

## Arachnid types in the Zoological Museum, Moscow State University. I. Opiliones (Arachnida)

### Типы паукообразных в Зоологическом музее МГУ. I. Opiliones (Arachnida)

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KEY WORDS: arachnids, harvestmen, museum collections, types, holotypes, paratypes.

КЛЮЧЕВЫЕ СЛОВА: паукообразные, сенокосцы, музейные коллекции, типы, голотипы, паратипы.

**ABSTRACT:** A list is provided of 19 holotypes and 92 paratypes belonging to 25 species of Opiliones. They represent 14 genera and 5 families (Ischyropsalidae, Nemastomatidae, Phalangiidae, Sabaconidae, Trogulidae) and are kept in the Zoological Museum of the Moscow State University. Other repositories housing the remaining types of the respective species are listed as well.

**РЕЗЮМЕ:** Представлен список 19 голотипов и 92 паратипов, относящихся к 25 видам сенокосцев (Opiliones). Они принадлежат к 14 родам и 5 семействам (Ischyropsalidae, Nemastomatidae, Phalangiidae, Sabaconidae, Trogulidae) и хранятся в Зоологическом музее МГУ. Также перечислены другие хранилища, в которых размещены другие типы указанных видов.

### Introduction

The Zoological Museum of the Moscow State University was established in 1791 as a small Cabinet of Natural History. At present, 225 years later, the Museum consists of seven research departments which harbour ca 10,000,000 fixed animal specimens, including the types of ca 7,000 species. The Department of Invertebrates exists officially since 1931 as a place of storage of various invertebrate collections, insects excluded. The oldest specimens, shells and possibly corals, are kept here since the beginning of the 19<sup>th</sup> century. Invertebrate type collections include holo-, para- and syntypes of more than 3,000 species, but published lists or catalogues are currently available only for oligochaete worms [Perel', Sokolskaya, 1972], mollusks [Ivanov, Sysoev, 2000], phoronids [Pakhnevich et al., 2013] and a few groups of crustaceans [Borutzky, 1972; Vinogradov, Vinogradov, 2006]; some of these publications need revision. Numerous arachnid and myria-

pod types, as well as most of the crustacean types have never enjoyed published catalogues.

Traditionally, the following handwritten information sources are accepted in the Museum, at least so since the 1930's: (1) department acquisition book (Fig. 1), (2) numerous inventory books on diverse invertebrate groups (see Fig. 2 for Opiliones), and (3) type cards (Fig. 3). Regrettably, only a small part of this information has been digitalized.

This paper starts a series of lists/catalogues of arachnid types kept at the Museum. The arachnid collection considered was founded in the 1860's and presently contains more than 200,000 specimens of arachnids alone, Acari excluded [Mikhailov, 2016].

Contrary to spiders which in Moscow constitute the largest collection among the Russian and ex-USSR museums, the harvestman collection is moderate, being smaller than those of both the Zoological Institute, Russian Academy of Sciences in St. Petersburg and the Institute of Animal Systematics and Ecology, Siberian Branch, Russian Academy of Sciences in Novosibirsk. Experts in opilionid taxonomy have never worked in Moscow. So, hardly surprisingly, the type collection mostly represents donations of ex-USSR specialists like N.Yu. Snegovaya (Baku, Azerbaijan), A.N. Tchemeris (Tomsk, Russia), speleozoologist S.I. Ljovuschkin (Moscow, Russia), as well as specimens accessed from J. Martens (Mainz, Germany), the latter based on the comprehensive material obtained from Russia and other ex-USSR territories from zoologist S.I. Golovatch (Moscow, Russia), partly during their joint expeditions. In the Museum, the harvestman type collection (Fig. 4) is kept separately from the main collection of this group (Fig. 5).

The following indices are used for arachnids in the inventory books of the Zoological Museum, Moscow State University: Ta — spiders (Aranei, or Araneae), Tb — scorpions (Scorpiones), Tc — solpugids (Solifugae), Td — mites and ticks (Acari), Tk — harvestmen

