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TWO NEW SPECIES OF THE GENUS *CORDILURA* FALLÉN, 1810 (DIPTERA: SCATHOPHAGIDAE) FROM BURYATIA AND PRIMORSKY KRAI, RUSSIA

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Two new species of Scathophagidae (Diptera), *Cordilura negrobovi* sp. n. from Buryatia and *Cordilura grunini* sp. n. from Primorsky krai, are described and illustrated.

KEY WORDS: Diptera, Scathophagidae, *Cordilura*, new species, description, Russia.

А. Л. Озеров¹⁾, М. Г. Кривошеина²⁾. Два новых вида рода *Cordilura* Fallén, 1810 (Diptera: Scathophagidae) из Бурятии и Приморского края (Россия) // Дальневосточный энтомолог. 2017. N 335. С. 1-6.

Даны описания двух новых видов семейства Scathophagidae (Diptera): *Cordilura negrobovi* sp. n. из Бурятии и *Cordilura grunini* sp. n. из Приморского края.

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INTRODUCTION

Cordilura Fallén, 1810 is one of the largest genera within the family Scathophagidae. The genus currently comprises 88 species in the World distributed primarily in the Holarctic Region (Ozerov & Krivosheina, 2015). In total 28 species are known from Siberia and the Russian Far East (Bagachanova et al., 2016; Ozerov & Krivosheina, 2014, 2015). Almost all species of *Cordilura* whose habits are known are primary borers in culms of *Carex* and *Scirpus* spp. (Cyperaceae) (Ferrar, 1987).

During examination of the material from the collection of Scathophagidae in the Zoological Institute of the Russian Academy of Sciences, St. Petersburg, Russia (ZISP), two undescribed species were recognized. The descriptions of these species are given below.

The terminology used in description of the new species follows McAlpine (1981). The original Russian geographical names are given in transliteration, but names of large geographical regions (e.g. Primorsky krai) taken from information program Google Earth. Geographical coordinates are given in the Decimal Degrees format.

DESCRIPTIONS OF THE NEW SPECIES

Cordilura grunini Ozerov et Krivosheina, sp. n.

Figs 1–3

MATERIAL. Holotype – male, **Russia:** "дол. р. Санхобэ, Приморская обл." [=Primorsky krai, valley of the river Serebryanka (ca. 45.04878 N 136.63558 E)], 17.V 1937, Grunin (ZISP). The holotype is pinned. The right mid leg is missing. The abdomen has been removed and the terminalia dissected; these are in a small vial of glycerine pinned with the specimen.

