

<https://doi.org/10.25221/levanidov.10.12>

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<http://urn:lsid:zoobank.org:pub:4A1B39D8-86C7-4DFD-A750-447154B91DB4>

**ДВА НОВЫХ ВИДА ХИРОНОМИД РОДА *DIAMESA* MEIGEN (DIPTERA, CHIRONOMIDAE, DIAMESINAE) ИЗ РЕКИ ОЛА ОХОТОМОРСКОГО ПОБЕРЕЖЬЯ МАГАДАНСКОЙ ОБЛАСТИ**

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Приведены иллюстрированные описания по имаго самцам двух новых для науки видов рода *Diamesa* Meigen, *D. olaensis* sp. nov. и *D. portentosa* sp. nov., из р. Ола Охотоморского побережья Магаданской области российского Дальнего Востока.

**TWO NEW SPECIES OF THE GENUS *DIAMESA* MEIGEN (DIPTERA, CHIRONOMIDAE, DIAMESINAE) FROM THE OLA RIVER ON THE SEA OF OKHOTSK COAST OF MAGADAN REGION**

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Illustrated descriptions of two new species *Diamesa olaensis* sp. nov. and *D. portentosa* sp. nov., from the Ola River on the Sea of Okhotsk coast in the Magadan Region of the Russian Far East are presented.

**Introduction**

The first data on the fauna and taxonomy of chironomid from the Ola River basin, one of the largest salmon rivers in the Sea of Okhotsk basin, were cited by Khamenkova et al. (2014), where a preliminary list of chironomids included 103 species, of which 14 species were indicated for the subfamily Diamesinae. During analyzing additional material collected in this river in different years, a new species for the Russian Far East, *Diamesa hamaticornis* Kieffer, and two species new to science were discovered, the descriptions of which are given below.

**Material and methods**

The adults of chironomids were preserved in 96 % ethanol. The material was slide-mounted in polyvinyl lactophenol. The terminology follows Sæther (1980). The photographs were taken using an Axio Lab.A1 (Karl Zeiss) microscope with an AxioCam ERc5s

digital camera, and then stacked using Helicon Focus software. The final illustrations were post-processed for contrast and brightness using Adobe® Photoshop® software.

Holotypes of the new species are deposited in the Federal Scientific Center of the East Asia Terrestrial Biodiversity, Far East Branch of the Russian Academy of Sciences, Vladivostok, Russia (FSCEATB FEB RAS).

### Descriptions

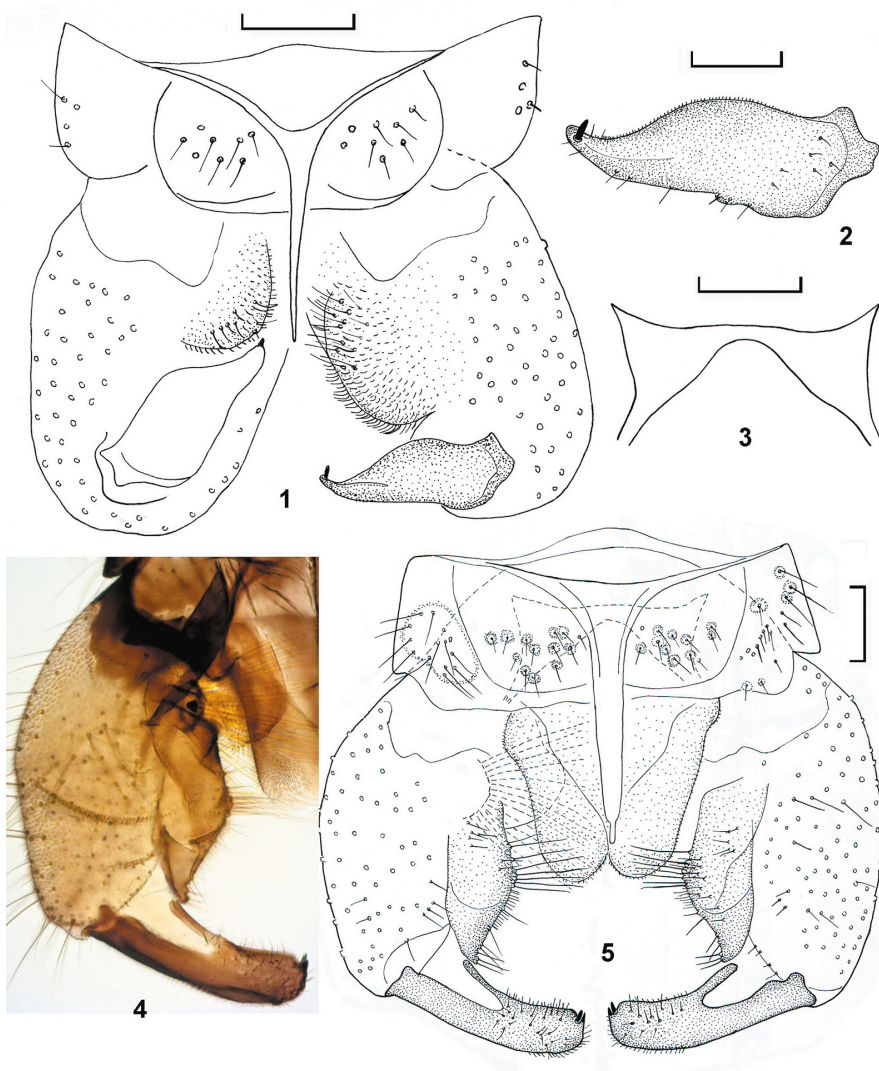
#### *Diamesa olaensis* Makarchenko, sp. nov.

