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## A new Callicera Panzer species (Diptera, Syrphidae) from Tajikistan

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A new species — Callicera ziminae from Tajikistan, reared from larvae found in rot hole of deserted poplar (turanga) – Populus sp., is described and illustrated.

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Key words. Diptera, Syrphidae, Callicera, Tajikistan, new species.

## Introduction

The *Callicera* Panzer, 1809 is characterized by the postpronotum with dense tufts of hairs, elongated scapus lying on the surface of the frons, with elongated pedicellus and first flagellomere with apical arista, wing with vein  $R_{4+5}$  straight, eyes with hairs and metallic shiny body covered by long downy hairs. Sixteen species are known: 6 Palaearctic, 5 Oriental, 4 Nearctic, and 1 Neotropical (Coe, 1964; Thompson, 1980; Zimina, 1986; Peck, 1988; Speight, 1991).

In March-April 1978 in the Tigrovaya Balka Nature Reserve in Tajikistan in rot hole of deserted poplar (turanga) – Populus sp., were gathered some third instar larvae of the genus *Callicera*, from which at the end of August and at the beginning of September were reared four adults of the new species, *Callicera ziminae* sp. n., description of which is given below.

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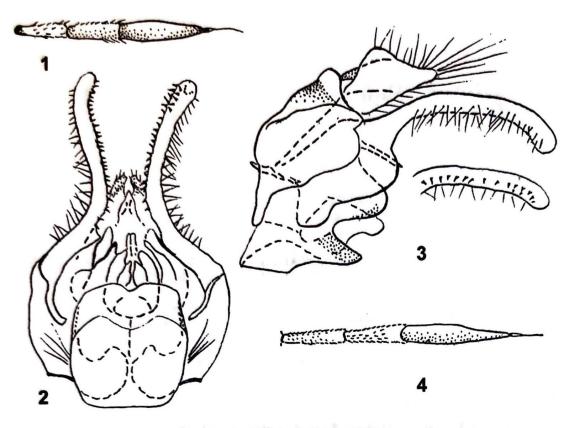
## Callicera ziminae sp. n.

(Figs 1—8)

Type locality. Tigrovaya Balka (near Jilikul), Tajikistan.

Diagnosis. The new species close to the palaearctic Callicera aenea (Fabricius, 1777), C. aurata (Rossi, 1790) and C. spinolae Rondani, 1844 and oriental C. doleshalli Verrall, 1913 from Burma (Muan-Mar) group of species with elongated pedicel and arista longer than width of the 1st flagellomere, from which it is distinguished by the shorter 1st flagellomere, scutellum with erected pale hairs, which on the margin of scutellum only 1/2 as long as length of scutellum or shorter, by the all hairs entirely yellow or pale, all trochanters and femora entirely yellow, scutum shining, almost without dusting, and male genitalia with slender, long and narrow surstyli (Figs 2, 3, 7,

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Figs 1—4. Callicera ziminae sp. n. 1, 4, antenna, lateral view: 1, male, 2, female; 2, 3, male genitalia: 2, ventral view, 3, lateral view.

8). In the paper of L.V. Zimina (1986) new species was mentioned as C. spinolae.

Holotypus. &, Tajikistan, Tigrovaya Balka Nature Reserve (Jilikul env.), larva collected under bark on deserted poplar (turanga) — Populus sp., 4.III.1978, imago — 31.VIII.1978, No. 74 (M. Danilevsky leg.).

Paratypes. 2 Q, the same data except: larvae collected in the rot-hole of deserted poplar (turanga) — Populus sp., 11.IV.1978, imago — 8.IX. 1978, No. 199 (M. Danilevsky leg.); 1 Q, the same data except: one larvae collected in the rot-hole on turanga — Populus sp., 1.III.1978, imago — 8.IX.1978, No. 31 (M. Danilevsky leg.).

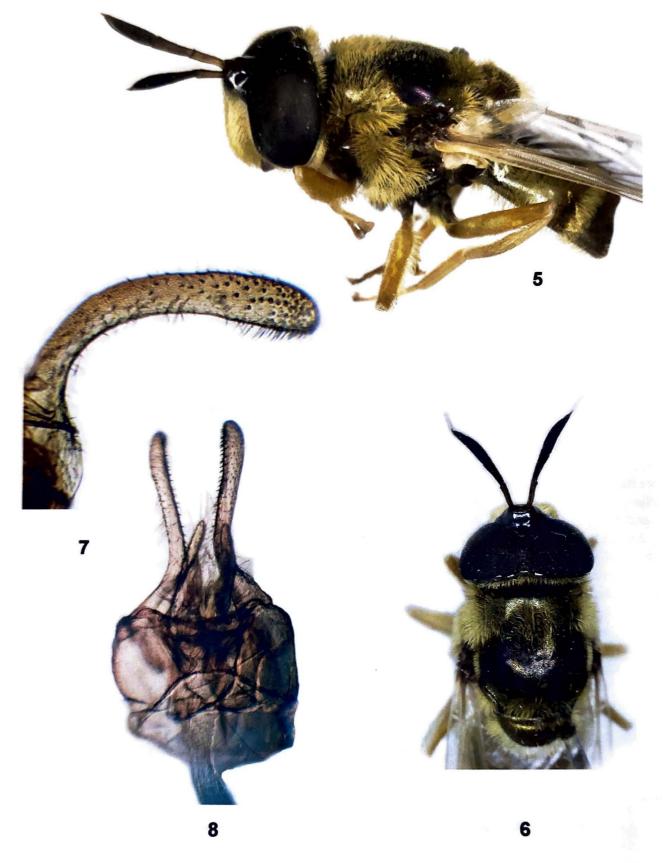
Description. Male. The body dark, with dense long yellowish hairs. The body length without antennae 10 mm.

