

The first description of the male of *Oreonetides badzhalensis* Eskov, 1991 (Aranei: Linyphiidae)

Первоописание самца *Oreonetides badzhalensis* Eskov, 1991 (Aranei: Linyphiidae)

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КЛЮЧЕВЫЕ СЛОВА: таксономия, Araneae, Micronetinae, пауки-пигмеи, распространение, Азия.

ABSTRACT. A previously unknown male of *Oreonetides badzhalensis* Eskov, 1991 is described for the first time, based on material from southern Siberia and the Russian Far East. The genitalic structures of both sexes are illustrated and the taxonomic position of the species is briefly discussed.

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РЕЗЮМЕ. Неизвестный ранее самец *Oreonetides badzhalensis* Eskov, 1991 описан из южной Сибири и российского Дальнего Востока. Гениталии обоих полов проиллюстрированы, кратко обсуждено таксономическое положение вида.

Introduction

The Holarctic genus *Oreonetides* Strand, 1901 has been revised in detail by Saaristo [1972], van Helsdingen [1981] and Eskov [1984, 1991]. At present, the genus includes 19 species [World Spider Catalog, 2023], with the greatest diversity observed in Siberia, Far East and the Nearctic Region.

Two species, *O. badzhalensis* Eskov, 1991 and *O. beringianus* Eskov, 1991, were described simultaneously from only female material from the Khabarovsk Province, and the Magadan Area and Chukotka, Russia, respectively [Eskov, 1991]. The male of *O. beringianus* Eskov, 1991 has recently been described from the Yamal Peninsula [Tanasevitch, 2022], also reported from the Wrangler Island, Russia [Khruleva *et al.*, 2022].

When revising material from Siberia and the Russian Far East collected 20 years ago, a previously un-

known male of *O. badzhalensis* has also been spotted together with corresponding females.

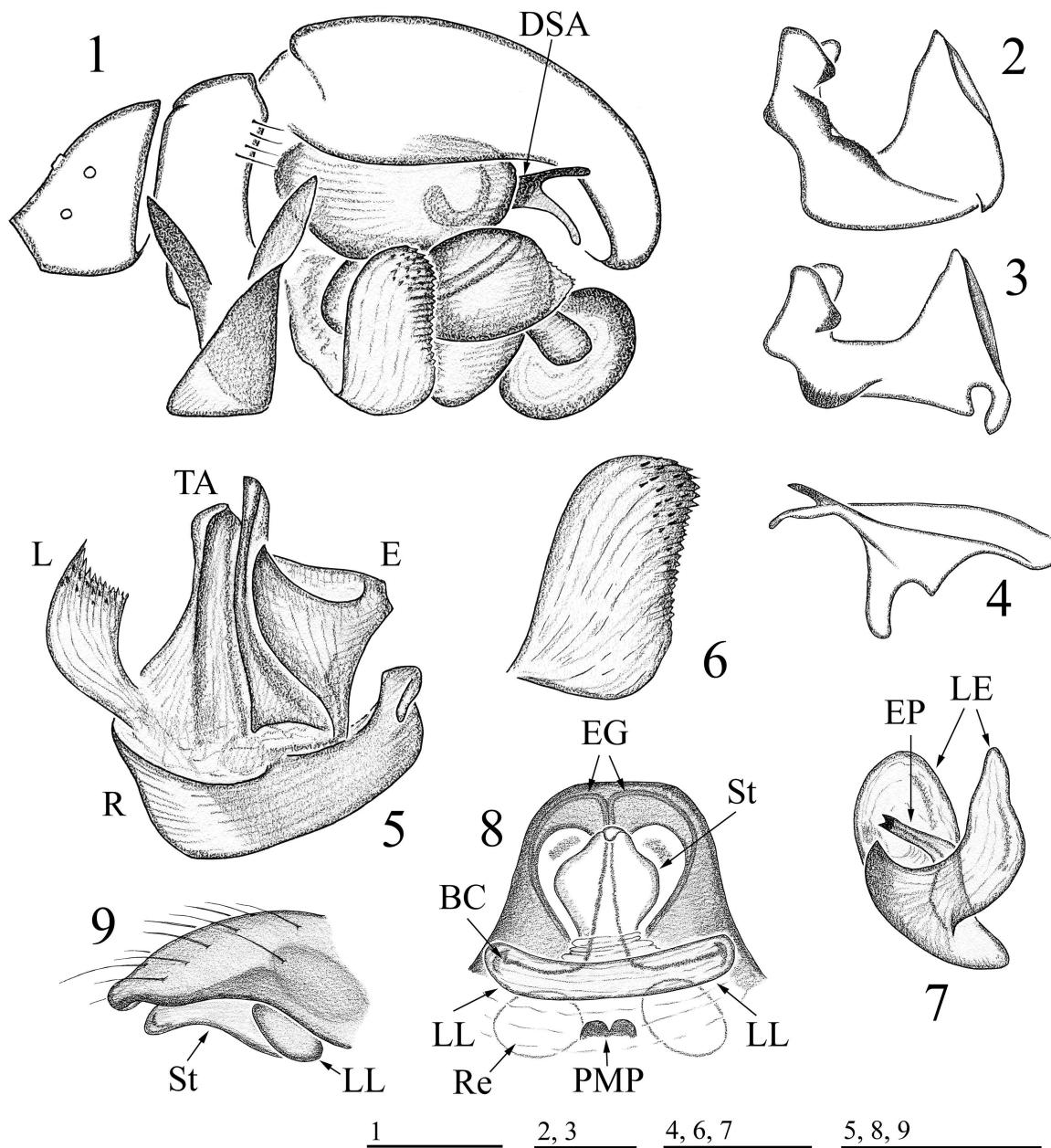
The first description of the male of *O. badzhalensis*, as well as illustrations of the genitalia of both sexes is the subject of the present note.

