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A new genus and species of Cylapinae from the Afrotropical Region (Hemiptera: Miridae)

JACEK GORCZYCA

Department of Zoology, University of Silesia, Bankowa 9, 40-007 Katowice, Poland, e-mail: gorczyca@us.edu.pl

ABSTRACT. A new genus and two new species *Kotejafulvius jani* **sp. n.** and *K. ghanaensis* **sp. n.** are described on the basis of specimens collected in Ghana. The species *Peritropis mactrotricha* GORCZYCA is transferred to the new genus, **comb. n**. The dorsal habitus of *Kotejafulvius jani* sp. n. and the pictures of male genitalia of all known species are provided. The key to all known Afrotropical genera and the key to the species of *Kotejafulvius* are also given.

KEY WORDS: Hemiptera, Miridae, Cylapinae, *Kotejafulvius*, new genus, new species, Afrotropical Region.

INTRODUCTION

The true bugs from the subfamily Cylapinae of the Afrotropical region and the Arabian Peninsula were revised a few years ago (GORCZYCA 2000, 2003a, b; LINNAVUORI & GORCZYCA 2002). Twelve genera, 66 species and one subspecies have so far been reported from this area. Although all available material was included in these papers, it is obvious that many taxa of the Afrotropical region still remain unknown.

Within the material borrowed from the Museum of Natural History I found specimens of Cylapinae which represented a new genus and two new species. The new genus belongs to the tribe Fulviini. Since the key to Afrotropical Fulviini which I presented in a revision of Afrotropical Cylapinae (GORCZYCA 2000) is incomplete, a new key is provided here.

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TAXONOMY

Key to the genera of Fulviini of the Afrotropical Region.

| 1. Second antennal segment distinctly flattened, in the middle much wider than vertex <i>Phyllofulvidius</i> GORCZYCA |
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| Second antennal segment not flattened, its diameter more than twice as short as the width of vertex |
| 2. Pronotum with calli projecting upwards in the form of long, pointed cones, eyes removed from the apical collar |
| Pronotum without calli projecting upwards in the form of long, pointed cones, eyes usually contiguous with the apical collar |
| 3. First segment of rostrum shorter than head in side view, pronotum less than twice as short as its posterior margin, mesoscutum not exposed |
| First segment of rostrum as long as head in side view or longer, pronotum at least twice as short as its posterior margin |
| 4. Pronotal collar distinct |
| Pronotal collar absent Rhinofulvius REUTER |
| 5. Body almost unicoloured, pale brown to almost black, cuneus long, curved and thin, usually as broad as embolium, claws not toothed subapically but with a long, sharp spine at their base |
| Body rarely unicoloured, cuneus usually distinctly broader than embolium, claws usually toothed subapically, without a long, sharp spine at their base |
| 6. Claval suture contiguous with punctuate line or deep furrow |
| Claval suture not contiguous with punctuate line or deep furrow |
| 7. Hemelytra with punctured long line along the medial fracture, reaching well beyond the apex of clavus |
| Hemelytra without punctured line along the medial fracture, or the line is short, not reaching beyond the apex of clavus |
| 8. Body usually elongate oval, embolium usually wide, pronotum very broad and short, lateral margins of pronotum usually elevated |
| Body usually elongate, if not, then lateral margins of pronotum not elevated |
| 9. Lateral margins of pronotum sharp, elevated Microfulvius POPPIUS |
| - Lateral margins of pronotum not elevated |

Kotejafulvius gen. n.

Type species: Kotejafulvius jani sp. n., present designation.

Etymology

This genus is named in honour of the late Professor JAN KOTEJA, an eminent biologist, famous specialist in scale insects and palaeontologist, my tutor and great authority.

Diagnosis

This genus is superficially similar to the genera *Peritropis* and *Peritropella*. From the former it can be distinguished by a deep line along the claval suture, while from the latter by short head and lack of the punctured line along the medial fracture, or by the length of this line, which, if present, is very short (Fig. 1). It can be also distinguished by a distinct, transverse furrow, separated mesoscutum and scutellum.

Description

Small insect, body relatively broad and stout, shining, covered with long setae; head short with a distinct, longitudinal sulcus on the vertex. Eyes relatively large, covered with protruding setae. Antennae inserted on small tubercles contiguous with the margin of eye, second antennal segment relatively short, much shorter than the posterior margin of pronotum.

Pronotal collar very thin, indistinct, pronotum broad, the anterior lobe of pronotum distinct, raised, with a deep sulcus between cali. Mesoscutum well exposed, separated from scutellum by a distinct, transverse furrow.

Hemelytra well developed, brachypterous forms unknown, corium with a distinct costal fracture; there is a punctuate line or a deep furrow inside the clavus, contiguous with claval suture, sometimes there is also a short, punctured line along the medial fracture. Cuneus short, broad, membrane two-celled, minor cell sometimes indistinct.