140. 11.08.2015	Diplopoda: Paradoxosomatidae, Sellenchera sp.	♂	Aug 2015 ex C.V. Tsekbara	J 2646
141. 15.01.2015	Diplopoda: Neopeltosomatidae, Nastriops karpinskii	♂, ♀	—	18.0.250
142. 14.08.2015	Diplopoda: Acanthodesmus solenophorus, Nguyen, 2010	18, 29g, juv.	—	18.0.12 J 2604
143. 19.08.2015	Diplopoda: Nedyoporus dawydoviaceus, Alcaraz, 1953	28g, juv.	—	18.0.12 J 2608-2209
144. 14.08.2015	Diplopoda: Tourniella peculiaris, Gobatash, 2003	26g, ♀	—	18.0.12 J 2710
145. 19.08.2015	Diplopoda: Leptogoniusulus corallinus, Gervais, 1847	19, ♀	—	18.0.12 J 2711
146. 7.09.2015	Aranei sp.рд. Детский зоопарк, октябрь	~ 100 ♂	— om A. D. Тришинская	18.0.54 Картинка погоды
147. 14.09.2015	Arachnida: Solifugae neosp. Волгоград, Пасека, осень	10	— om A. B. Домонюк	18.0.54 Картинка
148. 25.09.2015	Diplopoda: Polydesmus lignarius, Lohmander, 1936	18, ♀, juv.	— ex C.V. Tsekbara	18.0.250 J 2718-2741
149. 25.09.2015	Diplopoda: Polydesmus mursulewiczi, Lohmander, 1936	28g, ♀, juv.	—	18.0.12 J 2742-2744
150. 29.09.2015	Diplopoda: Brachydesmus marginatus, Alcaraz, 1951	—	—	18.0.12 J 2746-2755
151. 30.09.2015	Arachnida: Opiidae: Opis silvestris, O. arborealis, O. nakhonkai	8.20g.	— om H. D. Chernobor	18.0.12 TK-77-54
152. 01.10.2015	Arachnida: Opiidae: Opis tuericus, Tuncu	10г 1g	— om I. M. Марущак	18.0.1251 TK-55-56
153. 06.10.2015	Sabacoon negridactylum Martens, 1989, ГОЛОТИП	10g	— om J. Martens	18.0.11 TK-57
154. 02.10.2015	Nemespele kareli Tchernova, 2009, ПАРАТИПЫ	10г 1g	— om A. Н. Чернова	18.0.1251 TK-58-59
155. 02.10.2015	Arachnida: Opiidae: Opius acanthophagurus sibiricus Kormilov, 1923, ПАРАТИПЫ	7.30g	— —	18.0.1251 TK-62-66
156. 02.10.2015	Diplopoda: Brachydesmus assimilis, Lohmander, 1936	18, ♀, juv.	— ex C.V. Tsekbara	18.0.250 J 2756-2798
157. 05.10.2015	Arachnida: Uropodida: Uropactus asynamensis	1	— om K. V. Махова	18.0.251 Tm-1
158. 05.10.2015	Diplopoda: Brachydesmus furcatus, Lohmander, 1936	18, ♀, juv.	— ex C. V. Tsekbara	18.0.250 J 2799-2832
159. 06.10.2015	Cirripedia: Bayozobus Rossi, ПАРАТИПЫ	1 (гермафродит)	— om A. Koelschola	18.0.11 № 1222
160. 23.10.2015	Diplopoda: Brachydesmus halischewskyi, Ligman, 1915	18, ♀, juv.	— ex C.V. Tsekbara	J 2833-
161. 5.11.2015	Aranei sp.рд. и н.к.рд. Венециан.	300 гг	— om D. В. Логунова	18.0.12 + 18.0.54
162. 6.11.2015	Aranei: Graphosidae: Fedotovia feti ГОЛОТИП	8	— om A. В. Федотова	18.0.11 Ta-7743-7745
163. 11.11.2015	Aranei: Dictynidae: Dictynomorpha daemona ГОЛОТИП	1	— om C. A. Есюнина	18.0.11 Ta-7746
164. 13.11.2015	Hydrozoa: Cyanea sp. Красное море	2 кольцами	— om B. Н. Шакирова	— Eo-169
165. 13.11.2015	Diplopoda: Brachydesmus superus, Lotzel, 1884	55г, 11g	— ex C.V. Tsekbara	J 30.32, 3033
166. 16.11.2015	Diplopoda: Hyleoglomeris longitarsensis Paratypes	18, 1g	— ex C.V. Tsekbara	18.0.12 J 2712
167. 16.11.2015	Diplopoda: Hyleoglomeris aurea Paratypes	11, 1g	—	J 2713
168. 16.11.2015	Diplopoda: Hyleoglomeris carinata Paratypes	28g, 2g	—	J 2714
169. 19.11.2015	Diplopoda: Brachydesmus kravadei Paratype, Non-type	18, 1g	—	18.0.2 J 3055, 3036
170. 19.11.2015	Diplopoda: Brachydesmus simplex Holotype	19	—	18.0.12 J 3037
171. 19.11.2015	Diplopoda: Brachydesmus complex Paratypes	78g, 6g	—	J 3038-3040

Tm. МГУ 4747-10 кн.×250 к.

Fig. 1. An acquisition book of the ZMMU Invertebrate Department.

Рис. 1. Книга поступлений отдела беспозвоночных Зоологического музея МГУ.

(Opiliones), Tl — pseudoscorpions (Pseudoscorpiones), Tm — whip scorpions (Uropygi; currently no types).

Altogether, types of 25 species representing 14 genera and 5 families (Ischyropsalidae, Nemastomatidae, Phalangiidae, Sabaconidae, Trogulidae) are listed below, including 19 holotypes and 92 paratypes; 53 inventory numbers have been allotted. All opilionid species names are valid and currently available.

## Methods

The following sequence of data is accepted in the type catalogue: species name in the original description; reference to the first description; list of types with labels; list of other collections where the remaining types of the respective species are kept; remarks; current taxonomic status of the species.

Label abbreviations are put in angled brackets,  $\diamond$ , when necessary. Author's comments to the labels are given in square brackets, [ ]. An English translation of the original Russian labels is provided in figure brackets, { }.

Museum or personal collection data are abbreviated as follows: CJMM — work collection (= Arbeitssammlung) of Jochen Martens (Mainz, Germany); ISEA — Institute of Animal Systematics and Ecology, Siberian Branch, Russian Academy of Sciences (Novosibirsk, Russia); IZBA — Institute of Zoology, National Academy of Sciences (Baku, Azerbaijan); NHMW — Naturhistorisches Museum Wien (Vienna, Austria); RCNS — reference collection of Nataly Snegovaya (Baku, Azerbaijan); SMF — Senckenberg Museum (Frankfurt am Main, Germany); TNU — Department of Invertebrates, Taurida National University (Crimea, Russia); TTU-Z — Invertebrate Zoology, Museum of Texas Tech University (USA); ZIN — Zoological Institute, Russian Academy of Sciences (St. Petersburg, Russia); ZMMU — Zoological Museum, Moscow State University (Moscow, Russia). In the ZMMU, museum inventory numbers for Oplilones are indexed Tk put at the beginning of the museum labels. Labels are given literally, mistakes are indicated in comments.

