

New Harvestman Genus and Species from Kyrgyz Republic (Kyrgyzstan) (Arachnida: Opiliones: Nemastomatidae)

Nataly Yu. Snegovaya

Zoological Institute NAS of Azerbaijan, proezd 1128, kvartal 504, Baku, AZ 1073, Azerbaijan; E-mail: snegovaya@yahoo.com

Abstract: A new genus and new species are described from the territory of Central Asia – *Starengovia kirgizica* gen. et sp. nov. A comparison between new genus and other nemastomatid genera is given.

Key words: harvestmen, Kyrgyzstan, Nemastomatidae, *Starengovia kirgizica* gen. et sp. nov.

Introduction

The family Nemastomatidae is widely distributed throughout the Caucasus (REDIKORZEV 1936, MCHIEDZE 1952, 1959, 1964, STARĘGA 1966, 1978, CHARITONOV 1941, LJOVUSHKIN, STAROBOGATOV 1963, LJOVUSHKIN 1972, MARTENS 2006, SNEGOVAYA, CHEMERIS 2005, CHEMERIS 2009 and others) and in Europe (ROEWER 1951, ŠILHAVÝ 1956, STARĘGA 1976, MARTENS 1978 and others). From the territory of Central Asia, up to the present report, only one species was known: *Medisotoma pamiricum* STARĘGA, 1987. While reviewing collections from Central Asia the specimens of the family Nemastomatidae were found that did not corresponded with any known genera or species. It is therefore the purpose of the present contribution to describe *Starengovia* gen.n., and name it in honour of the Polish arachnologist Prof. Wojciech Staręga.

Abbreviations used: ZIN – Zoological Institute of Russian Academy of Sciences in Sankt-Petersburg; RCNS – reference collection of Nataly Snegovaya.

Starengovia gen. n.

Diagnosis. A genus of the family Nemastomatidae that is very close to *Mediostoma* KRATOCHVÍL, 1958 and *Caucnemastoma* MARTENS, 2006. From *Mediostoma* (MITOV, 2002, MARTENS, 2006), the new genus differs by the structure of the penis (presence of large transparent ‘wings’ on the

shaft); composition of the chelicerae (appendage on basal segment of chelicerae has another form); borders of tergites and edge of the body outlined by close and continuous rows of quadrangular denticles; eye mound with large quadrangular denticles. From *Caucnemastoma* (MARTENS, 2006), the new genus differs also by different penis structure, cheliceral apophyses of another form, and leg constitution (legs of the new genus are shorter and thickened).

Compare also with *Acromitostoma* ROEWER, 1951 (RAMBLA 1983). From *Acromitostoma* the new genus differs also by a different structure of penis (truncus appendages and glans of penis) and eye mound ornamentations.

Colouration of the body from ochre to dark-brown.

Body surface papillose; body margin and tergite borders outlined by close and continuous rows of quadrangular denticles. Anterior edge of cephalothorax with large quadrangular denticles, similar in appearance to a ‘hammer’. Tergites I-V each with a pair of low, cylindrical tubercles.

Eye mound round, covered with large denticles.

Chelicerae normal size, distal segment of male with hornlike apophyses.

Pedipalps not very long, thin.

Legs not very long, II pair thinner and longer than others, femora of legs (II-IV) with 2-8 pseudoarticulations.

Penis with large trapezoid transparent ‘wings’ on the shaft.

Species typica: – *Starengovia kirgizica* sp. nov.

Etymology: The genus is named in honour of the well known Polish arachnologist Prof. Wojciech Starega.

***Starengovia kirgizica* sp. nov.**

(Figs. 1-6)

Diagnosis: Tergites I-V with a pair of low, cylindrical tubercles, distal segment of male chelicera

with hornlike apophyses; penis with large trapezoid transparent ‘wings’ on the shaft.

Type Material: 1♂ (holotype) (ZIN), 1♂ (paratype) (RCNS), Kyrgyzstan, Alash Mountain Ridge, Alash River valley, near Alash 1550 m a. s. l., under stones, 26 May 1993, leg. Dr. S. Dashdamirov.

