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A new species of Cylapinae from the Oriental Region (Heteroptera: Miridae)

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ABSTRACT. A new species of Cylapinae *Fulvius thailandicus* is described from Thailand. A key to the species of *Fulvius bifenestratus*-group is given. Figures of the dorsal habitus, femoral trichobothria, parameres, aedeagus and tarsi of the new species, and of parameres and aedeagus of the afrotropical species *Fulvius major* SCHMITZ are provided.

Key words: Thailand, entomology, taxonomy, new species, Cylapinae, Miridae, Heteroptera.

INTRODUCTION

The genus *Fulvius* STÅL is one of the most diverse and speciose among the genera of Cylapinae. Most species have been described from the Neotropical, Afrotropical and Oriental Regions. Some are also known from the islands of the Indo-Pacific. There are twelve species of the genus known so far from the Oriental Region (SCHUH 1995; GORCZYCA 2002). According to their general appearance and the structure of tarsi and male genitalia they can be divided into two groups: *anthocoroides*-group, which occurs in the Orient, Afrotropics and Indo-Pacific, and *bifenestratus*-group which includes one Oriental form and one species from New Guinea, namely *Fulvius bifenestratus* POPPIUS and *F. bimaculatus* POPPIUS (GORCZYCA, 2002). Probably *F. subnitens* POPPIUS should also be added to this group.

During the visit of the junior author in the Zoological Museum in Copenhagen two male representatives of *Fulvius* were found among the material from Thai-

land. They represent a new species which belongs to the *bifenestratus*-group. A description of the new species is given below.

ACKNOWLEDGEMENTS

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TAXONOMY

KEY TO THE SPECIES OF *BIFENESTRATUS*-GROUP

1. Body without large, pale patches on corium or clavus *F. thailandicus* GORCZYCA n. sp.
- Corium with large, pale patches 2.
2. Corium with a pale or orange patch above the cuneus *F. subnitens* POPP.
- Corium without a pale or orange patch above the cuneus 3.
3. First antennal segment equal to or shorter than head, insects relatively large, length of the body more than 4 mm in female, 3.6 mm in male, a pale patch on the membrane distinct *Fulvius bimaculatus* POPP.
- First antennal segment distinctly longer than head, smaller insects, length of the body up to 4 mm in females, and up to 3.5 mm in males, a pale patch on the membrane indistinct *Fulvius bifenestratus* POPP.

***Fulvius thailandicus* GORCZYCA n. sp.**

DIAGNOSIS

This species is superficially similar to the afrotropical species *F. major* SCHMITZ and *F. unicolor* POPP. and to *F. carvalhoi* GORCZYCA from Papua New Guinea, but the structure of male genitalia indicates that it belongs to the *Fulvius bifenestratus*-group. The new species can be distinguished by having an orange spot above the cuneus and on the basis of male genitalia (Figs 2-4, 6-8; CARVALHO & LORENZATO 1978, Figs 63-65; GORCZYCA 2000, Figs 27 A-D).

Description

Male (female unknown). Body elongated, brown, covered with dense, short setae. Length of the body 4.80-4.90 mm, width 1.55 mm. Head elongated, dark brown, covered with pale, thin, semi-erect setae. Mandibular plate slightly tinged with red. Eyes flattened, slightly removed from the pronotal collar, sparingly

