

A new species of the spider genus *Gongylidiellum* Simon, 1884 from the Caucasus (Aranei: Linyphiidae)

Новый вид пауков рода *Gongylidiellum* Simon, 1884 с Кавказа (Aranei: Linyphiidae)

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КЛЮЧЕВЫЕ СЛОВА: Таксономия, паукообразные, Палеарктика, горная фауна.

ABSTRACT. A new species, *Gongylidiellum arkhyz* sp.n., is described based on a single male from low altitudes on the northern macro slope of the Caucasus Major, Republic of Kabardino-Balkaria, Russia. The species seems to be especially similar to *Gongylidiellum caucasicum* Tanasevitch et Ponomarev, 2015, known from both sexes from the West Caucasus, Republic of Adygea, Russia. *Gongylidiellum arkhyz* sp.n. differs well by the shape of the radix, as well as by the smaller and straight embolus.

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РЕЗЮМЕ. Новый вид, *Gongylidiellum arkhyz* sp.n., описан по единственному самцу из низкогорий северного макросклона Большого Кавказа, Республика Кабардино-Балкария. Вид наиболее близок к *Gongylidiellum caucasicum* Tanasevitch et Ponomarev, 2015, известному по обоим полам с Западного Кавказа, Республика Адыгея, Россия. *Gongylidiellum arkhyz* sp.n. хорошо отличается формой радикса, а также прямым и меньшим по размеру эмболусом.

Introduction

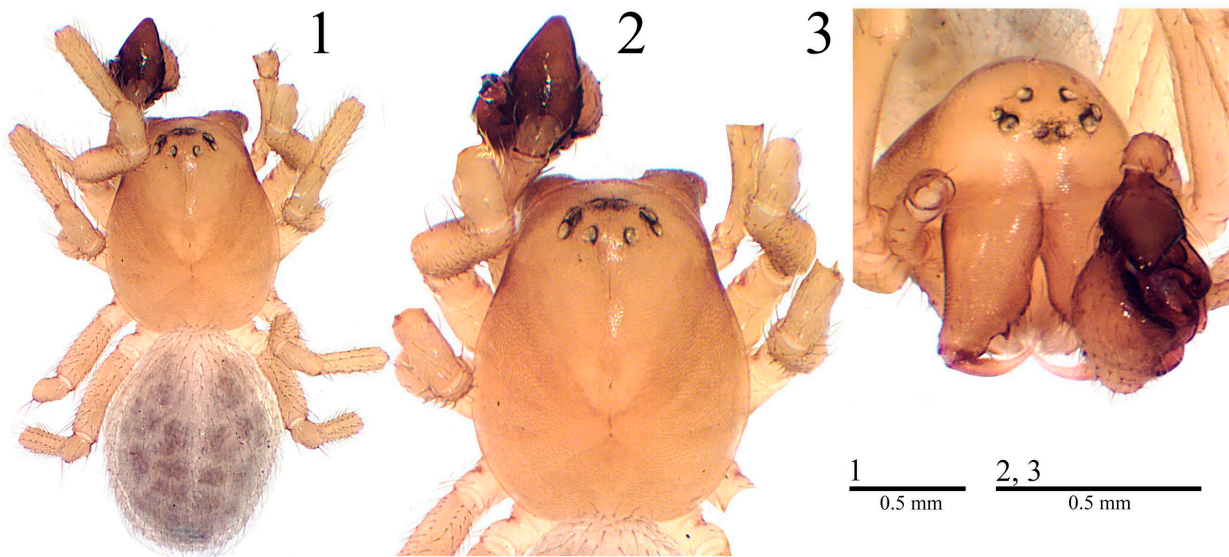
The Caucasian linyphiid spider fauna is presently known to contain four species of the genus *Gongylidiellum* Simon 1884: *G. latebricola* (O. Pickard-Cambridge, 1871), showing a European distribution pattern; *G. orduense* Wunderlich, 1995, with an Anatolian-Caucasian distribution; *G. caucasicum* Tanasevitch et Ponomarev, 2015, presumably endemic to the Caucasus; and *G. vivum* (O. Pickard-Cambridge, 1875), demonstrating a peculiar West Palaearctic – Far Eastern disjunction. Recently,

while revising the spider collection of the Zoological Museum of the Moscow State University, Russia (ZMMU), I revealed that specimens I had identified as *Gongylidiellum murcidum* Simon, 1884 actually represented *G. vivum*: 5 ♂♂, 1 ♀ (ZMMU), Russia, southern Sakhalin, Kholmsk Distr., Slepikovski Cape, 6–9.VI.1996, leg. A. Basarukin; 1 ♂, 4 ♀♀ (ZMMU), same locality, 6.VII.1992, leg. A. Basarukin; 1 ♀ (ZMMU), Russia, Alexandrovsk-Sakhalinskiy, Mgachi Village, 29.VI–6.VII.1988, leg. A. Basarukin.

A fifth, new *Gongylidiellum* has been collected during my short trip in 2023 across the Caucasus (see Tanasevitch [2023]). Its description is the subject of the present paper.

