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Mixocapsus eocenicus gen. n., sp. n. (Miridae, Heteroptera) from Baltic amber

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(With 4 textfigures)

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Zusammenfassung

Aus baltischem Bernstein werden eine neue Gattung und eine neue Art, *Mixocapsus eocenicus* gen. n., sp. n., der Familie Miridae (Heteroptera) beschrieben.

Abstract

A new genus and species of the family Miridae (Heteroptera) is described. Metric data and figures of the new species are presented. The specimen was found in the collection of amber inclusions of the Museum of Natural History in Vienna.

Mixocapsus gen. n.

Diagnosis: Body oblong oval in shape. Head broader than the posterior margin of pronotum. Eyes protuberant laterally, lying at the same plane as vertex, at a small distance from the collar, reaching two thirds of the head height. Vertex somewhat raised. Antennae cylindrical, set in close proximity of the inner lower corner of the eye. Antennal segment I slightly thicker than antennal segment II, extending beyond the anterior margin of head. Antennal hairs short, decumbent. Antennal segment III longer then fourth, both segments somewhat thinner than the second. Clypeus protuberant. Rostrum reaching coxa III. Rostral segment I shorter than others, extending to the anterior margin of xyphus. Rostral segments provided with small teeth.

Pronotum trapezoid in shape, anterior margin with an arched indentation, lateral and posterior margins straight, posterolateral ones rounded. Calli separate. Collar distinctly broader in the middle.

Mesonotum considerably shorter then scutellum, somewhat raised laterally.

Scutellum smooth, at base broader than its length, raised in the central part, apically flattened and somewhat depressed.

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Hemielytra adorned with shallow and fine spots and wrinkles. Claval, cubital and radial veins distinct. Cuneus longer than its width, separated by a deep cuneal fracture. Lateral cuneal incision shallow. Membrane longitudinally wrinkled, with two closed cells.

Femora I and II provided with short, bright teeth (reminiscent of those on the rostrum). Tarsi 3-segmented, linear, terminating in claws with very large pulvilli(?) which are attached to the inner side of claws. No parempodia were observed: if present should be very short and bristle-like.

Genital segment broad, in apical part covered densely with stout, semi-decumbent teeth (on the underside of abdominal sternites similar but finer hairs are located).

Type species: *Mixocapsus eocenicus* sp. n.

Mixocapsus eocenicus sp. n.

(Figs. 1–4)

Description: Ground colour brown. Head, pronotum and mesonotum black(?)[2]). Eyes brown, antennae dark brown. Scutellum yellow at centre and apex, with a dark patch at base(?). Hemielytra brown, embolium, cuneus at base, claval, cubital and radial veins and claval commissura yellow. Membrane dark grey, shiny. Legs brown, tarsi blackish brown.

Body oblong, oval in shape. Head obliquely declivous, 1.7× as broad as its length. Vertex 1.5 times as broad as the eye diameter. Antennae set on somewhat raised cup-like fovea antennalis. Antennal segment lengths in proportion: 6 : 15 : 6.3 : 5. Pronotum covered with dark, short, decumbent hairs.

Mesonotum twice as short as scutellum, laterally somewhat depressed, provided with hairs similar to those on pronotum.

Hemielytra covered with bright and decumbent hairs which are a bit longer and finer than those on pronotum. Cuneus 1.3× as long as its width at base. Legs normal, tibiae bear bright, decumbent, short hairs.

Metric data (in mm):

Body: length – 6.0, width (at the cuneus base) – 2.2; head: width – 1.17, length – 0.67, height – 0.57; vertex width – 0.50; eye: width – 0.33; height – 0.40; the length and the width of antennal segments: I – 0.6, 0.1, II – 1.5, 0.06, III – 0.63, 0.05, IV – 0.5, 0.05, pronotum: apical width – 0.73, distal width – 1.8, length – 0.90; collar: length – 0.15, width – 0.73; mesonotum length – 0.3; scutellum: length – 0.67, width at base – 0.9; commissural length – 1.2; cuneus: length – 0.9, the width at base – 0.7; rostral segment lengths: I – 0.5, II – 0.74, III – 0.76, IV – 0.5; the length and the width of leg I elements: coxa – 0.67, 0.31; femur – 1.2, 0.27; tibia – 1.3, 0.1; tarsal segment I – 0.23; II – 0.17; III – 0.20; legs II: coxa – 0.46, 0.27; femur – 1.1,

