

A new species of ground spiders of the genus *Pterotricha* Kulczyński, 1903 (Aranei: Gnaphosidae) from Azerbaijan

Новый вид пауков рода *Pterotricha* Kulczyński, 1903 (Aranei: Gnaphosidae) из Азербайджана

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КЛЮЧЕВЫЕ СЛОВА: Кавказ, Araneae, Gnaphosinae.

ABSTRACT. An illustrated description of a new species *Pterotricha pseudoparasyiaca* sp.n. from Azerbaijan is provided. The new species is closely related to *P. parasyiaca* Levy, 1995. It has been previously recorded in Azerbaijan as *Pterotricha* sp.

РЕЗЮМЕ. Приводится иллюстрированное описание нового вида *Pterotricha pseudoparasysiaca* sp.n. из Азербайджана. Новый вид близок к *P. parasyiaca* Levy, 1995. ранее он был отмечен в Азербайджане как *Pterotricha* sp.

Introduction

The genus *Pterotricha* Kulczyński, 1903 was erected by Kulczyński [1903] for *Agelena lengitinosa* C.L. Koch, 1837. Later, Dalmas [1921] divided it into six genera, with a more strict delimitation of *Pterotricha*, based on similarity in structure of the copulatory organs and presence of elongated anterior spinnerets. Another important contribution to the systematics of this genus was made by Levy [1995], who redescribed many poorly known species from Northern Africa and the Middle East, and also described several new species from Israel. Altogether, both Dalmas [1921] and Levy [1995] provided illustrations for 22 valid species of *Pterotricha* [see WSC, 2016]. Recently, Marusik et al. [2013] redescribed *P. loeffleri* (Roewer, 1955) and suggested that it could be a synonym of *P. strandi* Spassky, 1936.

We have analyzed published descriptions concerning remaining 14 species and our conclusions are as follows. Judging from the illustrations in L. Koch [1875], *P. aethiopica* (L. Koch, 1875) certainly belongs to *Pterotricha*. The same is true for *P. mauritanica* Denis, 1945 [see Denis, 1945]. Somewhat surprisingly, *P. tikaderi* Gajbe, 1983 described from India

[Gajbe, 1983] very likely also belongs to *Pterotricha*. Two species from the territory of the former USSR listed under “*Pterotricha*” in Mikhailov’s catalogue [Mikhailov, 2013] were described with insufficient illustrations [Charitonov, 1946; Spassky, 1952] to make any certain conclusion. Two species described by Denis [1966] from Libya most likely belong to another, probably, undescribed genus. The same is true for two Tucker’s species from South Africa [Tucker, 1923]. The remaining species were described without illustrations and in some cases even based on juvenile specimens, and their generic placement cannot be confirmed without seeing the types.

In the present paper we describe a new species of *Pterotricha* from Azerbaijan. It should be mentioned that this is only the third true representative of the genus recorded in the territory of the former USSR [see Mikhailov, 2013]. Earlier, it has been reported from Azerbaijan as *Pterotricha* sp. [Marusik, Guseinov, 2003].

Material and methods

The new species was examined, drawn and measured under NYKON SMZ 1270 stereomicroscope. The epigyne of one female was cleared in a solution of potassium hydroxide (KOH) and transferred to ethanol for drawing. Digital images of the palps and epigynes were taken with a digital camera SONY DSC – P8 via ocular of stereomicroscope. All specimens studied in this paper are deposited in the collection of Institute of Zoology, National Academy of Sciences of Azerbaijan, Baku (IZBA), Zoological Museum of the Moscow State University (ZMMU) and Taurida National University (TNU). The following abbreviations are used here for designating of position of spines on legs: d — dorsal, p — prolateral, r — retrolateral, v — ventral.

Taxonomy

Pterotricha pseudoparasysriaca sp.n.
Figs 1–18.

Pterotricha sp.: Marusik, Guseinov, 2003: 34.

