

# Паукообразные горных вершин Южного Урала

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Приведены сведения о находках (855 записей) пауков и сенокосцев (Arachnida: Araneae, Opiliones) Южного Урала. Основной материал получен в результате целенаправленных сборов на горных вершинах: Дальний Таганай (1109 м над ур. м.), Бол. Нургуш (1413 м), Мал. Иремель (1437 м) и Бол. Иремель (1565 м). Дополнительные материалы собраны на вершинах гор Круглица (1144 м), Бол. Шелом (1407 м), Бол. Уван (1222 м) и Круглая, или Мал. Поперечная (1389 м). Первые 4 вершины являются постоянными пунктами мониторинга международной исследовательской сети GLORIA (Global Observation Research Initiative in Alpine Environments). Все вершины расположены на особо охраняемых природных территориях Южного Урала: нацпарки «Таганай», «Зюраткуль» и «Зигальга» в Челябинской обл., природный парк «Иремель» и Южно-Уральский гос. природный заповедник в Республике Башкортостан. Сбор пауков проводили в 2008, 2015–2016 и 2022–2024 гг. с помощью почвенных ловушек, установленных на постоянных пробных площадках. Дополнительные сведения получены из разных сборов с Южного Урала в 1980–2013 гг. Набор данных сформирован на основе 3277 особей, относящихся к 162 видам, 94 родам и 17 семействам.

**Ключевые слова:** горная тундра, горное биоразнообразие, пауки, сенокосцы.

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# Arachnids (Arachnida: Araneae, Opiliones) of mountain summits of the South Urals

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We present 855 records of spiders and harvestmen (Arachnida: Araneae, Opiliones) from the South Urals. The collection mainly took place on Dalniy Taganay (1109 m a.s.l.), Bolshoy Nurgush (1413 m), Malyi Iremel (1437 m) and Bolshoy Iremel (1565 m) with additions from Kruglitsa (1144 m), Bolshoy Shelom (1407 m), Bolshoy Uvan (1222 m) and Kruglaya, or Malaya Poperechnaya (1389 m). The first four summits are permanent monitoring sites of the international research network GLORIA (Global Observation Research Initiative in Alpine Environments). All the summits are situated in protected areas of the South Urals: the national parks Taganay, Zyuratkul and Zigalga in the Chelyabinsk region, the natural park Iremel and the South Urals State Nature Reserve in the Republic of Bashkortostan. We collected the samples in 2008, 2015–2016 and 2022–2024 using soil traps established on permanent sampling plots. Additional records came from miscellaneous collections across the South Urals in 1980–2013. The dataset consists of 3277 specimens belonging to 162 species, 94 genera and 17 families.

*Key words:* Alpine tundra, alpine biodiversity, spiders, harvestmen.

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## GEOGRAPHIC COVERAGE

West 57.91°  
East 60.53°  
South 54.47°  
North 56.19°

Mountainous parts of the Chelyabinsk region and the Republic of Bashkortostan (Fig. 1, 2).

TAXONOMIC COVERAGE  
spiders (Arachnida: Araneae)

harvestmen (Arachnida: Opiliones)

## TEMPORAL COVERAGE

2008, 2015–2016, 2022–2024 (Fig. 3.)  
(14 June 2008 – 13 July 2024)

## STUDY AREA DESCRIPTION

The herpetobiont invertebrate communities were studied at the following mountain summits of the South Urals: Dalniy Taganay (1109 m a.s.l.), Bolshoy Nurgush (1413 m),

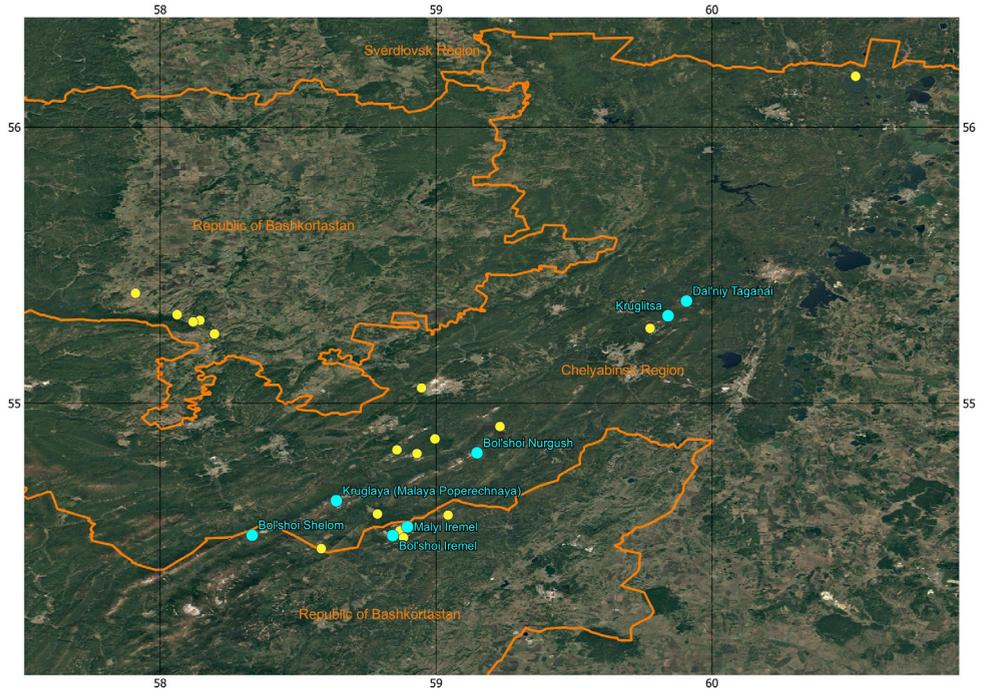


Fig. 1. Map of the studied area, permanent (blue dots) and miscellaneous (yellow dots) sampling plots.

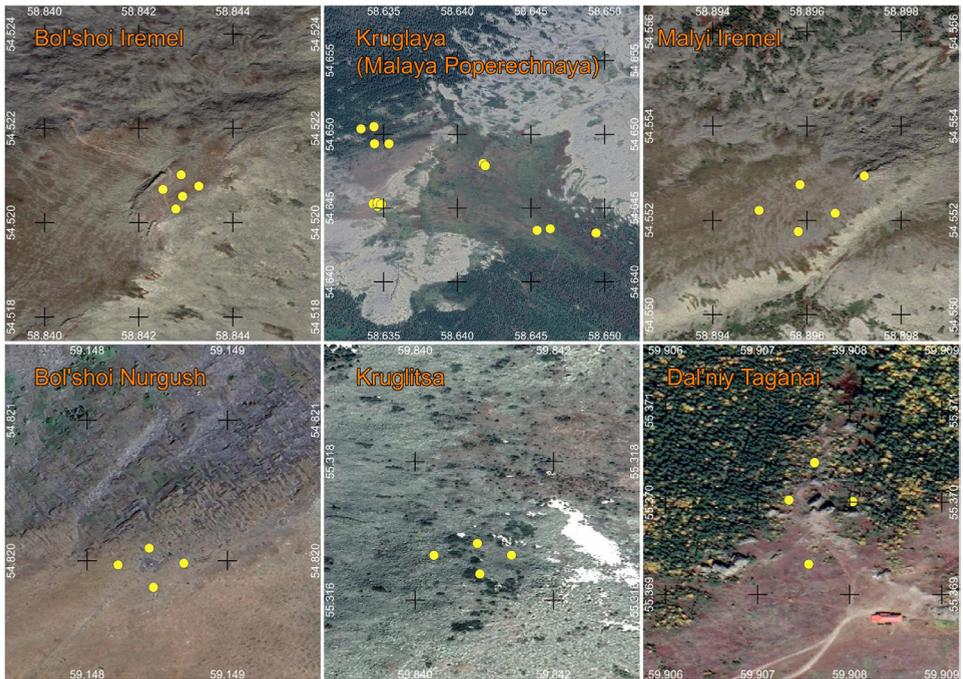


Fig. 2. Local map of the permanent sampling plots.

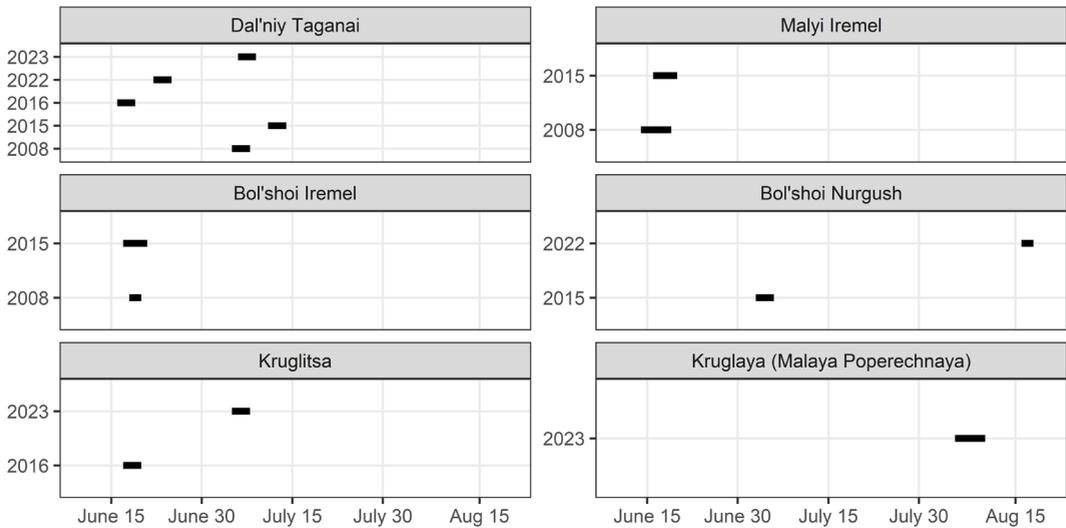


Fig. 3. Field collection chronology and phenology.

