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## THE FIRST EOCENE SPECIES OF THE GENUS *MICRAMBE* (COLEOPTERA, CLAVICORNIA, CRYPTOPHAGIDAE)

G. Yu. Lyubarsky<sup>1</sup>, E. E. Perkovsky<sup>2</sup>

<sup>1</sup> Zoological Museum of Moscow State University  
Bol'shaya Nikitskaya str., 6, Moscow, 103009 Russia  
E-mail: lgeorgy@rambler.ru

<sup>2</sup> Schmalhausen Institute of Zoology,  
Bogdan Chmielnitski str., 15, Kyiv, 01601 Ukraine  
E-mail: perkovsk@gmail.com

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**The First Eocene Species of the Genus *Micrambe* (Coleoptera, Clavicornia, Cryptophagidae). Lyubarsky G. Yu., Perkovsky E. E.** — Based on a fossil specimen from the Late Eocene Rovno amber (Ukraine), *Micrambe sarnensis* Lyubarsky et Perkovsky, sp. n., the first Eocene species of this genus is described. The new species is similar to the extant *Micrambe abietis* (Paykull) and *M. ulicis* (Stephens), differing by having the callosity with an acutangular caudolateral corner.

**Key words:** Cryptophagidae, *Micrambe*, Late Eocene, Rovno amber.

**Первый эоценовый вид рода *Micrambe* (Coleoptera, Clavicornia, Cryptophagidae). Любарский Г. Ю., Перковский Е. Э.** — Из позднеэоценового ровенского янтаря (Украина) описан *Micrambe sarnensis* Lyubarsky et Perkovsky, sp. n. — первый эоценовый вид рода. Вид наиболее близок к современным видам *Micrambe abietis* (Paykull) и *M. ulicis* (Stephens), отличается от них острым углом между мозолью и боковым краем переднеспинки.

**Ключевые слова:** Cryptophagidae, *Micrambe*, поздний эоцен, ровенский янтарь.

Cryptophagidae is the family of beetles with about 1000 described species represented in all biogeographic realms. Both adults and larvae are commonly found on mold, fungi, under bark as well as in decaying vegetation and nests of social Hymenoptera, birds and mammals. Species of *Myrmedophila* Bousquet live in the ant nests, species of *Telmatophilus* Heer apparently feed in flower heads of certain aquatic plants. One species of *Atomaria* Stephens is the pest of the sugar beet. Several species of *Cryptophagus* Herbst are found in stored products.

The oldest named cryptophagid species is the Late Cretaceous atomariine *Nganasania khetica* Zherikhin from the fossil resin at Yantardakh in the North Siberia (Zherikhin, 1977). The second cryptophagid species from fossil resins is described herein. Recently a questionable cryptophagid was reported from Early Cretaceous Lebanese amber (Kirejtshuk, Azar, 2008), and a representative of Cryptophagidae identified only to the family level was found in the lowermost Eocene French amber (Kirejtshuk, Nel, 2008). Representatives of other cryptophagid genera, viz., *Cryptophagus*, *Atomaria*, *Micrambe* Thomson, *Ephistemus* Stephens and *Telmatophilus* are reported from the Late Eocene Baltic amber found in former Eastern Prussia (now Kaliningrad region) (Klebs, 1910; Kubisz, 2000); the last genus is also reported from the Bitterfeldian amber (Hieke, Pietrzeniuk, 1984).

Rovno amber is southern coeval analogue of the famous Baltic amber (Perkovsky et al., 2007). Amber collection of the Schmalhausen Institute of Zoology NAS of Ukraine (SIZK) contains more than 650 inclusions of beetles from Late Eocene Rovno amber, but the first cryptophagid species from Rovno amber was found only a year ago. The new species is quite characteristic of the family Cryptophagidae: tarsal formula, 3-segmented club of antennae, closed procoxal cavities. The new species showing antennal insertions exposed in dorsal view; pronotum with well developed marginal callosity; mesocoxal cavity closed laterally by the sternum; ventrite 1 longer than remaining ven-

trites; puncturation of elytra confused; tarsal formula 5–5–5; lateral edge of pronotum with callosity and with a few lateral teeth. These characters are indicative of the genus *Micrambe* Thomson Cryptophaginae. Representatives of the genus *Cryptophagus* have pronotum with callosity and singular tooth, of the genus *Salebius* Casey have pronotum with two teeth; the genera *Henoticus* Thomson and *Mnioticus* Coombs et Woodroffe have pronotum without callosity. Representatives of *Micrambe* are found in all biogeographic realms. 101 species of the genus are known in the world, including the 22 species in the Palearctic Region (Johnson et al., 2007).