MATERIAL: Holotype ♂ (IZBA), Central-eastern Azerbaijan, Gobustan, Kichik-dash hill, 40°07'N, 49°23'E, 29.05.2009 (E.F. Huseynov). Paratypes. 1 ♀ (IZBA), same locality, together with holotype; 1 ♀ (IZBA), the same area, Beyuk-dash hill, 2.09.1999 (E.F. Huseynov); 2 ♀♀ (IZBA), same locality, 5.05.2001 (E.F. Huseynov); 1 ♀, same locality, 18.05.2003 (Yu.M. Marusik); 1 ♂, 2 ♀♀ (ZMMU), central-eastern Azerbaijan, Absheron Peninsula, Kergez hill, 28.04.2000 (E.F. Huseynov); 1 ♂ (TNU), south-eastern Azerbaijan, Lerik Distr., Divagach Vill., 38°41.74'N, 48°22.86'E, 25.05.2003 (E.F. Huseynov).

COMPARATIVE MATERIAL. *Pterotricha parasyriaca*: 1 ♂, Israel, En Zetim NW Zefat (Safed).

ETYMOLOGY. The specific name refers to close similarity with *P. parasyriaca* Levy, 1995 from Israel.

DIAGNOSIS. Male of *P. pseudoparasysriaca* sp.n. is most similar to *P. parasyriaca*. However, in the new species the tip of median apophysis is straight and pointed (Figs 1–2, 11–12), but not curved and bulged as in *P. parasyriaca* (Figs 6–7, 15–16). In addition, the protrusion of apical process of median apophysis in *P. pseudoparasysriaca* sp.n. is pointed and directed horizontally (Figs 1, 11), while in *P. parasyriaca* it is blunt and inclined upward (Figs 6, 16). The tibial apophysis with a single slightly bent tip (Figs 1, 3), bifurcated in *P. parasyriaca* (Figs 16, 18). Two species also differ from each other by trajectory of filamentous part of embolus (Figs 1 vs. 6). The anterior margin of the epigyne of *P. pseudoparasysriaca* sp.n. is almost straight (Figs 4, 13), while in *P. parasyriaca* it is clearly concave (Fig. 9) and its septum is not connected to the anterior part of the epigyne in contrast to *P. parasyriaca* (Figs 4, 13 vs. 9). There are also differences in the shape of copulatory ducts between two species (Figs 5, 14–15 vs. 10).

DESCRIPTION. Male. Total length 7.9. Carapace 3.7 long, 3.1 wide. Carapace yellow without pattern. Sternum, labium, chelicerae and maxillae light brown. Abdomen dorsally grey with dark grey spots and brown scutum in anterior part, ventrally light grey. Legs yellow. Scopula on metatarsi and tarsi indistinct. Metatarsi III, IV longer than femora.

Palp as in Figs 1–3, 11–12; with tibial apophysis a little bit slanting upward in horizontal plane with slightly bent tip (Figs 1–3, 11–12). Median apophysis with two extended basal edges and narrow almost straight pointed apical process with distinct pointed protrusion at the middle of it (Figs 1, 11). A long, basally originated embolus ending with very fine loops of stylus (Figs 1, 2).

Leg segment length:

	Fe	Pa	Ti	Mt	Ta	Total
I	3.25	1.35	2.8	3.15	2.6	13.15
II	2.6	0.9	2.2	2.5	1.9	10.1
III	3.6	1.65	3.15	4.18	2.3	14.78
IV	4.05	1.75	3.6	5.45	3.05	17.9

Leg spination in male:

	Fe	Pt	Ti	Mt
I	d1-1-1 p0-1-1 r0-1-1		p1-1-1 r1-0-0 v2-2-2	p1-0-1 r1-1-0 v2-2-2
II	d1-1-0 p0-0-1		d1-1-0 p1-0-1 v2-2-0	v2-2-2
III	d1-1-1 p0-1-1 r0-1-1		d2-2-0 p1-0-1 r1-0-1 v2-2-2	d0-1-0 p1-1-0 r0-1-0 2-0-2
IV	d1-1-1 p0-1-1 r0-1-1	d1	d2-1-2-1 p1-1-1 r1-1 v2-2-2 1	d1-1-1 p1-1-0 r1-1-0 v1-1-1

Female. Total length 10.9. Carapace 3.8 long, 3.05 wide. Coloration as in male.