Malyi Iremel (1437 m) and Bolshoy Iremel (1565 m) with additions from Kruglitsa (1144 m), Bolshoy Shelom (1407 m), Bolshoy Uvan (1222 m) and Kruglaya, or Malaya Poperechnaya (1389 m) (Fig 3). The first four summits are monitoring sites of the South Urals (RU-SUR) target region of the international research network GLORIA (Global Observation Research Initiative in Alpine Environments). The GLORIA network was founded in Vienna in 2000 to operate and coordinate the worldwide long-term observation network for the comparative study of climate change impacts on alpine biota (mainly plants) and its biodiversity (Grabherr et al., 2000). The first permanent plots were established in 2001 at 66 summits in 17 mountain regions of Europe including the South Urals (Pauli et al., 2012) and resurveyed in 2008, 2015/2016 and 2022/2023.

All the summits reach the alpine zone and have plateaus covered with alpine tundra vegetation. The summit plateaus of Bolshoy Nurgush, Malyi Iremel and Bolshoy Iremel have the same type of alpine tundra — grass-moss tundra (*Carex-Rhytidium*) with stone hollows and clay patches. The summit

plateau of Dalniy Taganay is covered with shrub-lichen tundra except the eastern sector with tundra-like shrub communities.

All the summits are situated in the floristic region of dark coniferous forests and tundra of the upper mountain belt of the South Urals consisting of two sub-regions separated by the valley of River Ay (Kulikov, 2005). The vegetation of the mountain forests is similar throughout the region but the alpine vegetation is different in the two sub-regions. The Taganay sub-region is situated at the main watershed of the Urals at the sources of the rivers Ufa, Kusa and Bolshoy Kialim and includes the mountain ranges of Bolshoy and Malyi Taganay, Itsyl and Yurma. The highest summit is Kruglitsa (1178 m a.s.l.). The alpine tundra vegetation is present in the Bolshoy Taganay mountain range (the summits Kruglitsa and Dalniy Taganay) (Kulikov, 2005). At the summits Otkliknoy Greben and Yurma only fragments of alpine vegetation can be found.

The flora and vegetation of alpine tundra of the Taganay mountain range is considered to be relatively poor in species diversity and different from the rest of the South Urals highlands. The shrub-lichen type of alpine

tundra is common here with the dominance of *Vaccinium uliginosum*, *V. vitis-idaea*, *Empetrum hermaphroditum* in the grass layer, and species of *Cladina* and *Cetraria* in the moss-lichen layer. *Festuca igoschiniae* (the most peculiar dominant of the grass-moss tundra of the South Urals) is very rare here and is mainly replaced by *F. ovina*, which does not occur in other regions of the South Urals. Tundra plant communities with the dominance of *Juncus trifidus* are also common. Tundra-like shrub communities with *Empetrum hermaphroditum* and *Vaccinium uliginosum* and communities with a predominance of forest species (e.g. *Maianthemum bifolium*) are widespread. This can be explained by the repeated reduction of the alpine vegetation area in the mountains during the warmer phases of the Holocene (Kulikov, 2005).

The Zyuratkul-Iremel subregion is situated in the upper parts of the rivers Yuryuzan, Katav, Satka and Ay and occupies a system of mountain ranges built from Proterozoic quartzite and crystalloid slates (the Urenga, Zyuratkul, Nurgush, Zigalga ranges, the Iremel massif). Here, the grass-moss tundra is common with the dominant species *Festuca igoschiniae*, *Carex ensifolia* and *Rhytidium rugosum*. Rarely, small patches of tundra vegetation from *Dryas octopetala* and *Arctous alpina* can also be found (Kulikov, 2005).

## DESIGN DESCRIPTION

The South Urals as a GLORIA target region comprise a suite of four summits which represent an elevation gradient from the natural treeline ecotone up to the uppermost vegetation zone. The target region (SUR) is the mountain area in which these four summits are located. All summits of a target region must be exposed to the same regional climate, where climatic differences are caused by elevation rather than by topographically determined weather divide effects. The ideal altitudinal positions of the four summits would be within the ecotones that form a transition between vegetation belts because climate-induced changes

are most likely first to become apparent in these transition zones (Pauli et al., 2015). The four summits of the South Urals were chosen as a GLORIA target region with the direct supervision of GLORIA coordinators in 2001.

The sampling design for each summit provides delimitation of four sections in the upper summit area (5-m summit area) and four sections in the lower summit area (10-m summit area). The size of the summit area section is not fixed but depends on the slope structure and steepness. To study herpetobiont invertebrates (insects, arachnids, centipedes), pitfall traps were set in each of four sampling areas (usually lower summit area sections) connected with the cardinal directions (N, E, S, W) of every summit. The installation of pitfall traps was carried out according to the protocol included in the fifth edition of the official manual (section 7.2) of the GLORIA project for extra approaches (Pauli et al., 2015). The sampling design for GLORIA summits was proposed by Mikhailov (2009) and later included in the official manual (Mikhailov, 2015).

In the South Urals, the first results of the method were obtained in 2008, and the first repeated survey was carried out in 2015. The results for insects and spiders after two surveys (2008 and 2015) were published (Mikhailov & Ermakov, 2016). However, in July 2015, the weather before the survey in Dalniy Taganay was cool and rainy, unfavourable for invertebrate activity, so the surveys there were repeated in 2016 in better weather. The second resurvey in Dalniy Taganay was carried out on 22–25 June 2022, but unusually cold weather in June resulted in poor sampling. To confirm the results, the survey was repeated on 6–9 July 2023. On 5–8 July 2023, another peak of the Bolshoy Taganay ridge — Kruglitsa (1144 m) — was surveyed simultaneously. The first data from that peak were obtained in 2016. Like Dalniy Taganay, it is one of the northernmost peaks in the Southern Urals where mountain tundra has been preserved.

The summits Kruglaya, or Malaya Poperechnaya, (1389 m) and Bolshoy

Shelom (1407 m) of the Zigalga mountain range are not GLORIA summits even though they were surveyed in 2023 and 2024 respectively with the same sampling design.

#### SAMPLING DESCRIPTION

In each sector, 20 standard 75 mm diameter plastic cups were installed in a cross-shaped line, i.e. 10 traps were placed along the main line (north, south, west and east) at least 1 m apart, and another 10 traps were placed perpendicular to the first line. In three days, the lines were removed and the contents of the traps from each line were placed in the marked containers. Preliminary sorting of adults and larvae of insects, arachnids and centipedes was carried out in the field. Analysis and identification of the collected material was later carried out in the laboratory.

Additional miscellaneous materials were collected by various arachnological field methods: entomological net sweeping, litter sifting, tree shaking and manual collecting along with pitfall traps.

#### QUALITY CONTROL

The collection is stored in the Perm State University (PSU). A few specimens are stored in the Zoological Institute of the Russian Academy of Sciences, St.-Petersburg (ZIN). S. L. Esyunin identified all adult individuals at the species level. Juvenile individuals were identified at the species, genera or family level depending on the informative value of somatic features (body size, shape and coloration, eyes configuration, chaetotaxy etc.). The taxonomical nomenclature follows the World Spider Catalog (WSC, 2024).

#### DATA RESOURCES

Data package title:

Arachnids (Arachnida: Araneae, Opiliones) of Mountain Summits of the South Urals

#### RESOURCE LINK:

<https://www.gbif.org/dataset/5a47109d-1b41-4153-8bac-6210f2055163>

#### ALTERNATIVE IDENTIFIERS:

<https://doi.org/10.15468/56esv5>,  
[https://ipt.ipae.uran.ru/resource?r=arachnids\\_mountainsummits\\_southurals](https://ipt.ipae.uran.ru/resource?r=arachnids_mountainsummits_southurals)

#### DATA SET NAME:

Arachnids (Arachnida: Araneae, Opiliones) of Mountain Summits of the South Urals.

#### DATA FORMAT:

Darwin Core (Wieczorek et al., 2012; Darwin Core ..., 2023; Sozontov, Filippova, 2024).

#### MATERIAL

Here we provide record listing in a traditional “faunistic” way, duplicating data uploaded on the GBIF repository. This can be helpful in comparing text and digital tables, facilitating the transition from the first to the second approach. All taxa are given in the alphabetic order. Some abbreviations are used here: “ad.” (= adult), “juv.” (= juvenile) for life stages and “MYE” (= Yu. E. Mikhailov), “AIE” (= A. I. Ermakov), “ABP” (= A. B. Polyinin) for the collectors. The collector of some specimens that are more than 40 years old and stored in the Perm State University museum is unknown. End dates are given in case of collecting during a few days.

#### Order Araneae

#### Family Araneidae

*Aculepeira carbonarioides* (Keyserling, 1892). Chelyabinsk region: Satka district: summit Bolshoy Uvan: alpine barrens: 1♂, 8♀, 25 June 1984, leg. N. M. Pakhorukov; Republic of Bashkortostan: Beloretsk district: summit Iremel: rock river: 2♀, 27 May 1982, leg. ABP; 2♀, 28 June 1987, leg. ABP.

*Araneus sturmi* (Hahn, 1831). Chelyabinsk region: Zlatoust town: summit Dvuglavaya Sopka: faunistic record: 1♂, 13 July 2013, leg. S. S. Sokolova.

*Araniella displicata* (Hentz, 1847). Chelyabinsk region: Satka district: Satka town: Pinus forest with herbs: 1♂, 17 June 1984.

*A. proxima* (Kulczyński, 1885). Chelyabinsk region: Satka district: Mountain ridge Bolshaya Suka: alpine barrens: 1♀, 14 June 1984; Satka town: forest cutting: 1♀, 10 June 1984; upland meadow: 1♂, 14 June 1984.

*Cyclosa conica* (Pallas, 1772). Chelyabinsk region: Satka district: Satka town: *Pinus* forest with herbs: 1♀, 17 April 1984, leg. A. Skorokhodova; faunistic record: 3♀, 8 July 1984, leg. A. Skorokhodova; water-logged *Picea* forest: 1♂, 16 April 1984, leg. A. Skorokhodova; Republic of Bashkortostan: Beloretsk district: summit Bolshoy Iremel: bog: 2♀, 30 July 1990, leg. ABP.

