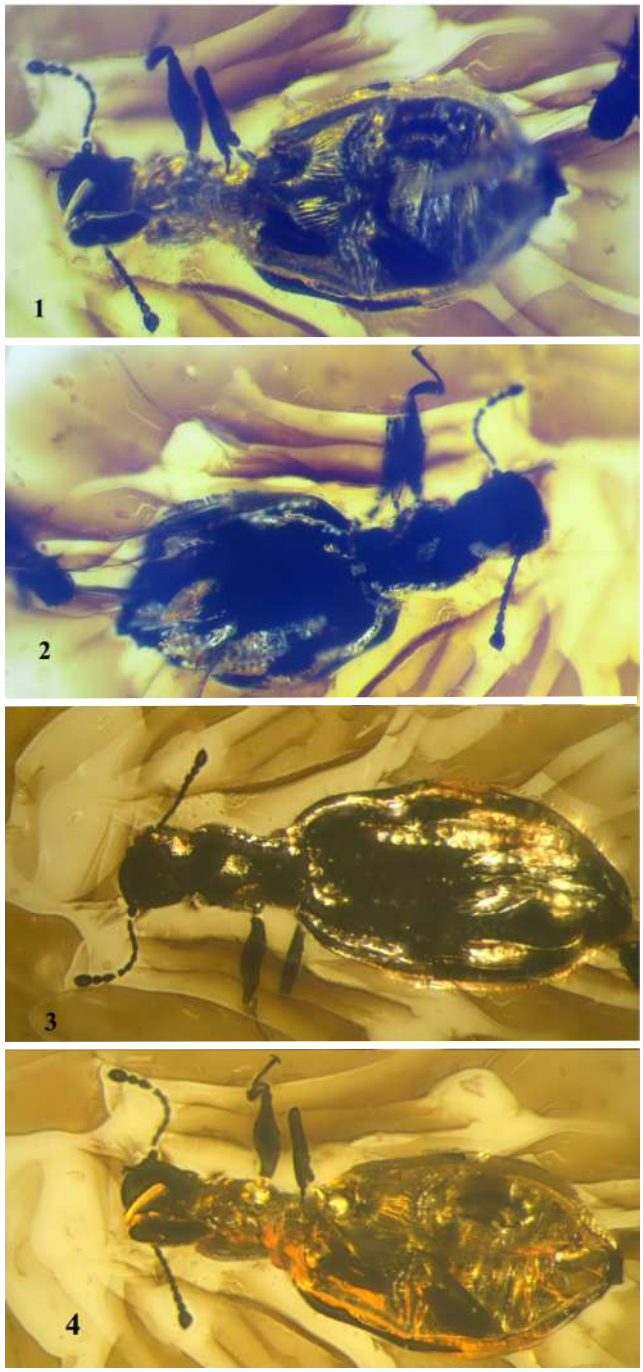
Length 1.65 mm, max. width 0.6 mm. Dorsal surface unicolorous black, glabrous. Elongate, apparently with rather convex elytra (the holotype is strongly deformed) and moderately subflattened ventrally.

Head. Slightly longer than wide, apparently with distinct fine and moderately dense punctures smaller than eye facets. Temples shorter than the width of an eye. Labrum wide with widely rounded anterior margin. Eyes large with moderately coarse and distinct facets. Antennae 11-segmented, moderately long, reaching the middle of the pronotum. Scape elongate oval and somewhat larger than antennomere 2; antennomere 2 subcylindrical, wider than antennomere 3; antennomeres 3–8 slightly longer than wide (1.5–2x), widened apically. Antennal club loose and 3-segmented; antennomer 11 widely oval and acute apically; antennomeres 9–10 more slender than antennomere 11.

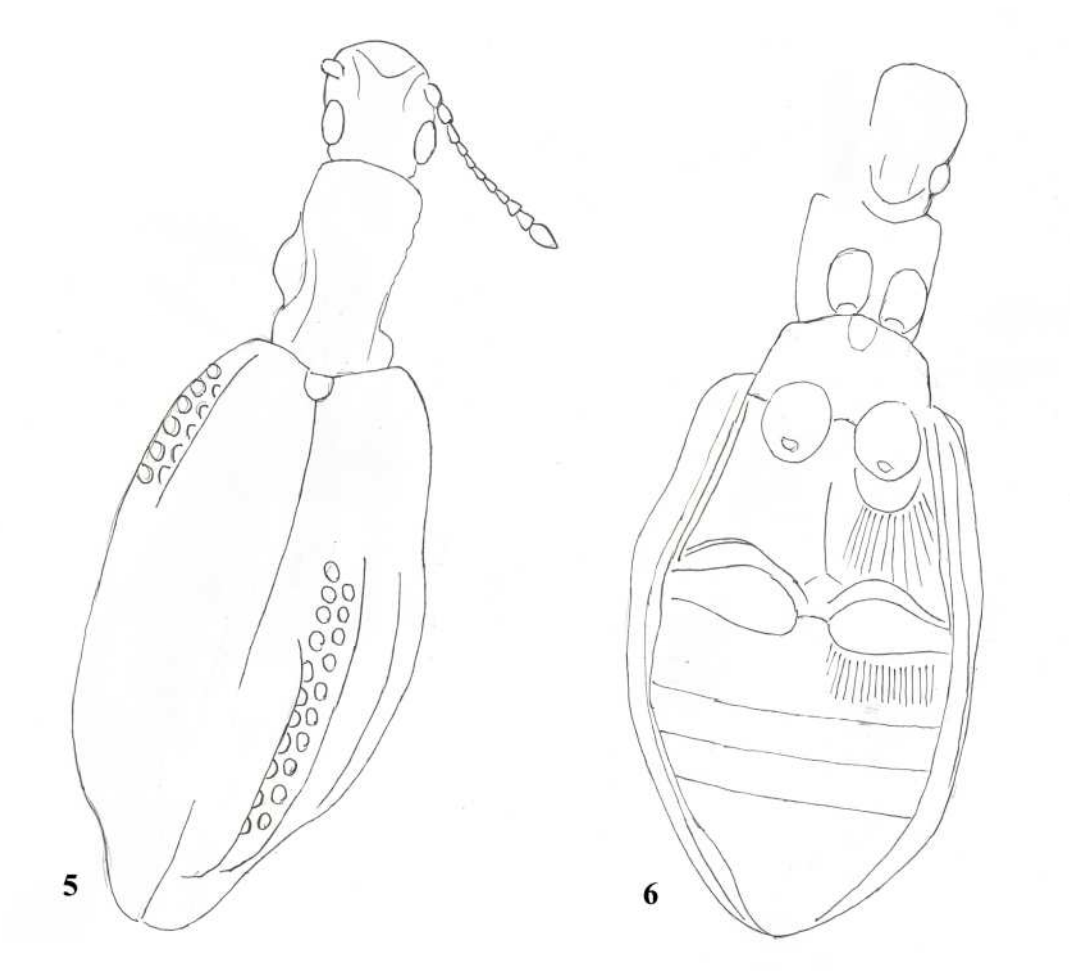
Pronotum. Elongate, aproximately 1.5 times longer than wide; apparently with fine punctures smaller than eye facets; widest in anterior 1/3; base and anterior side approximately equal; lateral margins in basal 1/3 deeply incised.

