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To cite this article: Nataly Yu. Snegovaya (2022): New records of harvestman species (Arachnida: Opiliones) from the Caucasus (Georgia, Russia), with description of a new species, *Zoology in the Middle East*, DOI: [10.1080/09397140.2022.2145803](https://doi.org/10.1080/09397140.2022.2145803)

To link to this article: <https://doi.org/10.1080/09397140.2022.2145803>



Published online: 13 Nov 2022.



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New records of harvestman species (Arachnida: Opiliones) from the Caucasus (Georgia, Russia), with description of a new species

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(Received 27 September 2022; accepted 6 November 2022)

A new harvestman species of the family Phalangiidae, *Metaplatybunus valentinae* sp. n. is diagnosed, illustrated, and described from the Caucasus region of Russia. *Rilaena artvinensis* Kurt, 2015 is recorded for the fauna of Georgia for the first time and a drawing of the female is provided for the first time.

<http://www.zoobank.org/urn:lsid:zoobank.org:pub:A0312B48-1578-4B71-9DE0-4C926A0B1B62>

Keywords: *Rilaena*; *Metaplatybunus*; Kabardino-Balkaria; Adjara

Introduction

While working on material of harvestmans (Opiliones) obtained from the Zoological Museum of Moscow State University, a species of the genus *Metaplatybunus* Roewer, 1911 was discovered which is still undescribed. Additionally, a species of the genus *Rilaena* Šilhavy, 1965 was found to be new to the fauna of Georgia.

Material and Methods

The specimens were collected by hand and into the Malaise traps and preserved in 75% ethanol. Specimens were examined and measured using a Nikon SMZ 1270 stereomicroscope equipped with a Sony DSCP8 camera. Image processing was carried out with Adobe Photoshop CS5.

Abbreviations used are as follows: Fe (femur), Pa (patella), Ti (tibia), Mt (metatarsus), Ta (tarsus). BLI – Index of legs length (proportion of femur I length to width of carapace, according to Staręga (1972, 2003).

All material is held within the collections of the Museum of the Moscow State University, Moscow, Russia (ZMMU), Institute of Zoology, Ilia State University, Tbilisi, Georgia (IZ ISU), and the Reference Collection of Nataly Snegovaya, Baku, Azerbaijan (RCNS).

Results

Suborder Palpatores Thorell, 1876, Family Phalangiidae Latreille, 1802

Metaplatybunus valentinae sp. n. (Figure 1)

Material. Holotype Male, Russia (Caucasus): Kabardino-Balkaria, Chegem Mts, 5 km S of Upper Chegem, 1700 m, *Betula*, *Pinus* and *Juniperus* forest, litter, 12.vii.1986, leg. S. Golovatch (ZMMU). – Paratypes: 3♂ (ZMMU), same place.

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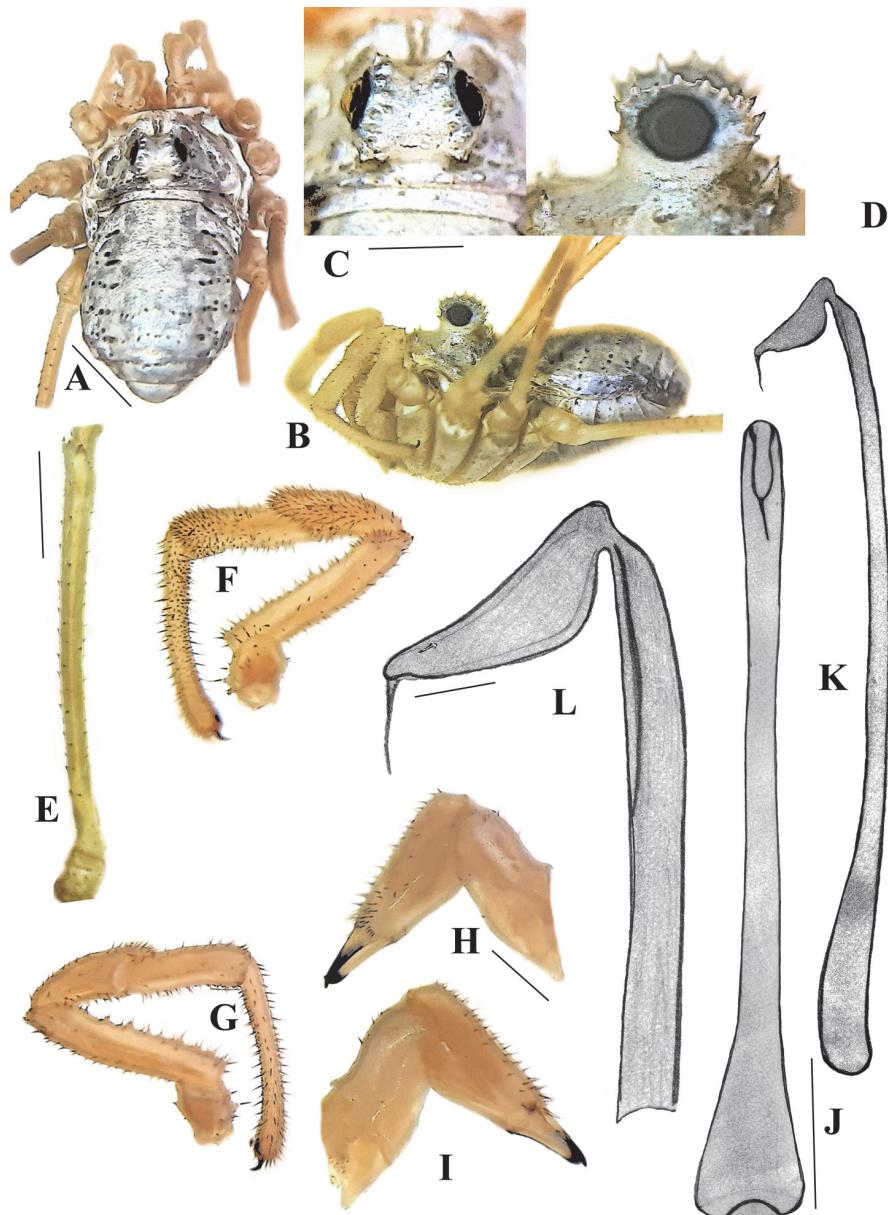