Material and methods

This paper is based on material deposited in the Zoological Museum of the Moscow State University, Moscow, Russia (ZMMU). Specimens preserved in 70% ethanol, was studied using an MBS-9 stereomicroscope. Drawings were done with a drawing tube. Photographs were taken using a SEM JEOL JSM-5200 scanning microscope at the Zoological Museum, University of Turku, Turku, Finland in cooperation with Michael Saaristo in 2006.

All scale lines in the figures correspond to 0.1 mm, except those in SEM micrographs which are in micrometers (μm). Leg chaetotaxy is presented in a formula: 2.2.2.1, which refers to the number of dorsal spines on tibiae I–IV. The sequence of leg segment measurements is as follows: femur + patella + tibia + metatarsus + tarsus. All measurements are given in mm. The terminology of the structures of the copulatory organs mainly follows that of Merrett [1963], as well as that of the authors mentioned in the abbreviations below.

The following abbreviations were used in the text and figures: a.s.l. — above sea level; BC — bursa copulatrix Saaristo [1973]; DSA — distal suprategular apophysis after Hormiga [2000]; E — embolus; EG — entrance grooves after Saaristo & Tanasevitch [1996]; EP — embolus proper after Saaristo [1971]; LC — lamella characteristic after Kulczyński [1898]; LE — lateral extensions of embolus; LL — lateral lobes of distal part of scapus after Helsdingen [1965]; PMP — posterior median plate after Helsdingen *et al.* [1977]; R — radix; Re — receptacle; S — stem of embolus; St — stretcher; TA — terminal apophysis after Merrett [1963]; TMI — relative position of trichobothrium on MtI.



Figs 1–9. Details of male palpal structure (1–7) and female epigyne (8, 9) of *Oreonetides badzhalensis* Eskov, 1991, specimens from Cordon “Strelka”. 1 — right palp, retrolateral view; 2, 3 — paracymbium, lateral and from above, respectively; 4 — distal suprategular apophysis; 5 — embolic division; 6 — lamella characteristic; 7 — embolus; 8, 9 — epigyne, dorsal and lateral views, respectively.

