

On the harvestman fauna of Absheron-Gobustan zone (Azerbaijan), with a description of a new species (Opiliones)

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Abstract: Seven harvestmen of family Phalangiidae are found in the Absheron-Gobustan zone of Azerbaijan. One of them, *Phalangium bakuensis* sp.n., is newly described and illustrated. It is most closely related to *Ph. staregai* SNEGOVAYA, 2005 but differs from it in having smaller chelicerae, shorter penis and 2-3 rows of tubercles on ocularium. The species *Opilio afghanus* ROEWER, 1960 is recorded for the territory of Caucasus for the first time.

Key words: faunistics, harvestman, new record, *Phalangium bakuensis* sp.n., Azerbaijan

Introduction

The Absheron-Gobustan region is located in the eastern part of Azerbaijan and includes Absheron Peninsula and the neighbouring territories of the Gobustan Hills. The harvestman fauna of the region has hitherto remained unknown. The recent collecting activities carried out in the area revealed the following species: *Opilio parietinus* (DE GEER, 1778), *O. lederi* ROEWER, 1911, *O. absheronicus* SNEGOVAYA, 2005, *O. shirvanicus* SNEGOVAYA, 2004, *O. afghanus* ROEWER, 1960, and *Phalangium punctipes* C.L. KOCH, 1878. A new species, *Phalangium bakuensis*, is herewith described and illustrated. The find of *O. afghanus* in Absheron-Gobustan represents the first formal record of the species in Caucasus.

Taxonomy

Phalangium bakuensis sp. n.

Figs 1-16.

Type material: Holotype: 1♂ (Zoological Institute RAN, St.-Petersburg, Russia; V. A. Krivokhatski), Azerbaijan, Absheron, Volchi Vorota (vicinities of Baku), 7-12.V.2005, collected under stones and in grass, Ilham Alekperov and Nataly Snegovaya leg.; Paratypes: 1♀ (Zoological Institute RAN, St.-Petersburg, Russia; V. A. Krivokhatski), 1♂, 6♀ (Institute of Zoology, Baku; N. Yu. Snegovaya, No. 276), same locality, data and collectors.

Diagnosis: The new species is close to *Phalangium staregai* SNEGOVAYA, 2005 but differs from it by the characters given in Table 1.

Etymology: The species is named after Baku City, the type locality.

Description (all measurements are in mm): Male (Holotype) (Figs 1-10): Body: length 5.0; width 3.2; Chelicera: basal segment 1.5, distal segment 3.1, horn 1.4; Penis: length 1.88; length of glans: 0.33, stylus 0.15. Length of palp and leg segments: see Table 2.

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Table 1. Diagnostic characters of *Phalangium bakuensis* sp.n. and *Ph. staregai*.

	<i>Ph. bakuensis</i> sp.n.	<i>Ph. staregai</i> SNEGOVAYA, 2005
Body	Quadrangular, oval; not very large, 5.0 mm long (Figs 1-2)	Quadrangular, widening to caudal end; large, 5.6 mm long (SNEGOVAYA 2005: Fig. 46)
Chelicerae	Relatively small (Figs 5-6)	Relatively large (SNEGOVAYA 2005: Figs 53-54)
Legs	Fm I slightly thickened	Fm I strongly thickened
Penis	Relatively short (1.88 mm) (Figs 7-10)	Relatively long (2.8 mm); “wings” long (SNEGOVAYA 2005: Figs 47-50)
Ocularium	With 2-3 rows of black-tipped tubercles	With a single row of small tubercles

Table 2. *Phalangium bakuensis* sp.n., male (Holotype). Length of palp and leg segments (mm).