The following translations of the administrative units are used herein: Area for "область, oblast", District for "район, rayon", Province for "краев, kray".

Инвентарный №	Наименование	Место сбора	Дата сбора	Кол-во экземпляров, под возраст	Хранитель музея	Коллектор, палеоз.	Автор определения, дата	№ в Каталоге выступления	Дата записи	Примечания
TK-26	<i>G. vestita</i> Martens, 2006	193. USSR, Caucasian State Reserve, Polukh, ca. 20 km E of Krasnaya Polyana Mt. Arshkho-2, 5'000-6'000 m, subalpine meadows & sparse Acer, Betula & Abies stand, after stones	12.VIII.1980	1♂	S.Golovatch		6-2001			
TK-27	<i>G. vestita</i> Martens, 2006	193. USSR, Caucasian State Reserve, Polukh, ca. 20 km E of Krasnaya Polyana Mt. Arshkho-2, 5'000-6'000 m, subalpine meadows & sparse Acer, Betula & Abies stand, after stones	18-20.VIII.1985	0♀	S.Golovatch by		-1-			
TK-28	<i>G. vestita</i> Martens, 2006	193. USSR, Caucasian State Reserve, Polukh, ca. 20 km E of Krasnaya Polyana Mt. Arshkho-2, 5'000-6'000 m, subalpine meadows & sparse Acer, Betula & Abies stand, after stones	29.VII.1985	1♂	S.Golovatch		-1-			
TK-29	<i>G. vestita</i> Martens, 2006	193. USSR, Caucasian State Reserve, Polukh, ca. 20 km E of Krasnaya Polyana Mt. Arshkho-2, 5'000-6'000 m, subalpine meadows & sparse Acer, Betula & Abies stand, after stones	29.VII.1985	3♂♂	-1-		-1-			
TK-30	<i>G. vestita</i> Martens, 2006	193. USSR, Caucasian State Reserve, Polukh, ca. 20 km E of Krasnaya Polyana Mt. Arshkho-2, 5'000-6'000 m, subalpine meadows & sparse Acer, Betula & Abies stand, after stones	15-16.VIII.1988	1♂†	S.Golovatch by		-1-			
TK-31	<i>G. vestita</i> Martens, 2006	193. USSR, Caucasian State Reserve, Polukh, ca. 20 km E of Krasnaya Polyana Mt. Arshkho-2, 5'000-6'000 m, subalpine meadows & sparse Acer, Betula & Abies stand, after stones	18.VIII.1988	1♀	S.Golovatch		-1-			
TK-32	<i>G. vestita</i> Martens, 2006	193. USSR, Caucasian State Reserve, Polukh, ca. 20 km E of Krasnaya Polyana Mt. Arshkho-2, 5'000-6'000 m, subalpine meadows & sparse Acer, Betula & Abies stand, after stones	20-22.VIII.1988	1♂†	S.Golovatch by		-1-			
TK-33	<i>G. thoracoceranota</i> Martens, 2006	193. USSR, Caucasian State Reserve, Polukh, ca. 20 km E of Krasnaya Polyana Mt. Arshkho-2, 5'000-6'000 m, subalpine meadows & sparse Acer, Betula & Abies stand, after stones	25.VIII.1988	4♀			-1-			
TK-34	<i>Nemaspela femorocurva</i> Martens, 2006	Georgia, Taurid Khakhe (1981: 446), Terekh (Terekh Koba)	1990	1♂	V.Kiselev by (ob & Kiselev)		-1-			
TK-35	<i>Vestiferum alatum</i> Martens, 2006	Georgia, Adzharia, Kintrishi State Reserve, Becharuli, 450-600 m	1-3.June 1987	1♂	Golovatch & Martens 2		-1-			
TK-36	<i>Caucinemastoma galovatchi</i> Martens, 2006	193. USSR, Caucasian State Reserve, Polukh, 2000 m, Betula, Pinus, Fagus, Abies, Larix, different forest & shrub stands, 6'000 m	20-22.VIII.1988	1♂†	S.Golovatch by		-1-			
TK-37	<i>C. galovatchi</i> Martens, 2006	193. USSR, Caucasian State Reserve, Polukh, 2000-2500 m, Betula, Pinus, Fagus, Larix, Abies, Larix, different forest & shrub stands, 6'000 m	16-18.VIII.1988	1♂†	-1-		-1-			
TK-38	<i>Medostoma variabile</i> Martens, 2006	193. USSR, Caucasus, Azerbaijan, Talysh Mts., Yandary 93, 1983, Dipte. Aitar, 1700-1800 m, dense forest of Quercus Cinnamomea, firs, larch, under stones	3.IX.1983	3♂♂	-1-		-1-			
TK-39	<i>M. variabile</i>	216. USSR, Caucasus, Azerbaijan, Sivat. Kd. du 750m, Fagus Cinnamomea etc. dense forest, firs, larch, under stones	22.IV.1987	1♂	S.Golovatch, K.Eskar by		-1-		KR-Tunel	
TK-40	<i>M. variabile</i>	217. USSR, Caucasus, Azerbaijan, Shevache Dist., Aitku, near Observatory Gulestan, Kar. Taus forest, larch (1200-1500 m)	20-21.VI.1987	2♂♂	-1-		-1-		KR-Tunel	
TK-41	<i>M. variabile</i>	Azerbaijan, Lenkoran, Aqbil, 1000 m	16-17.VI.1987	1♂, 1♀	by S.Golovatch	2 эпикризис!	-1-		KR-Tunel	
TK-42	<i>M. variabile</i>	Lenkoran, Aqbil, 1000 m	16-17.VI.1987	1♂	H. Aliev		-1-		KR-Tunel	
TK-43	<i>M. variabile</i>	Azerbaijan, Tardymly, Kish, 1200-1500 m	14-15.VII.1987	2♂♂	by S.Golovatch	2 эпикризис!	-1-		KR-Tunel	
TK-44	<i>M. nigra</i> Martens, 2006	Azerbaijan, Lenkoran, Aqbil, below Balaar, 1500 m	19.VII.1987	1♂	W.Schwarze		-1-			
TK-45	<i>Sabacorn rossepacificus</i> Martens, 2015	Primorskiy krai, Primorskiy pr., car le prebeza, rayon Belitsa	6.VII.1980	1♂	CA.G.Егоров		7.V.2015			