Eyes holoptic, frons shining black, without hairs, as long as eyes touching line. Face black, covered by dense yellow hairs with the narrow median stripe bare, without hairs. Face 1.5 time as long as length of distance from the anterior ocellus to the base of the scape. Occiput with dense erected hairs. Face laterally without hairs, with broad bare stripe, which separated facial hairs from the hairs on the cheeks and occiput. Occiput laterally at level of scape with scarcely tiny adpressed hairs.

Antennae dark, the scape brownish yellow, pedicel dark brown and the first flagellomere black. The antennal ratio — scape : pedicel : 1st flagellomere without arista — as 1.6 : 1.6 : 2.5, and (scape + pedicel) : 1st flagellomere with arista as 3.2 : 3.5. Arista in basal third black, in apical part — snowy white. Eyes with dense erected hairs.

Thorax: scutum and scutellum bronze, rather metallic shining, almost without dusting. Scutum in the anterior third with stripe of dense long light yellow hairs, in the middle part with shorter and scarce, medially light, and laterally dark greyish hairs. Scutum posterolaterally and before scutellum with pale hairs. Anepisternum, katepisternum and anepimeron with tufts of long dense pale hairs. Scutellum with erected pale moderately long hairs, which on the margin of scutellum only 1/2 as long as length of scutellum or shorter.

Coxae brownish. Legs with all trochanters, femora, tibiae and tarsi entirely light reddish yellow, last tarsal segments entirely light yellow. Femora posteriorly with long pale bristles. Halteres pale. Wing hyaline, at base slightly yellowish, veins brownish.



Figs 5-8. Callicera ziminae sp. n., male, holotype. 5, 6, common view: 5, lateral view, 6, dorsal view; 7, 8, male genitalia: 7, left surstylus, lateral view, 8, dorsal view. Abdomen gold shining with long pale erected hairs. The 2nd tergite at posterior margin with dark bronze stripe, which is as long as distance from the posterior margin of segment. The posterior margin of 2nd tergite after dark streak with dark semiadpressed hairs. 3rd tergite in anterior 2/3 before dark bronze stripe with equal in length erected hairs, posterior part after dark bronze stripe with dense semiadpressed hairs. Tergite 4 in anterior half with erected hairs, and in posterior half with directed posteriorly almost adpressed dense hairs. Male genitalia (Figs 2, 3, 7, 8) with surstyli long, slender and narrow.

Female. Eyes broadly separated with the frontal stripe. Width of eye at the level of anterior ocellus 2.5 times of the width of frons.

The frons is broadened at the base of antennae, its width at the antennae base about 2 times (4:1.5) wider than at level of anterior ocellus. Frons black, roughly dotted, along the eye margin with the semilunar spot of white dust. Frons covered with goldish hairs, semiadpressed near the lateral margins of the ocellar triangle and erected in the upper half; hairs enclose the shining black stripe. Frons near the base of scape without hairs.

The face slightly convex, 1.5 times as long as frons; covered with dense adpressed hairs, with bare narrow median stripe. Occiput with long dense yellow hairs; at the antennae level — near the lateral margins of eyes with comparatively scarce adpressed hairs, which on the face and the cheeks separated with narrow bare stripe.

The antennal segments black; the scape slightly lighter, dark brown. The proximal part of flagellum is dark, distal part — white. The antennal ratio — scape : pedicel = 2.2:1.9, (scape +pedicel) : 1st flagellomere without arista = 4.1:3.5, and (scape +pedicel) : 1st flagellomere with arista = 4.1:4.5.

The eyes with short pale hairs, situated mostly along the inner half at the level of the base of antennae and face. The outward half of the eye almost bare.

The thorax in most part dark brown. The scutum shining black, slightly dotted, with tufts of long yellow hairs along the anterior and posterior margins. The scutum along the lateral margins with shorter greyish hairs.

The scutellum dark, fine dotted, with yellow hairs, longer at the margins.

The coxae black, with pale pile. Legs entirely light reddish-yellow include light yellow last tarsal segments. Halteres pale. Wing hyaline, veins brownish.

The abdominal segments dark, tergites from above with evenly dense yellow hairs. 2nd tergite with erected hairs. The anterior half of 3rd and 4th tergites with erected, and posterior half with semiadpressed hairs. The 1st, 2nd, 3rd and 4th tergites broad, 5th tergite triangular, narrower and shorter.

Distribution. Tajikistan.

## References

- Coe, R. L. 1964. Diptera from Nepal. Syrphidae. Bull. Br. Mus. (Nat. Hist.) Entomol. 15: 255-290.
- Peck, L. V. 1988. Family Syrphidae. In: Soós, A. and Papp, L. (eds): Catalogue of Palaearctic Diptera. Syrphidae-Conopidae. Elsevier Science Publ., Amsterdam, etc. 8: 11-230.
- Speight, M.C.D. 1991. Callicera aenea, C. aurata, C. fagesii and C. macquartii redefined, with a key to and notes on the European Callicera species (Dipt., Syrph.). Dipt. Digest. 10: 1-25.
- Thompson, F. C. 1980. The North American species of *Callicera* Panzer (Diptera: Syrphidae). Proc. entomol. Soc. Wash., 82: 195-211.
- Verrall, G. H. 1913. Descriptions of new species of the Syrphid genus Callicera (Diptera). Trans. Entomol. Soc. Lond. 1913(2): 323-333.
- Zimina, L.V. 1986. Review of Palaearctic hoverflies of the genus *Callicera* Panzer (Diptera, Syrphidae). Ent. Oboz., 65(3): 633-638 (In Russian).

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