A new species of lacebug from Southern Kazakhstan, Catoplatus guentheri n. sp. (Heteroptera: Tingidae)

VIKTOR B. GOLUB

Kurzfassung

Eine neue Gitterwanzenart aus Kasachstan, Catoplatus guentheri n. sp. (Heteroptera, Tingidae)

Catoplatus guentheri n. sp. wird von den nordwestlichen Ausläufern des Tien Shan im südlichen Kasachstan beschrieben und abgebildet.

Abstract

Catoplatus guentheri n. sp. from Southern Kazakhstan (spurs of Northwestern Tien Shan) is described and illustrated.

Key words: Catoplatus guentheri n. sp., Heteroptera, Kazakhstan, New species, Taxonomy, Tingidae, Tien Shan

1. Introduction

In this paper, Catoplatus guentheri n. sp. is described as the eighteenth known Palaearctic species of Catoplatus Spinola (PÉRICART & GOLUB 1996). The paper is based on the material of the Zoological Institute, St. Petersburg, Russia.

This paper is dedicated to the well-known researcher of Heteroptera, collector entomologist, remarkable person and my senior colleague Dr. Hannes Günther on the occasion of his 70th birthday.

2. Results

Catoplatus guentheri sp. n.

(Figs. 1, 2, 5, 9).

HOLOTYPE &: Southern Kazakhstan, Karatau Range, 20 km N of Kentau (25 V 1966), *Emeljanov*.

PARATYPES: 1 ♂, as holotype; 1 ♀, Southern Kazakhstan, Karatau Range, 20 km N of Kentau, Baldyr River (26 V 1966), *Emeljanov*; 2 ♀, Southern Kazakhstan, Karatau Range, Teresakan River, Achisay settlement (1 VI 1936), *Luk'yanovich*;

1 ♀, Southern Kazakhstan, 30 km W of former Auleata (Dzhambul at present), Akkul' Lake (7-8 V 1937), Luk'yanovich.

Holotype and Paratypes are deposited in the collection of the Zoological Institute, St. Petersburg, Russia.

Distribution: Spurs of Northwestern Tien Shan, Southern Kazakhstan.

Description: Body oval, 2.4-2.6 times as long as wide, with distinctly rounded margins of hemelytra in all there length. Dorsal colour dirty yellow, pronotal disc sometimes blackish brown.

Head brown, covered with light bloom, rather broad, 2.31 (3) or 1.82-2.17 (2) as wide as long, with two pairs of light spines: small, conical, parallel, slightly moved apart frontally and extremely small occipitally, the latter located behind the eyes. Occipital spines can be hardly visible, almost microscopic. Vertex wide. Antennae thick, touching or almost touching each other by their segment I (thickness of the antennal segment I equal 0.1-0.12 mm), moderately long, brown or yellowish brown, antennal

segment IV brownish black, except at its light base. Antennae covered with extremely short, light, pressed hairs. Antennal tubercles short, their apex curved toward medial line of head. Ratio of length of antennal segment III to width of head $0.9 \, (3)$, or 0.88- $0.95 \, (9)$.

Pronotum moderately convex, with 3 very low longitudinal carinae that do not have areolae or bearing extremely small, hardly visible areolae at the base of posterior pronotal triangular process. Disc brownish yellow or blackish brown. Hood (or else vesicula, elevated areolate formation in the anterior part of pronotum) rather low, with almost straight anterior margin. Paranota reflexed and pressed to sides of pronotal disc in all their length, with 2 rows of small, mainly rectangular areolae in almost all their length or only in their widest middle part; base and apex of paranota with only 1 row of areolae.

Macropterous form: Hemelytra with rather small areolae. Costal area very narrow, carinate, without areolae in the most part of its length; slightly expanded only at the base and near the apex, with 1 row of extremely small areolae. Subcostal area with 3 rows of areolae in the middle part of its length, biseriate in the base and near the apex. Discoidal area with 7 irregular rows of areolae in the widest part. Sutural (inner) area with 8-9 irregular rows of areolae in the widest part.