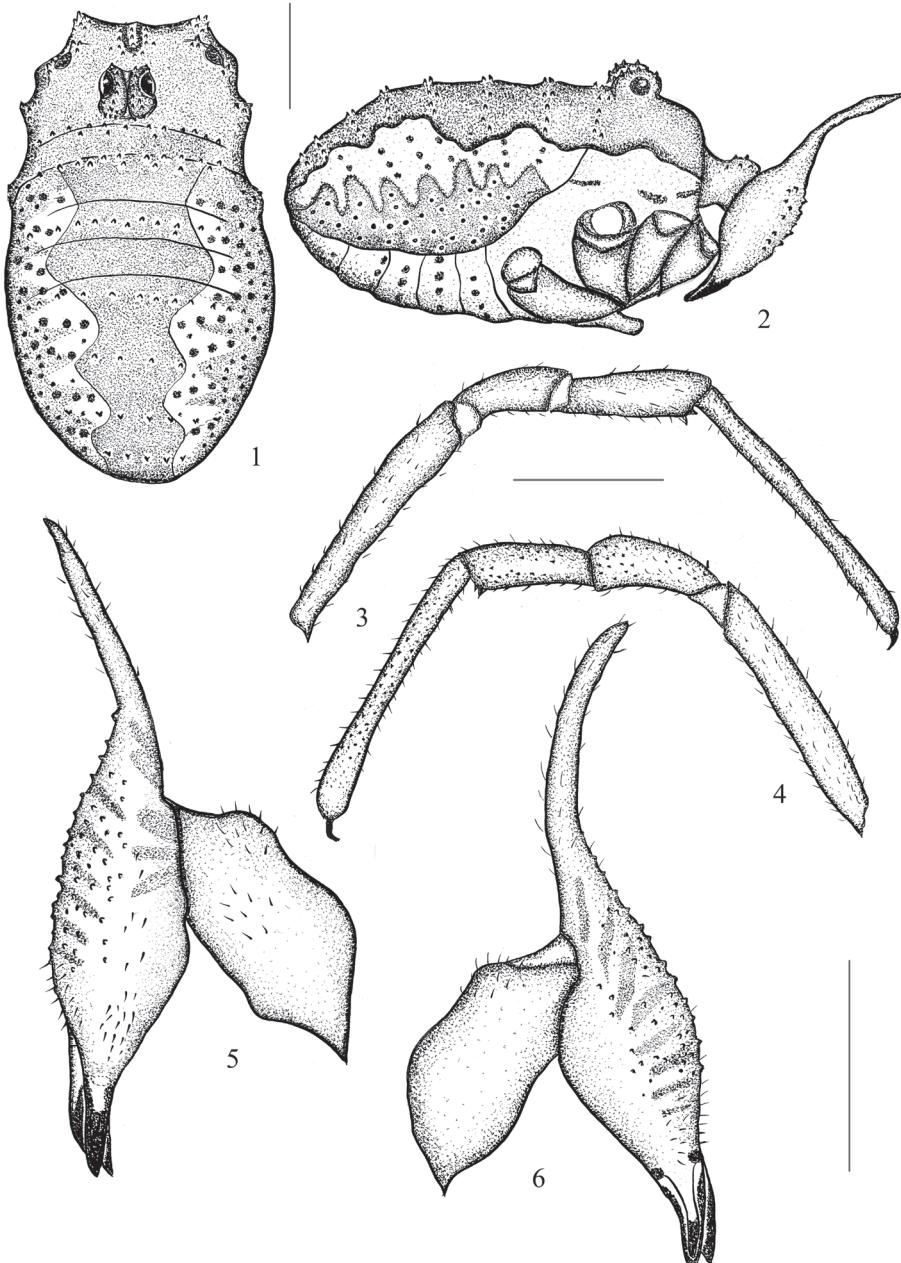
	Femur	Patella	Tibia	Metatarsus	Tarsus	Total
Palp	1.85	0.8	1.0	---	2.1	5.75
Legs						
I	2.55	0.9	2.45	3.1	3.9	12.9
II	4.0	1.1	3.3	2.3	9.2	19.9
III	2.6	0.8	2.0	2.6	5.6	13.6
IV	7.0	1.0	3.0	3.5	7.4	21.9