*Larinioides folium* (Schränk, 1803). Chelyabinsk region: Katav-Ivanovsk district: Yuryuzan river, near Makhmutovo: faunistic record: 1♂, 1♀, 17 July 2009, leg. T. K. Tuneva; Verkhniy Ufaley district: Dautovo village: inside buildings: 1♂, 1♀, 30 June 2001, leg. AIE; 1♀, 25 August 2001, leg. AIE; Republic of Bashkortostan: Salavat District: Arkaulovo village: faunistic record: 1♂, 16 July 2009, leg. T. K. Tuneva; Yangan-Tau: faunistic record: 1♂, 12 July 2009, leg. T. K. Tuneva.

*Leviellus stroemi* (Thorell, 1875). Chelyabinsk region: Verkhniy Ufaley District: Dautovo village: *Betula* forest: 1♂, 18 June 2001, leg. AIE; inside buildings: 2♂, 30 June 2001, leg. AIE.

*Singa hamata* (Clerck, 1757). Republic of Bashkortostan: Salavat District: Chulpan village: faunistic record: 1♂, 13 July 2009, leg. T. K. Tuneva; Musatovo: faunistic record: 1♂, 11 July 2009, leg. T. K. Tuneva.

#### Family Cheiracanthiidae

*Cheiracanthium erraticum* (Walckenaer, 1802). Chelyabinsk region: Satka district: Satka town: herb meadow: 1♀, 20 July 1984, leg. V. E. Efimik.

#### Family Clubionidae

*Clubiona diversa* O. Pickard-Cambridge, 1862. Chelyabinsk region: Zlatoust town: summit Dalniy Taganay: shrub-lichen alpine tundra: 1 ad., 19 June 2016, leg. MYE&AIE; tundra-like shrub communities: 1 ad., 9 July 2023, leg. MYE&AIE.

*C. germanica* Thorell, 1870. Republic of Bashkortostan: Salavat District: Akhuno-vo village: faunistic record: 1♂, 3♀, 14 July 2009, leg. T. K. Tuneva.

*C. kulczynskii* Lessert, 1905. Republic of Bashkortostan: Beloretsk district: summit Maliy Iremel: grass-moss alpine tundra: 1 ad., 20 June 2015, leg. MYE&AIE.

*C. neglecta* O. Pickard-Cambridge, 1862. Republic of Bashkortostan: Salavat District: Musatovo: faunistic record: 1♂, 11 July 2009, leg. T. K. Tuneva.

#### Family Dictynidae

*Dictyna pusilla* Thorell, 1856

Chelyabinsk region: Satka district: Satka town: herb meadow: 1♀, 10 June 1984, leg. A. Danilova; mixed forest with herbs: 1♀, 10 June 1984, leg. A. Danilova; Sibirka village: herb meadow on forest cutting: 4♀, 10 June 1984, leg. A. Danilova.

#### Family Gnaphosidae

*Drassodes lapidosus* (Walckenaer, 1802). Chelyabinsk region: Zlatoust town: summit Dalniy Taganay: shrub-lichen alpine tundra: 1 ad., 8 July 2008, leg. MYE; 1 ad., 19 June 2016, leg. MYE&AIE; 1 ad., 25 June 2022, leg. MYE; 2 ad., 9 July 2023, leg. MYE&AIE; tundra-like shrub communities: 1 ad., 19 June 2016, leg. MYE&AIE; summit Kruglitsa: moss-grass-shrub alpine tundra: 4 ad., 20 June 2016, leg. MYE&AIE; 1 ad., 8 July 2023, leg. MYE&AIE; Republic of Bashkortostan: Beloretsk district: summit Bolshoy Iremel: grass-moss alpine tundra: 5 ad., 21 June 2015, leg. MYE&AIE; summit Maliy Iremel: grass-moss alpine tundra: 2 ad., 19 June 2008, leg. MYE; 11 ad., 20 June 2015, leg. MYE&AIE; mountain tundra with moss: 2♂, 8♀, 31 May 1989.

*D. pubescens* (Thorell, 1856). Chelyabinsk region: Zlatoust town: summit Dalniy Taganay: shrub-lichen alpine tundra: 1 ad., 9 July 2023, leg. MYE&AIE.

*Drassodes villosus* (Thorell, 1856). Chelyabinsk region: Verkhniy Ufaley District: Dautovo village: inside buildings: 1♂, 30 June 2001, leg. AIE; 1♂, 1♀, 25 August 2001, leg. AIE.

*Drassyllus praeficus* (L. Koch, 1866). Chelyabinsk region: Zlatoust town: summit Kruglitsa: moss-grass-shrub alpine tundra: 1 ad., 20 June 2016, leg. MYE&AIE; 3 ad., 8 July 2023, leg. MYE&AIE.

*D. pusillus* (C. L. Koch, 1833). Chelyabinsk region: Katav-Ivanovsk district: summit Kruglaya (Malaya Poperechnaya): treeline ecotone (upper level): 1♀, 10 August 2023, leg. MYE; Zlatoust town: summit Dalniy Taganay: shrub-lichen alpine tundra: 1 ad., 19 June 2016, leg. MYE&AIE; 1 ad., 25 June 2022, leg. MYE; summit Kruglitsa: moss-grass-shrub alpine tundra: 1 ad., 8 July 2023, leg. MYE&AIE.

*Gnaphosa muscorum* (L. Koch, 1866). Chelyabinsk region: Katav-Ivanovsk district: summit Kruglaya (Malaya Poperechnaya): grass-moss alpine tundra: 1♀, 1♂, 9 August 2023, leg. MYE; Satka district: Mountain ridge Bolshaya Suka: faunistic record: 1♀, 23 June 1984, leg. A. Danilova; Zlatoust town: summit Dalniy Taganay: shrub-lichen alpine tundra: 1 ad., 7 July 2008, leg. MYE; 5 ad., 8 July 2008, leg. MYE; 1 ad., 14 July 2015, leg. AIE; 10 ad., 19 June 2016, leg. MYE&AIE; 5 ad., 9 July 2023, leg. MYE&AIE; tundra-like shrub communities: 4 ad., 19 June 2016, leg. MYE&AIE; summit Kruglitsa: moss-grass-shrub alpine tundra: 36 ad., 20 June 2016, leg. MYE&AIE; 16 ad., 8 July 2023, leg. MYE&AIE; Republic of Bashkortostan: Beloretsk district: summit Maliy Iremel: faunistic record: 1♀, 2 June 1980, leg. Yu. I. Korobeynikov; grass-moss alpine tundra: 2 ad., 20 June 2015, leg. MYE&AIE.

*Haplodrassus cognatus* (Westring, 1861). Chelyabinsk region: Zlatoust town: summit Kruglitsa: moss-grass-shrub alpine tundra: 1 ad., 8 July 2023, leg. MYE&AIE.

*H. signifer* (C. L. Koch, 1839). Chelyabinsk region: Zlatoust town: summit Dalniy Taganay: shrub-lichen alpine tundra: 2 ad., 19 June 2016, leg. MYE&AIE; 1 ad., 9 July 2023, leg. MYE&AIE; summit Kruglitsa: moss-grass-shrub alpine tundra: 1 ad., 20 June 2016, leg. MYE&AIE.

*H. soerensemi* (Strand, 1900). Chelyabinsk region: Zlatoust town: summit Dalniy Taganay: shrub-lichen alpine tundra: 1 ad.,

19 June 2016, leg. MYE&AIE; 3 ad., 25 June 2022, leg. MYE; tundra-like shrub communities: 2 ad., 19 June 2016, leg. MYE&AIE; 1 ad., 25 June 2022, leg. MYE; 1 ad., 9 July 2023, leg. MYE&AIE; summit Kruglitsa: moss-grass-shrub alpine tundra: 1 ad., 20 June 2016, leg. MYE&AIE.

*Micaria aenea* Thorell, 1871. Chelyabinsk region: Zlatoust town: summit Dalniy Taganay: shrub-lichen alpine tundra: 1 ad., 19 June 2016, leg. MYE&AIE; 1 ad., 25 June 2022, leg. MYE; 5 ad., 9 July 2023, leg. MYE&AIE; tundra-like shrub communities: 1 ad., 19 June 2016, leg. MYE&AIE; 2 ad., 9 July 2023, leg. MYE&AIE; summit Kruglitsa: moss-grass-shrub alpine tundra: 3 ad., 20 June 2016, leg. MYE&AIE; Republic of Bashkortostan: Beloretsk district: Tygynskoe bog: bog: 1♀, 28 July 1993, leg. A. V. Alikin.

*M. pulicaria* (Sundevall, 1831). Republic of Bashkortostan: Beloretsk district: summit Maliy Iremel: grass-moss alpine tundra: 1 ad., 20 June 2015, leg. MYE&AIE.

*M. silesiaca* L. Koch, 1875. Chelyabinsk region: Zlatoust town: summit Dalniy Taganay: shrub-lichen alpine tundra: 1 ad., 14 July 2015, leg. AIE; 4 ad., 19 June 2016, leg. MYE&AIE; 4 ad., 9 July 2023, leg. MYE&AIE; summit Kruglitsa: moss-grass-shrub alpine tundra: 3 ad., 20 June 2016, leg. MYE&AIE; 3 ad., 8 July 2023, leg. MYE&AIE.

*Zelotes azsheganovae* Eshyunin & Efimik, 1992. Chelyabinsk region: Zlatoust town: summit Dalniy Taganay: shrub-lichen alpine tundra: 1 ad., 9 July 2023, leg. MYE&AIE; summit Kruglitsa: moss-grass-shrub alpine tundra: 4 ad., 8 July 2023, leg. MYE&AIE; Republic of Bashkortostan: Beloretsk district: summit Bolshoy Shelom: grass-moss alpine tundra: 1♂, 13 July 2024, leg. MYE.

*Z. mundus* (Kulczyński, 1897). Chelyabinsk region: Zlatoust town: summit Kruglitsa: moss-grass-shrub alpine tundra: 1 ad., 8 July 2023, leg. MYE&AIE.