Figs. 1–2.

<http://zoobank.org/NomenclaturalActs/C6F25712-6E67-4D26-8102-302745A5F8D1>

**Type material.** Holotype: adult male, Russian Far East, Magadan Region, Olskyi District, Ola River, 13.V. 2013, leg. E. Khamenkova.

**Derivatio nominis.** The species is named as *olaensis* after the type locality in Ola River of Magadan Region.



**Figs 1–5.** Adult male of *Diamesa olaensis* sp.nov. (1–2) and *D. portentosa* sp. nov. (3–5). 1, 5 – hypopygium, dorsal view; 2 – gonostylus; 3 – transverse sternapodeme (TSA); 4 – gonocoxite and gonostylus. Scale bars for Figs 1, 3, 5–100 µm; for Fig. 2–50 µm

**Adult male** (n = 1). Total length 4.39 mm. Total length/wing length 1.12.

Coloration. Brown to dark brown. Wings grayish.

Head. Eyes bare, reniform. Temporal setae including 4 preoculars, 10–11 verticals. Clypeus with 12 setae. Antenna with 13 flagellomeres and developed plume of setae; terminal flagellomere with 1 setae, 36  $\mu\text{m}$  long in apical area; AR1.82. Palpomere length ( $\mu\text{m}$ ): 56, 96, 140, 128, 180. Palpomere 3 in distal part with sensilla capitata with diameter 16  $\mu\text{m}$ . Head width/palpal length 1.3.

Thorax. Anteprepronotum with 5–7 ventrolateral setae. Dorsocentrals 10–11, prealars 10. Scutellum with 34 setae.

Wing. Length 4.4 mm, width 1.4 mm. Anal lobe rounded. Squama with 45 setae in 1–2 rows. R and R<sub>1</sub> with 10 setae, R<sub>4+5</sub> with 4 setae. RM/MCu 2.5.

Legs. BR<sub>1</sub> 2.6, BR<sub>2</sub> 1.5, BR<sub>3</sub> 2.0. Spur of front tibia 84  $\mu\text{m}$  long. Spurs of mid tibia 68  $\mu\text{m}$  and 56  $\mu\text{m}$  long. Spurs of hind tibia 84  $\mu\text{m}$  and 56  $\mu\text{m}$  long. Hind tibial comb with 12 setae. Length ( $\mu\text{m}$ ) and proportions of leg segments are as in Table 1.

Table 1

Lengths (in  $\mu\text{m}$ ) and proportions of leg segments of *Diamesa olaensis* sp. nov, male (n = 1)

P	f	t	ta <sub>1</sub>	ta <sub>2</sub>	ta <sub>3</sub>	ta <sub>4</sub>	ta <sub>5</sub>	LR	BV	SV
P <sub>1</sub>	1230	1443	1050	525	295	115	131	0.73	3.49	2.55
P <sub>2</sub>	1394	1394	722	426	246	115	131	0.52	3.82	3.86
P <sub>3</sub>	1591	1706	1132	607	328	115	131	0.66	3.75	2.91

Hypopygium (Figs 1–2). Tergite IX with 8–11 setae from one side and with long (176  $\mu\text{m}$ ) and thin anal point (Fig. 1). Laterosternite IX with 10–12 setae. Transverse sternapodeme (TSA) narrow arcuate. Phallapodeme 170  $\mu\text{m}$  long. Gonocoxite 324  $\mu\text{m}$  long, with round and flat inferior volsella, covered some short setae (Fig. 1). Basimedial setae cluster absent. Gonostylus 164  $\mu\text{m}$  long, with wide basal 2/3 and thin subapical part, apically with megaseta 12  $\mu\text{m}$  long (Fig. 2). HR1.98.

**Diagnosis.** Total length 4.39 mm. Eyes bare, reniform. Antenna with 13 flagellomeres and developed plume of setae, AR1.82. Wing 3.92 mm long. Squama with 45 setae in 1–2 rows. LR<sub>1</sub> 0.73, BV<sub>1</sub> 3.49, SV<sub>1</sub> 2.55. Tergite IX with 8–11 setae from one side and with long and thin anal point. Transverse sternapodeme narrow arcuate. Gonocoxite with round and flat inferior volsella, covered some short setae. Basimedial setae cluster absent. Gonostylus with wide basal 2/3 and thin subapical part, apically with megaseta. HR1.98.

**Distribution.** Known only from type locality in Ola River of Magadan Region.

### *Diamesa portentosa* Makarchenko, sp. nov.

Figs. 3–5.