тип. Государств РСФСР 117-1000/200-1990

Fig. 2. The ZMMU inventory book of Opiliones (index Tk).

Рис. 2. Инвентарная книга сенокосцев (Opiliones, индекс Tk) Зоологического музея МГУ.

### List of the types

#### *alatum* Martens, 2006, *Vestiferum*

Martens, 2006: 176-178, Abb. 18h-o, 20, 21c-d.

Tk-35. Holotype ♂, 14. USSR, Georgia/Adzharia, Kintrishi State Reservation, Zeraboseli, 450-600 m, 1-3 June 1981, Golovatch &amp; Martens 1.

The species was described from two specimens; a paratype male is kept in NHMW.

CURRENT STATUS. *Vestiferum alatum* Martens, 2006 (Nemastomatidae).

#### *arborphilus* Snegovaya, 2010, *Opilio*

Snegovaya, 2010: 7-9, figs 74-82.

Tk-49. Holotype ♂, Azerbaijan, Ismailly Distr., Chaygovshan, 23.07.2004, leg. N. Snegovaya.

Tk-50. Paratype: 1 ♀, Azerbaijan, Ismailly Distr., Chaygovshan, 23.07.2004, leg. N. Snegovaya.

Other types are kept in IZBA and RCNS.

CURRENT STATUS. *Opilio arborphilus* Snegovaya, 2010 (Phalangiidae).

#### *birsteini* Ljovuschkin, 1972, *Nemaspela*

Ljovuschkin, 1972: 66-70, figs 2-3.

Tk-60. Holotype ♂, Abkhazia, пещ. Таркиладзе {Abkhazia, Cave Tarkiladze}, 7.VIII.1939, leg. Я.А. Бирштейн {Ya.A. Birstein} [+ micropreparation of copulatory apparatus, a slide]

Tk-61. Paratype: 1 ♀, Абхазия, пещ. Таркиладзе {Abkhazia, Cave Tarkiladze}, 7.VIII.1939, leg. Я.А. Бирштейн {Ya.A. Birstein}.

REMARK. No other paratypes mentioned in the original description are in ZMMU, likely being lost.

CURRENT STATUS. *Nemaspela birsteini* Ljovuschkin, 1972 (Nemastomatidae).

#### *birsteini* Ljovuschkin, 1971, *Taracus*

Ljovuschkin, 1971: 127-130, figs 1A-Д, 2A-Б, 3 (map).

Tk-1. Holotype ♂, Приморский край, Партизанский район, пещера Белый Дворец {Maritime Province, Partizansk Distr., Cave Belyi Dvorets}, 15-20.IX.1966, собр. С.И. Левушкин {leg. S.I. Ljovuschkin}. [+micropreparation of copulatory apparatus, a slide]

Tk-2. Paratypes: 9 ♀♀, Приморский край, Партизанский район, пещера Белый Дворец {Maritime Province, Partizansk Distr., Cave Belyi Dvorets}, 15-20.IX.1966, собр. С.И. Левушкин {leg. S.I. Ljovuschkin}.

Types are kept in ZMMU only.

CURRENT STATUS. *Taracus birsteini* Ljovuschkin, 1971 (Ischyropsalidae).

#### *caucasicus* Snegovaya, 2010, *Opilio*

Snegovaya, 2010: 9, figs 92-100.

Tk-53. Holotype ♂, Russia, North Caucasus, 2003, leg. P. Kiyashko.