Description: Male (measurement are of holotype). Body length 1.7 mm, width 1.1 mm. Body ovoid to quadrangular; integument papillose; body margin and tergite borders outlined by close and continuous row of quadrangular denticles. Anterior edge of cephalothorax with large quadrangular denticles, shapped like ‘hammer’ (‘T’-shaped denticles). Tergites I-V with a pair of low, cylindrical tubercles. Eye mound

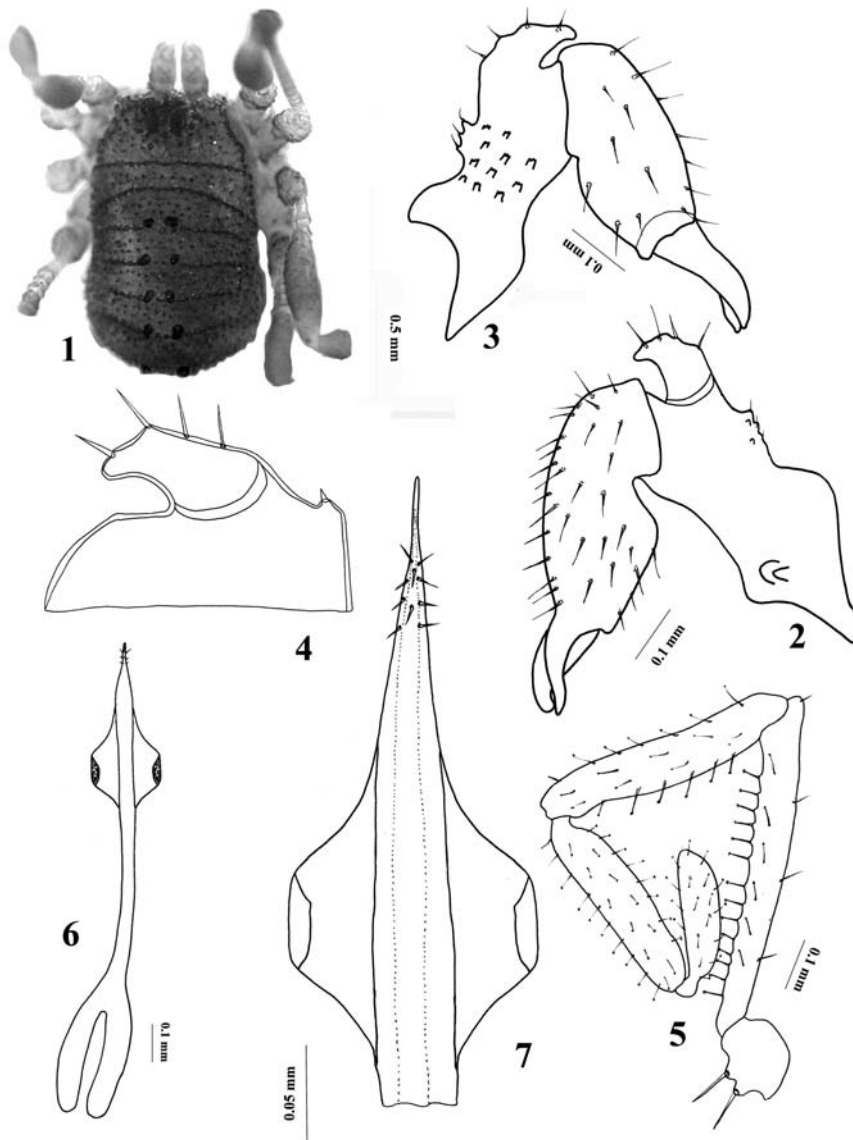


Fig. 1-6. *Starengovia kirgizica* sp. nov. male holotype. Body dorsal view (1). Right chelicera, prolateral view (2). Right chelicera, retrolateral view (3). Cheliceral apophyses, lateral view (4). Right pedipalpus, prolateral view (5). Dorsal views of penis (6). Glans, dorsal view (7). Scale lines = 0.05 mm (7), 0.1 mm (2-3, 5-6), 0.5 mm (1).

round, with large quadrangular denticles, placed near anterior part of cephalothorax. Tergites I-V with a pair of low, cylindrical tubule-like tubercles inclined posteriorly. Tips of these tubules bear aciculae.