Material and methods

This paper is based on specimens kept in the Zoological Museum of Moscow University (ZMMU). Specimens preserved in 70% ethanol were studied using an MBC-9 stereomicroscope. Drawings were executed with the help of a drawing tube; a Levenhuk C-800 digital camera was used for taking photographs. Leg chaetotaxy is presented in a formula, e.g., 2.2.1.1, 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. Scale lines in the figures correspond to 0.1 mm unless indicated otherwise. The terminology of copulatory organs mainly follows that of Merrett [1963] and/or the authors mentioned in the section abbreviations given below. The following abbreviations are used in the text and figures: a.s.l. — above sea-level; D — duct; DSA — distal suprategular apophysis *sensu* Hormiga [2000]; E — embolus; MM — median membrane *sensu* van Helsdingen [1965] = embolic membrane *sensu* van Helsdingen [1986], Hormiga [2000]; R — radix; TmI — relative position of trichobothrium on the metatarsus of leg I.



Figs 1–3. Photographs of *Gongyliellum arkhyz* sp.n., holotype. 1 — habitus, dorsal view; 2, 3 — prosoma, dorsal and frontal view, respectively.
 Рис. 1–3. Фотографии *Gongyliellum arkhyz* sp.n., голотип. 1 — внешний вид; 2, 3 — просома, соответственно вид сверху и спереди.

Taxonomy

Class Arachnida Cuvier, 1812
 Order Aranei Clerck, 1758
 Family Linyphiidae Blackwall, 1859
 Subfamily Erigoninae Emerton, 1882

Genus *Gongyliellum* Simon, 1884

TYPE SPECIES: *Gongyliellum latebricola* (O. Pickard-Cambridge, 1871).

Gongyliellum arkhyz sp.n.
 Figs 1–8.

HOLOTYPE: ♂ (ZMMU), RUSSIA, Caucasus Major, Republic of Kabardino-Balkaria, Arkhyz River Valley, environs of Nizhniy Arkhyz, *Fagus* forest on slope with *Quercus*, *Acer*, *Sorbus*, *Corylus*, etc., sifting dead leaves and litter, 43.67678°N 41.44228°E, 1231 m a.s.l., 6.VI.2023, leg. A. Tanasevitch.

ETYMOLOGY. The specific name is a noun in apposition, referring to the *terra typica* of the new species.

DESCRIPTION. Male holotype. Total length 1.85 (Fig. 1) Carapace 0.90 long, 0.70 wide, yellowish pale brown, unmodified, sulci absent (Fig. 2). Chelicerae 0.38 long, a small mastidion present at the distal part of chelicera (Fig. 3). Legs yellow to pale brown. Leg I, 2.45 (0.70 + 0.25 + 0.60 + 0.50 + 0.40), leg IV, 2.29 (0.65 + 0.23 + 0.58 + 0.48 + 0.35). Chaetotaxy 2.2.1.1, spines 1–1.5 times as long as diameter of corresponding leg segment. Metatarsi I–III each with a trichobothrium. TmI 0.31. Palp (Figs 4–8): Tibia massive, with a slender, long, slightly curved, retrolateral apophysis and a small tooth at its base. Paracymbium simple, U-shaped. Distal suprategular apophysis relatively short, somewhat broadened distally. Median membrane very small. Embolic division well-developed. Radix large, its basal part flat and wide, distal part divided into two flat and slightly curved lobes making a “cup”. Embolus very short,

straight, located at near base of median membrane. Abdomen 1.00 long, 0.70 wide, pale, with greyish reticulation (Fig. 1).

Female unknown.

TAXONOMIC REMARKS. The new species seems to be most similar to *Gongyliellum caucasicum* Tanasevitch et Ponomarev, 2015, known from both sexes from the Republic of Adygea, Russia, West Caucasus. *Gongyliellum arkhyz* sp.n. differs well by the shape of the radix (Figs 4, 5, 7 cf. Figs 1, 2, 6, 7 in Tanasevitch & Ponomarev [2015]), as well as by the straight and smaller embolus (Fig. 8 cf. Figs 6, 7 see in op. cit.).