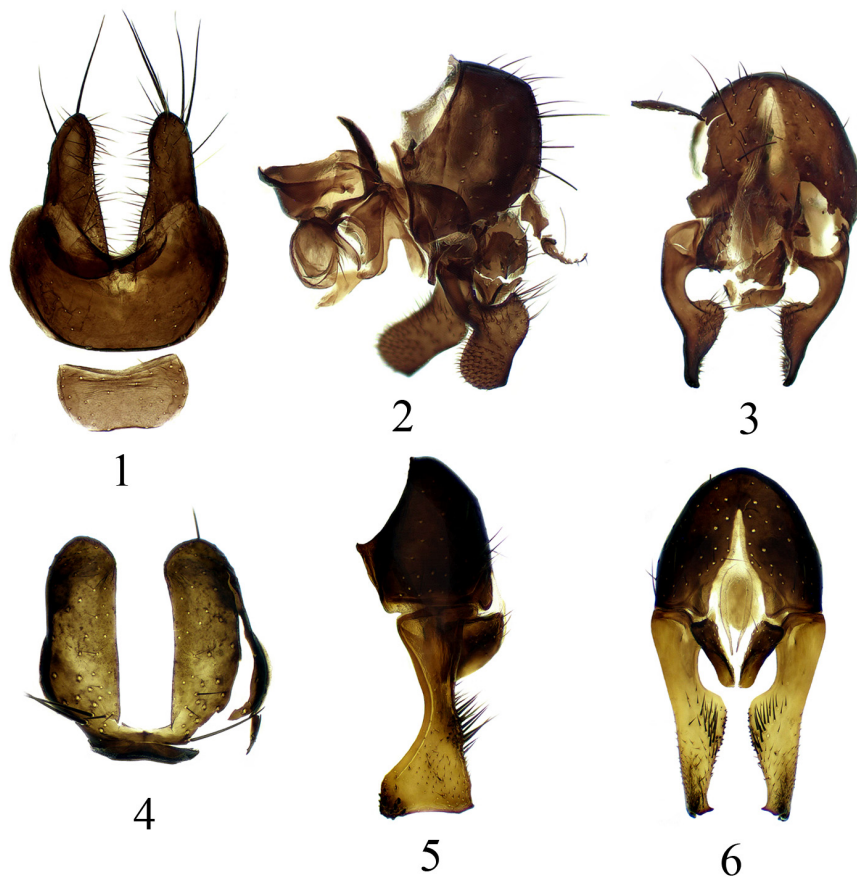
DESCRIPTION. MALE. Head. Frontal vitta brownish, with whitish reflection; fronto-orbital plate black. Ocellar triangle black. Face and parafacial whitish. Gena yellow, whitish dusted. Postcranium black, subshining, with black setae in upper third and pale hairs in lower part. Setae: 2 orbitals, 2–3 frontals, 1 ocellar, 1 inner vertical, 1 outer vertical (approximately 0.5 times as long as inner vertical), 1 small postocellar; 1 pair of strong vibrissae and 1 pair of subvibrissae present. Antenna black. Postpedicel rounded apically, approximately 1.5 times as long as wide. Arista black, pubescent in basal quarter (the longest hairs are no longer than the width of its thickened basal part) and the rest bare. Palpus, clypeus and proboscis blackish. Palpus with a long apical seta.

Thorax black, scutum subshining, thoracic sclerites greyish dusted. Acrostichal hairs in two irregular rows, dorsocentrals 3+3 (first presutural short and directed anteriorly), intra-alars absent, supra-alars 1+2, 2 postpronotals, 2 notopleurals, 2 postalars. Proepisternum with pale hairs and 1 black seta near ventral margin. Proepimeron with 1 black strong seta ventral to spiracle. Anepisternum with a few pale hairs in posterior half. Katepisternum with pale hairs in ventral corner and posterior

half, also with 1 strong long black seta in posterodorsal corner. Anepimeron bare. Scutellum with a pair of strong lateral and a pair of strong apical setae.

Legs. Ground-colour black; all coxae and femora black, mid and hind tibiae blackish; fore tibia and all tarsi yellow. Fore femur with a row of posterodorsal setae, additionally with long hairs on ventral surface. Fore tibia with 2 posterodorsal, 1–2 anterodorsal, 2 posteroventral setae, and with a ring of apicals. Mid femur with 1 posterior apical and 1 posterodorsal apical seta. Mid tibia with 1 anterodorsal, 1 posterodorsal, 2 posterior setae, and with a ring of apicals. Hind femur with a row of anterodorsal setae and 2–3 anteroventral setae in apical third. Hind tibia 2 posterodorsal, 2–3 anterodorsal setae, and with a ring of apicals (anteroventral apical seta present).

Wing tinged with brownish; veins brown. Vein R_1 bare. Calypters, including margins, and halteres whitish.



Figs 1–6. *Cordilura grunini* Ozerov et Krivosheina, sp. n., holotype male (1–3) and *Cordilura fulvifrons* Ozerov, male (4–6): 1 – sternite 4 (lower) and 5 (upper); 2, 5 – epandrium, cercus and surstylus, lateral view; 3, 6 – the same, dorsal view; 4 – sternite 5.

