

Oldenbergiella devyatkovii sp.n.: a new heleomyzid species (Diptera, Heleomyzidae) from Kunashir Island of the Russian Far East

Oldenbergiella devyatkovii sp.n.: новый вид хелеомизиды (Diptera,
Heleomyzidae) с острова Кунашир

V.K. Zinchenko
В.К. Зинченко

Institute of Systematics and Ecology of Animals, Russian Academy of Sciences, Siberian Branch, Frunze Str. 11, Novosibirsk 630091 Russia; Federal State Institution «Kurilsky State Nature Reserve», Zarechnaya Str. 5, Sakhalinskaya Oblast, Yuzhno-Kurilsk 694500 Russia. E-mail: vzscar@yandex.ru.

Институт систематики и экологии животных СО РАН, ул. Фрунзе 11, Новосибирск 630091 Россия; ФГУ «Курильский государственный природный заповедник», ул. Заречная 5, Сахалинская область, Южно-Курильск 694500 Россия.

Key words: Diptera, Heleomyzidae, Kunashir Island, new species.

Ключевые слова: Diptera, Heleomyzidae, о-в Кунашир, новый вид.

Abstract. A new species of heleomyzid fly of the family Heleomyzidae, *Oldenbergiella kunashirica* Zinchenko, sp.n., is described from Kunashir Island of the Russian Far East.

Резюме. В статье даётся описание нового вида шипокрылки *Oldenbergiella kunashirica* Zinchenko, sp.n. семейства Heleomyzidae с острова Кунашир.

The genus *Oldenbergiella* Czerny, 1924 (Diptera, Heleomyzidae) contains only eight species, although it has a relatively wide geographical distribution. One of the species has a Holarctic distribution and the remaining seven species are known only from the Western Palearctic [Gorodkov, 1970, 1984; Papp, 1980; Carles-Tolrá, 1992, 1995, 1998]. No species of the genus has been recorded from the Asian part of the Palearctic.

The species of *Oldenbergiella* Czerny are small (2–4 mm) and typically dark grey or reddish in colour, with reduced characteristic costal spines. Adults emerge in autumn and spring. The life cycle is unknown, but some specimens have been collected from pig excrements and decaying liver [Papp, 1980; Carles-Tolrá, 1995].

Material and methods

The flies were collected in a birch-oak forest on yellow plates baited with rotting fish and preserved in 70 % alcohol. The flies removed from the alcohol were washed in water and mounted. The identification, preparation and photographing of the material was carried out using Zeiss Stemi 2000-C and Altami PS0745-T binocular microscopes. The material presented in the article is kept in the collection of the «Siberian Zoological Museum» of the Institute of Systematics and Ecology of Animals SB RAS (ISEA, Novosibirsk).

Nomenclatural acts introduced in the present work are registered in ZooBank (www.zoobank.org) under urn:lsid:zoobank.org:pub:0852A103-2CC6-464B-B39F-C545EDA46B57.

Oldenbergiella devyatkovii Zinchenko, sp.n.

Figs 1–6.