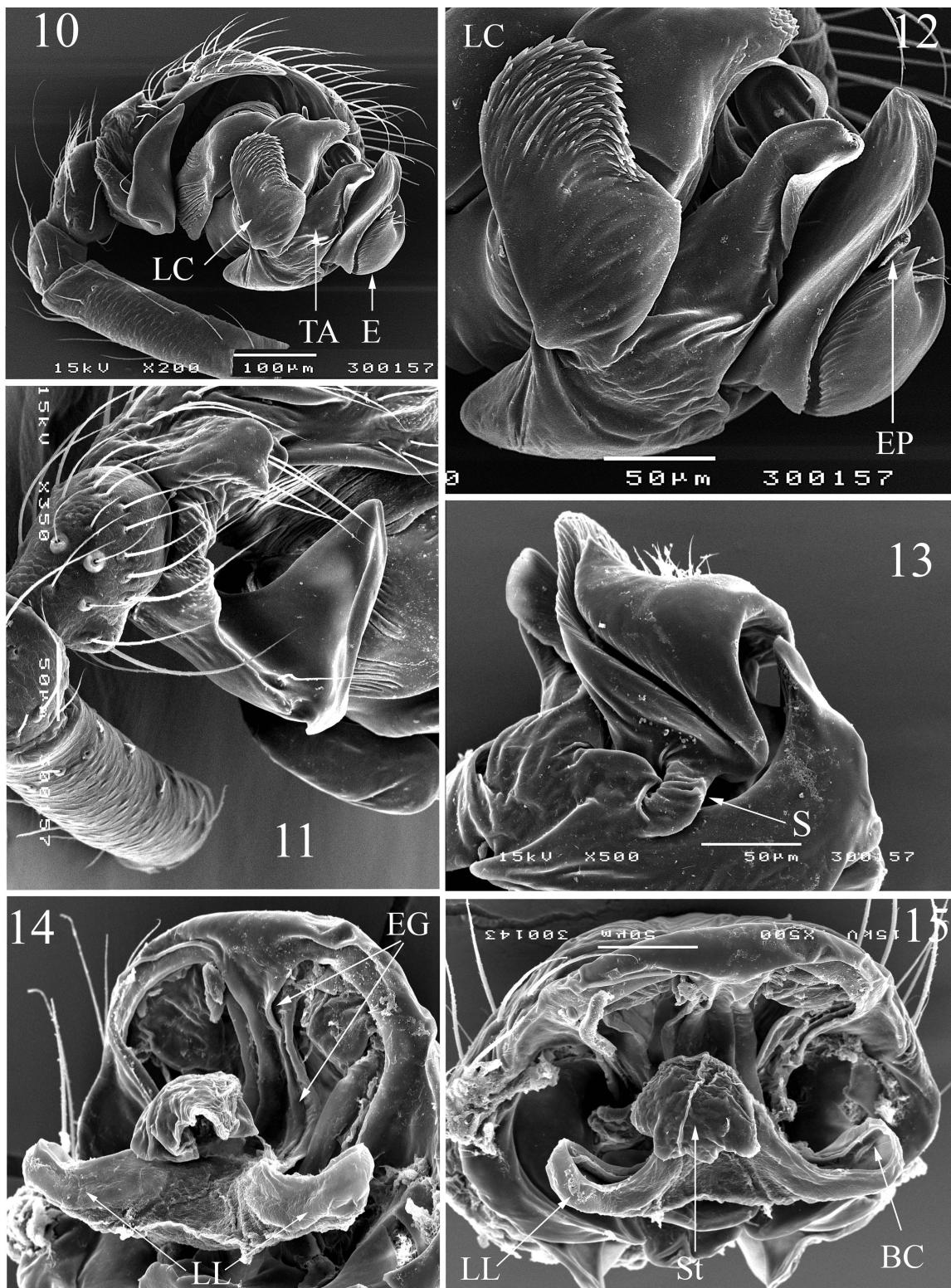
Рис. 1–9. Детали строения пальпы самца (1–7) и эпигина самки (8, 9) *Oreonetides badzhalensis* Eskov, 1991, экземпляры с кордона «Стрелка». 1 — правая пальпа, ретролатерально; 2, 3 — парасимбиум, соответственно сбоку и сверху; 4 — дистальная апофиза супратегулюма; 5 — эмболионный отдел; 6 — lamella characteristic; 7 — эмболий; 8, 9 — эпигина, соответственно вид сверху и сбоку.

Taxonomy

Order Aranei Clerck, 1758
Family Linyphiidae Blackwall, 1859
Subfamily Micronetinae Hull, 1920
Genus *Oreonetides* Strand, 1901