Figure 1. *Metaplatybunus valentinae* sp.n., holotype male: A. Habitus dorsal; B. Habitus, lateral; C. Eye mound, dorsal; D. Eye mound, lateral; E. Femur I, dorsal; F. Right pedipalp, mesal; G. Right pedipalp, lateral; H. Right chelicera, mesal; I. Right chelicera, lateral; J. Penis, dorsal; K. Penis, lateral; L. Close-up of penis glans, lateral. Scale lines: 1 mm: 1-2, 5; 0.5 mm: 3-4, 6-11, 0,1 mm: 12.

Diagnosis. Small harvestmen (3.4 mm body length), silvery; eye tubercle large, slightly trapezoid with 10 fairly large denticles; legs long, all femora of the same thickness, slender; pedipalps slender, with long pointed apophysis on Pa; penis long (2.65 mm) with a wide base, tapering towards the glans, distal part without wings.

Comparative remarks. In the Caucasus, only one member of the genus *Metaplatybunus* (*M. hypanicus*) was recorded (Šilhavy, 1966). The new species differs from the *M. hypanicus* (Šilhavy, 1966) by a smaller body size (3.4 vs. 5.0 mm); body colour of *M.v valentinae* sp. n. silvery, of *M. hypanicus* dark brown with a metallic shine; legs in *M. hypanicus* more slender and longer; eye tubercle in *M. valentinae* sp.n. with long and pointed teeth; apophysis on Pa pedipalps in *M.valentinae* sp.n. more pointed; penis in *M.valentinae* sp.n. shorter (2.65 vs. 4.0 mm).

Description. Male (Holotype). Medium-sized harvestman species, body 3.4 mm long, 1.7 mm wide. Body rectangular with a slightly elongated caudal part (Figures 1A-B). Body almost smooth, with sparse fine setae. Row of lack-tipped denticles in front of the eye tubercle and lateral of it. Eye tubercle large (1.0 mm long, 0.9–1.0 mm wide), slightly trapezoidal, with 10 black-tipped denticles on each side (Figures 1C-D). Body silvery with light brown limbs. Legs medium-sized, lengths of segments and whole legs: I. $3.5+0.9+2.5+3.5+6.0 = 16.4$; II. $6.6+1.0+5.25+6.5+9.3 = 28.65$; III. $3.5+1.0+2.5+4.25+5.1 = 12.14$; IV. $5.8+1.0+3.5+6.8+6.6 = 23.7$. BLI 2.06. Fe of the legs approximately the same width, not widened (Figure 1E). Fe of all legs with small denticles and setae, other segments of legs with setae. Palp not large (3.75 mm), ventrally with rather high denticles, dorsally and laterally with setae (Figures 1F-G); Pa and Ti ventrally with some microdenticles; dorsally and ventrally with setae; Ta ventrally densely covered with microdenticles; dorsally and ventrally with setae. Pa and Ti with well-marked pubescent apophysis. Length of palpal segments: femur 1.15, patella 0.7, tibia 0.65, tarsus 1.25; total length 3.75 mm. Chelicera not thickened, only with bristles on dorsal side of basal segments and basal and lateral sides on distal segments (Figures 1H-I). Basal segment of chelicera 1.2 mm long, distal segment 1.25 mm. Penis long (2.65 mm), slender, with a wide base tapering towards the glans, distal part without wings; glans (0.35 mm long) laterally triangular in shape with long (0.15 mm) stylus, with 1 pair of setae on each side (Figures 1J-L).