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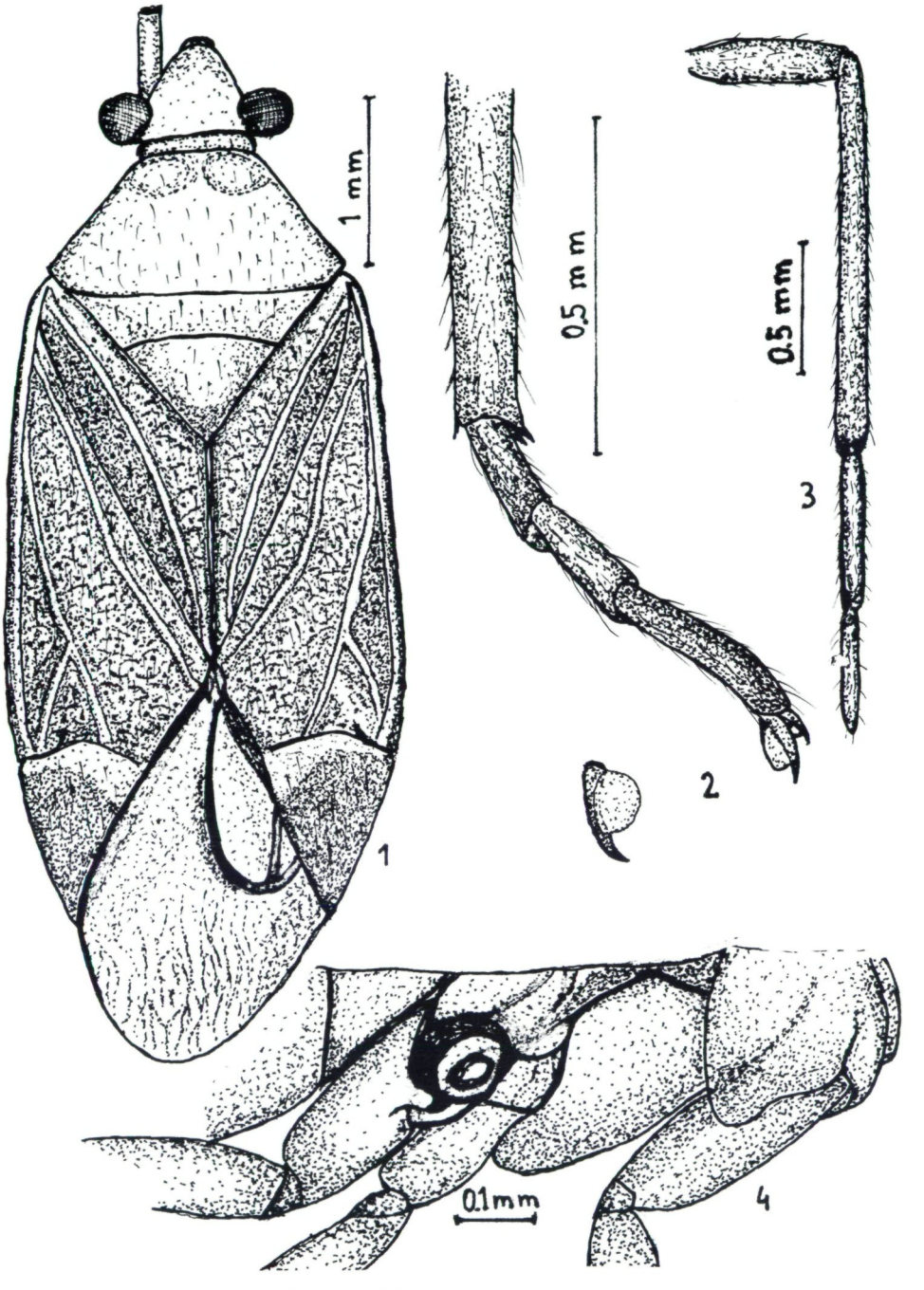
[2]) The fragment surrouded by milky cloud of gas which makes it difficult to observe either the surface structure or the colour.



Figs. 1–4: *Mixocapsus eocenicus* sp. n.
1 – body outline, 2 – tarsus III and claw, 3 – antena, 4 – the pattern of pleurites and the outlet of the scent gland.

0.28; tibia – 1,3, 0.1; tarsal segment I – 0.23; II – 0.23; III – 0.23; legs III: coxa – 0.57, 0.33; femur – 1.6, 0.25; tibia – 2.2, 0.1; tarsal segment I – 0.23; II – 0.20; III – 0.30; genital segment length – 0.67.

Holotype: 1 ♂, Baltic amber, Naturhistorisches Museum in Vienna, 1938/ No. 49.

Remarks: Large pulvilli (?) arising from the inner side of the claw and the absence of parempodia (?) suggest that the genus and species are related to the subfamily Bryocorinae (sensu SCHUH 1976). On the other hand, the forewing membrane has two distinct, closed cells and the 3-segmented tarsus is linear; these would indicate some relation to Phylinae but the pronotal collar is well-defined and rounded in outline.

SCHUH (1976) delimited Bryocorinae as containing Eccritotarsini and Dicyphini + Bryocorini. The former are typically provided with pulvilli on the inner side of the claw and have pulvillar comb (except the genus *Bunsua*). The latter have pseudopulvilli but lack pulvilli.

Due to the relative position of the tarsus in the examined specimen, it was difficult to determine whether the structures on claws were of the pseudopulvillar type. Accordingly, the systematic position of the new genus and species remains uncertain. Under an optic microscope, the picture is somewhat reminiscent of the genus *Bunsua* (SCHUH 1976). However, the general appearance of *Mixocapsus eocenicus* is quite different. Any systematic decision should be postponed until more mirid inclusions are found and described.

M. eocenicus is quite different from all the mirid forms known so far from Baltic amber (CARVALHO 1954, 1966; CARVALHO & POPOV 1984; GERMAR & BERENDT 1856; JORDAN 1944).

The autor is indebted to the authorities of the Museum of Natural History in Vienna for the loan of materials and their kind permission to examine them.

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