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A NEW SPECIES OF CORDILURA FALLÉN, 1810 (DIPTERA: SCATHOPHAGIDAE) FROM RUSSIAN FAR EAST

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Summary. A new species, Cordilura flavotibialis sp. n. (Diptera: Scathophagidae), is described and illustrated based on specimen from Khabarovsky Krai. Characteristics for the differentiation of the new species from other species of Cordilura are given.

Key words: Diptera, Scathophagidae, Cordilura, new species, Khabarovsky Krai, Russia.


Резюме. По материалу из Хабаровского края описан Cordilura flavotibialis sp. n. (Diptera: Scathophagidae). Приведены иллюстрации и указаны признаки, отличающие новый вид от других видов рода Cordilura.

INTRODUCTION

Cordilura Fallén, 1810 is the largest genus within the family Scathophagidae and consists of 91 species distributed in the Northern Hemisphere: 46 species are known...
in Palaearctic (Iwasa, 2020) and 36 in Nearctic (Vockeroth, 1965, 1987), with seven species with Holarctic distribution; two species are recorded in Oriental Region (Ozerov & Krivosheina, 2012; 2013). There are currently 38 species in Russia (Ozerov & Krivosheina, 2023).

Recent collecting trip of Nikita Vikhrev to Khabarovsky Krai in June 2022 yielded one new to science species of scathophagid flies from the genus *Cordilura*. Its description is given below.

The terminology used in the species descriptions follows Séguy (1952) (scapular seta), McAlpine (1981), Cumming & Wood (2009), and Stuckenberg (1999) (post-pedicel).

The holotype of the new species is kept in the Zoological Museum, Moscow State University.

**DESCRIPTION OF NEW SPECIES**

*Cordilura flavotibialis* Ozerov et Krivosheina, sp. n.

https://zoobank.org/NomenclaturalActs/5124BB25-856A-4F1D-B0D1-3C587B7A1956

Figs 1–3


DESCRIPTION. MALE.

**Head.** Frontal vitta black in upper half and yellow in lower half, whitish dusted; fronto-orbital plate black, whitish dusted. Ocellar triangle black. Face pale yellow with whitish reflections. Parafacial pale yellow and gena yellow. Postcranium black, whitish dusted. Setae: 2 orbitals, 2 frontals, 1 ocellar, 1 very long inner vertical, 1 small outer vertical and 1 small postocellar; 1 pair of strong vibrissae present. Antenna black. Postpedicel rounded apically, approximately 1.5–2 times as long as wide. Arista moderately pubescent in basal half. Palpus yellow, with a long apical seta.

**Thorax** black; scutum subshining, pleural sclerites thinly greyish dusted. Scutum with 2 postpronotal (dorsal about one half of ventral), 1+2 supra-alar (anterior postspiracular seta about one half of posterior postspiracular seta), 2 postalar, 1 scapular, 1+2 dorsocentral setae; acrostichal setulose in two rows, intra-alar setae absent. Proepisternum covered with pale hairs, without strong setae. Aneupisternum with one strong black setae near posterior margin. Katepisternum with pale hairs in ventral corner and 1 strong black seta in posterodorsal corner. Aneupimerion bare. Scutellum with a pair of strong lateral setae and a pair of apical setulae.

**Legs** completely yellow, only femora dorsally in apical half slightly darkened. Fore femur with a row of dorsal setae, and covered with long pale hairs on posterodorsal surface. Fore tibia with 1 posterodorsal, 2 anterodorsal, 2 posteroventral, 1 anterodorsal apical and 2 posterior apical setae. Mid femur with a row of thin anterior setae and with 1 posterior apical seta, additionally with 1 long hair basally on ventral surface. Mid tibia with 1 anterodorsal, 2 posterodorsal, 2 posterior setae, and with a ring of apicals. Hind femur with a row of anterodorsal setae, additionally with
Figs 1–4. *Cordilura flavotibialis* sp. n. (1–3) and *Cordilura albicoxa* James (4), males: 1 – abdominal sternites 4 (lower) and 5 (upper); 2 – epandrium, cerci and surstyli, dorsal view; 3 – same, lateral view; 4 – surstyli, dorsolateral view. (Fig. 4 after James, 1955, fig. 15).
1 long hair basally on ventral surface. Hind tibia with 2 posterodorsal, 3 anterodorsal, 1 anteroventral, 1 dorsal preapical setae, and apicals: posterior, anteroventral, and ventral.

Wing tinged with brownish; veins pale brown. Vein R₁ setulose on apical third of dorsal surface. Calypters, including margins, and halter whitish.

Abdomen cylindrical, blackish, thinly greyish dusted. Syntergite 1+2 with 3–4 lateral and with a row of marginal setae; tergites 3–6 each with a row of marginal setae.

Sternite 4 rectangular about 1.5 times as long as wide; sternite 5 bilobed covered with hairs on internal surface of each conical lobe (Fig. 1). Epandrium, cerci and surstyli as in Figs 2 and 3.

MEASUREMENTS. Length of body 3.9 mm. Length of wing 4.1 mm.

FEMALE. Unknown.

DIAGNOSIS and COMPARISON. This species is distinguished from congeners noted in Russia (Ozerov & Krivosheina, 2020, 2023) by the following combination of characters: postpedicel unicolor, completely black, approximately 1.5–2 times as long as wide; arista moderate pubescent, longest hairs exceeding greatest diameter of arista; scutellum with a pair of strong discal setae only, the apical scutellars weak, hair-like; legs completely yellow, only femora dorsally in apical half slightly darkened; fore coxa yellowish.

The new species is closely related to Nearctic species C. albicoxa James, 1955 in the structure of surstyli (compare Figs 3 and 4), but is distinguished from this species by the colour of antenna and legs. C. albicoxa has "first and second antennal segments brownish yellow, the second yellow above; third black, somewhat paler at the base" and "femora, and middle and hind tibiae black" (James, 1955).

DISTRIBUTION. Russia: Khabarovsky Krai.

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