Female- Unknown.

Etymology. The new species is named after my mother, Snegovaya Valentina.

Distribution. Known only from the type locality in Caucasus, Kabardino-Balkaria (Russia).

Rilaena artvinensis Kurt, 2015 (Figure 2)

Material. 4♂. CaBOL-ID 1020810, Georgia: Lesser Caucasus, Adjara, Kintrishi, above the waterfall, malaise trap 4 ($41^{\circ}44'38.88''$, $42^{\circ}50.2904''$), 1264 m, leg CaBOL members et al. (IZ ISU), 01–15.vi.2018. – 2♂, 2♀ same place (RCNS).

Description. Male. Medium-sized specimens, 3.6 mm long, 2.1 mm wide. Body oval with pointed posterior end and narrowed caudal part, covered with small setae (Figures 2A-B). Large teeth only along the edges of the cephalothoracic glands. Eye tubercle quite wide (0.8 mm long, 1.0 mm wide), trapezoid with 7-8 denticles on each side (Figures 2C-D). Body dark brown with a prominent saddle pattern and large light silvery areas on the sides. Palp slender, Fe ventrally with long teeth, Fe ventrally with long teeth, Ti and Ta ventrally with microdenticles; other parts with bristles. Pa with long pointed apophysis densely covered with setae (Figures 2F-G). Length of palpal segments: femur 1.38, patella 0.9, tibia 1.25, tarsus 1.55, total length 5.08 mm. Pa and half of Ti dark brown, the rest of the legs light brown. Legs long, dark brown at the base and lighter at the ends; Fe of all legs not thickened (Figure 2E), with small teeth, other parts with setae. Lengths of segments and whole legs: I. $4.3+1.0+3.0+4.7+5.8 = 18.8$; II.