Body ventrally brown, places blackish brown. Legs brown. Femora and tibiae rather thick, tibiae slightly thinner than antennal segment III. Fore and middle tibiae 1.05-1.08 (\circlearrowleft), or 1.0-1.05 (\updownarrow), hind tibiae 1.43-1.45 (\circlearrowleft) or 1.35-1.43 (\updownarrow) times longer than width of head. Fore and middle tibiae 1.19 (\circlearrowleft) or 1.08-1.14 (\updownarrow), hind tibiae 1.6 (\circlearrowleft) or 1.45-1.54 (\updownarrow) times longer than length of antennal segment III.

Measurements (in mm): Body length 3.5-3.87, body width 1.42-1.58, pronotum width 1.12-1.25, head width 0.53-0.54 (\circlearrowleft) or 0.54-0.57 (\updownarrow), vertex width 0.27-0.31, length of discoidal area of hemelytron 1.86 (\circlearrowleft) or 2.0-2.14 (\updownarrow), its width 0.43-0,49 (\circlearrowleft) or 0.5 (\updownarrow). Length of antennal segments (I-IV): holotype \circlearrowleft : 0.16, 0.14, 0.48, 0.24, paratypes \updownarrow 0.16-0.19, 0.15-0.17, 0.51-0.53, 0.24-0.27. Length of tibiae: fore and middle 0.57, hind 0.77.

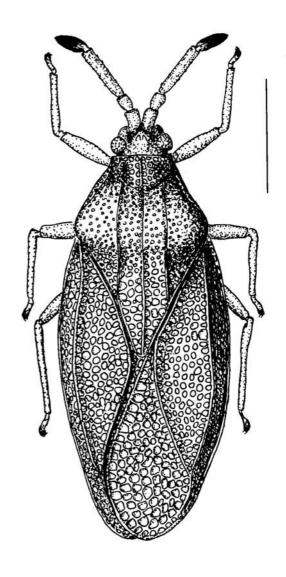
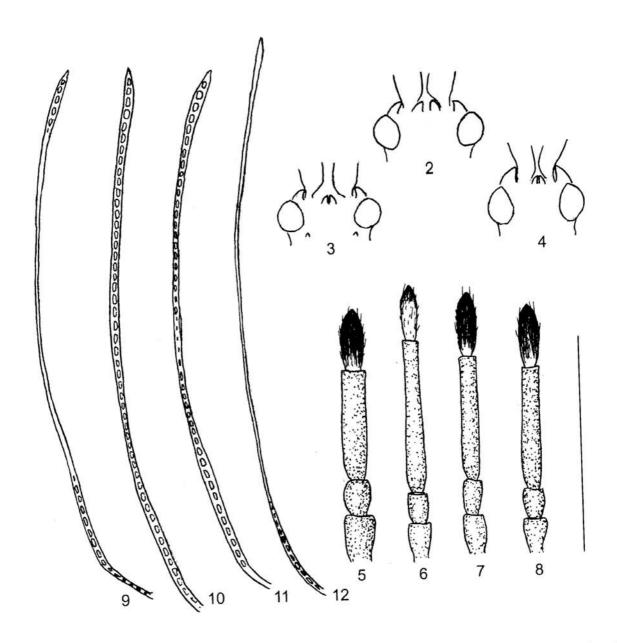


Fig. 1: Catoplatus guentheri n. sp., ♂ Holotype, general view. Scar bar = 1 mm.

Etymology: I am very glad to dedicate this species to the well known heteropterologist Hannes Günther.

Diagnosis: The new species is very similar to 3 Middle Asian species: C. fulvicornis (JAKOVLEV, 1889), C. citrinus HORVÁTH, 1897 and C. immarginatus GOLUB, 1974 in very narrow, carinae like costal area, brownish yellow antennal segments I-III, 3 rows of areolae in subcostal area of hemelytra, 2 rows of areolae in widest part of paranota.

C. guentheri distinguishes from these 3 closely related species by the thickest antennae (Fig. 5), frontal spines moved apart (Fig. 2), and not strongly convex pronotal disc. All 3 comparable species have thinner antennae (Figs. 6-8), touching frontal spines (Figs. 3-4) except part of individuals of C. citrinus, and rather strong convex



Figs. 2-12: Catoplatus guentheri n. sp., C. fulvicornis (JAKOVLEV), C. citrinus HORVÁTH, C. immarginatus Golub; 2-4 – head dorsal, \circlearrowleft : 2 – C. guentheri, 3 – C. fulvicornis (Uzbekistan), 4 – C. immarginatus (Tajikistan); 5-8 – antenna, \circlearrowleft : 5 – C. guentheri, 6 – C. fulvicornis (Uzbekistan), 7 – C. citrinus (Tajikistan), 8 – C. immarginatus (Tajikistan); 9-12 – costal area of hemelytron, \circlearrowleft : 9 – C. guentheri, 10 – C. fulvicornis (Uzbekistan), 11 – C. citrinus (Tajikistan), 12 – C. immarginatus (Tajikistan). Scar bar = 1 mm.

pronotal disc. Besides each comparable species have additional similarities to *C. guentheri* and distinctions from it.