Зоологический музей МГУ  
название учреждения, где хранятся типы

<i>Bij</i> вид, подвид и пр.		<i>Martens, 2006</i> автор, год	современное полное название	
<i>Giljarovia vestita</i> полное первоначальное название		Сем. (отр.) <i>Nemastomatidae (Opiliones)</i>		
Первоописание: <i>Senckenbergiana Biologica, 2006, Bd. 86, N. 2, S. 161-165, Abb. 9, 10, 13c-f</i> издание, год, том, вып., стр., рис.				
Лектотип обозначен:				
Неотип обозначен:		автор, год, издание, том, вып., стр.		
Тип	Колич. и пол	Этикетка	№№ (препа- рата, экземп- ляра и пр.)	Примечание: от кого получен, сохранность, паратип отнесен к др. виду и т. п.
Голотип	♂	149.USSR, Caucasus, Krasnodar Prov, Caucasian State Reserve, Psukh ca. 20km E of Krasnaya Polyana Mt. Kogot, Fagus & Abies forest, 1000-1400m, P. litter, under bark & stones, 18-20.v. 1985, S. Golovatch leg.	TK-27	
Лектотип				
Неотип				
Синтипы				
Аллотип	1♂ 3♀♀	153.USSR, Caucasus, Stevropol Prov, Teberda State Reserve, Mt. Malaya Khatsipara, above town Teberda, Abies, Fagus & Acer forest 1550-1700m a.s.l., litter, 29-30.v. 1985, S. Golovatch	TK-28	
Паратипы		153.455 R, -1-1-, town Teberda, Botula, Acer & Populus tremula dwarf stand near a stream up to timber line, litter & under stones, 1800m, 29-30.v. 1985, S. Golovatch	TK-29	
Паралектотипы	3♂ 1♀	200. USSR, Georgia, Abkhazia Sukhumi distr, Bayd Valley, Pskhu 700-960m, Fagus Quercus, Castanea etc. forest, litter, under bark & stones, 15-16.vii. 1986, S. Golovatch leg.	TK-30	
	1♀	201.USSR, -1-1- distr, Tsode Ida, 300m Larinus, Acer Buxus scrub, litter, 19.viii. 1986, S. Golovatch	TK-31	
	1♂ 2♀♀	206.USSR, Caucasus, Georgia, 10km N of Dzvari, 800m Buxus, Fagus, Pinus Taxus etc. forest, litter, 20-21.viii. 1986, S. Golovatch leg.	TK-32	

Заполнять тушью!

Карточка заполнена Михайлова Г.Г. 29.IX.2015 г.

Фамилия, дата

Тип. МГУ (ф.) 1111-71-20 000

## ПРИМЕЧАНИЯ

Тип переописан: \_\_\_\_\_

автор, год, издание, том, вып., стр., рис.

Вид сведен в синонимы: \_\_\_\_\_

Вид отнесен к другому роду: \_\_\_\_\_

*Senckenberg Museum (Frankfurt am Main, Germany), рабочая коллекция Arbeitssammlung*  
другие типы хранятся: Ul. Мартенса (Майнц, Германия)

Паратипы посланы в обмен: \_\_\_\_\_  
куда, когдаТип исследовали: \_\_\_\_\_  
Фамилия, дата, подпись

Fig. 3. An example of a ZMMU type card, recto and verso.

Рис. 3. Образец типовой карточки Зоологического музея МГУ, спереди и сзади.



Fig. 4. The type collection of Opiliones in ZMMU.  
Рис. 4. Типовая коллекция сенокосцев (Opiliones) Зоологического музея МГУ.



Fig. 5. The main collection of Opiliones in ZMMU.  
Рис. 5. Основная коллекция сенокосцев (Opiliones) Зоологического музея МГУ.

Tk-54. Paratype: 1 ♀, Сев. Кавказ {North Caucasus}, <Лагонаки {Lagonaki}>, <2003>, Кияшко П. {Kiyashko P.}  
Other types are kept in RCNS.

CURRENT STATUS. *Opilio caucasicus* Snegovaya, 2010 (Phalangiidae).

*crimeana* Chemeris<sup>1</sup> et Kovblyuk, 2006, *Rilaena* Chemeris, Kovblyuk, 2006: 318–322, figs 34–47, map 3.  
Tk-67. Paratypes: 3 ♂♂, 3 ♀♀, Ukraine: the Crimea, near Yalta, Nikita Vil., Mart'yan Cape Reserve, p<itfall>t<raps>, 15.04.2000–4.06.2001, coll. M.M. Kovblyuk.  
Other types are kept in ISEA (holotype) and TNU.

CURRENT STATUS. *Rilaena crimeana* Chemeris et Kovblyuk, 2006 (Phalangiidae).

*femorecurvata* Martens, 2006, *Nemaspela*

Martens, 2006: 171–173, Abb. 14–15, 17.

Tk-34. Paratype: 1 ♂, Georgia, ? Cave Khobyu, 1990, V. Kiselyov leg. [Russian label:] 1990 г. Грузия, ? пещ. Кобю, сб. В. Киселев.

The species was described from two specimens; the holotype is kept in CJMM.

CURRENT STATUS. *Nemaspela femorecurvata* Martens, 2006 (Nemastomatidae).

*gobiensis* Tsurusaki, Tchemeris et Logunov, 2000,  
*Homolophus*  
Tsurusaki et al., 2000: 80–83, figs 6–8.

<sup>1</sup> In various papers, the name of A.N. Tchemeris is transliterated either as Tchemeris or Chemeris. The former option is preferable. In this list, both spellings are cited, according to the original papers.

Tk-62. Holotype ♂, Mongolia, South Gobi Aimak, 15 km W of Tsogt-Tsetsy, 1.09.1986, coll. A.P. Rasnitsyn.

Tk-63. Paratypes: 2 ♀♀, Mongolia, South Gobi Aimak, 15 km W of Tsogt-Tsetsy, 1.09.1986, coll. A.P. Rasnitsyn.

Types are kept in ZMMU only.

**REMARK.** On the original label Tk-62, the name of the collector was erroneously given as A.N. Rasnitsyn, instead of A.P. Rasnitsyn.

**CURRENT STATUS.** *Homolophus gobiensis* Tsurusaki, Tchemeris et Logunov, 2000 (Phalangiidae).

***golovatchi*** Martens, 2006, *Caucnemastoma*

Martens, 2006: 180–182, Abb. 17, 19, 21i–k.