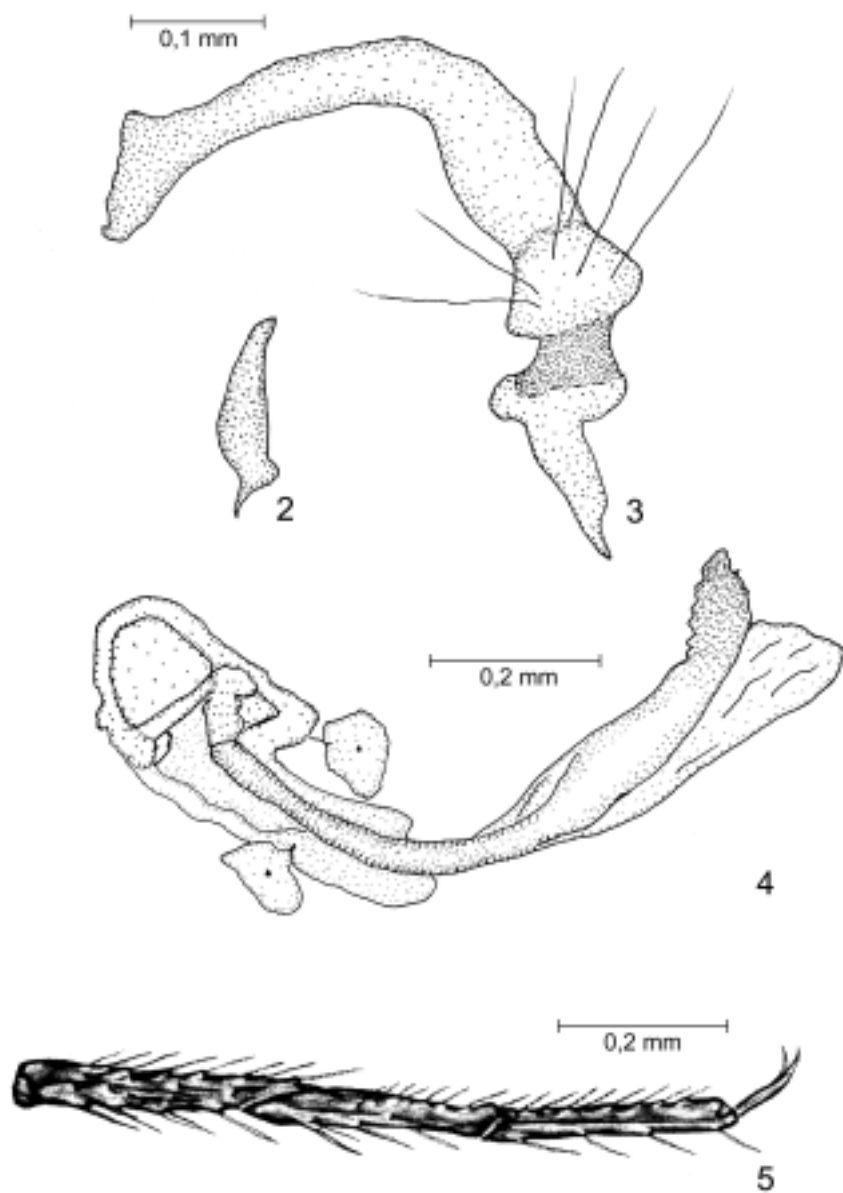
covered with short, fine setae. Length of head in top view 0.82 mm, width 0.64 mm, diameter of eye 0.18 mm. Antennae inserted on distinct tubercles contiguous with the margin of eye. First antennal segment relatively thick and long, brown, slightly thickened and tinged with red in the apical part, covered with pale setae. This segment also bears a single, long, erect seta in the apical part. Second segment bicoloured, brown in the basal part, then pale, slightly thickened towards the apex, covered with dense, short, pale setae. Third segment dark brown, very thin, covered with long, protruding setae. Length of the antennal segment in mm: 0,70: 1,38: 1.0 ? (third segment broken at apex in the examined specimens). Rostrum thin, brown, reaching pygophore, the length of individual segments unmeasurable in the examined specimens.

Pronotal collar very thin, dark brown, pronotum dark brown, the anterior lobe of pronotum raised, with a distinct longitudinal sulcus in the middle, the posterior margin of pronotum with a small incision (Fig. 1). Length of pronotum 0,64 mm, length of anterior margin 0.60 mm, lateral margins 0,80 mm, posterior margin 1,28 mm. Mesoscutum well exposed, slightly paler than scutellum, slightly tinged with red at angles, scutellum flat, brown.

Hemelytra brown, paler than head and pronotum, covered with dark and pale setae. Clavus dark brown, pale at apex, embolium narrow, pale brown, widened and orange in the distal part, cuneus dark brown. There is a small, pale patch continuous with the distal part of embolium and cuneus. Membrane brown, venation dark brown, indistinct, major cell triangular.