Chelicerae normal sized, basal segment dorsally with triangular shaped apophysis with curved top; prolaterally with group of large tubercles; identical tubercles on dorsal side of triangular apophysis. Apophyses covered with long bristles. Prolateral side with a large blunt tubercle. Distal segment typical in form, covered with long bristles. Cheliceral segments 0.5 mm long (basal), 0.57 mm long (distal).

Palps normal, all segments covered with bristles and club-shaped bristles. Length of palpal segments: femur 0.69, patella 0.57, tibia 0.45, tarsus 0.29; total length 2.0 mm.

Legs not very long, II pair thinner and longer than others; Femora of all legs (except II pair) thickened; widths for femora I-IV: 0.2 – 0.13 – 0.23 – 0.2 mm. Femora with pseudarticulations as follows: I- 0, II- 8(7), III- 2(2), IV- 3(3). Coxae I-IV covered on edge with 'hammer'-like tubercles and with small tack-like tubercles on all surfaces. All leg segments covered with small hairs. Lengths (femur through tarsus in mm) of legs:

I: 0.9+0.4+0.65+0.9+0.95=3.8;

II: 1.65+0.5+1.25+2.0+1.5=6.9;

III: 0.95+0.38+0.75+1.0+0.9 = 3.98;

IV: 1.45+0.45+0.9+1.25+1.05 = 5.1.

Penis not very long, rounded in transverse section, slightly flattened dorso-ventrally. Two large

trapezoid transparent wings on distal third of truncus. Glans with small spicules. Penis length 1.37 mm.

Female unknown.

Remarks: *Starengovia kirgizica* sp. nov. is very close to *Mediostoma pamiricum* STAREGA, 1986 (known only female Holotype) (STAREGA, 1986, p. 302), but differs from our new species by longer cylindrical tubercles on tergites I-V, as beside *Histicostoma* KRATOHVIL, 1958. Only the finding of female specimens from the type locality of *S. kirgizica* sp. nov. and comparison the genitalia structures of the both species will help to clarify the relationship between of the both species *Starengovia kirgizica* sp. nov. and *Mediostoma pamiricum*. The pedipalps of the *S. kirgizica* sp. nov. are very close to *Mediostoma armatum* MARTENS, 2006. Chelicera of *S. kirgizica* sp. nov. is very close to the *A. rhinocerus*, but differs bigger curvature. The new genus considerable differs from other Nemastomatid species by large trapezoid transparent 'wings' on the shaft of the penis truncus.

Etymology: The species is named after its type locality – Kyrgyzstan.

Distribution: Kyrgyzstan.

Acknowledgements: The author is extremely grateful to Dr. S. Dashdamirov (Dusseldorf, Germany) for collected material and Prof. W. Starega (Warsaw, Poland) for his kind help with recognition and diagnosis of the new species. Dr. J. Cockendolpher (Lubbock, Texas, USA) is thanked for comments and improving English. Also thank to Dr. Pl. Mitov (Sofia University, Faculty of Biology, Bulgaria) for critical review and help to correct the article.