Body: rounded-quadrangular, anterior margin of carapace smooth; there are groups of tubercles situated at corners and directed anteriorly. Each of the supra-cheliceral lamellae with a single setae. Saddle is clearly visible. On the cephalothorax all tergites bear a longitudinal row of small tubercles. There are 8-9 small tubercles in front of the ocularium, with each branch of the longitudinal stripe. Lateral sides of the cephalothorax with tubercles and setae between coxae. Ocularium contently high, with a group of 14-15 spine-tipped tubercles on each side, forming double/triple rows. There is a group of 8-9 tubercles on each sides of the ocularium. Abdominal sternites and coxae of legs covered with hairs. Palp not very long. Femur covered with small tubercles and setae. Patella also covered with tubercles and setae and bears hardly visible apophysis densely covered with micro-denticles. Tibia with setae and small and dark grains and tubercles. Tarsus with setae and grains. Chelicera rather robust. Cheliceral segment I covered with setae, segment II covered anteriorly with black micro-denticles and hairs and bearing a horn, covered with micro-denticles and hairs; the horn’ size is variable. Legs not very long, femur I thicker and shorter than others. Legs I covered ventrally with denticles. Other legs covered with setae. Penis: the corpus penis is short, narrowing in the middle and then widening towards the glans. Glans long and thin with two pairs of setae on each side. Stylus long, hooked at its tip.

Female (Paratype) (Figs 11-16): Body: length 5.6; width 4.2; Chelicera: basal segment 1.3, distal segment 1.7. Length of palp and leg segments: see Table 3. Ovipositor: length 3.4, width

Table 3. *Phalangium bakuensis* sp.n., female. Length of palp and leg segments.

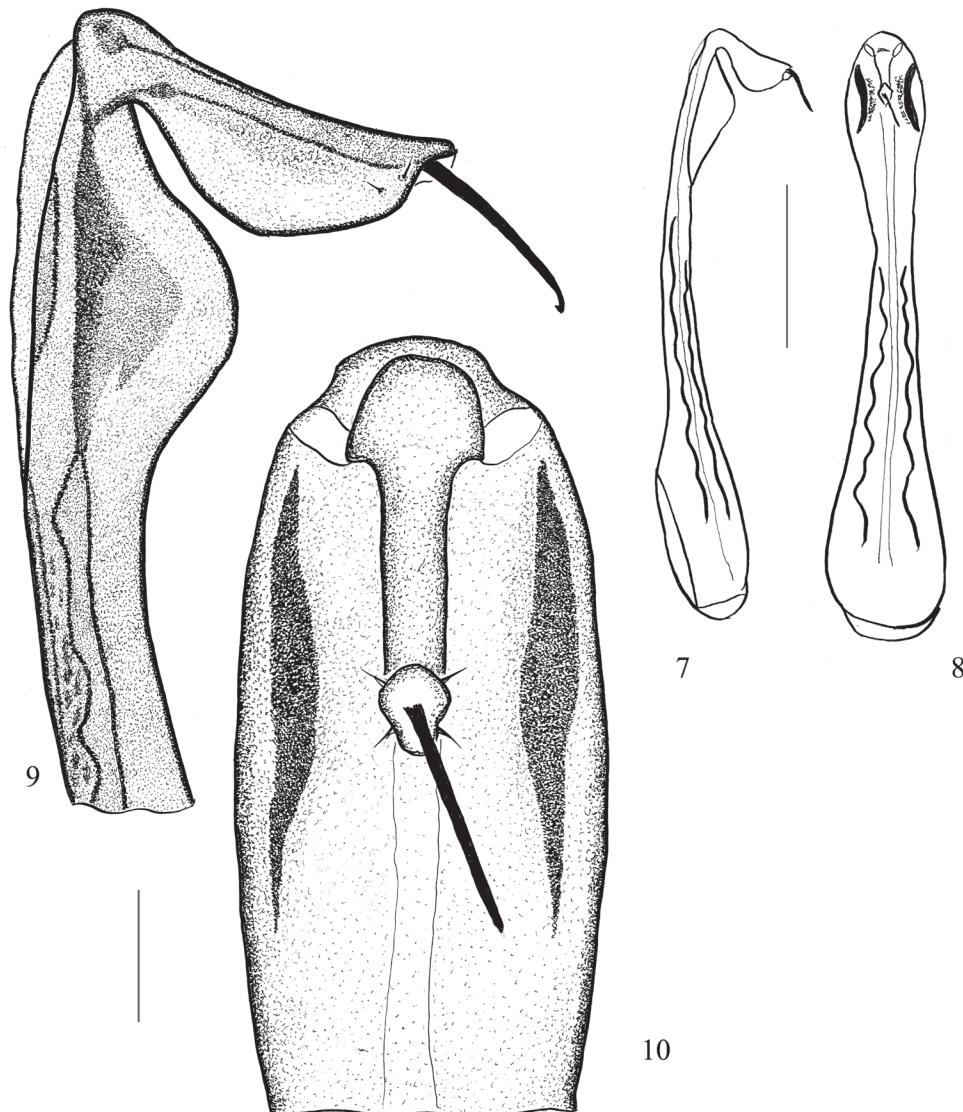
	Femur	Patella	Tibia	Metatarsus	Tarsus	Total
Palp	1.3	0.8	0.7	---	1.6	4.4
Legs						
I	2.1	1.0	1.75	2.0	3.25	10.1
II	3.25	1.1	3.0	2.8	6.35	16.5
III	2.3	1.1	1.9	2.9	3.9	12.1
IV	3.25	1.1	2.7	4.1	5.6	16.75