Legs relatively short, tarsi short, two-segmented, second segment divided, claws with a distinct subapical tooth.

Parameres relatively large, especially right paramere, aedeagus membranous (Figs 2-8).

Key to the species of the genus Kotejafulvius

| 1. Cuneus unicoloured, brown | |
|-------------------------------------|----------------------------------|
| Cuneus partly pale | <i>jani</i> sp. n |
| 2. Pronotum unicoloured, dark brown | ghanaensis sp. n. |
| Pronotum pale brown to yellow | mactotrichus (GORCZYCA) comb. n. |

Kotejafulvius ghanaensis sp. n.

(Figs 4, 5)

Type material

Holotype (male): UV Trap; Tafo, Ghana, 05. I. 66. Housed in the Natural History Museum, London, England.

Etymology

Named after its terra typica.

Diagnosis

Similar to *K. jani* sp. n., but it can be distinguished by unicoloured cuneus and almost unicoloured corium.

Description

Male (female unknown). Body small, brown, shining, length of the body 2.60 mm, width 1.00 mm. Head unicoloured, dark brown, length of the head 0.40 mm, width 0.62 mm, diameter of eye 0.20 mm. First antennal segment brown, pale only at base, second segment pale brown, slightly darkened in the apical part, covered with dense, short setae. Remaining segments broken in the specimen examined. Length of the anntenal segments in mm: 0.25: 0.75. Rostrum brown, long, reaching pygophor but the length od the individual segments umeasureable in the specimen examined.

Pronotum unicoloured, dark brown, length of pronotum 0.37 mm, length of the anterior margin 0.50 mm, lateral margins 0.47 mm, posterior margin 0.95 mm. Mesoscutum dark brown, scutellum dark brown, with a white patch at apex.

Hemelytra brown, covered with fine setae; there is a small, short punctured line along medial fracture. Clavus with large pale patch in the middle, cuneus small, unicoloured brown. Membrane pale gray, venation brown, distinct.

Body ventrally brown, coxae pale, femora and tibiae brown, tarsi slightly paler.

Kotejafulvius jani sp. n. (Figs 1–3, 8)

Type material

Holotype (male): UV Trap; Tafo, Ghana, 19. I. 66; paratype (female): UV Trap; 16. VII. 65, Tafo, Ghana.. Housed in the Natural History Museum, London, England.

Etymology

Named after a well-known Polish hemipterologist, the late Professor JAN KOTEJA.



Fig. 1. Kotejafulvius jani sp. n., holotype, dorsal habitus.

Diagnosis

This species can be distinguished from the other by unicoloured, dark brown head and pronotum, hemelytra with a pale longitudinal line and patches, and body covered with silvery, long, closely fitting setae.



Figs 2–8. Parameres: 2–3 - *Kotejafulvius jani* sp. n., holotype; 4–5 - *K. ghanaensis* sp. n., holotype; 6–7 - *K. macrotrichus* (GORCZYCA), paratype; 8 - aedeagus *Kotejafulvius jani* sp. n., holotype.

Description

F e male. Body small, stout, brown with pale areas, length of the body 2.80 mm, width 1.32 mm. Head dark brown with small paler spots, covered with thin, pale setae, length of the head 0.47 mm, width 0.65 mm, diameter of eye 0.17 mm. First antennal segment chestnut, pale at base and apex, second segment paler at base, darker at the slightly

thickened apex. Remaining segments broken in the specimen examined. Length of segments in mm: 0.27: 0.80. Rostrum thin, long, reaching beyond the metacoxae, length of the individual segments immeasurable in the specimen examined.

Pronotum unicoloured, dark brown covered with long, slivery setae. Length of pronotum 0.62 mm, length of the anterior margin 0.62 mm, lateral margin 0.50 mm, posterior margin 1.12 mm. Mesoscutum and scutellum slightly convex, dark brown, only apex of scutellum pale.

Hemelytra dark brown, covered with dense, long, silvery setae, there is a large white patch in the middle of clavus and five short, white longitudinal lines between claval suture and the margin of hemelytra. There is also a thin, short, punctured line along the medial fracture. Cuneus white at base, dark brown at apex, membrane grey, major cell triangular.

Body ventrally chestnut, coxae pale, mesofemora dark brown with a white patch at apex (remaining legs broken in the specimen examined), tibiae brown, pale at apex, tarsi pale.

Male. Similar to female but smaller and the pale lines and patches are less distinct than in female. Length of the body 2.36 mm, width 1.08 mm, length of the head 0.35 mm, width 0.57 mm, diameter of eye 0.15 mm. Length of the antennal segments in mm: 0.20: 0.62 (remaining segments and rostrum broken in the specimen examined). Length of pronotum 0.32 mm, length of the anterior margin 0.50 mm, lateral margins 0.37 mm, posterior margin 0.90 mm. Membrane paler than in female, venation distinct.

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