Abdomen black, thinly greyish dusted. Syntergite 1+2 with several discal lateral setae and with a row of marginal setae; tergites 3–6 each with a row of marginal setae. Male sternite 4 simple, approximately 2 times as wide as long (Fig. 1); sternite 5 with linear lobes (Fig. 1). Surstyli having the form of an ax (Figs 2, 3).

Female unknown.

MEASUREMENTS. Length of body 4.6 mm. Length of wing 4.2 mm.

ETYMOLOGY. The species is named in the honour of the late Russian dipterist Dr. Konstantin Yakovlevich Grunin, the collector of type specimen.

DISTRIBUTION. Russia: Primorsky krai.

COMPARISONS. *C. grunini* sp. n. belongs to the group of species possessing 1) scutellum with pairs of strong lateral/basal scutellar and apical scutellar setae, 2) arista pubescent or bare. Among the species of this group, registered in Russia, the new species is similar to East Palaearctic species *C. fulvifrons* Ozerov, 1997. Both species are easily differentiated by structure of surstylus (Figs 2, 3 and Figs 5, 6).

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

Figs 7–9

MATERIAL. Holotype – male, **Russia**: Republic of Buryatia, East Sayan, Arshan, Tagarhay (51.8786 N 102.3927 E), 3.VII 1965, Negrobov (ZISP). The holotype is pinned. The abdomen has been removed and the terminalia dissected; these are in a small vial of glycerine pinned with the specimen, otherwise it is in good condition.

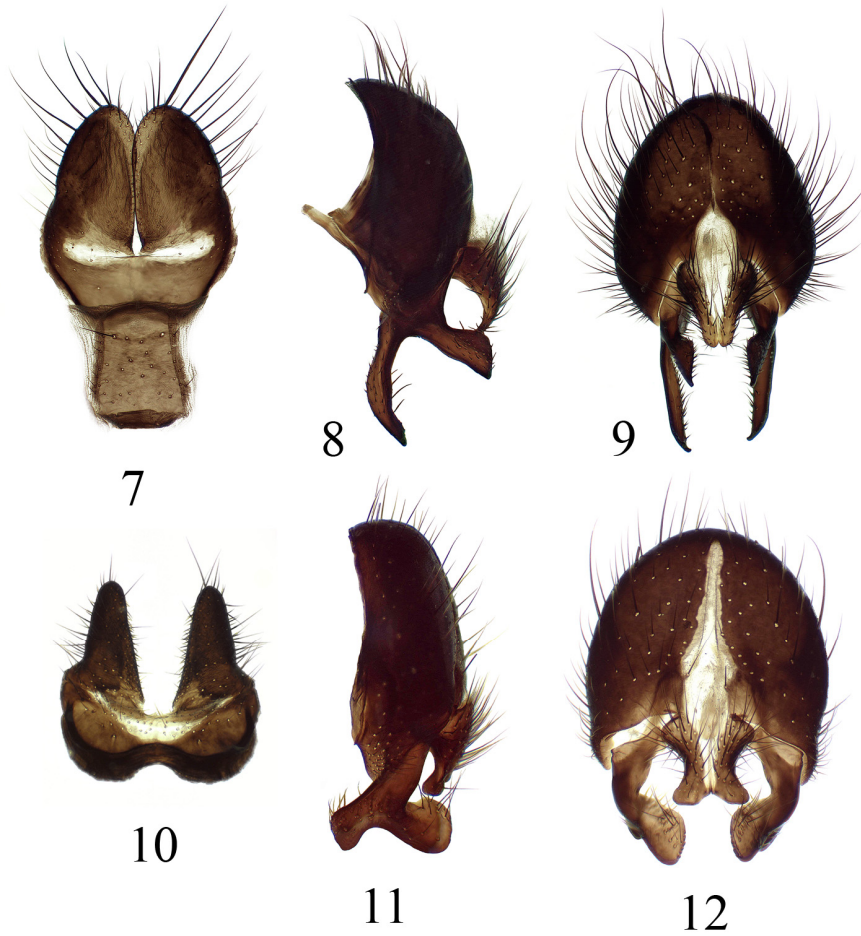
DESCRIPTION. MALE. *Head*. Frontal vitta black, in upper third brownish; fronto-orbital plate black, whitish dusted. Ocellar triangle black. Face and parafacial white. Gena and postgena brownish. Postcranium black. Setae: 2 orbitals, 4 frontals, 1 ocellar, 1 very long inner vertical, 1 outer vertical (approximately 1/3 times as long as inner vertical), 1 small postocellar; 1 pair of strong vibrissae and 2 pairs of subvibrissae present. Antenna brownish. Postpedicel rounded apically, approximately 2 times as long as wide. Arista yellow, plumose, the longest hairs, usually some of them, as long as the 1/2 width of the postpedicel. Palpus and clypeus yellow. Proboscis dark brown. Palpus with a long apical seta.