Photographs were taken at the Paleontological Institute, Russian Academy of Sciences (Moscow) by A. V. Mazin and the second author at the microscope Leica MZ 16.

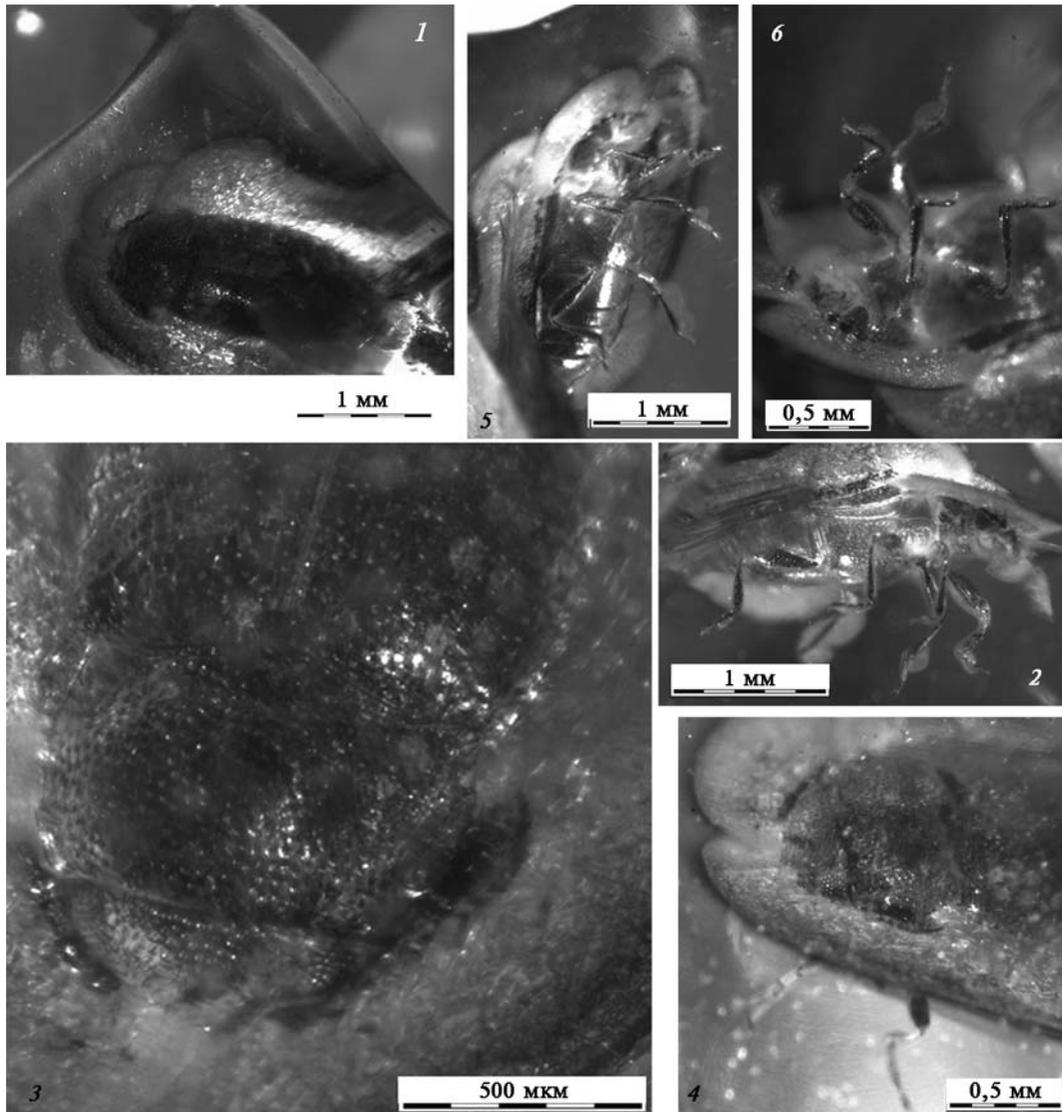


Fig. 1. *Micrambe sarnensis*, Holotype (inv. N K–5247 from the collection Schmalhausen Institute of Zoology, collection, Kyiv): 1 – body, dorsal; 2 – body, lateral; 3 – front part, dorsal; 4 – front part, dorsolateral; 5 – body, ventral; 6 – front part, ventral.