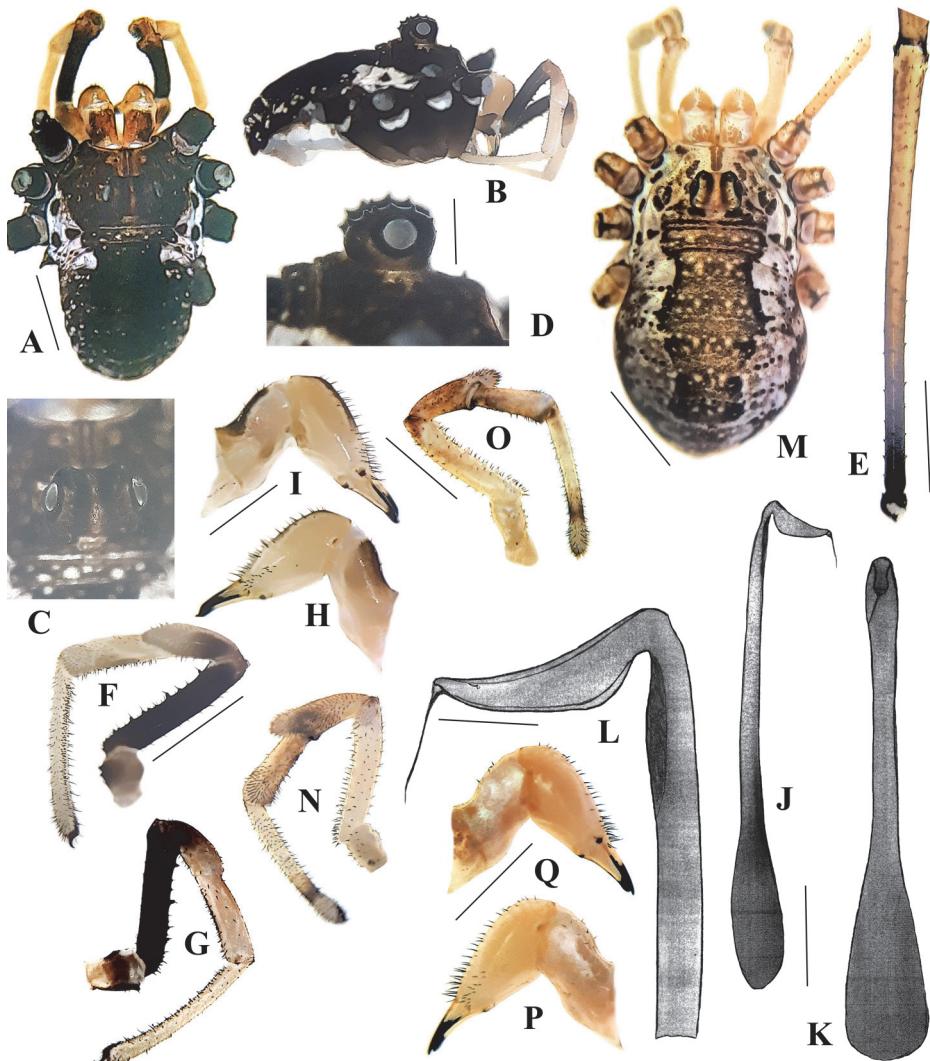


Figure 2. *Rilaena artvinensis* Kurt, 2015. Male: A. Habitus dorsal; B. Habitus, lateral; C. Eye mound, dorsal; D. Eye mound, lateral; E. Femur I, dorsal; F. Right pedipalp, mesal; G. Right pedipalp, lateral; H. Right chelicera, mesal; I. Right chelicera, lateral; J. Penis, dorsal; K. Penis, lateral; L. Close-up of penis glans, lateral. – Female: M. Habitus dorsal; N. Right pedipalp, mesal; O. Right pedipalp, lateral; P. Right chelicera, mesal; Q. Right chelicera, lateral. Scale lines: 1 mm: 1-2.5, 69, 13-17, 0.5 mm: 3-4, 10-11, 0.1 mm: 12.

$8.0+1.5+6.3+8.5+10.3 = 44.1$; III. $5.0+1.0+3.0+5.8+7.5 = 22.3$; IV. $7.5+1.6+4.2+9.0 = 11.0 = 33.3$. BLI 2.05. Chelicera not thickened, segments only with setae, dorsal parts even brown, other parts light brown (Figures 2H-I). Basal segment of chelicera 2.3 mm long, distal segment 3.0 mm. Penis 2.4 mm long, with a wide base, the glans (0.25 mm long) is slightly triangular in shape with one pair of setae on each side (Figures 2J-L). Stylus long (0.15 mm).

Female. More rounded body (5.0 mm long, 2.3 mm wide), lighter, with a dark brown saddle pattern and numerous dark spots of various shapes on a lighter background (Figure 2M). Length of palpal segments: femur 1.5, patella 1.1, tibia 1.1, tarsus 1.6, total length 5.3 mm (Figures 2N-O). Basal segment of chelicera 1.5 mm long, distal segment 1.6 mm (Figures 2P-Q). Abdomen light, covered with bristles.

Distribution. Previously described from Artvin Province, in northeastern Anatolia, Turkiye (Kurt, 2015).

Discussion

The described new species *Metaplatybunus valentinae* sp. n. is the second representative of the genus *Metaplatybunus* Roewer, 1911 in the Caucasus. So far, this is only the first record of this species recorded from Kabardino-Balkaria (Russia). Another representative of this genus, *M. hypanicus*, is also recorded from the North Caucasus (Russia), as well as from Georgia.

The *Rilaena* Šilhavy, 1965 genus is currently represented in the Caucasus by 9 species: *Rilaena atrolutea* (Roewer, 1915) widely represented in the North Caucasus, *R. picta* (Mchedidze, 1952) so far known only from the territory of Georgia, *R. zakatalica* Snegovaya, Chemeris, 2005 distributed almost throughout the Caucasus (North Caucasus, Azerbaijan, Armenia), *R. lenkoranica* Snegovaya, 2006 noted from Azerbaijan and Iran (Hyrcanian forests), *R. talyshica* (Snegovaya, 2006) so far recorded only from Azerbaijan (Yardimly district), *R. kelbajarica* Snegovaya & Pkhakadze, 2014 also noted only from Azerbaijan (Kalbajar district), *R. caucasica* Snegovaya, Tchemeris, 2016 observed from the territory of Georgia and the Russian North Caucasus, *R. silhavyi* Snegovaya, Tchemeris, 2016 found in Georgia, *R. artvinensis* Kurt, 2015 recorded before our data from the territory of Turkey, bordering on Georgia (Snegovaya, 2007, Snegovaya & Starega, 2009; Snegovaya & Pkhakadze, 2014; Snegovaya & Tchemeris, 2016). *Rilaena artvinensis* noted in this article is recorded for the fauna of Georgia for the first time.

Acknowledgements

I wish to thank the Zoological Museum, Moscow, Russia and Dr. K. G. Mikhailov for allowing the samples from museum to be studied. We are also grateful to A. Seropian, Invited Taxonomy Coordinator in CaBOL (Caucasus Barcode of Life, Institute of Ecology, Ilia State University, Tbilisi, Georgia) for the material provided.

Funding

Part of the project on which this study is based was funded by the Federal Ministry of Education and Research under grant number 01DK20014A. The responsibility for the content of this publication lies with the author.

Disclosure Statement

No potential conflict of interest was reported by the author.

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