*Z. subterraneus* (C. L. Koch, 1833). Chelyabinsk region: Zlatoust town: summit Dalniy Taganay: shrub-lichen alpine tundra: 29 ad., 19 June 2016, leg. MYE&AIE; 2 ad., 25

June 2022, leg. MYE; 12 ad., 9 July 2023, leg. MYE&AIE; tundra-like shrub communities: 1 ad., 7 July 2008, leg. MYE; 3 ad., 14 July 2015, leg. AIE; 4 ad., 19 June 2016, leg. MYE&AIE; 1 ad., 25 June 2022, leg. MYE; 10 ad., 9 July 2023, leg. MYE&AIE; summit Kruglitsa: moss-grass-shrub alpine tundra: 1 ad., 8 July 2023, leg. MYE&AIE.

#### Family Linyphiidae

*Abacoproeces saltuum* (L. Koch, 1872). Chelyabinsk region: Satka district: Zyuratkul lake: moss-covered *Picea* forest: 1♀, 17 July 1984.

*Agyseta affinis* (Kulczyński, 1898). Chelyabinsk region: Zlatoust town: summit Kruglitsa: moss-grass-shrub alpine tundra: 2 ad., 20 June 2016, leg. MYE&AIE; 1 ad., 8 July 2023, leg. MYE&AIE; Republic of Bashkortostan: Beloretsk district: summit Maliy Iremel: grass-moss alpine tundra: 4 ad., 20 June 2015, leg. MYE&AIE.

*A. conigera* (O. Pickard-Cambridge, 1863). Republic of Bashkortostan: Beloretsk district: summit Maliy Iremel: grass-moss alpine tundra: 1 ad., 20 June 2015, leg. MYE&AIE.

*A. fuscipalpa* (C. L. Koch, 1836). Chelyabinsk region: Satka district: mountain ridge Nurgush: faunistic record: 5♀, 25 June 1984, leg. A. Danilova; rock exposure: 1♂, 5♀, 25 June 1984, leg. A. Danilova.

*A. gulosa* (L. Koch, 1869). Chelyabinsk region: Katav-Ivanovsk district: summit Kruglaya (Malaya Poperechnaya): grass-moss alpine tundra: 1♂, 9 August 2023, leg. MYE; Satka district: summit Bolshoy Nurgush: grass-moss alpine tundra: 1 ad., 6 July 2015, leg. MYE&AIE; Zlatoust town: summit Kruglitsa: moss-grass-shrub alpine tundra: 5 ad., 20 June 2016, leg. MYE&AIE; Republic of Bashkortostan: Beloretsk district: summit Bolshoy Iremel: grass-moss alpine tundra: 37 ad., 21 June 2015, leg. MYE&AIE; summit Maliy Iremel: grass-moss alpine tundra: 2 ad., 19 June 2008, leg. MYE; 35 ad., 20 June 2015, leg. MYE&AIE.

*A. innotabilis* (O. Pickard-Cambridge, 1863). Chelyabinsk region: Satka district: Sibirka village: *Picea* forest with *Oxalis*: 5♂, 14 June 1984.

*A. mossica* (Schikora, 1993). Chelyabinsk region: Zlatoust town: summit Kruglitsa: moss-grass-shrub alpine tundra: 1 ad., 20 June 2016, leg. MYE&AIE.

*A. ripariensis* Tanasevitch, 1984. Chelyabinsk region: Zlatoust town: summit Dalniy Taganay: shrub-lichen alpine tundra: 1 ad., 19 June 2016, leg. MYE&AIE.

*A. saaristoi* Tanasevitch, 2000. Chelyabinsk region: Satka district: Zyuratkul lake: lake shore with *Carex*: 1♂, 1♀, 18 July 1984, leg. N. M. Pakhorukov; summit Bolshoy Nurgush: grass-moss alpine tundra: 2 ad., 6 July 2015, leg. MYE&AIE; Zlatoust town: summit Kruglitsa: moss-grass-shrub alpine tundra: 1 ad., 20 June 2016, leg. MYE&AIE; 1 ad., 08 July 2023, leg. MYE&AIE; Republic of Bashkortostan: Beloretsk district: summit Bolshoy Iremel: grass-moss alpine tundra: 4 ad., 21 June 2015, leg. MYE&AIE; mountain tundra: 1♂, 1♀, 01 August 1985, leg. ABP; summit Maliy Iremel: grass-moss alpine tundra: 1 ad., 20 June 2015, leg. MYE&AIE; meadow: 2♂, 23 July 1986, leg. ABP; mountain tundra: 1♂, 27 May 1982, leg. V. N. Olshwang; Salavat District: Musatovo: faunistic record: 1♂, 11 July 2009, leg. T. K. Tuneva.

*Aphileta misera* (O. Pickard-Cambridge, 1882). Chelyabinsk region: Satka district: summit Bolshoy Nurgush: grass-moss alpine tundra: 1 ad., 6 July 2015, leg. MYE&AIE.

*Baryphyma trifrons* (O. Pickard-Cambridge, 1863). Republic of Bashkortostan: Beloretsk district: summit Iremel: mountain meadow: 1♀, 20 July 1984.

*Bathyphantes setiger* F. O. Pickard-Cambridge, 1894. Chelyabinsk region: Satka district: Satka town: mixed forest with herbs: 3♂, 18 July 1984.

*Bolyphantes alticeps* (Sundevall, 1833). Chelyabinsk region: Katav-Ivanovsk district: summit Kruglaya (Malaya Poperechnaya): treeline ecotone (middle level): 1♂, 10 August 2023, leg. MYE.

*Centromerita bicolor* (Blackwall, 1833). Chelyabinsk region: Katav-Ivanovsk district: Karagayka river near Tybuk village: *Pinus* forest edge: 1♂, 1♀, 3 September 1993, leg. V. E. Efimik; river bank: 1♂, 3 September 1993, leg. V. E. Efimik.

*Cnephalocotes obscurus* (Blackwall, 1834). Chelyabinsk region: Satka district: summit Bolshoy Nurgush: grass-moss alpine tundra: 1 ad., 6 July 2015, leg. MYE&AIE; Zlatoust town: summit Dalniy Taganay: shrub-lichen alpine tundra: 1 ad., 19 June 2016, leg. MYE&AIE; summit Kruglitsa: moss-grass-shrub alpine tundra: 2 ad., 20 June 2016, leg. MYE&AIE; 2 ad., 8 July 2023, leg. MYE&AIE; Republic of Bashkortostan: Beloretsk district: Tygynskoe bog: bog: 1♂, 28 July 1991, leg. A. V. Alikin; summit Bolshoy Iremel: grass-moss alpine tundra: 2 ad., 21 June 2015, leg. MYE&AIE; summit Maliy Iremel: grass-moss alpine tundra: 1 ad., 19 June 2008, leg. MYE; 22 ad., 20 June 2015, leg. MYE&AIE

*Collinsia caliginosa* (L. Koch, 1879). Chelyabinsk region: Satka district: Satka town: *Picea* forest: 1♀, 14 June 1984.

*Deciphantes decipiens* (L. Koch, 1879). Republic of Bashkortostan: Beloretsk district: summit Maliy Iremel: grass-moss alpine tundra: 1 ad., 20 June 2015, leg. MYE&AIE.

*Dicymbium tibiale* (Blackwall, 1836). Chelyabinsk region: Satka district: Satka town: forest cutting: 2♂, 1♀, 20 June 1984.

*Dismodicus bifrons* (Blackwall, 1841). Republic of Bashkortostan: Beloretsk district: summit Bolshoy Iremel: grass-moss alpine tundra: 1 ad., 21 June 2015, leg. MYE & AIE; summit Maliy Iremel: grass-moss alpine tundra: 4 ad., 19 June 2008, leg. MYE.

*Erigone atra* Blackwall, 1833. Chelyabinsk region: Satka district: summit Bolshoy Nurgush: grass-moss alpine tundra: 1 ad., 6 July 2015, leg. MYE&AIE; Zlatoust town: summit Dalniy Taganay: shrub-lichen alpine tundra: 5 ad., 14 July 2015, leg. AIE; 3 ad., 19 June 2016, leg. MYE&AIE; Republic of Bashkortostan: Beloretsk district: summit Bolshoy Iremel: grass-moss alpine tundra: 5 ad., 21 June 2015, leg. MYE&AIE.

*E. dentipalpis* (Wider, 1834). Chelyabinsk region: Verkhniy Ufaley District: Dautovo village: *Betula* forest: 2♂, 1♀, 21 August 2001, leg. AIE.

*Gonatium rubellum* (Blackwall, 1841). Chelyabinsk region: Zlatoust town: summit Dalniy Taganay: shrub-lichen alpine tundra:

1 ad., 19 June 2016, leg. MYE&AIE; 5 ad., 9 July 2023, leg. MYE&AIE; summit Kruglitsa: moss-grass-shrub alpine tundra: 1 ad., 8 July 2023, leg. MYE&AIE.

*G. rubens* (Blackwall, 1833). Chelyabinsk region: Katav-Ivanovsk district: summit Kruglaya (Malaya Poperechnaya): grass-moss alpine tundra: 1♀, 9 August 2023, leg. MYE.

*Helophora insignis* (Blackwall, 1841). Chelyabinsk region: Verkhniy Ufaley District: Dautovo village: *Betula* forest: 1♂, 1♀, 18 June 2001, leg. AIE.

*Hilaira herniosa* (Thorell, 1875). Chelyabinsk region: Satka district: Satka town: water-logged *Picea* forest: 3♀, 16 June 1986, leg. N. M. Pakhorukov; Republic of Bashkortostan: Beloretsk district: summit Iremel: sparse forest: 1♂, 20 June 1987, leg. ABP.

*Improphantes improbulus* (Simon, 1929). Republic of Bashkortostan: Beloretsk district: summit Iremel: mountain tundra: 1♀, 23 July 1986, leg. V. N. Olshwang.

*Incestophantes incestoides* (Tanasevitch & Eskov, 1987). Republic of Bashkortostan: Beloretsk district: summit Maliy Iremel: grass-moss alpine tundra: 2 ad., 20 June 2015, leg. MYE&AIE.

*I. incestus* (L. Koch, 1879). Republic of Bashkortostan: Beloretsk district: summit Maliy Iremel: mountain tundra with moss: 1♂, 1♀, 31 May 1989, leg. ABP.