Figs 1-6. *Phalangium bakuensis* sp.n., male (Holotype): 1 – body, dorsal view; 2 – body, lateral view; 3-4 – palp, lateral view; 5-6 – chelicerae, lateral view. Scale lines: 1 mm.

0.4. Female longer and wider than the male; the second cheliceral segment without a process. Femora I not thickened. Palps and legs entirely covered with setae. Seminal receptacles situated between 2-5 segments.

Coloration: In both sexes, body light brown, with numerous dark brown and light yellow spots. Abdomen light brown, with dark spots. Palp light brown, with dark longitudinal spots. Legs light brown, with large and small dark brown spots.

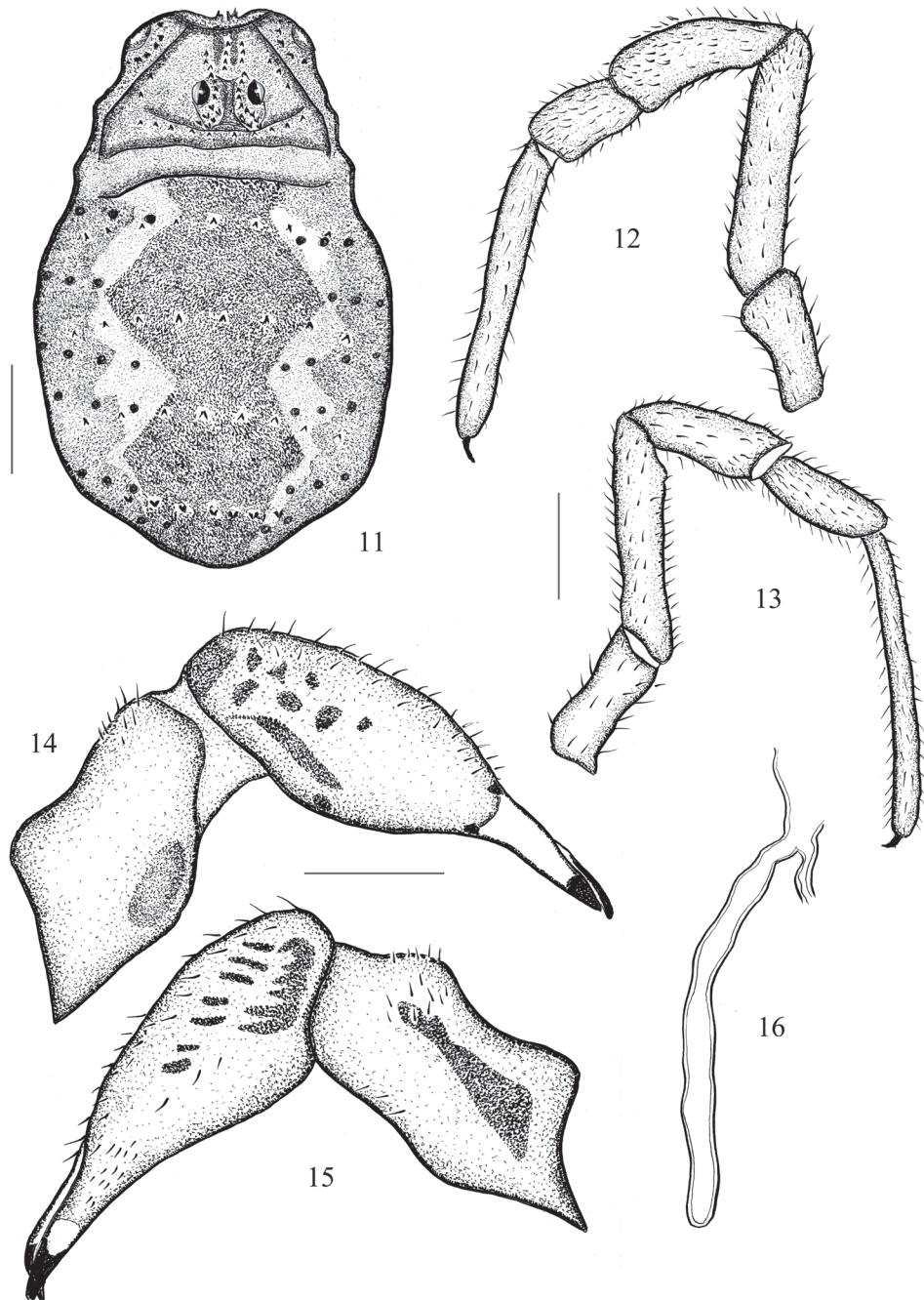


Figs 7-10. *Phalangium bakuensis* sp.n., male (Holotype): 7 – penis, lateral view; 8 – penis, dorsal view; 9 – glans penis, dorsal view; 10 – glans penis, lateral view. Scale lines: 0.5 mm (7, 8), 0.1 mm (9, 10).

