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Amberofulvius dentatus, a new genus and species of the subfamily Cylapinae (Heteroptera, Miridae) in Baltic amber

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(With 6 figures)

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Zusammenfassung

Aus baltischem Bernstein werden eine neue Gattung und eine neue Art der Unterfamilie Cylapinae (Heteroptera, Miridae) beschrieben: Amberofulvius dentatus gen: n., sp. n.

Abstract

The autor describes a new genus and species of the subfamily Cylapinae which was found in the collection of Baltic amber of the Museum of Natural History in Vienna. The morphological description is provided with metric data and figures of the new species.

In Baltic amber the subfamily Cylapinae KIRKALDY (Heteroptera, Miridae) is represented by three genera belonging to two tribes. USINGER (1942) and JORDAN (1944) created the genus *Electrocoris* to contain *E. brunneus* and *E. fuscus*. Under a new name, *Jordanofulvius*, the genus was transferred to the subfamily Cylapinae (tribe Fulviini) by CARVALHO (1954). Moreover, the same autor shifted the genus described by JORDAN (1944) as *Oligocoris* (type-species *O. bidentata*) into Cylapinae and pronounced it synonymous with the genus *Fulvius*.

The tribe Cylapini is represented by a single genus and species – Ambercylapus nigrus – described by CARVALHO & POPOV (1984).

Amberofulvius g. n.

Diagnosis: Miridae, Cylapinae, Fulviini. Body oblong oval in shape, with general attributes of the tribe Fulviini, covered with fine, decumbent, bright hairs.

Head elongate, oblique. Vertex flat, lying at the same plane as eyes, smooth. Eyes protuberant laterally, in close contact with pronotum but not touching its anterior margin. In lateral view eyes reach beyond gulae. Antennae set very closely to the inner lower corner of eyes; antennal segment I somewhat thicker than

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antennal segment II, reaching beyond the anterior margin of the head, covered with short, decumbent hairs. Rostrum extends beyound coxa III. Rostral segment I longer than head, nearly twice as thick as rostral segment II; rostral segment II longer than rostral segment III and rostral segment IV shorter than the third one.

Pronotum with a narrow collar and large, fused calli occupying almost two thirds of its lenght. Lateral margins straight and carinate.

Mesonotum long, slightly shorter than scutellum. Scutellum flat.

Hemielytra distinctly longer than the abdomen with broad embolium and a cuneus longer than its width, covered with decumbent hairs.

Femora I and III thickened, tibiae covered in short, decumbent hairs in all pairs, tibiae II provided distally with small bright spines. Similar structures found on the inner side of femora I. Tarsi 2-segmented, claws elongated, narrow, without pulvilli, with a distinct subapical tooth. Parempodia well manifested, bristle-like.

Differential diagnosis: The genus is distinct from Archeofulvius described by CARVALHO (1966) on the oblique position of head, shorter rostrum, the antennae set very close to the eyes, broad and straight lateral and posterolateral margins of pronotum, hemielytra, which are distinctly longer than the abdomen, the cuneus longer than its width and on the fact that the tarsi are 2-segmented.

Type species: Amberofulvius dentatus sp. n.

Amberofulvius dentatus sp. n. (Figs. 1-6)

Diagnosis: Ground colour dirty yellow. Eyes and antennal segments I and II brown. Membrane gray with yellow veins.

Head with eyes broader than the anterior margin of pronotum, slightly oblique. Vertex as wide as the eye diameter. Antennae cylindrical, with antennal segment I slightly extending beyond the anterior margin of head. Antennal segments III and IV missing in the examined specimen. Gulae broad, baccula higher in the anterior part and tapering posteriorly. Clypeus well-developed, protuberant. Rostrum long, with rostral segment I stout and longer than the head length. Labrum narrow, long, reaching three quarters of the rostral segment I length.

Pronotum twice as broad at base as its length, anteriorly convex, laterally flattened, with the anterior margin straight; posterior margin with a broadly sinuate incision. Apical ring distinct but narrow. Posterolateral margins cut straightly.

Mesonotum and scutellum flat.

Hemielytra smooth, covered with very short, bright decumbent hairs. Claval commissura distinct, nearly twice as long as scutellum. Embolium very broad, cuneus distinct but without lateral cuneal incision. Membrane wrinkled longitudinally, with veins forming two closed cells.

Femora I and III thickened. Their inner margins provided with 5 short spines. Tibiae I (in distal half) bear 5 spines similar in structure to those on femora. Tibiae



Figs. 1–4: Amberofulvius dentatus g. n. sp. n. 1 – body outline, 2 – antennal segments I and II, 3 – femur and tibia I, 4 – termination of genital segment and claspers from below.

of other legs covered with very short, decumbent hairs. Tarsi 2-segmented, terminating in claws without pulvilli. Parempodia bristle-like.

Genital segment strongly elongate, conical. Claspers (from below) as in fig. 4. Metric data (in mm):

body length -5.1; max. width -2.0; head width -0.90; head length -0.67; head height -0.48; vertex width -0.30; eye width -0.30; eye height -0.50; the length and the width of antennal segments: I -0.53, 0.10; II -1.3; 0.06; III and IV - missing; apical width of pronotum -0.40; distal width of pronotum -1.53; pronotum length -0.67; mesonotum length -0.33; scutellum length -0.50; scutellum width at base -0.67; the length of the claval commissure -1.0; cuneus length -0.67; cuneus width -0.50; length of rostral segments: I -0.58; II -0.77; III -0.68; IV -0.57; the length and the width of leg I elements: femur -1.0; 0.30; tibia -1.2, 0.08; total length of tarsal segments I and II -0.23; leg II respectively: femur -0.83, 0.20; tibia -1.5, 0.06; tarsal segments length -0.16; legs III: coxa -0.30, 0.33; femur -1.30, 0.33; tibia -1.8(?); tarsal segments length -0.20; genital segment length -0.67.

Remarks: The new species does not correspond to any extant species of the tribe Fulviini (CARVALHO 1955; CARVALHO & LORENZATO 1978; CARVALHO & WAL-LERSTEIN 1978; SMITZ & STYS 1973; WHEELER Jr. 1977). It is also different from the mirid species in Baltic amber which were described by GERMAR & BERENDT (1856) although most of their specimens belonged to the subfamily Cylapinae KIRK. (The author's comment.)

Amberofulvius dentatus can be distinguished from Jordanofulvius fuscus (JORDAN) on the following characters: antennal segment I is longer (reaching beyond the anterior margin of head), antennal segments II, III and IV are cylindrical in shape, rostrum is distinctly shorter, clypeus is not exposed above, spines are located on femora I and tibiae II, tarsi are 2-segmented, long hairs on lateral margins of pronotum are wanting.

The differences between the new form and *Archeofulvius singularis* CARVALHO are outlined in the generic diagnosis.

The diagnostic differences between the genera Archeofulvius CARVALHO and Jordanofulvius CARVALHO (1954) are presented in CARVALHO (1966).

Holotype: 1 δ , Baltic amber, Naturhistorische Museum, Vienna, 1913, No. 42 (a small piece of amber).

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Figs. 5–6: *Amberofulvius dentatus* g. n. sp. n. 5 – head and pronotum, 6 – head in lateral view.

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