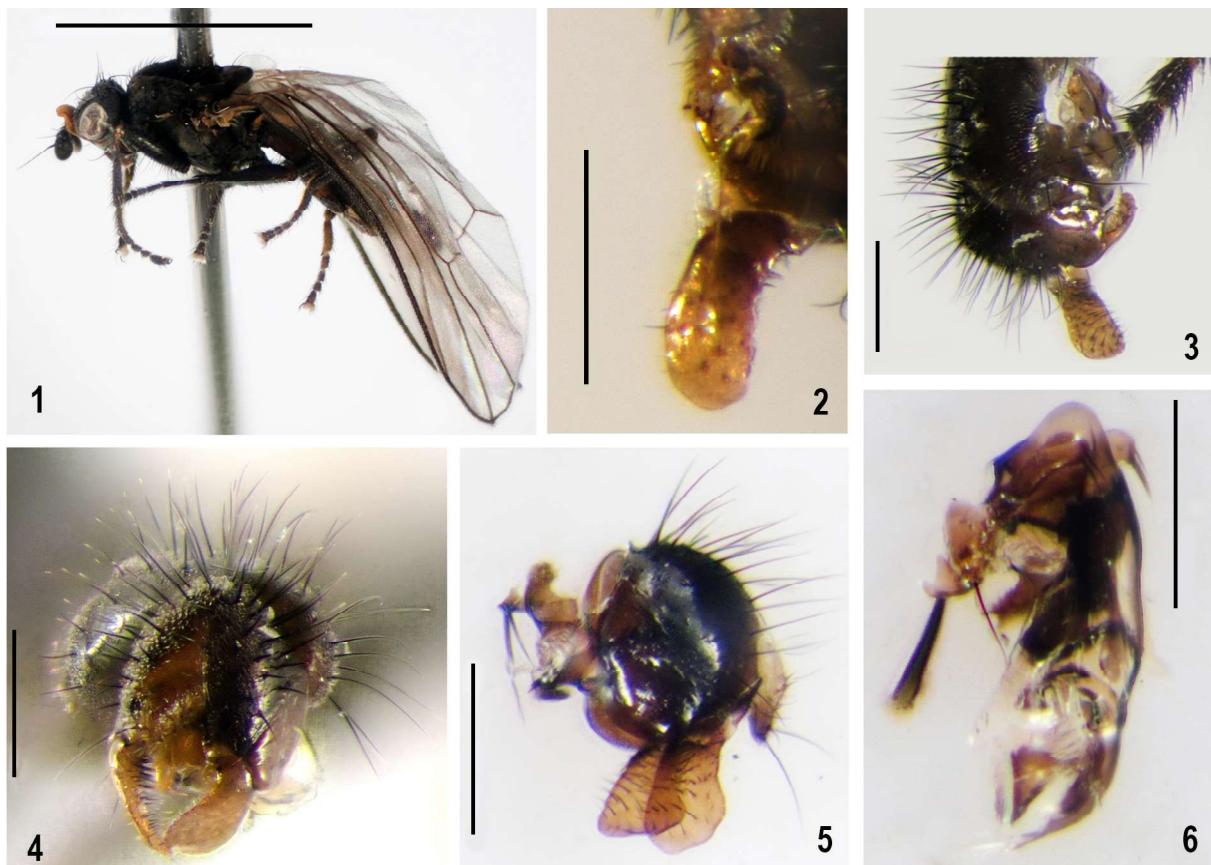
Urn:lsid:zoobank.org:act:CB46BC31-CE35-482A-9D01-6017EC98309B.

Material. Russia, Southern Kuril Islands: Holotype, ♂ — Kunashir Island, kordon Andreevsky, birch forest, h~33 m a.s.l., 43°53'56" N, 145°35'37" E, 21.XI.2023, V.K. Zinchenko leg. Paratypes — 5♂♂, idem.

Description. Male (Fig. 1). Body length: 3 mm. Body black, gray pollinose. Head black, with gray pollinose. Ocellar triangle almost equilateral, not reaching middle of forehead. Forehead black with narrow brown stripe in front. Anterior oars closer to posterior than to lunula. All antennomeres dark, 3rd antennomere large and rounded; arista short, micro-pubescent. Palps black. Eyes oval. Genae about half height of eye. Face gray, concave. Chaetotaxy: 2 oars, pvt crossed, oc directed forward, vte, vti, vi. Thorax black, gray pollinose. Chaetotaxy: 1 h, 2 np, 1 prst, 0+2 dc (anterior is shorter), 1 sa, 2 pa (internal is shorter), 2 se, 1 st. Legs black, apices of profemora orange. Protibia with preapical seta; the preapical setae of meso- and metatibiae short. Profemora with complete row of long spiny setae on ventral side. Ventroapical spur of mesotibia short. First tarsomere of metatarsi thickened, covered below with yellow hairs with short ventroapical process. Wing uniformly and slightly brownish; veins dark brown, costal vein thickened (after vein r1), costal spines very weak. Wing length ~ 4 mm. Halteres yellowish. Abdomen gray. Marginal setae of abdominal tergites long, but not very thick. Male genitalia (Figs 2–6). Edites (Figs 2–5) elongated, widening towards rounded apex, curved inward, outer side bare, inner side covered with setae with prebasal tuft. Gonitae (Fig. 6) with rounded apex and short ventral anterior process, with two thick and one thin setae. Phallus (Fig. 6): subcylindrical, sclerotized in middle, with pointed and curved apiventral process. Cerci (Figs 4–5): short, fused with each other by transparent membrane, with 2 very long apical setae.