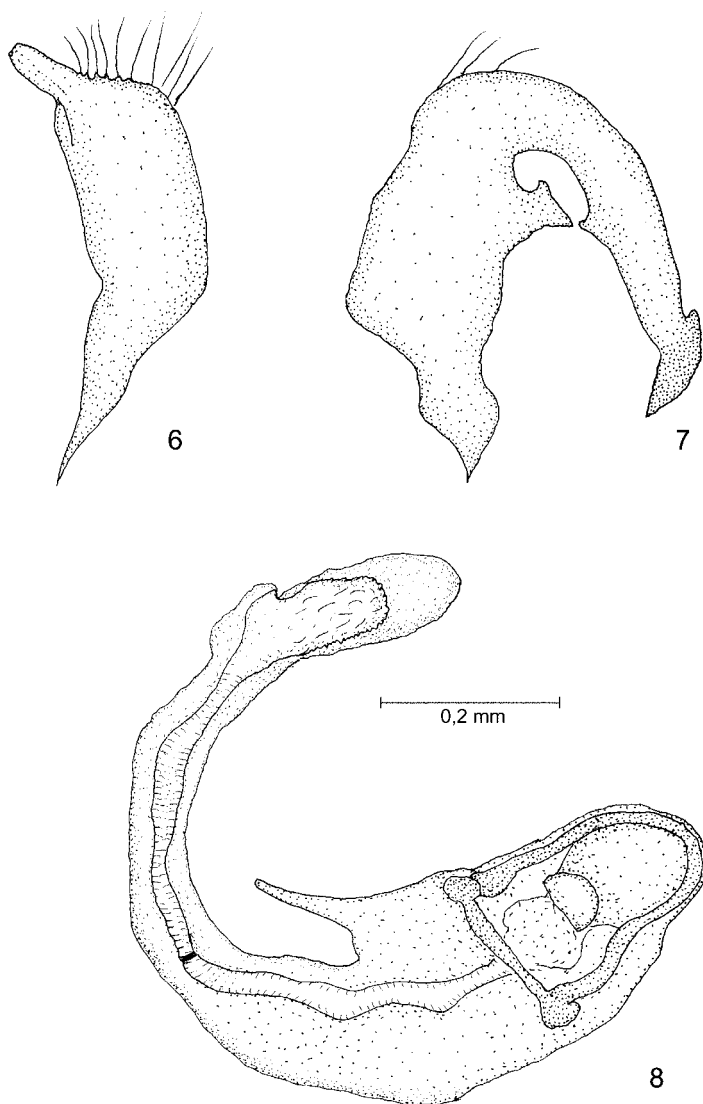


1. *Fulvius thailandicus* n. sp., holotype, dorsal habitus

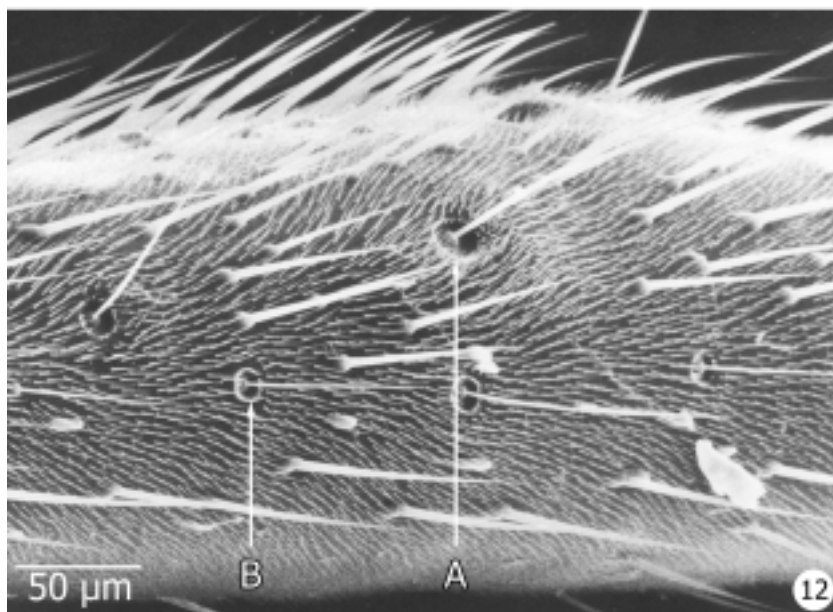
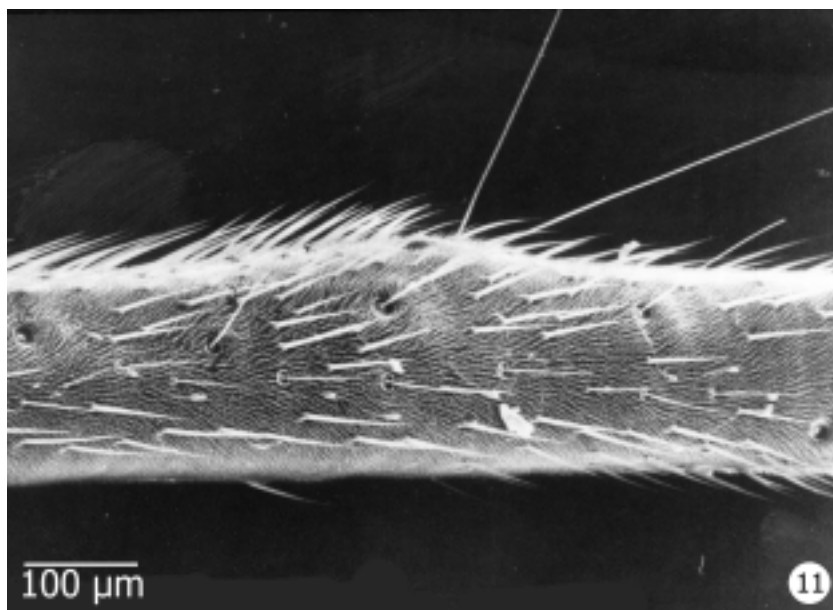