Elytra. About 1.35 times as long as wide combined; widest at the middle; lateral sides as wide as the width of the ultimate antennomere. Punctures in elytral rows very large (with diameter about three times as great as the eye facets), becoming slightly smaller at the apex. Shoulders moderately raised. Base of the elytra somewhat wider than the base of the pronotum and widened to the middle. Interstriae 3, 5 and 7 strongly carinate, the carina somewhat mesially curved and somewhat apically elevated; carina of interstriae 3 and 5 gradually rounded at the apex of the elytra, carina of interstriae 3 with a sharp little distal elevation.

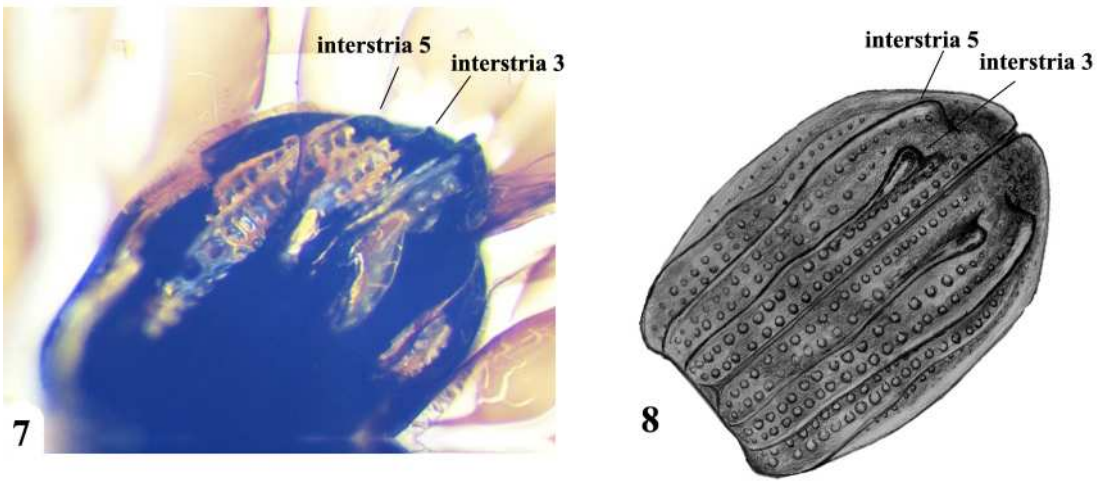
Epipleura. Epipleura of the elytra moderately wide at their base and gradually narrowing posteriorly; with extremely fine, nearly indistinct and diffuse punctures. Meso- and metaventrites covered with distinct and very sparse punctures about as large as eye facets. Procoxae narrowly separated and meso- and metacoxae widely separated. Pro- and mesocoxae suboval; metacoxae transversely oblique. Halo behind the mesocoxae comparatively large with deep grooves radially divergent; halo behind the



Figs 1–4.
***Cartodere* (*Aridius*) *succinobaltica* sp. nov.**
Holotype: habitus.



Figs 5–6.
***Cartodere* (*Aridius*) *succinobaltica* sp. nov., holotype: body outline, dorsal and ventral view.**



Figs 7–8.
Elytra: fig. 7. *Cartodere* (*Aridius*) *succinobaltica* sp. nov., fig. 8. *C.* (*Aridius*) *nodifer*.

metacoxae with somewhat finer grooves. The first abdominal ventrite is the longest. At least abdominal ventrites 1 and 2 with only some very sparse punctures and the other ventrites impunctured and apparently smoothed.

Legs. Moderately long and narrow. Femora slightly curved, thickest at the middle and 2.5–3.0 times as wide as the tibiae. Tibiae slender; tibiae and femora approximately comparable in length. Tarsi about 2/3 as long as the tibiae; tarsomeres1 and 2 approximately comparable in length; tarsomere 3 markedly (1.5 times) longer than both previous ones combined. Claws simple and comparatively stout.

Etymology

The epithet of the new species is formed from the resource of its origin.

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