*Lepthyphantes luteipes* (L. Koch, 1879). Chelyabinsk region: Satka district: Mountain ridge Nurgush: rock exposure: 2♀, 25 June 1984; Zlatoust town: summit Dalniy Taganay: shrub-lichen alpine tundra: 1 ad., 19 June 2016, leg. MYE&AIE; summit Kruglitsa: moss-grass-shrub alpine tundra: 1 ad., 20 June 2016, leg. MYE&AIE; Republic of Bashkortostan: Beloretsk district: summit Bolshoy Iremel: forest cutting: 2♀, 30 July 1990, leg. V. E. Efimik; summit Maliy Iremel: alpine barrens: 2♀, 29 August 1993, leg. V. E. Efimik.

*Leptorhoptrum robustum* (Westring, 1851). Chelyabinsk region: Katav-Ivanovsk district: summit Kruglaya (Malaya Poperechnaya): treeline ecotone (lower level): 1♀,

10 August 2023, leg. MYE; treeline ecotone (middle level): 1♀, 10 August 2023, leg. MYE.

*Linyphia triangularis* (Clerck, 1757). Chelyabinsk region: Verkhniy Ufaley District: Dautovo village: *Betula* forest: 1♀, 18 June 2001, leg. AIE.

*Lophomma punctatum* (Blackwall, 1841). Chelyabinsk region: Satka district: Zyuratkul lake: river bank with *Carex*: 2♀, 18 July 1984, leg. V. E. Efimik.

*Macrargus multesimus* (O. Pickard-Cambridge, 1875). Chelyabinsk region: Satka district: Sibirka village: *Tilia* forest: 1♀, 06 July 1984, leg. A. Danilova.

*Maro minutus* O. Pickard-Cambridge, 1907. Chelyabinsk region: Satka district: Sibirka village: forest cutting: 4♀, 20 June 1984, leg. V. E. Efimik; Republic of Bashkortostan: Beloretsk district: Tygynskoe bog: bog: 4♂, 28 July 1993, leg. A. V. Alikin.

*M. pansibiricus* Tanasevitch, 2005. Chelyabinsk region: Katav-Ivanovsk district: Karagayka river near Tyubuk village: *Pinus* forest: 1♀, 3 September 1993, leg. V. E. Efimik; Satka district: Satka town: forest cutting: 1♀, 20 June 1984, leg. V. E. Efimik; Sibirka village: moss-covered *Pinus* forest: 1♂, 30 June 1984, leg. V. E. Efimik.

*Metopobactrus prominulus* (O. Pickard-Cambridge, 1873). Chelyabinsk region: Zlatoust town: summit Kruglitsa: moss-grass-shrub alpine tundra: 1 ad., 20 June 2016, leg. MYE&AIE; Republic of Bashkortostan: Beloretsk district: summit Bolshoy Iremel: grass-moss alpine tundra: 3 ad., 21 June 2015, leg. MYE&AIE; summit Maliy Iremel: grass-moss alpine tundra: 2 ad., 19 June 2008, leg. MYE; 5 ad., 20 June 2015, leg. MYE&AIE.

*Microlinyphia pusilla* (Sundevall, 1830). Chelyabinsk region: Katav-Ivanovsk district: summit Kruglaya (Malaya Poperechnaya): grass-moss alpine tundra: 1♀, 9 August 2023, leg. MYE; Verkhniy Ufaley District: Dautovo village: inside buildings: 1♂, 30 June 2001, leg. AIE.

*Minicia marginella* (Wider, 1834). Chelyabinsk region: Satka district: Satka town: *Picea-Betula-Populus* forest: 1♀, 3 July

1984; Republic of Bashkortostan: Beloretsk district: summit Bolshoy Iremel: faunistic record: 1♂, 10 August 1985, leg. ABP; summit Iremel: faunistic record: 1♀, 28 July 1984, leg. ABP; 1♀, 23 July 1986, leg. ABP; meadow: 4♀, 25 July 1984, leg. ABP.

*Mughiphantes suffusus* (Strand, 1901). Chelyabinsk region: Satka district: Satka town: *Picea* forest with *Oxalis*: 1♂, 3♀, 18 June 1984; Republic of Bashkortostan: Beloretsk district: summit Iremel: *Abies-Picea* forest: 1♂, 2♀, 31 August 1993, leg. V. E. Efimik.

*Nerienne peltata* (Wider, 1834). Chelyabinsk region: Satka district: Satka town: *Tilia* forest: 3♀, 14 June 1984.

*Oedothorax agrestis* (Blackwall, 1853). Chelyabinsk region: Katav-Ivanovsk district: Karagayka river near Tyubuk village: river bank: 1♂, 3♀, 3 September 1993, leg. V. E. Efimik.

*O. gibbosus* (Blackwall, 1841). Chelyabinsk region: Satka district: Satka town: water-logged forest cutting: 1♂, 5 July 1984; Zyuratkul lake: lake shore with *Carex*: 1♀, 19 June 1984.

*Oreonetides vaginatus* (Thorell, 1872). Chelyabinsk region: Katav-Ivanovsk district: summit Kruglaya (Malaya Poperechnaya): treeline ecotone (lower level): 1♀, 10 August 2023, leg. MYE.

*Oryphantes angulatus* (O. Pickard-Cambridge, 1881). Chelyabinsk region: Satka district: Satka town: *Abies-Picea* forest with *Betula*: 2♀, 17 July 1984, leg. V. E. Efimik; *Betula* forest: 1♀, 17 July 1984, leg. V. E. Efimik; *Picea-Pinus-Betula* forest with herbs: 1♀, 1 July 1984, leg. V. E. Efimik; forest cutting: 2♀, 20 June 1984, leg. V. E. Efimik; moss-covered *Picea* forest: 1♀, 8 July 1984, leg. V. E. Efimik.

*Panamomops tauricornis* (Simon, 1881). Chelyabinsk region: Satka district: summit Bolshoy Uvan: sparse *Picea* forest: 1♂, 8 July 1984; Republic of Bashkortostan: Beloretsk district: summit Bolshoy Iremel: mountain tundra: 3♀, 2 June 1988, leg. A. Malozemov; summit Iremel: mountain tundra: 2♂, 9 July 1984, leg. A. Malozemov; summit Maliy Iremel: mountain tundra: 2♀, 6 June

1981, leg. A. Malozemov; 1♂, 4♀, 1982, leg. A. Malozemov.

*Pelecopsis elongata* (Wider, 1834). Republic of Bashkortostan: Beloretsk district: summit Bolshoy Iremel: rock river: 1♀, 30 July 1990.

*P. mengei* (Simon, 1884). Chelyabinsk region: Katav-Ivanovsk district: summit Kruglaya (Malaya Poperechnaya): treeline ecotone (upper level): 1♀, 10 August 2023, leg. MYE; Satka district: summit Bolshoy Nurgush: grass-moss alpine tundra: 6 ad., 6 July 2015, leg. MYE&AIE; Zlatoust town: summit Dalniy Taganay: shrub-lichen alpine tundra: 5 ad., 14 July 2015, leg. AIE; 14 ad., 19 June 2016, leg. MYE&AIE; 1 ad., 25 June 2022, leg. MYE; 14 ad., 9 July 2023, leg. MYE&AIE; summit Kruglitsa: moss-grass-shrub alpine tundra: 15 ad., 20 June 2016, leg. MYE&AIE; 123 ad., 8 July 2023, leg. MYE&AIE; Republic of Bashkortostan: Beloretsk district: summit Bolshoy Iremel: grass-moss alpine tundra: 12 ad., 21 June 2015, leg. MYE&AIE; summit Maliy Iremel: grass-moss alpine tundra: 2 ad., 19 June 2008, leg. MYE; 9 ad., 20 June 2015, leg. MYE&AIE.

*Pocadicnemis pumila* (Blackwall, 1841). Chelyabinsk region: Zlatoust town: summit Kruglitsa: moss-grass-shrub alpine tundra: 3 ad., 8 July 2023, leg. MYE&AIE; Republic of Bashkortostan: Beloretsk district: summit Maliy Iremel: grass-moss alpine tundra: 1 ad., 20 June 2015, leg. MYE&AIE.

*Porrhomma pallidum* Jackson, 1913. Chelyabinsk region: Satka district: Mountain ridge Nurgush: moss-covered *Picea* forest: 1♀, 9 August 1987, leg. ABP; Republic of Bashkortostan: Beloretsk district: Tygynskoe bog: *Betula* forest: 1♀, 1 September 1993, leg. V. E. Efimik.

*Savignia producta* Holm, 1977. Chelyabinsk region: Zlatoust town: summit Dalniy Taganay: shrub-lichen alpine tundra: 1 ad., 19 June 2016, leg. MYE&AIE; 1 ad., 9 July 2023, leg. MYE&AIE.

*Semljicola faustus* (O. Pickard-Cambridge, 1900). Republic of Bashkortostan: Beloretsk district: Tygynskoe bog: *Picea* forest: 1♂, 1♀, 1 September 1993, leg. V. E. Efimik; summit

Iremel: *Abies-Picea* forest: 1♀, 2 September 1993, leg. V. E. Efimik.

*S. latus* (Holm, 1939). Republic of Bashkortostan: Beloretsk district: summit Iremel: moss-covered *Picea* forest: 5♂, 10♀, 26 July 1990, leg. ABP.

*S. thaleri* (Eskov, 1981). Chelyabinsk region: Satka district: Satka town: mixed forest with herbs: 1♂, 5♀, 10 June 1984, leg. A. Danilova; Republic of Bashkortostan: Beloretsk district: summit Iremel: *Pinus* forest: 1♂, 3♀, 3 September 1993, leg. V. E. Efimik.

*Silometopus reussi* (Thorell, 1871). Chelyabinsk region: Satka district: Mountain ridge Nurgush: *Picea* forest with *Oxalis*: 2♂, 4♀, 14 June 1984, leg. N. M. Pakhorukov.

*Tapinopa longidens* (Wider, 1834). Chelyabinsk region: Katav-Ivanovsk district: summit Kruglaya (Malaya Poperechnaya): treeline ecotone (lower level): 1♂, 10 August 2023, leg. MYE.

*Taranucus setosus* (O. Pickard-Cambridge, 1863). Chelyabinsk region: Satka district: Satka town: mixed forest with herbs: 1♂, 10 July 1984, leg. A. Danilova.