Female unknown.

Diagnosis. *Oldenbergiella devyatkovii* Zinchenko, sp.n. differs from other species in the monochromatic black-gray colouration of the body, and also clearly differs from other species in the genital characteristics of edites, gonites and phallus (Figs 1—6).



Figs 1–6. *Oldenbergiella devyatkovii* Zinchenko, sp.n.: holotype (1, 4) and paratypes (2, 3, 5, 6) external (1, 2), inward (3) and posteriorly (4). 1 — appearance of male; 2–6 — terminalia: edites. Scale bars 2 mm for Fig. 1, 0.5 mm for Figs 2–6.

Рис. 1–4. *Oldenbergiella devyatkovii* Zinchenko, sp.n. (1, 4 — голотип (1, 4) и паратипы (2, 3, 5, 6) снаружи (1, 2), изнутри (3) и сзади (4). 1 — самец; 2–6 — терминалии: эдиты. Масштаб 2 мм для рис. 1, 0,5 мм для рис. 2–6.

Etymology. The species is named after my friend Vladimir Ilyich Devyatkov (Ust-Kamenogorsk, Kazakhstan), hydrobiologist and dipterologist, and specialist in tipuloid dipterans of the Asian part of Russia, Kazakhstan and Central Asia.

Acknowledgments

The author is grateful to Alexander Alekseevich Kisleyko (Director of the Kurilsky Nature Reserve), Elena Vladimirovna Linnik (Deputy Director for Scientific Work of the Kurilsky Nature Reserve) for the opportunity to study insects in the reserve, and V.V. Dubatolov (Novosibirsk) for assistance with field research.

The work was supported by the programme of the Federal Research Institute of State Academies of Sciences for 2021–2025. Project № FWSG-2021-0004.

References

- Carles-Tolrá M. 1992. *Oldenbergiella pappi* sp.n.: a new heleomyzid species from Spain (Insecta, Diptera, Heleomyzidae) // Reichenbachia. Bd.29. No.2. S.195–197.
- Carles-Tolrá M. 1995. A new heleomyzid species from Spain: *Oldenbergiella blascoi* sp.n. (Diptera, Heleomyzidae) // Zoologica baetica. Vol.6. P.3–7.
- Carles-Tolrá M. 1998. Description of *Oldenbergiella canalicata* sp.n. from Spain (Diptera, Heleomyzidae) // Boletín de la Asociación española de Entomología. Vol.22. Nos 1–2. P.69–74.
- Gorodkov K.B. 1970. Helomyzidae (Heleomyzidae) // Stackelberg A.A., Nartshuk E.P. (Eds): [Opyredelitel' nasekomykh Evropeiskoi chasti SSSR]. Leningrad: Nauka. T.5. No.2. P.306–325. [In Russian].
- Gorodkov K.B. 1984. Family Heleomyzidae (Helomyzidae) // Soós Á., Papp L. (Eds): Catalogue of Palaearctic Diptera. Vol.10. P.15–45.
- Papp L. 1980. Three new species of Helomyzidae (Diptera) from Hungary // Acta Zoologica Academiae Scientiarum Hungaricae. Vol.26. Nos 1–3. P.211–221.

Поступила в редакцию 12.5.2024