2-5. *Fulvius thailandicus* n. sp., paratype, 2 - right paramere, 3 - left paramere, 4 - aedeagus, 5 - tarsi

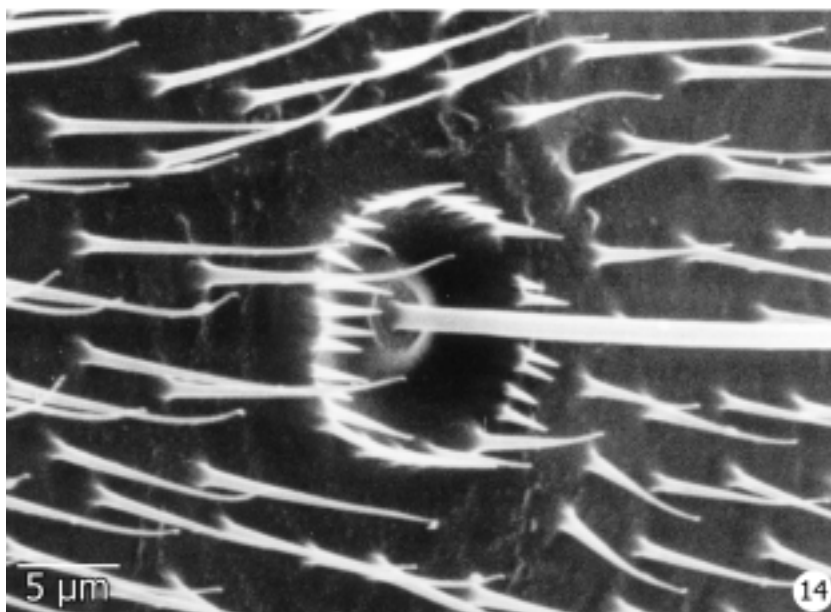
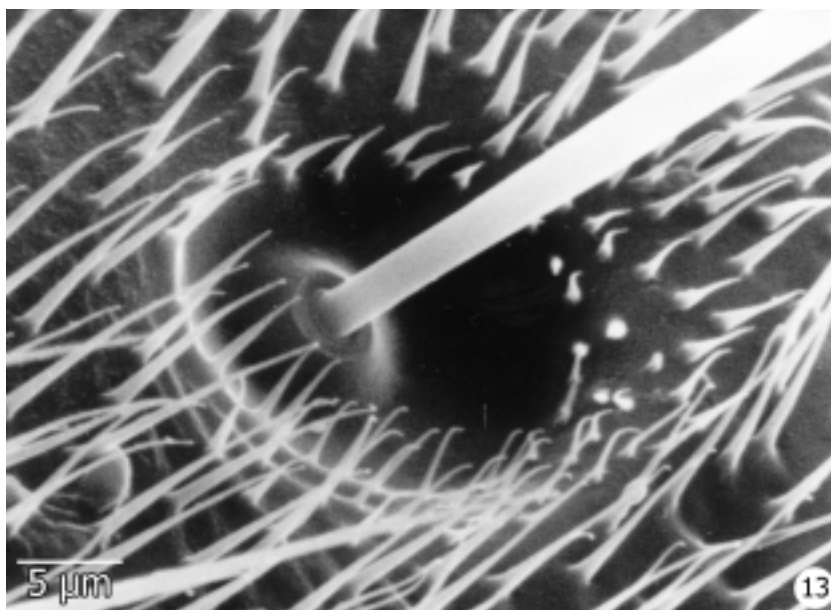
Underside of the body brown, coxae and femora brown, slightly tinged with red at apex; tibiae and tarsi pale brown, covered with dense, pale setae, tarsi two-segmented, second segment divided, claws not toothed subapically (Fig 5). Mesofemora bearing five small trichobothria with a very short (broken?) trich (Figs 9-10). Metafemora with five main and six minor trichobothria, with simple trichoma (Figs 11-14). SCHUH (1975) examined the number and structure of