Remark: The genus *Phalangium* LINNAEUS, 1758 is hitherto known with five species in Azerbaijan: *Phalangium punctipes* (L. KOCH, 1878), *Ph. armatum* SNEGOVAYA, 2005, *Ph. zuvandicum* SNEGOVAYA, 2005 and *Ph. staregai* SNEGOVAYA, 2005, and *Ph. bakuensis* sp.n. (ROEWER 1911, 1923, 1956, STARĘGA 1978, SNEGOVAYA 1999, 2004, 2005, present study).

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Figs 11-16. *Phalangium bakuensis* sp.n., female (Paratype): 11 – body, dorsal view; 12-13 – palp, lateral view; 14-15 – chelicerae, lateral view; 16 – seminal receptacle. Scale lines: 1 mm (11), 0.5 mm (12-15).

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Сенокосци от Абшерон-Гобустан (Азербайджан) с описание на нов вид (Opiliones)

H. Снеговая

(Резюме)

Седем вида сенокосци от семейство Phalangiidae са установени в района на Абшерон-Гобустан, Източен Азербайджан. Един от тях – *Opilio afghanus* ROEWER, 1960, е нов за фауната на Кавказ. Описва се новият за науката вид *Phalangium bakuensis*, намерен в околностите на Баку. Видът е морфологично близък до *Ph. staregai*, но се различава от него по малките хелициери и пенис, както и по наличието на 2-3 реда туберкули на окулариума.