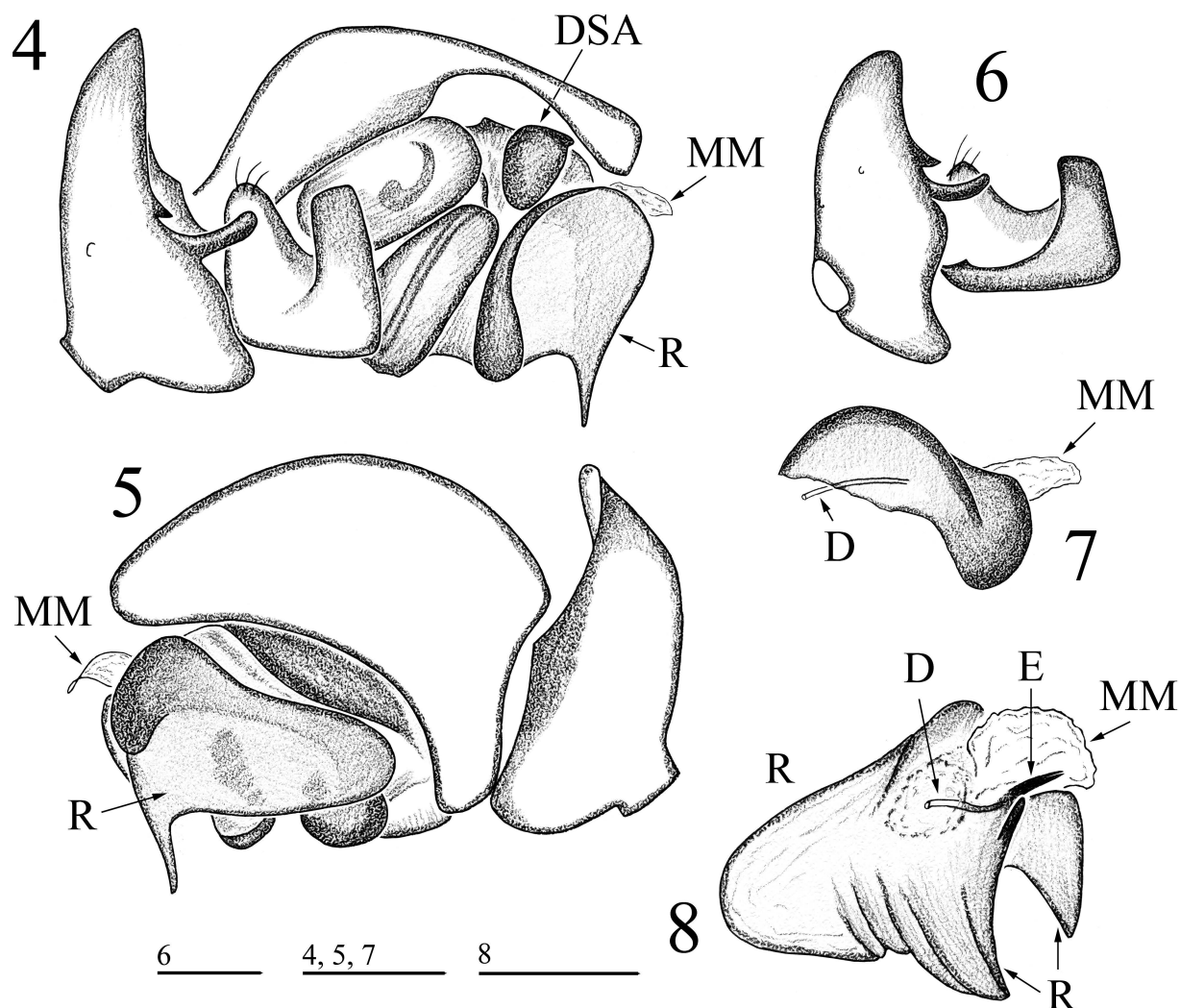
DISTRIBUTION. Known only from the type locality in the Republic of Kabardino-Balkaria, Caucasus, Russia.

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References

- Heldsingen van P.J. 1986. World distribution of Linyphiidae // Proceedings of the Ninth International Congress of Arachnology, Panama 1983. Washington D.C.: Smithsonian Institution Press. P.121–126.
- Hormiga G. 2000. Higher level phylogenetics of erigonine spiders (Araneae, Linyphiidae, Erigoninae) // Smithsonian Contributions to Zoology. No.609. P.1–160.
- Merrett P. 1963. The palpus of male spiders of the family Linyphiidae // Proceedings of the Zoological Society of London. Vol.140. No.3. P.347–467.
- Tanasevitch A.V. 2023. New records of linyphiid spiders of the Caucasus and Crimea, Russia (Aranei: Linyphiidae) // Arthropoda Selecta. Vol.32. No.4. P.518–526.
- Tanasevitch A.V., Ponomarev A.V. 2015. A new *Gongyliellum* Simon, 1884 from the western Caucasus (Arachnida: Aranei: Linyphiidae) // Arthropoda Selecta. Vol.24. No.1. P. 113–116.
- World Spider Catalog 2024. World Spider Catalog, version 24.5. Natural History Museum Bern. Available at <http://wsc.nmbe.ch> (accessed in January 2024).

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Figs 4–8. Details of male palpal structure of *Gongyliellum arkhyz* sp.n., holotype. 4, 5 — right palp, retrolateral and prolateral view, respectively; 6 — palpal tibia and paracymbium, ventro-lateral view; 7 — distal suprategular apophysis, lateral view; 8 — embolic division, antero-lateral view.

Рис. 4–8. Детали строения пальпы самца *Gongyliellum arkhyz* sp.n., голотип. 4, 5 — правая пальпа, соответственно ретролатерально и пролатерально; 6 — голень пальпы и парацимбиум, вид снизу и сбоку; 7 — дистальный супратегулярный отросток, вид сбоку; 8 — эмболозный отдел, фронтально-латеральный вид.