Epygine as in Figs 4–5, 13–15; with anterior depression of subquadangular shape, divided by narrow septum widening markedly in the posterior portion (Figs 4, 13). Vulva with complicated sinuous ducts leading to elongated oval spermathecae (Figs 5, 14–15).

Leg segment length:

	Fe	Pa	Ti	Mt	Ta	Total
I	3.0	1.4	2.7	2.5	2.1	11.7
II	2.95	1.2	2.3	2.58	1.95	11.03
III	3.2	1.4	2.65	2.6	2.2	12.05
IV	3.6	1.6	2.85	4.25	2.3	14.6

Leg spination in female:

	Fe	Pt	Ti	Mt
I	d1-1-1 p0-1-1		r1-0-1 v2-2-2	v2-2-2
II	d1-1-1 r0-1-1		r1-0-1 v2-2-2	r0-1-0 v2-2-2
III	d1-1-1 r0-1-1 r0-1-1	p1	d1-1-0 p1-0-1 r1-1-1 v2-2-2	d1-1-0 p0-1-0 r1-1-0 v2-2-0
IV	d1-1-1 p0-0-1 r1-0-1	d1	d2-1-2-1 p0-1-1 r0-1-1 v2-2-2	d1-2-1-1 p0-1-0 r0-1-0 v2-2-0

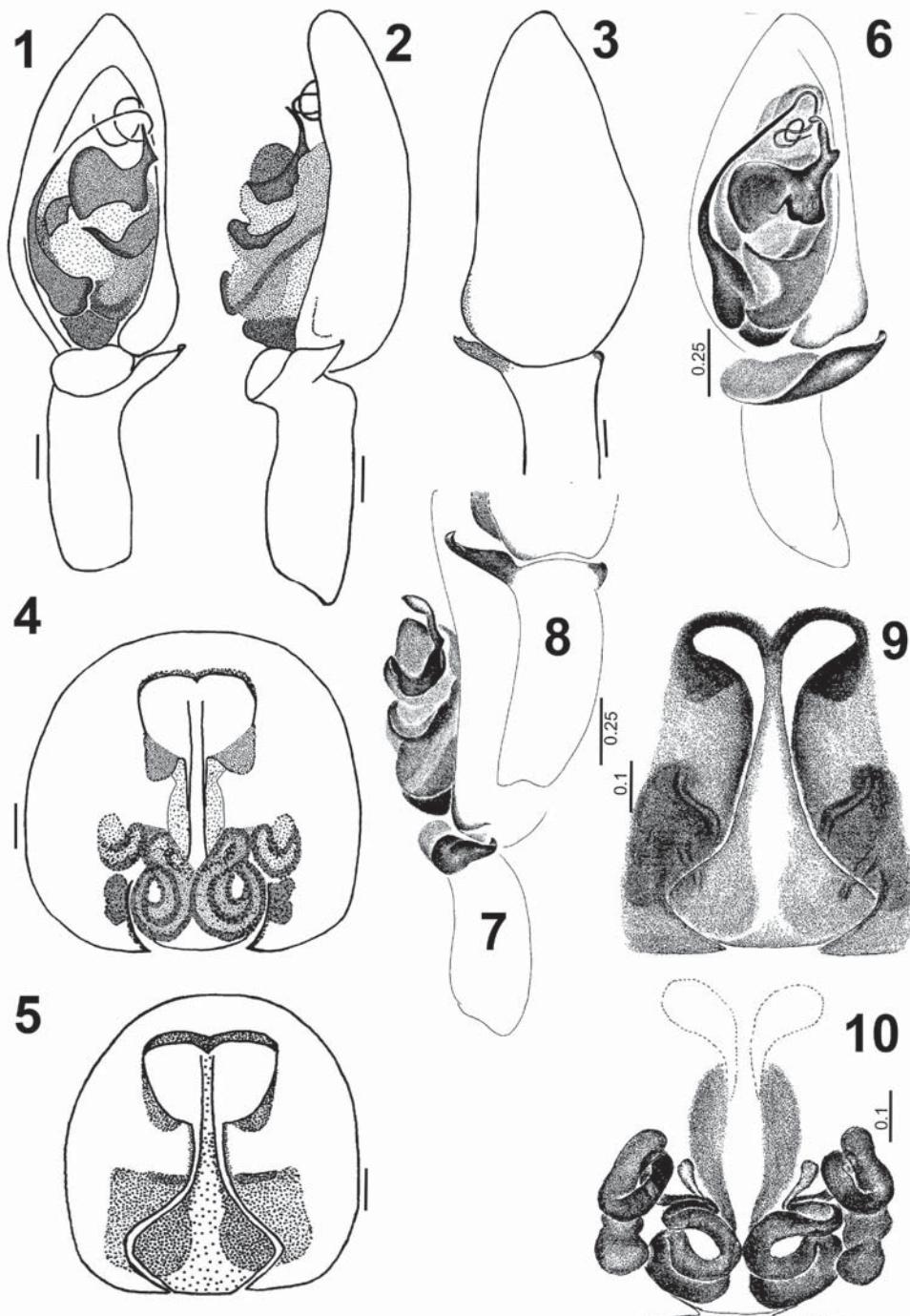
DISTRIBUTION. The species is known from central-eastern Azerbaijan, Gobustan (the type locality) and the adjacent Apsheron Peninsula [Marusik, Guseinov, 2003, sub *Pterotricha* sp.], and south-eastern Azerbaijan (Zuvand).