<http://zoobank.org/NomenclaturalActs/B0CD4DD7-5702-4978-A7F9-C46DC74ABA40>

**Type material.** Holotype: adult male, Russian Far East, Magadan Region, Olskyi District, Ola River, 13.V. 2013, leg. E. Khamenkova.

**Derivatio nominis.** The name of the new species comes from the Latin *portentosa*, which means strange.

**Adult male** (n = 1). Total length 5.47 mm. Total length/wing length 1.2.

Coloration. Brown to dark brown. Wings gray, with brownish veins.

Head. Eyes hairy, reniform. Temporal setae including 6 preoculars, 21 verticals and 9 postorbitals. Clypeus with 17 setae. Antenna with 13 flagellomeres and developed plume of setae; terminal flagellomere with 1 setae, 42  $\mu\text{m}$  long in apical area; AR2.1.

Palpomere length ( $\mu\text{m}$ ): 68, 108, 196, 184, 284. Palpomere 3 in distal part with sensilla capitata with diameter 12  $\mu\text{m}$ . Head width/palpal length 1.07.

Thorax. Anteprepronotum with 7–8 ventrolateral setae. Dorsocentrals 18, prealars 11. Scutellum with ca 60 setae.

Wing. Length 4.56 mm, width 1.3 mm. Anal lobe rounded, slightly protrudes. Squama with 64 setae in 2–3 rows. R and R<sub>1</sub> with 34 setae, R<sub>4+5</sub> with 10 setae. RM/MCu 2.2.

Legs. BR<sub>1</sub> 2.6, BR<sub>2</sub> 1.8, BR<sub>3</sub> 2.6. Spur of front tibia 88  $\mu\text{m}$  long. Spurs of mid tibia 68  $\mu\text{m}$  and 64  $\mu\text{m}$  long. Spurs of hind tibia 96  $\mu\text{m}$  and 64  $\mu\text{m}$  long. Hind tibial comb with 22 setae. Length ( $\mu\text{m}$ ) and proportions of leg segments are as in Table 2.

Table 2

Lengths (in  $\mu\text{m}$ ) and proportions of leg segments of *Diamesa portentosa* sp. nov, male (n = 1)

P	f	t	ta <sub>1</sub>	ta <sub>2</sub>	ta <sub>3</sub>	ta <sub>4</sub>	ta <sub>5</sub>	LR	BV	SV
P <sub>1</sub>	1440	1960	1280	722	443	148	180	0.65	3.13	2.66
P <sub>2</sub>	1780	1800	880	525	312	164	180	0.49	3.78	4.7
P <sub>3</sub>	1960	2120	1360	787	426	164	197	0.64	3.46	3.00

Hypopygium (Figs 3–5). Tergite IX with 13–19 setae 40–48  $\mu\text{m}$  long from one side and with long anal point, 360  $\mu\text{m}$  long, which in subapical part tapering (Fig. 5). Laterosternite IX with 19–21 setae 68–76  $\mu\text{m}$  long. Transverse sternapodeme (TSA) 252  $\mu\text{m}$  long, with triangular antero-lateral peaked projections (Fig. 3). Gonocoxite 412  $\mu\text{m}$  long, with large inferior volsella, 326  $\mu\text{m}$  long and 93  $\mu\text{m}$  wide in middle part, in which some long setae 68–96  $\mu\text{m}$  long; subapical part of inferior volsella narrower and with some setae 40–48  $\mu\text{m}$  long. (Figs 4–5). Basimedial setae cluster with 19–23 setae 200–228  $\mu\text{m}$  long radiating fan-like (Fig. 5). Gonostylus 260–272  $\mu\text{m}$  long, almost straight, apically with megaseta 16  $\mu\text{m}$  long and tooth, 8  $\mu\text{m}$  long (Figs 4–5). HR= 1.51–1.53.

**Diagnosis.** Total length 5.47 mm. Eyes hairy, reniform. Antenna with 13 flagellomeres and developed plume of setae, AR2.1. Wing 4.56 mm long. Squama with 64 setae in 2–3 rows. LR<sub>1</sub> 0.65, BV<sub>1</sub> 3.13, SV<sub>1</sub> 2.66. Tergite IX with 13–19 setae from one side and with long anal point, 360  $\mu\text{m}$  long, which in subapical part tapering. Transverse sternapodeme 252  $\mu\text{m}$  long, with triangular antero-lateral peaked projections. Inferior volsella, most wide in middle part, in which some long setae 68–96  $\mu\text{m}$  long; subapical part of inferior volsella narrower and with some setae 40–48  $\mu\text{m}$  long. Basimedial setae cluster with 19–23 long radiating fan-like. Gonostylus almost straight, apically with megaseta and tooth. HR1.51–1.53.

**Distribution.** Known only from type locality in Ola River of Magadan Region.

#### Acknowledgments

We are much grateful to Dr. E.V. Khamenkova Institute of Biological Problems of the North (Magadan) for making material available to us.

The research was carried out within the state assignment of Ministry of Science and Higher Education of the Russian Federation (theme No. 121031000147-6).

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