Tk-36. Holotype ♂, 152. USSR, Caucasus, Krasnodar Prov., pasture Abago by Guzeripl, Caucasian State Reserve, Abies, Fagus, Acer, Betula etc. forest, up to timber line & in subalpine meadows, 1700–1850 m, litter, under bark & stones, 24–26.V.1985, S. Golovatch leg.

Tk-37. Paratypes: 1 ♂, 1 ♀, 167. USSR, Caucasus, Krasnodar Prov., Mt. Derbyi, ca. 15 km SW of Ubinskaya, 800–850 m, old Quercus, Fagus, Fraxinus, Alnus etc. forest, litter, 2.VII.1986, S. Golovatch leg.

Other types are kept in CJMM and SMF.

**CURRENT STATUS.** *Caucnemastoma golovatchi* Martens, 2006 (Nemastomatidae).

***gorbunovi*** Snegovaya, 2014, *Phalangium*

Snegovaya, 2014: 6–7, figs 113–127, 129 (map).

Tk-68. Holotype ♂, Russia, Volgograd region, 2 km WNW of Mikhailovka, 49°46.80'N, 44°24.09'E, 15–17.05.2003, leg. O. Gorbunov.

Tk-69. Paratype: 1 ♀, Russia, Volgograd region, 2 km WNW of Mikhailovka, 49°46.80'N, 44°24.09'E, 15–17.05.2003, leg. O. Gorbunov.

Other types are kept in RCNS.

**CURRENT STATUS.** *Phalangium gorbunovi* Snegovaya, 2014 (Phalangiidae).

***hirsutus*** Snegovaya in Snegovaya et Chumachenko, 2011, *Calathocratus*

Snegovaya, Chumachenko, 2011: 117, figs 2–14.

Tk-70. Holotype ♂, Russia, Sochi, yew and box-tree grove, yew-beech (area 1), October 2006, soil trap № 4, leg. Yu. Chumachenko.

Tk-71. Paratype: 1 ♀, Russia, Sochi, yew and box-tree grove, yew-beech (area 1), October 2006, soil trap № 4, leg. Yu. Chumachenko.

Other types are kept in RCNS, SMF, TTU-Z, and ZIN.

**CURRENT STATUS.** *Calathocratus hirsutus* Snegovaya in Snegovaya et Chumachenko, 2011 (Trogulidae).

***kovali*** Chemeris, 2009, *Nemaspelea*

Chemeris, 2009: 293–294, figs 7–8, 17–18, 21, 26, 35–39, map 1.

Tk-58. Paratype: 1 ♀, Russia, C. Caucasus, Kabardino-Balkaria, canyon of the upper stream of River Nal'chik, Omega-15 Cave, 28.05.1998, coll. A.G. Koval'.

Tk-59. Paratype: 1 ♂, Russia, C. Caucasus, Kabardino-Balkaria, source of Belya River, Fontanka Cave, 21.05.1998, A.G. Koval'.

Other types are kept in ISEA and ZIN (holotype).

**CURRENT STATUS.** *Nemaspelea kovali* Chemeris, 2009 (Nemastomatidae).

***minutus*** Snegovaya in Snegovaya et Chumachenko, 2011, *Calathocratus*

Snegovaya, Chumachenko, 2011: 117, figs 15–27.

Tk-72. Holotype ♂, Russia, Sochi, yew and box-tree grove, beech forest, May 2006, soil trap № 6, leg. Yu. Chumachenko.

Tk-73. Paratype: 1 ♀, Russia, Sochi, yew and box-tree grove, beech forest, May 2006, soil trap № 6, leg. Yu. Chumachenko.

Other types are kept in RCNS, SMF, TTU-Z, and ZIN.

**CURRENT STATUS.** *Calathocratus minutus* Snegovaya in Snegovaya et Chumachenko, 2011 (Trogulidae).

***nabozhenkoi*** Snegovaya, 2010, *Opilio*

Snegovaya, 2010: 9, figs 83–91.

Tk-51. Holotype ♂, Russia: North Ossetia, 25.07.2006, leg. M. Nabozhenko.

Tk-52. Paratype: 1 ♀, Сев. Осетия {North Ossetia}, 25.07.2006, Набоженко А.В. {Nabozhenko A.V.}

Other types are kept in IZBA, RCNS, and ZIN.

**CURRENT STATUS.** *Opilio nabozhenkoi* Snegovaya, 2010 (Phalangiidae).

***nigrum*** Martens, 2006, *Mediostoma*

Martens, 2006: 190–192, Abb. 20, 23o–q, 24a–e, 25a–b.

Tk-44. Paratype: 1 ♀, [in pencil] Azerbaijan, Lenkoran, Apo below Bilasar, 350 m, 8–9.VI.1996, W. Schawaller.

Other types are kept in CJMM, NHNW, and SMF (holotype).

**CURRENT STATUS.** *Mediostoma nigrum* Martens, 2006 (Nemastomatidae).

***rossopacificus*** Martens, 2015, *Sabacon*

Martens, 2015: 204–206, figs 220–228.

Tk-45. Holotype ♂, Приморский край, Партизанский р-н, сел. Сергеевка, пещера Великан {Maritime Province, Partizansk Distr., Sergeevka, Cave Velikan}, 6.VI.1980, <А.Б. {A.B.}> Егоров {Egorov}.

One more paratype is kept in SMF.

**CURRENT STATUS.** *Sabacon rossopacificus* Martens, 2015 (Sabaconidae).

***sergeiedicatum*** Martens, 1989, *Sabacon*

Martens, 1989: 372–376, Abb. 7–11, 13, 15–16.