*Tenuiphantes nigriventris* (L. Koch, 1879). Chelyabinsk region: Katav-Ivanovsk district: summit Kruglaya (Malaya Poperechnaya): treeline ecotone (lower level): 1♂, 10 August 2023, leg. MYE.

*Trichopterna cito* (O. Pickard-Cambridge, 1873). Chelyabinsk region: Zlatoust town: summit Dalniy Taganay: shrub-lichen alpine tundra: 4 ad., 14 July 2015, leg. AIE.

*Walckenaeria alticeps* (Denis, 1952). Republic of Bashkortostan: Beloretsk district: Tygynskoe bog: bog: 1♀, 28 July 1993, leg. A. V. Alikin.

*W. antica* (Wider, 1834). Chelyabinsk region: Zlatoust town: summit Dalniy Taganay: shrub-lichen alpine tundra: 1 ad., 9 July 2023, leg. MYE&AIE.

*W. atrotibialis* (O. Pickard-Cambridge, 1878). Republic of Bashkortostan: Beloretsk district: summit Bolshoy Shelom: grass-moss alpine tundra: 1♂, 13 July 2024, leg. MYE.

*W. capito* (Westring, 1861). Chelyabinsk region: Satka district: summit Bolshoy Nurgush: grass-moss alpine tundra: 3 ad., 6 July 2015, leg. MYE&AIE; Republic of Bashkortostan: Beloretsk district: summit Maliy Iremel: grass-moss alpine tundra: 2 ad., 19 June 2008, leg. MYE.

*W. karpinskii* (O. Pickard-Cambridge, 1873). Chelyabinsk region: Zlatoust town: summit Kruglitsa: moss-grass-shrub alpine tundra: 3 ad., 8 July 2023, leg. MYE&AIE.

*W. korobeinikovi* Esyunin & Efimik, 1996. Chelyabinsk region: Zlatoust town: summit Kruglitsa: moss-grass-shrub alpine tundra: 2 ad., 20 June 2016, leg. MYE&AIE; Republic of Bashkortostan: Beloretsk district: summit Maliy Iremel: grass-moss alpine tundra: 2 ad., 19 June 2008, leg. MYE.

*W. mitrata* (Menge, 1868). Chelyabinsk region: Katav-Ivanovsk district: Karagayka river near Tyubuk village: river bank: 1♀, 3 September 1993, leg. V. E. Efimik

*W. nodosa* O. Pickard-Cambridge, 1873. Chelyabinsk region: Zlatoust town: summit Dalniy Taganay: shrub-lichen alpine tundra: 1 ad., 9 July 2023, leg. MYE&AIE; Republic of Bashkortostan: Beloretsk district: summit Maliy Iremel: *Picea* forest with *Oxalis*: 1♀, 28 June 1991, leg. ABP.

*Wubanoides uralensis* (Pakhorukov, 1981). Chelyabinsk region: Zlatoust town: summit Kruglitsa: moss-grass-shrub alpine tundra: 1 ad., 20 June 2016, leg. MYE&AIE.

#### Family Liocranidae

*Agroeca brunnea* (Blackwall, 1833). Chelyabinsk region: Satka district: Satka town: herb meadow: 2♀, 30 June 1986, leg. N. M. Pakhorukov.

*A. maculata* L. Koch, 1879. Chelyabinsk region: Satka district: Mountain ridge Bolshaya Suka: alpine barrens: 1♀, 25 June 1986, leg. N. M. Pakhorukov.

*A. proxima* (O. Pickard-Cambridge, 1871). Chelyabinsk region: Satka district: summit Bolshoy Nurgush: grass-moss alpine tundra: 1 ad., 18 August 2022, leg. MYE; Republic of Bashkortostan: Beloretsk district: summit Bolshoy Iremel: forest cutting: 1♂, 30 July 1990, leg. ABP.

#### Family Lycosidae

*Acantholycosa norvegica* (Thorell, 1872). Chelyabinsk region: Satka district: summit Bolshoy Nurgush: grass-moss alpine tundra: 3 ad., 18 August 2022, leg. MYE; Zlatoust town: summit Dalniy Taganay: shrub-lichen alpine tundra: 1 ad., 19 June 2016, leg. MYE&AIE; 1 ad., 9 July 2023, leg. MYE&AIE; summit Kruglitsa: moss-grass-shrub alpine tundra: 1 ad., 20 June 2016, leg. MYE&AIE; 1 ad., 8 July 2023, leg. MYE&AIE; Republic of Bashkortostan: Beloretsk district: summit Bolshoy Iremel: grass-moss alpine tundra: 5 ad., 20 June 2008, leg. MYE; 122 ad., 21 June 2015, leg. MYE&AIE; summit Maliy Iremel: grass-moss alpine tundra: 23 ad., 19 June 2008, leg. MYE; 37 ad., 20 June 2015, leg. MYE&AIE.

*Alopecosa cuneata* (Clerck, 1757). Chelyabinsk region: Zlatoust town: summit Kruglitsa: moss-grass-shrub alpine tundra: 1 ad., 20 June 2016, leg. MYE&AIE.

*A. pinetorum* (Thorell, 1856). Chelyabinsk region: Satka district: Sibirka village: water-logged *Picea* forest: 2♀, 16 June 1984, leg. N. M. Pakhorukov.

*A. taeniata* (C. L. Koch, 1835). Chelyabinsk region: Katav-Ivanovsk district: summit Kruglaya (Malaya Poperechnaya): treeline ecotone (lower level): 1♀, 1♂, 10 August 2023, leg. MYE; treeline ecotone (middle level): 1♀, 10 August 2023, leg. MYE; Satka district: Mountain ridge Bolshaya Suka: mountain meadow: 1♀, 23 June 1984, leg. A. Danilova; Mountain ridge Nurgush: faunistic record: 1♂, 25 June 1984, leg. A. Danilova; Satka town: forest cutting with herbs: 1♂, 20 June 1984, leg. A. Danilova; mixed forest with herbs: 2♂, 2♀, 27 June 1984, leg. A. Danilova; Zyuratkul lake: rock exposure: 2♀, 19 July 1984, leg. A. Danilova; Zlatoust town: summit Dalniy Taganay: shrub-lichen alpine tundra: 1 ad., 7 July 2008, leg. MYE; 2 ad., 14 July 2015, leg. AIE; 32 ad., 19 June 2016, leg. MYE&AIE; 157 ad., 25 June 2022, leg. MYE; 34 ad., 9 July 2023, leg. MYE&AIE; tundra-like shrub communities: 13 ad., 7 July 2008, leg. MYE; 14 ad., 14 July 2015, leg. AIE; 48 ad., 19 June 2016, leg.

MYE&AIE; 39 ad., 25 June 2022, leg. MYE; 25 ad., 9 July 2023, leg. MYE&AIE; Republic of Bashkortostan: Beloretsk district: summit Iremel: forest cutting: 2♂, 22 June 1987, leg. ABP; meadow: 1♂, 1♀, 22 June 1987, leg. ABP; rock river: 1♀, 22 June 1987, leg. ABP.

*Arctosa alpigena* (Doleschal, 1852). Republic of Bashkortostan: Beloretsk district: summit Bolshoy Iremel: bog: 1♀, 30 July 1990, leg. ABP.

*Pardosa agrestis* (Westring, 1861). Chelyabinsk region: Zlatoust town: summit Dalniy Taganay: shrub-lichen alpine tundra: 3 ad., 19 June 2016, leg. MYE&AIE; summit Kruglitsa: moss-grass-shrub alpine tundra: 1 ad., 20 June 2016, leg. MYE&AIE; Republic of Bashkortostan: Beloretsk district: summit Bolshoy Iremel: grass-moss alpine tundra: 4 ad., 21 June 2015, leg. MYE&AIE; summit Maliy Iremel: grass-moss alpine tundra: 1 ad., 19 June 2008, leg. MYE; Katav-Ivanovsk district: Yuryuzan river, near Makhmutovo: faunistic record: 1♂, 1♀, 17 July 2009, leg. T. K. Tuneva.

*P. fulvipes* (Collett, 1876). Chelyabinsk region: Satka district: summit Bolshoy Nurgush: grass-moss alpine tundra: 1 ad., 6 July 2015, leg. MYE&AIE; Republic of Bashkortostan: Beloretsk district: summit Bolshoy Iremel: grass-moss alpine tundra: 2 ad., 21 June 2015, leg. MYE&AIE; summit Bolshoy Shelom: grass-moss alpine tundra: 1♂, 13 July 2024, leg. MYE.

*P. hyperborea* (Thorell, 1872). Chelyabinsk region: Katav-Ivanovsk district: summit Kruglaya (Malaya Poperechnaya): grass-moss alpine tundra: 1♀, 9 August 2023, leg. MYE; treeline ecotone (middle level): 1♀, 10 August 2023, leg. MYE; treeline ecotone (upper level): 10♀, 10 August 2023, leg. MYE; Satka district: summit Bolshoy Nurgush: grass-moss alpine tundra: 5 ad., 6 July 2015, leg. MYE&AIE; 2 ad., 18 August 2022, leg. MYE; Zlatoust town: summit Dalniy Taganay: shrub-lichen alpine tundra: 1 ad., 7 July 2008, leg. MYE; 5 ad., 8 July 2008, leg. MYE; 61 ad., 19 June 2016, leg. MYE&AIE; 36 ad., 25 June 2022, leg. MYE; 29 ad., 9 July 2023, leg. MYE&AIE; tundra-like shrub communities: 4 ad., 7 July 2008, leg. MYE; 2 ad., 14 July 2015, leg. AIE; 14

ad., 19 June 2016, leg. MYE&AIE; 1 ad., 9 July 2023, leg. MYE&AIE; summit Kruglitsa: moss-grass-shrub alpine tundra: 81 ad., 20 June 2016, leg. MYE&AIE; 23 ad., 8 July 2023, leg. MYE&AIE; Republic of Bashkortostan: Beloretsk district: summit Bolshoy Iremel: grass-moss alpine tundra: 62 ad., 21 June 2015, leg. MYE&AIE; summit Maliy Iremel: grass-moss alpine tundra: 75 ad., 19 June 2008, leg. MYE; 44 ad., 20 June 2015, leg. MYE&AIE.