Thorax black. Scutum and scutellum shining; anepisternum shining, but along anterior margin greyish dusted; anepimeron shining completely; mediotergite shining along border with abdomen; the rest parts of thorax greyish dusted. Acrostichals absent, dorsocentrals 3+3 (first presutural short and directed anteriorly, first postsutural short), intra-alars absent, supra-alars 0+2, 1 postpronotal, 2 notopleurals, 2 postalars. Proepisternum with black hairs and 1 strong black seta near ventral margin. Proepimeron with several hairs ventral to spiracle. Anepisternum with few hairs in posterior half and 1 black seta near posterior margin. Katepisternum with black hairs in ventral corner and 1 strong long black seta in posterodorsal corner. Anepimeron bare. Scutellum with a pair of strong lateral setae.

Legs. Fore coxa yellow, mid and hind coxae blackish. Femora of all legs black. Fore tibia and tarsi of all legs yellow. Mid and hind tibiae brownish. Fore femur with rows of dorsal, posterodorsal and posteroventral setae. Fore tibia with 1 posterodorsal, 2 anterodorsal, 2 posteroventral setae, and with a ring of apicals. Mid femur

with a row of anterior setae and with 1 posterior apical seta and 1 posteroventral seta in apical third, additionally with a long hair basally on ventral surface. Mid tibia with 2 anterodorsal, 2 posterodorsal, 2 posterior, 1 anteroventral setae, and with a ring of apicals. Hind femur with a row of anterodorsal setae, 1 posterodorsal apical seta and with 1 anteroventral seta in apical third, additionally with a row of thin posteroventral setae. Hind tibia with 3 posterodorsal, 3 anterodorsal, 2 anteroventral setae, and with a ring of apicals (anteroventral apical seta present).

Wing tinged with brownish; veins brown. Vein R_1 bare. Calypters, including margins, and halteres yellow.



Figs 7–12. *Cordilura negrobovi* Ozerov et Krivosheina, sp. n., holotype male (7–9) and *Cordilura remmi* (Elberg), male (10–12): 7 – sternite 4 (lower) and 5 (upper); 8, 11 – epandrium, cercus and surstylus, lateral view; 9, 12 – the same, dorsal view; 10 – sternite 5.

Abdomen black, thinly greyish dusted. Syntergite 1+2 with 3–4 lateral discal and with a row of marginal setae; tergites 3–6 each with a row of marginal setae. Male sternite 4 simple, approximately 2 times as long as wide; sternite 5 with long wide lobes (Fig. 7). Surstyli bifurcate (Figs 8, 9).

Female unknown.

MEASUREMENTS. Length of body 6.7 mm. Length of wing 4.7 mm.

ETYMOLOGY. The species is named in the honour of the Russian dipterist Dr. Oleg Pavlovich Negrobov, the collector of holotype specimen.

DISTRIBUTION. Russia: Buryatia.

COMPARISON. New species is closely related to East Palaearctic species *Cordilura remmi* (Elberg, 1972), but is readily distinguished from latter by the structure of male sternite 5 (Fig. 7 and Fig. 10) and surstylus (Figs 8, 9 and Figs 11, 12).

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