Tk-57. Holotype ♂, УдзССР, Сибирь, Алтай-Гебирге, Черга, beim Dorf Artybash, nahe dem Teletzkoye See, 7–13.7.1982, S.I. Golovatch leg.

One more paratype (male) is kept in SMF.

**CURRENT STATUS.** *Sabacon sergeiedicatum* Martens, 1989 (Sabaconidae).

***sibiricus*** Tsurusaki, Tchemeris et Logunov, 2000, *Acanthomegapinus*

Tsurusaki et al., 2000: 74–79, figs 1–4.

Tk-64. Paratype: 1 ♂, Хакасия, Ширинский р-н, ~1 км Ю п. Коммунар, мохово-каменистая лесотундра, {Khakasia, Shira Distr., ca 1 km S of Kommunar, moss-stony forested tundra} 1300–1400 м {m}, 23.7.1990, сб. Д.В. Логунов {leg. D.V. Logunov}.

Tk-65. Paratypes: 2 ♂♂, юг Кемеровской области, Горная Шория, 10 км сев п. Шерегеш, г. Пустаг, голыцы, {south of Kemerovo Area, Montane Shoria, 10 km N of Sheregesh, Mt Pustag, goltsy, =stony screes} h=1300–1500 м {m}, 13–26.06.1999, D.E. Lomakin leg.

Tk-66. Paratypes: 1 ♂, 1 ♀, W-Сибирь, Кузнецкий Алатау Mt. Range, ~50 km S of Belogorsk Town, Tsemmodan and Stanovoy Khrebet Mts, anemone meadow, 23.07.1992, N.B. Demidenko.

Other types are kept in ISEA (holotype) and the Department of Biology, Faculty of Education, Tottori University (Japan).

REMARK. The correct name of the mountain in Tk-66 is Tshemodan, not Tsemidan.

CURRENT STATUS. *Acanthomegabunus sibiricus* Tsurusaki, Tchemeris et Logunov, 2000 (Phalangiidae).

#### *silvestris* Snegovaya, 2010, *Opilio*

Snegovaya, 2010: 7, figs 65–73.

Tk-47. Holotype ♂, Azerbaijan: Shemakha Distr., Pirgulu, environs of Sis village, 19–22.05.2004, leg. N. Snegovaya, Kh. Aliyev.

Tk-48. Paratype: 1 ♀, Azerbaijan: Shemakha Distr., Pirgulu, environs of Sis village, 19–22.05.2004, leg. N. Snegovaya, Kh. Aliyev.

Other types are kept in IZBA, RCNS, and ZIN.

CURRENT STATUS. *Opilio silvestris* Snegovaya, 2010 (Phalangiidae).

#### *thoracocornuta* Martens, 2006, *Giljarovia*

Martens, 2006: 167–169, Abb. 12g–h, 13g–h, 20.

Tk-33. Holotype ♀, USSR, N Caucasus, Dagestan, upper Gunib, 1700 m, Betula & Pinus stand, litter, 7–9.VI.1982, S. Golovatch leg.

The species was described from the holotype alone.

CURRENT STATUS. *Giljarovia thoracocornuta* Martens, 2006 (Nemastomatidae).

#### *triangula* Martens, 2006, *Giljarovia*

Martens, 2006: 156–159, Abb. 4–5, 8, 13i–k.

Tk-16. Holotype ♂, 77. USSR, Caucasus Major, Georgia, Kazbegi, 2000 m, in forests of Betula & Pinus, in meadows, litter & under stones, 2–6.VI.1982, <S.I.> Golovatch leg.

Tk-17. Paratypes: 9 ♀♀, 77. USSR, Caucasus Major, Georgia, Kazbegi, 2000 m, in forests of Betula & Pinus, in meadows, litter & under stones, 2–6.VI.1982, <S.I.> Golovatch leg.

Tk-19. Paratypes: 1 ♂, 3 ♀♀, 153. USSR, Caucasus, Stavropol Prov., Teberda State Reserve, Mt. Malaya Khatipara above Town Teberda, Betula, Acer & Populus tremula dwarf stand near a stream up to timber line, litter & under stones, 1800 m, 29–30.V.1985, S. Golovatch.

Tk-20. Paratypes: 1 ♂, 2 ♀♀, 155. USSR, Caucasus, Stavropol Prov., Teberda State Reserve, Canyon Gonach-khir, between Teberda and Dombai, road to Klukhor Pass, 1700–1800 m, Abies, Fagus, Acer..., <litter, under bark & stones,> 1.VI.1985, S. Golovatch leg.

Tk-21. Paratypes: 2 ♂♂, 4 ♀♀, 159. USSR, Caucasus, Stavropol Prov., Teberda State Reserve, Kizgich Canyon, N of Arkhyz, Abies, Picea, Pinus, Fagus, Betula & Acer forest, litter, under bark & stones, 1550–1650 m, 5.VI.1985, S. Golovatch leg.

Tk-22. Paratypes: 1 ♂, 3 ♀♀, 159. USSR, Caucasus, Stavropol Prov., Teberda State Reserve, Kizgich Canyon, N of Arkhyz, riverine Alnus & Betula wet forests, 1450–1500 m, 5.VI.1985, S. Golovatch leg.

Tk-23. Paratype: 1 ♂, 178. USSR, Caucasus, Kabardino-Balkaria, Chegem Distr., 5 km S of Upper Chegem, timberline of Betula, Rhododendron & Juniperus, litter, under stones, 2100–2200 m, 13.VII.1986, leg. S. Golovatch.

Other types are kept in CJMM and SMF.