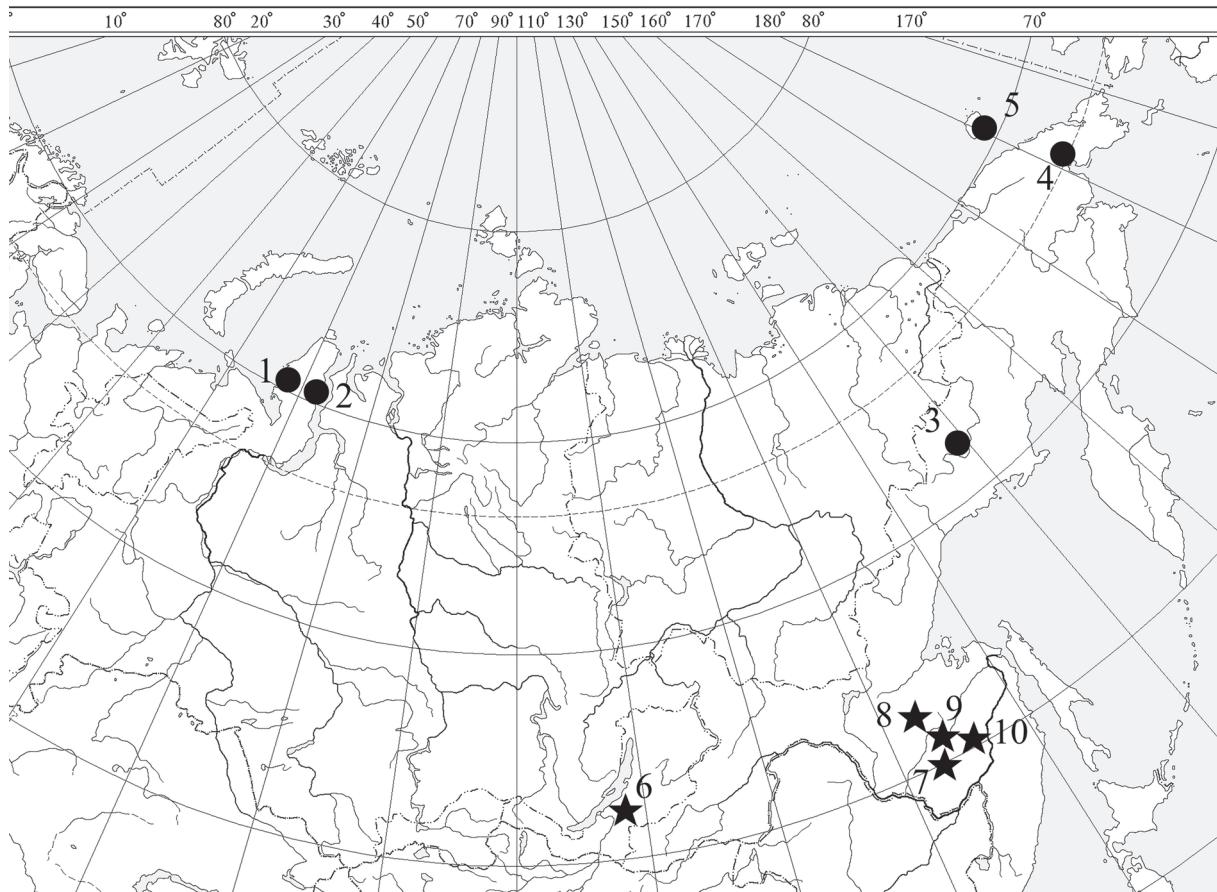
Oreonetides badzhalensis Eskov, 1991
Figs 1–15, Map.

1991 *Oreonetides badzhalensis* Eskov, figs 2: 1–3 (♀).
2017 *O. badzhalensis*. — Tanasevitch, fig. 12 (♀).
TYPE MATERIAL RE-EXAMINED. *Oreonetides badzhalensis* Eskov, 1991: 1 ♀ paratype (ZMMU), RUSSIA, Khabarovsk Province, Verkhnebureinsky District, Badzhalsky Mt. Ridge, 1000



Figs 10–15. Microphotographs of male palp (10–13) and female epigyne (14, 15) of *Oreonetides badzhalensis* Eskov, 1991, specimens from Cordon “Strelka”. 10 — right palp, retrolateral view; 11 — paracymbium, lateral view; 12 — embolic division; 13 — embolus from below; 14 — epigyne, dorsolateral view; 15 — epigyne, posterodorsal view.

Рис. 10–15. Микрофотографии пальпы самца (10–13) и эпигина самки (14, 15) *Oreonetides badzhalensis* Eskov, 1991, экземпляры с кордона «Стрелка». 10 — правая пальпа, ретролатерально; 11 — парасимбиум, латерально; 12 — эмболиальный отдел; 13 — эмбобилюс, снизу; 14 — эпигина, вид сверху и сбоку; 15 — эпигина, вид сверху и сзади.