C. fulvicornis has 2 extremely small occipital spines (Fig. 3) as C. guentheri, but it can be separated from C. guentheri by distinctly longer and thinner antennae (length of antennal segment III of \circlearrowleft 0.54-0.57 mm; ratio of length of antennal segment III to width of head by \circlearrowleft 1.06-1.32, by \circlearrowleft 1.0-1.03; thickness of segment III in its base 0.07-0.09 mm,

segment III in the apical half clearly thinning), yellow antennal segment IV in almost the whole of its length except apex (Fig. 6), narrower vertex (0.22-0.24 mm) (Fig. 3), the presence of extremely small areolae in the all length of costal area (Fig. 10), slightly rounded margins of hemelytra, smaller sizes: body length 3.3-3.8, body width 1.25-1.4, pronotum width 1.06-1.12 mm. Body as a rule more elongated: 2.6-2.85 times as long as wide.

C. citrinus has sometimes frontal spines slightly moved apart as C. guentheri. C. immarginatus has very narrow costal area as C. guentheri. Both species can be separated from C. guentheri by the absence of occipital spines and presence of a pair of small, smooth spots or even impressions.

As a distinction from *C. guentheri* narrow costal area of *C. citrinus* of hemelytron with 1 row of very small or extremely small areolae in all or almost all its length (only a short medial part of the costal area can sometimes be without areolae) (Fig. 11). Antennae of *C. citrinus* as a rule are slightly longer than those of *C. guentheri* (Fig. 7): length of antennal segment III 0.54-0.57 (3) or 0.49-0.51 (\$\tilde{\pi}\$); ratio of length of antennal segment III to width of head 0.1-0.12 (3) or 0.94-0.96 (\$\tilde{\pi}\$).

C. immarginatus has no areolae at costal area of hemelytra or has only several rudimentary areolae near the apex of it (Fig. 12), antennae thinner and always longer than those of C. guentheri (Fig. 8): length of antennal segment III 0.56-0.64 (\circlearrowleft) or 0.54-0.6 mm, ratio of length of antennal segment III to width of head 1.05-1.2 (\circlearrowleft) or 1.0-1.02 (\updownarrow), margins of hemelytra slightly rounded. Body more elongated: 2.83-3.12 (\circlearrowleft) or 2.47-2.98 times as long as wide.

3. Acknowledgements

The author is indebted to Professor I. M. Kerzhner for the opportunity to study extensive material of the Zoological Institute, St. Petersburg. The work was supported by the Russian Foundation for Basic Research (grants 05-04-49089-a, 05-04-49917-a).

4. References

HORVÁTH, G. (1897): Description d'Hémiptères nouveaux et notes diverses. – Revue d'Entomologie **16**: 81-97. Caen.

JAKOVLEV, V. E. (1889): Zur Hemipteren-Fauna Russlands und der angrenzenden Länder. – Horae Societatis Entomologicae Rossicae **24** (1889-1990): 311-348. Moscow [in Russian and German].

GOLUB, V. B. (1974): Lacebugs of the genus Catoplatus (Heteroptera, Tingidae) of the fauna of the USSR. – Zoologicheskii Zhurnal **53**: 1798-1802. Moscow [in Russian, English summary].

PÉRICART, J. & GOLUB, V. B. (1996): Superfamily Tingoidea Laporte, 1832. In: AUKEMA, B. & RIEGER, C. (eds.): Catalogue of the Heteroptera of the Palaearctic Region. Vol. 2. Amsterdam (The Netherlands Entomological Society): 1-83.

Address of the author:

Prof. Viktor B. Golub, Voronezh State University, Universitetskaya Pl. 1, 394006 Voronezh, Russia E-mail: v.golub@inbox.ru

Manuscript received: 13.06.2007