HABITAT. All specimens of *P. pseudoparasysriaca* sp.n. were found during the day time either on the ground or under stones in hot and dry xerophytic landscapes, such as semi-desert and mountain steppe.

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Figs 1–10. *Pterotricha pseudoparasyiaca* sp.n. (1–5) and *P. parasyiaca* (6–10): 1–3 — male palp, ventral, retrolateral and dorsal; 4, 9 — epigyne; 5, 10 — endogyne; 6–8 — male palp, ventral, retrolateral and dorsal; 9 — epigyne; 10 — endogyne. 6–10 — after Levy [1995]. Scale = 0.2 mm if not otherwise indicated.

Рис. 1–10. *Pterotricha pseudoparasyiaca* sp.n. (1–5) и *P. parasyiaca* (6–10): 1–3 — пальпа самца, вентрально, ретролатерально и дорсально; 4, 9 — эпигина; 5, 10 — эндогина; 6–8 — пальпа самца, вентрально, ретролатерально и дорсально; 9 — эпигина; 10 — эндогина. 6–10 — по оригиналным рисункам Levy [1995]. Масштаб 0,2 мм, если не указано иначе.

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Figs 11–18. *Pterotricha pseudoparasyiaca* sp.n. (11–15) and *P. parasyiaca* (16–18): 11–12 — male palp, ventral and retrolateral; 13–14 — epigyne before and after maceration; 15 — endogynae; 16–18 — male palp, ventral, retrolateral and dorsal. Scale = 0.2 mm if not otherwise indicated.

Рис. 11–18. *Pterotricha pseudoparasyiaca* sp.n. (11–15) и *P. parasyiaca* (16–18): 11–12 — пальпа самца, вентрально и ретролатерально; 13–14 — эпигина до и после мацерации; 15 — эндогина; 16–18 — пальпа самца, вентрально, ретролатерально и дорсально. Масштаб 0,2 мм, если не указано иначе.

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