*P. lasciva* L. Koch, 1879. Chelyabinsk region: Satka district: Mountain ridge Nurgush: faunistic record: 1♀, 6 July 1986, leg. ABP; moss-covered *Picea* forest: 1♂, 8 September 1987, leg. ABP.

*P. lugubris* (Walckenaer, 1802). Chelyabinsk region: Zlatoust town: summit Dalniy Taganay: tundra-like shrub communities: 1 ad., 9 July 2023, leg. MYE&AIE.

*P. palustris* (L.). Chelyabinsk region: Satka district: summit Bolshoy Nurgush: grass-moss alpine tundra: 2 ad., 06 July 2015, leg. MYE&AIE; Zlatoust town: summit Dalniy Taganay: shrub-lichen alpine tundra: 5 ad., 08 July 2008, leg. MYE; 5 ad., 14 July 2015, leg. AIE; 11 ad., 19 June 2016, leg. MYE&AIE; 1 ad., 25 June 2022, leg. MYE; 1 ad., 9 July 2023, leg. MYE&AIE; summit Kruglitsa: moss-grass-shrub alpine tundra: 10 ad., 20 June 2016, leg. MYE&AIE; 3 ad., 08 July 2023, leg. MYE&AIE; Republic of Bashkortostan: Beloretsk district: summit Bolshoy Iremel: grass-moss alpine tundra: 2 ad., 20 June 2008, leg. MYE; 12 ad., 21 June 2015, leg. MYE&AIE; summit Maliy Iremel: grass-moss alpine tundra: 2 ad., 20 June 2015, leg. MYE&AIE.

*P. plumipes* (Thorell, 1875). Chelyabinsk region: Zlatoust town: summit Kruglitsa: moss-grass-shrub alpine tundra: 1 ad., 20 June 2016, leg. MYE&AIE; Republic of Bashkortostan: Beloretsk district: summit Bolshoy Iremel: grass-moss alpine tundra: 1 ad., 21 June 2015, leg. MYE&AIE.

*P. riparia* (C. L. Koch, 1833). Chelyabinsk region: Katav-Ivanovsk district: summit Kruglaya (Malaya Poperechnaya): treeline ecotone (middle level): 1♀, 10 August 2023, leg. MYE; treeline ecotone (upper level): 1♂, 10 August 2023, leg. MYE; Zlatoust town:

summit Dalniy Taganay: shrub-lichen alpine tundra: 1 ad., 19 June 2016, leg. MYE&AIE; 1 ad., 25 June 2022, leg. MYE; 6 ad., 9 July 2023, leg. MYE&AIE; tundra-like shrub communities: 7 ad., 9 July 2023, leg. MYE&AIE; summit Kruglitsa: moss-grass-shrub alpine tundra: 1 ad., 20 June 2016, leg. MYE&AIE; 4 ad., 8 July 2023, leg. MYE&AIE; Republic of Bashkortostan: Beloretsk district: summit Bolshoy Iremel: grass-moss alpine tundra: 6 ad., 21 June 2015, leg. MYE&AIE; summit Maliy Iremel: grass-moss alpine tundra: 7 ad., 20 June 2015, leg. MYE&AIE.

*P. schenkeli* Lessert, 1904. Chelyabinsk region: Zlatoust town: summit Kruglitsa: moss-grass-shrub alpine tundra: 1 ad., 20 June 2016, leg. MYE&AIE.

*P. sphagnicola* (Dahl, 1908). Chelyabinsk region: Satka district: Satka town: water-logged herb meadow: 1♀, 19 June 1984, leg. A. Danilova; Sibirka village: faunistic record: 1♀, 21 June 1984, leg. A. Danilova; Republic of Bashkortostan: Beloretsk district: Tygynskoe bog: bog: 20♂, 13♀, 31 August 1993, leg. A. V. Alikin; summit Bolshoy Iremel: grass-moss alpine tundra: 3 ad., 21 June 2015, leg. MYE&AIE.

*Piratula insularis* (Emerton, 1885). Republic of Bashkortostan: Beloretsk district: Tygynskoe bog: 8♂, 4♀, 1 September 1993, leg. A. V. Alikin; 21♂, 28 July 1993, leg. A. V. Alikin.

*P. uliginosa* (Thorell, 1856). Republic of Bashkortostan: Beloretsk district: summit Bolshoy Iremel: bog: 1♂, 4♀, 30 July 1990, leg. ABP.

*Trochosa terricola* Thorell, 1856. Chelyabinsk region: Verkhniy Ufaley District: Dautovo village: *Betula* forest: 1♀, 18 June 2001, leg. AIE.

*Xerolycosa miniata* (C. L. Koch, 1834). Chelyabinsk region: Zlatoust town: summit Dalniy Taganay: shrub-lichen alpine tundra: 2 ad., 14 July 2015, leg. AIE; 1 ad., 19 June 2016, leg. MYE&AIE; 1 ad., 9 July 2023, leg. MYE&AIE.

*X. nemoralis* (Westring, 1861). Chelyabinsk region: Zlatoust town: summit Dalniy Taganay: shrub-lichen alpine tundra: 2 ad., 14 July 2015, leg. AIE; 3 ad., 19 June 2016, leg. MYE&AIE; 1 ad., 25 June 2022, leg.

MYE; 4 ad., 9 July 2023, leg. MYE&AIE; tundra-like shrub communities: 1 ad., 7 July 2008, leg. MYE; summit Kruglitsa: moss-grass-shrub alpine tundra: 1 ad., 20 June 2016, leg. MYE&AIE; Republic of Bashkortostan: Beloretsk district: summit Maliy Iremel: faunistic record: 1♀, 8 July 1986, leg. O. Mosina.

#### Family Miturgidae

*Zora spinimana* (Sundevall, 1833). Chelyabinsk region: Zlatoust town: summit Dalniy Taganay: shrub-lichen alpine tundra: 1 ad., 9 July 2023, leg. MYE&AIE.

#### Family Philodromidae

*Philodromus emarginatus* (Schrank, 1803). Chelyabinsk region: Satka district: Satka town: *Pinus* forest with herbs: 1♂, 6 June 1984, leg. N. M. Pakhorukov; river bank with *Carex*: 1♀, 15 June 1984, leg. N. M. Pakhorukov.

*P. fuscomarginatus* (De Geer, 1778). Chelyabinsk region: Satka district: Satka town: *Pinus* forest: 1♀, 11 June 1986, leg. N. M. Pakhorukov.

*Thanatus arcticus* Thorell, 1872. Chelyabinsk region: Zlatoust town: summit Dalniy Taganay: shrub-lichen alpine tundra: 1 ad., 25 June 2022, leg. MYE.

*T. bungei* (Kulczyński, 1908). Republic of Bashkortostan: Beloretsk district: summit Iremel: rock river: 1♂, July 1986, leg. ABP.

*T. formicinus* (Clerck, 1757). Republic of Bashkortostan: Beloretsk district: summit Maliy Iremel: grass-moss alpine tundra: 1 ad., 20 June 2015, leg. MYE&AIE.

*T. striatus* C. L. Koch, 1845. Chelyabinsk region: Satka district: summit Bolshoy Nurgush: grass-moss alpine tundra: 1 ad., 18 August 2022, leg. MYE; Zlatoust town: summit Kruglitsa: moss-grass-shrub alpine tundra: 1 ad., 8 July 2023, leg. MYE&AIE.

*Tibellus maritimus* (Menge, 1875). Chelyabinsk region: Satka district: Sibirka village: faunistic record: 1♀, 16 June 1986.

*T. oblongus* (Walckenaer, 1802). Chelyabinsk region: Satka district: Sibirka village: grass meadow: 1♂, 14 June 1986; meadow

with *Oxalis*: 2♂, 16 June 1986; mixed forest with herbs: 1♀, 11 June 1986.

#### Family Pisauridae

*Dolomedes fimbriatus* (Clerck, 1757). Chelyabinsk region: Satka district: Satka town: river bank with *Carex*: 1♂, 1♀, 20 June 1984, leg. A. Danilova; Republic of Bashkortostan: Uchaly District: upstream of the Tyulyuk river: river bank: 1♂, 21 June 1987, leg. ABP.

#### Family Salticidae

*Attulus terebratus* (Clerck, 1757). Chelyabinsk region: Verkhniy Ufaley District: Dautovo village: inside buildings: 1♀, 30 June 2001, leg. AIE.

*Chalcoscirtus alpicola* (L. Koch, 1876). Republic of Bashkortostan: Beloretsk district: summit Bolshoy Iremel: grass-moss alpine tundra: 1 ad., 21 June 2015, leg. MYE&AIE; summit Maliy Iremel: mountain tundra: 4♀, 6 June 1981, leg. A. Malozemov.

*Evarcha falcata* (Clerck, 1757). Republic of Bashkortostan: Beloretsk district: Tygynskoe bog: bog: 1♂, 1♀, 1 September 1993, leg. A. V. Alikin; summit Iremel: faunistic record: 1♂, 12 June 1987, leg. ABP; Katav-Ivanovsk district: Karagayka river near Tyubuk village: *Pinus* forest edge: 1♀, 3 September 1993, leg. V. E. Efimik.

*Phlegra fasciata* (Hahn, 1826). Chelyabinsk region: Zlatoust town: summit Kruglitsa: moss-grass-shrub alpine tundra: 1 ad., 20 June 2016, leg. MYE&AIE; 2 ad., 8 July 2023, leg. MYE&AIE.

*Pseudeuophrys erratica* (Walckenaer, 1825). Chelyabinsk region: Satka district: Mountain ridge Bolshaya Suka: alpine barrens: 1♂, 23 June 1984, leg. V. E. Efimik.

#### Family Sparassidae

*Micrommata virescens* (Clerck, 1757). Chelyabinsk region: Satka district: Satka town: mixed forest with herbs: 2♂, 1♀, 29 June 1984, leg. ABP.