Рис. 1. *Micrambe sarnensis*, голотип (инв. номер К–5247 коллекции Института зоологии НАН Украины, Киев): 1 – вид сверху; 2 – вид сбоку; 3 – пронотум сверху; 4 – пронотум сбоку; 5 – вид снизу; 6 – передняя часть тела снизу.

Family CRYPTOPHAGIDAE Kirby, 1837

Subfamily CRYPTOPHAGINAE Kirby, 1837

Genus *Micrambe* Thomson, 1863

*Micrambe sarnensis* Lyubarsky et Perkovsky, sp. n. (fig 1, 2)

Material. Holotype, SIZK No K-5247, Klesov, Rovno amber, Late Eocene.

Description: Body broadly elongate (fig. 1, *I*; 2, *I*), slightly convex; head, pronotum, and elytra reddish brown. Elytra slightly convex, covered with almost appressed pubescence.

Head transverse, of normal size, with prominent, hemispherical, somewhat coarsely faceted eyes, strongly and sparsely punctured. Antennae long, slender, with club reaching beyond base of pronotum, joints 1–3 transverse, joint 4 very transverse, joints 5–8 almost equal in length, subquadrate, 9th elongate, 10th transverse, 11th obliquely oval, joints 9–11 equal in width.

Pronotum distinctly transverse, barely 1.8 times broader than long, moderately strongly and densely punctured (0.5 diameters apart), an individual puncture almost equal to facette diameter. Pronotum without sublateral line, somewhat convex, with slightly rounded at sides, with a few lateral teeth. Sides finely margined, anterior edge weakly sinuate. Callosity occupying at most one-fourth of side margin, with a small, elongate-oval patch of bare surface invisible from above; caudolateral corner acute angular, with tip. Lateral margin with 9 small teeth. Posterior corners obtuse, base round, slightly sinuate, basal groove narrow.

Scutellum small, transverse. Elytra oval, humeral corners rounded, shoulders a little broader than maximum breadth of pronotum, 1.45 times as long as wide and 2.9 times as long as thorax, moderately convex, slightly flattened behind scutellum, with moderately strongly rounded sides and a narrowly rounded apex, puncturation as strong as, yet more sparse than that on pronotum.

Length 2.2 mm.

*Micrambe sarnensis* is most similar to the recent *M. abietis* (Paykull) and *M. ulicis* (Stephens), but differs from them in having the callosity with caudolateral corner acute angular, with tip. *Micrambe abietis* is a common and widely distributed beetle found in

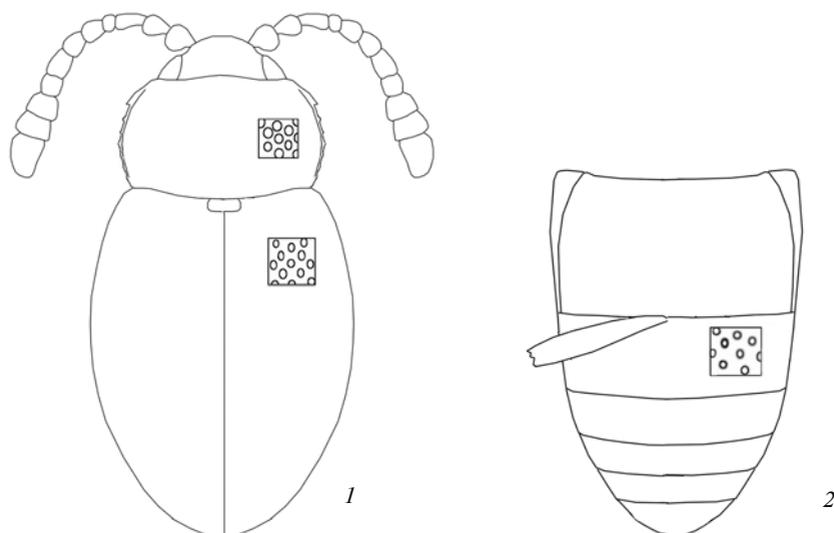


Fig. 2. Holotype *Micrambe sarnensis*: 1 — body, dorsal; 2 — abdomen and thorax, ventral.

Рис. 2. Голотип *Micrambe sarnensis*: 1 — вид сверху; 2 — брюшко и грудь, вид снизу.

Palaeartic and Nearctic. *Micrambe ulicis* is widespread in the Palaeartic, Nearctic and Afrotropical Regions.

*Micrambe sarnensis* is attributed to the subgenus *Micrambe* s. str. based on the pronotum with callosity and serrate lateral edge.

**E t y m o l o g y.** Species name derived from Sarny district, where situated Lagerstätte.

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