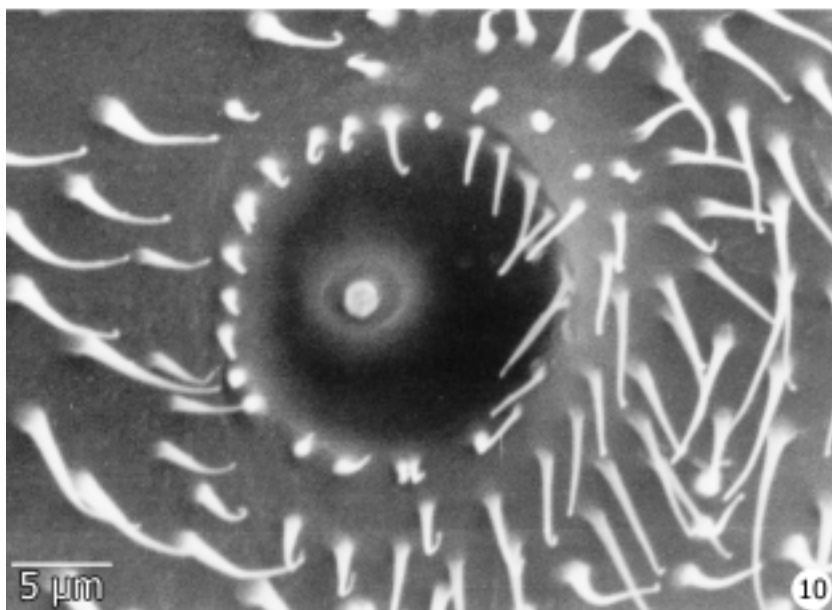
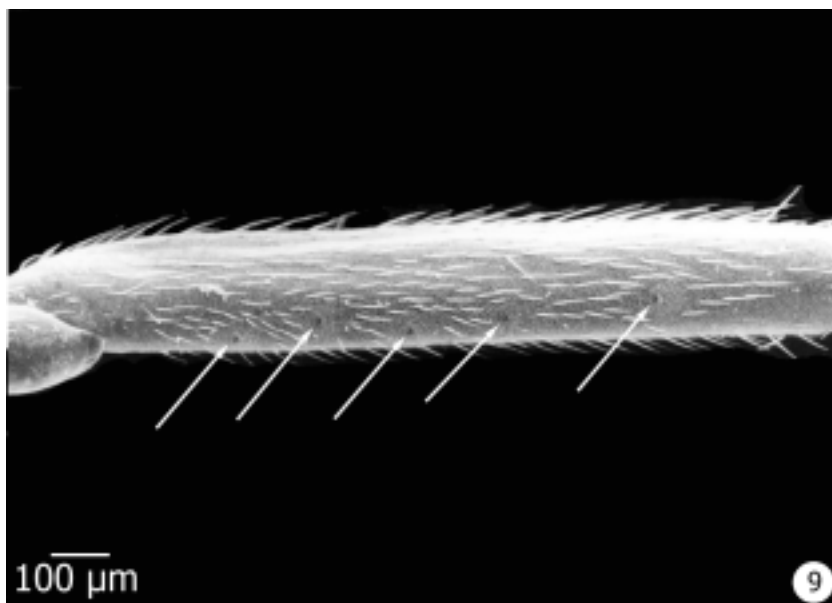
6-8. *Fulvius major* SCHMITZ, 6- right paramere, 7 - left paramere, 8 - aedeagus



9-10. *Fulvius thailandicus* n. sp., paratype, trichobothria, 9 - number and distribution of mesofemoral trichobothria, 10 - single mesofemoral trichobothrium



11-12. *Fulvius thailandicus* n. sp., paratype, trichobothria: number and distribution of metafemoral trichobothria (A - main trichobothrium, B - minor trichobothrium)



13-14. *Fulvius thailandicus* n. sp., paratype, trichobothria: 13 - single main trichobothrium, 14 - single minor trichobothrium

trichobothria in Miridae and described these structure also in the genus *Fulvius* Stål. He reported six mesofemoral and eight metafemoral trichobothria with well developed trichoma. Trichobothrial pattern in *Fulvius thailandicus* may indicate that the structure and number of trichobothria in the genus *Fulvius* might be much more variable.

Left paramere robust (Fig. 3), right paramere reduced to a small “leaflet” (Fig. 2), reminiscent of *F. bimaculatus*, *F. bifenestratus* and *F. subnitens* and quite different from *F. major* (Figs 6-8). Aedeagus membranous (Fig. 4).

TYPE MATERIAL

Holotype (male): Thailand, Doi Suthep-Pui, natn. Park, Doi Pui road 1000 m, 23-26. x. 1979, Zool. Mus. Copenhagen Exped.; paratype (male): the same data as holotype. Both housed in the Zoological Museum, Copenhagen, Denmark.

DISTRIBUTION

Thailand.

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