Map. Distribution records of *Oreonetides beringianus* Eskov, 1991 (circles, 1–5) and *O. badzhalensis* Eskov, 1991 (stars, 6–10). 1 — Bovanenkovo; 2 — Sabetta; 3 — Vakkhana (the type locality); 4 — 118 road-km from Egvekinot to Iultin; 5 — Wrangel Island; 6 — Mostovoy; 7 — Mogdy River (the type locality); 8 — Kobold; 9 — Cordon "Strelka"; 10 — Lake Evoron.

Карта. Находки *Oreonetides beringianus* Eskov, 1991 (круги, 1–5) и *O. badzhalensis* Eskov, 1991 (звезды, 6–10). 1 — Бованенково; 2 — Сабетта; 3 — Вакханка (типовое местообитание); 4 — 118 км трассы Эгвекинот — Иультин; 5 — о-в Врангеля; 6 — Мостовой; 7 — р. Могды (типовое местообитание); 8 — Коболдо; 9 — кордон «Стрелка»; 10 — оз. Эврон.

m a.s.l., Mogdy River, *Picea* forest, moss, VII.1989, leg. D. Kurenshchikov.

NEW AND COMPARATIVE MATERIAL EXAMINED. 1 ♀ (ZMMU), RUSSIA, Amur Area, Selemdzhinsky District, right bank of Selemdzha River, upstream of Kobolodo, steep rocky slope of a bare mountain, 52.98017°N 132.740017°E, 450–465 m a.s.l., mosses, leaf litter, plant debris among fallen birch trunks, 30.VI.2007, leg. E. Veselova & A. Ryvkin; 1 ♀ (ZMMU), Khabarovsk Province, Lake Evoron, *Larix* forest, VI.1992, leg. G. Ganin; 3 ♂♂, 1 ♀ (ZMMU), RUSSIA, Khabarovsk Province, Verkhnebureinsk District, Bureinsky Nature Reserve, Bureya River Valley, ca 210 km NE of Chegdomyn, 3.5 km downstream of confluence of Pravaya & Levaya Bureya rivers, near Cordon "Strelka", *Larix* forest, in moss, 22.V.2003, leg. A. Tanasevitch; 6 ♂♂, 3 ♀♀ (ZMMU), same locality, *Larix* forest, 27.V.2003, leg. A. Tanasevitch; 3 ♂♂ (ZMMU), same locality, near Cordon "Strelka", VI.2004, leg. L. Trilikauskas; 1 ♂ (ZMMU), RUSSIA, Buryatia Republic, near Mostovoy, floodplain of stream, 15.VI.1980, leg. S. Danilov (new record).

DESCRIPTION. Male from Cordon "Strelka". Total length 1.63. Carapace unmodified, 0.75 long, 0.58 wide, yellow to pale brown. Chelicerae 0.75, a mastidion absent. Legs pale yellow. Leg I, 1.96 long (0.60 + 0.20 + 0.48 + 0.38 + 0.30), IV, 1.73 long (0.55 + 0.20 + 0.25 + 0.43 + 0.30). Chaetotaxy: 2.2.2.1. Length of spines about 1–2.5 diameter of segment. Lateral spine on tibiae I–II absent.

Femora and metatarsi unarmed. TmI 0.36. Metatarsi I–III each with a trichobothrium. Palp (Figs 1–7, 10–13): Cymbium without posterodorsal outgrowths. Tibia short, unmodified. Paracymbium U-shaped, with a large posterior pocket forming a ridge with a small depression near middle. Distal suprategular apophysis bifid. Radix boat-shaped. Lamella characteristic short and relatively wide. Terminal apophysis massive, complex. Embolus cup-shaped, with two large lateral extensions embracing a bifid embolus proper. Abdomen 1.00 long, 0.70, white. Stridulation furrows on lung covers well-developed.

Female (Figs 8, 9, 13–15), well described by Eskov [1991].

TAXONOMIC REMARKS. *Oreonetides badzhalensis* is very similar to *O. beringianus*. The male can easily be distinguished by the entire lamella characteristic which is not divided into two lobes. The female differs by the shape of the distal part of the scape: the stretcher in *O. badzhalensis* is with a rounded lateral swelling on each side, vs pyramidal in *O. beringianus*.

DISTRIBUTION. Southern Siberia: Lake Baikal region, Buryatia, as well as the Amur and Khabarovsk provinces, Russian Far East.

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