REMARK. Possibly the habitat label in Tk-21 is incorrect, see under Tk-22.

CURRENT STATUS. *Giljarovia triangula* Martens, 2006 (Nemastomatidae).

#### *trianguloides* Martens, 2006, *Giljarovia*

Martens, 2006: 159–161, Abb. 6–8.

Tk-24. Holotype ♂, 149. USSR, Caucasus, Krasnodar Prov., Caucasian State Reserve, Pslukh, ca. 20 km E of Krasnaya Polyana, 18–20.V.1985, S. Golovatch leg.

Tk-25. Paratypes: 1 ♂, 8 ♀♀, 199. USSR, Caucasian State Reserve, Krasnaya Polyana, 600–750 m, Quercus, Fagus, Castanea, Carpinus etc. forest, litter, bark, stones, 8–9.VIII.1986, <S.I.> Golovatch.

Tk-26. Paratype: 1 ♂, 197. USSR, Caucasian State Reserve, Pslukh, ca. 20 km E of Krasnaya Polyana, Mt. Aishkho-2, S slope, 1900–2000 m, subalpine meadow & sparse Acer, Betula & Azalea stand, litter, stones, 12.VIII.1986, S. Golovatch.

Other types are kept in CJMM and SMF.

CURRENT STATUS. *Giljarovia trianguloides* Martens, 2006 (Nemastomatidae).

#### *turcicus* Snegovaya ey Marusik, 2012, *Egaenus*

Snegovaya, Marusik, 2012: 68, figs 44–53.

Tk-55. Holotype ♂, Turkey, T-10, Bursa, Nilüfer, 40°07.466'N, 28°42.105'E, 570 m, 2.06.2009, Yu.M. Marusik.

Tk-56. Paratype: 1 ♀, Turkey, T-10, Bursa, Nilüfer, 40°07.466'N, 28°42.105'E, 570 m, 2.06.2009, Yu.M. Marusik.

One more paratype (♂) is kept in RCNS.

CURRENT STATUS. *Egaenus turcicus* Snegovaya et Marusik, 2012 (Phalangiidae).

#### *variabile* Martens, 2006, *Mediostoma*

Martens, 2006: 185–189, Abb. 20, 23a–h, 24k–q, 25i–k.

Tk-38. Paratypes: 3 ♂♂, 2 ♀♀, 141. USSR, Caucasus, Azerbaijan, Talysh Mts., Yardymly Distr., Allar, 1700–1800 m, sparse forest of Quercus, Carpinus, Acer, litter, rotten wood, under stones, 9.X.1983, S. Golovatch leg.

Other types are kept in CJMM and SMF (holotype).

REMARK. In addition, the specimens listed as non-types in the original description are kept in ZMMU under numbers Tk-39–43.

CURRENT STATUS. *Mediostoma variabile* Martens, 2006 (Nemastomatidae).

#### *vestita* Martens, 2006, *Giljarovia*

Martens, 2006: 161–165, Abb. 9, 10, 13c–f.

Tk-27. Holotype ♂, 149. USSR, Caucasus, Krasnodar Prov., Caucasian State Reserve, Pslukh, ca. 20 km E of Krasnaya Polyana, Mt. Kogot, Fagus & Abies forest, 1000–1400 m, litter, under bark & stones, 18–20.V.1985, S. Golovatch leg.

Tk-28. Paratypes: 1 ♂, 3 ♀♀, 153. USSR, Caucasus, Stavropol Prov., Teberda State Reserve, Mt. Malaya Khatipara above Town Teberda, Abies, Fagus, & Acer forest, 1550–1700 m a.s.l., litter, 29–30.V.1985, S. Golovatch.

Tk-29. Paratypes: 3 ♂♂, 153. USSR, Caucasus, Stavropol Prov., Teberda State Reserve, Mt. Malaya Khatipara above Town Teberda, Betula, Acer & Populus tremula dwarf stand near a stream up to timber line, litter & under stones, 1800 m, 29–30.V.1985, S. Golovatch.

Tk-30. Paratypes: 1 ♂, 1 ♀, 200. USSR, Caucasus, Georgia, Abkhazia, Sukhumi distr., Bzyb Valley, Pskhu, 700–960 m, Fagus, Quercus, Castanea etc. forest, litter, under bark & stones, 15–16.VIII.1986, S. Golovatch leg.

Tk-31. Paratype: 1 ♀, 204. USSR, Caucasus, Georgia, Abkhazia, Sukhumi distr., Tsebelda, 300 m, Carpinus, Acer & Buxus scrub, litter, 19.VIII.1986, S. Golovatch.

Tk-32. Paratypes: 1 ♂, 2 ♀♀, 206. USSR, Caucasus, Georgia, 10 km N of Djvari, 800 m, Buxus, Fagus, Picea, Taxus etc. forest, litter, 20–21.VIII.1986, S. Golovatch leg.

Other types are kept in CJMM and SMF.

CURRENT STATUS. *Giljarovia vestita* Martens, 2006 (Nemastomatidae).

**Acknowledgements.** I am cordially obliged to my colleague and friend Sergei I. Golovatch (Moscow, Russia) for strongly enriching the ZMMU arachnid collection. He also rendered linguistic help. Dmitry V. Logunov (Manchester, Great Britain) and Alexander V. Sysoev (ZMMU) kindly reviewed this paper and made very useful comments. This paper is supported by Russian Science Foundation Project No. 14-50-00029. The inventory book-keeping is supported by Moscow State University Project No. AAAA-A16-116021660077-3.

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Responsible editor S.I. Golovatch