References

- CHARITONOV D. E. 1941. New materials on the Arachnoidea of Abkhasian caves. – *Trudy Zoologicheskogo Instituta*, Tbilisi, **4**: 165-172. (In Russian).
- CHEMERIS A. N. 2009. New data on the harvestman genus *Nemaspela* ŠILHAVÝ, 1966 (Arachnida: Opiliones). – *Bulletin of the British Arachnological Society*, **14** (7): 286-296.
- LJOVUSHKIN S. I. 1972. Harvestmen of the family Nemastomatidae from caves of the USSR. *Biospeologica Sovietica*. N XLVI. – *Sbornik Trudov Zoologicheskogo Muzeya MGU*, **12**: 61-72. (In Russian).
- LJOVUSHKIN S. I., STAROBOGATOV Y. I. 1963. The cavernicolous Opiliones in the Crimea and Caucasus. – *Biospeologica Sovietica*. N XVIII. *Bulleten Moskovskogo Obschestva Ispytateley Prirody*, (Biol.), **68**: 41-51. (In Russian).
- MARTENS J. 1978. Spinnentiere, Arachnida. Weberknechte, Opiliones. – *Die Tierwelt Deutschlands*, **64**: 464 p.
- MARTENS J. 2006. Weberknechte aus dem Kaukasus (Arachnida, Opiliones, Nemastomatidae). – *Senckenbergiana Biologica*, **86** (2): 145-210.
- MCHUIDZE T. S. 1952. New species of harvest-spiders-Opiliones from Georgia. – *Report of AS Georgian SSR*, Tbilisi, **13**: 545-548. (In Georgian).
- MCHUIDZE T. S. 1959. Materials by study of specific composition spread of harvest-spiders in Georgian SSR. – *Works of Tbilisi University*, Tbilisi, **70**: 109-117. (In Georgian).
- MCHUIDZE T. S. 1964. Opiliones. – *In Tierwelt in Grusien. 2 Arthropoda*, Tbilisi, 117-126. (In Georgian).
- MITOV P. G. 2002. Rare and endemic harvestmen (Opiliones, Arachnida) species from the Balkan Peninsula. I. On *Mediostoma stussineri* (SIMON 1885) (Nemastomatidae) – a new species and genus for the Bulgarian fauna. – *Linzer biologische Beiträge*, Linz, **34/2**: 1639-1648.

- RAMBLA M. 1983. Sobre los Nemastomatidae (Arachnida, Opiliones) de la Península Ibérica. VI. *Acromitostoma rhinocerus* y *Acromitostoma hispanum* (nueva combinación). – *Speleon*, **26/27**: 21-27.
- REDIKORZEV V. V. 1936. Materialy k faune Opiliones SSSR. – *Trudy Zoologicheskogo Instituta AN SSSR*, **3**: 33-57. (In Russian).
- ROEWER C. F. 1951. Über Nemastomatiden. Weitere Weberknechte XVI. – *Senckenbergiana biologica*, **32**: 95-153.
- ŠILHAVÝ, V. 1956. Sekáči-Opilionidea. Fauna ČSR. No. 7. Prague. Československa Akademie Ved, 272 p.
- SNEGOVAYA N. Y., CHEMERIS A. N. 2005. A contribution to the knowledge of the harvestman fauna of the Zakataly State Reserve, Azerbaijan (Arachnida: Opiliones). – *Arthropoda Selecta*, **13**: 263-278.
- STARĘGA W. 1966. Beitrag zur Kenntnis der Weberknecht-Fauna (Opiliones) der Kaukasusländer. – *Annales Zoologici* (Warsaw), **23**: 387-411.
- STARĘGA W. 1976. Opiliones – Kosarze. Fauna Poloniae, **5**: 197 p.
- STARĘGA W. 1978. Katalog der Weberknechte (Opiliones) der Sowjet-Union. – *Fragmenta faunistica*, Warszawa, **23**: 197-241.
- STARĘGA W. 1986. Eine neue Art der Nemastomatidae (Opiliones) aus dem Pamir, nebst nomenklatorisch-taxonomischen Anmerkungen. – *Bulletin Polish Academy of Sciences, Biological Sciences*, **34**: 301-305.

Received: 19.02.2010
Accepted: 21.09.2010

Нов род и вид сенокосец от Киргизката република (Киргизстан) (Arachnida: Opiliones: Nemastomatidae)

Н. Снеговая

(Резюме)

Нов род и вид са описани на територията на Централна Азия – *Starengovia kirgizica* gen. et sp. nov. Направено е сравнение между новия род и другите немастоматидни родове.