#### Family Tetragnathidae

*Metellina mengei* (Blackwall, 1869). Chelyabinsk region: Satka district: Satka town:

*Picea-Betula-Populus* forest: 1♀, 1 July 1984; edge of steppe forest: 1♂, 7 July 1984; herb meadow: 2♀, 3 July 1984; mixed forest with herbs: 1♀, 10 June 1984; river bank with *Carex*: 2♀, 22 June 1984; Sibirka village: faunistic record: 1♀, 1984; forest: 4♂, 6♀, 10 June 1984, leg. N. M. Pakhorukov; herb meadow: 3♂, 10 July 1984.

*Pachygnatha clercki* Sundevall, 1823. Chelyabinsk region: Satka district: Zyuratkul lake: lake shore with *Carex*: 1♂, 19 June 1984, leg. N. M. Pakhorukov; 1♂, 19 June 1986.

*P. listeri* Sundeval, 1830. Chelyabinsk region: Katav-Ivanovsk district: Karagayka river near Tyubuk village: *Pinus* forest edge: 1♀, 3 September 1993, leg. V. E. Efimik; Satka district: Satka town: forest cutting with herbs: 1♀, 18 June 1984, leg. N. M. Pakhorukov; herb meadow: 1♀, 10 June 1984, leg. N. M. Pakhorukov.

*Tetragnatha dearmata* Thorell, 1873. Chelyabinsk region: Satka district: Sibirka village: river bank: 3♀, 23 April 1984, leg. S. L. Eshyunin; Verkhniy Ufaley District: Dautovo village: inside buildings: 1♂, 2♀, 30 June 2001, leg. AIE.

*T. extensa* (L.). Chelyabinsk region: Satka district: Zyuratkul lake: lake shore with *Carex*: 5♂, 3♀, 18 July 1984, leg. V. E. Efimik; Republic of Bashkortostan: Salavat District: Yangan-Tau: faunistic record: 3♂, 1♀, 12 July 2009, leg. T. K. Tuneva.

*T. nigrita* Lendl, 1886. Republic of Bashkortostan: Salavat District: Yangan-Tau: faunistic record: 1♂, 1♀, 12 July 2009, leg. T. K. Tuneva.

*T. pinicola* L. Koch, 1870. Chelyabinsk region: Satka district: Satka town: *Picea-Betula* forest with herbs: 1♂, 19 June 1984, leg. V. E. Efimik; Zyuratkul lake: waterlogged herb meadow: 1♀, 19 June 1984, leg. V. E. Efimik.

#### Family Theridiidae

*Crustulina sticta* (O. Pickard-Cambridge, 1861). Chelyabinsk region: Zlatoust town: summit Kruglitsa: moss-grass-shrub alpine tundra: 1 ad., 20 June 2016, leg. MYE&AIE; 1 ad., 8 July 2023, leg. MYE&AIE.

*Cryptachaea riparia* (Blackwall, 1834). Chelyabinsk region: Verkhniy Ufaley District: Dautovo village: inside buildings: 1♂, 30 June 2001, leg. AIE.

*Neottiura bimaculata* (Linnaeus, 1767). Chelyabinsk region: Verkhniy Ufaley District: Dautovo village: *Betula* forest: 1♀, 21 August 2001, leg. AIE; inside buildings: 1♂, 30 June 2001, leg. AIE.

*Steatoda albomaculata* (De Geer, 1778). Chelyabinsk region: Zlatoust town: summit Dalniy Taganay: shrub-lichen alpine tundra: 1 ad., 9 July 2023, leg. MYE&AIE.

*S. bipunctata* (L.). Chelyabinsk region: Verkhniy Ufaley District: Dautovo village: *Betula* forest: 4♀, 18 June 2001, leg. AIE; inside buildings: 2♂, 30 June 2001, leg. AIE; 1♀, 25 August 2001, leg. AIE.

#### Family Thomisidae

##### *Coriarachne depressa* (C. L. Koch, 1837)

Chelyabinsk region: Satka district: Sibirka village: *Pinus* forest with herbs: 1 juv., 6 June 1984, leg. ABP.

*Ozyptila orientalis basegica* Esyunin, 1992. Chelyabinsk region: Katav-Ivanovsk district: summit Kruglaya (Malaya Poperechnaya): grass-moss alpine tundra: 1♂, 3♀, 4 juv., 9 August 2023, leg. MYE; treeline ecotone (middle level): 1♀, 10 August 2023, leg. MYE; Zlatoust town: summit Dalniy Taganay: shrub-lichen alpine tundra: 4 ad., 14 July 2015, leg. AIE; 12 ad., 19 June 2016, leg. MYE&AIE; 5 ad., 25 June 2022, leg. MYE; 11 ad., 9 July 2023, leg. MYE&AIE; tundra-like shrub communities: 3 ad., 14 July 2015, leg. AIE; 3 ad., 19 June 2016, leg. MYE&AIE; summit Kruglitsa: moss-grass-shrub alpine tundra: 16 ad., 20 June 2016, leg. MYE&AIE; 34 ad., 8 July 2023, leg. MYE&AIE.

*Psammittis bonneti* (Denis, 1938). Chelyabinsk region: Katav-Ivanovsk district: summit Kruglaya (Malaya Poperechnaya): grass-moss alpine tundra: 1♀, 1 juv., 9 August 2023, leg. MYE; Satka district: summit Bolshoy Nurgush: grass-moss alpine tundra: 6 ad., 6 July 2015, leg. MYE&AIE; 5 ad., 18 August 2022, leg. MYE; Zlatoust town: summit Dalniy Taganay: shrub-lichen

alpine tundra: 2 ad., 25 June 2022, leg. MYE; 2 ad., 9 July 2023, leg. MYE&AIE; summit Kruglitsa: moss-grass-shrub alpine tundra: 9 ad., 20 June 2016, leg. MYE&AIE; 12 ad., 8 July 2023, leg. MYE&AIE; Republic of Bashkortostan: Beloretsk district: summit Maliy Iremel: grass-moss alpine tundra: 3 ad., 19 June 2008, leg. MYE; 3 ad., 20 June 2015, leg. MYE&AIE.

*Xysticus acerbus* Thorell, 1872. Republic of Bashkortostan: Beloretsk district: summit Iremel: faunistic record: 1♀, 26 July 1987, leg. A. Malozemov.

*X. audax* (Schrank, 1803). Chelyabinsk region: Satka district: Satka town: grass meadow: 1♂, 4♀, 22 June 1984, leg. N. M. Pakhorukov; herb meadow: 1♂, 20 June 1984, leg. N. M. Pakhorukov; herb meadow on forest cutting: 1♀, 17 June 1984, leg. N. M. Pakhorukov; meadow: 1♂, 16 June 1984, leg. N. M. Pakhorukov; 1♀, 21 June 1984, leg. N. M. Pakhorukov; river bank with *Carex*: 2♀, 17 June 1984, leg. N. M. Pakhorukov; upland meadow: 1♀, 20 June 1984, leg. N. M. Pakhorukov; Zlatoust town: summit Dalniy Taganay: shrub-lichen alpine tundra: 1 ad., 9 July 2023, leg. MYE&AIE; Republic of Bashkortostan: Beloretsk district: summit Bolshoy Iremel: faunistic record: 1♂, 30 May 1985, leg. V. N. Olshwang; summit Maliy Iremel: *Betula* forest: 1♂, 30 July 1985, leg. V. N. Olshwang; faunistic record: 2♀, 2 July 1985, leg. V. N. Olshwang; grass-moss alpine tundra: 1 ad., 19 June 2008, leg. MYE; meadow: 2♂, 24 May 1986, leg. V. N. Olshwang.

*X. austrosibiricus* Logunov & Marusik, 1998. Chelyabinsk region: Katav-Ivanovsk district: summit Kruglaya (Malaya Poperechnaya): grass-moss alpine tundra: 1♀, 9 August 2023, leg. MYE; treeline ecotone (upper level): 1♂, 1♀, 10 August 2023, leg. MYE; Satka district: summit Bolshoy Nurgush: grass-moss alpine tundra: 6 ad., 6 July 2015, leg. MYE&AIE; Zlatoust town: summit Dalniy Taganay: shrub-lichen alpine tundra: 1 ad., 8 July 2008, leg. MYE; summit Kruglitsa: moss-grass-shrub alpine tundra: 17 ad., 20 June 2016, leg. MYE&AIE; Republic of Bashkortostan: Beloretsk dis-

trict: summit Bolshoy Iremel: grass-moss alpine tundra: 47 ad., 20 June 2008, leg. MYE; 96 ad., 21 June 2015, leg. MYE&AIE; summit Iremel: *Juniperus* sparse forest: 1♀, 27 May 1982, leg. ABP; 1♀, 26 July 1985, leg. ABP; mountain tundra: 2♀, 21 July 1985, leg. ABP; 12♀, 30 July 1985, leg. ABP; summit Maliy Iremel: faunistic record: 4♂, 4 July 1985, leg. ABP; grass-moss alpine tundra: 65 ad., 19 June 2008, leg. MYE; 147 ad., 20 June 2015, leg. MYE&AIE.

*X. bifasciatus* C. L. Koch, 1837. Chelyabinsk region: Zlatoust town: summit Dalniy Taganay: shrub-lichen alpine tundra: 1 ad., 25 June 2022, leg. MYE; Republic of Bashkortostan: Salavat District: Yangan-Tau: faunistic record: 1♀, 12 July 2009, leg. T. K. Tuneva.

*X. luctuosus* (Blackwall, 1836). Chelyabinsk region: Satka district: Sibirka village: *Pinus* forest with herbs: 7♂, 3♀, 24 June 1984, leg. ABP; Zlatoust town: summit Dalniy Taganay: shrub-lichen alpine tundra: 7 ad., 19 June 2016, leg. MYE&AIE; 10 ad., 25 June 2022, leg. MYE; 2 ad., 9 July 2023, leg. MYE&AIE; tundra-like shrub communities: 4 ad., 19 June 2016, leg. MYE&AIE; 4 ad., 25 June 2022, leg. MYE; 1 ad., 9 July 2023, leg. MYE&AIE.

*X. obscurus* Collett, 1877. Chelyabinsk region: Satka district: Satka town: *Picea* forest with grasses: 1♂, 24 June 1984, leg. ABP.

*X. slovacus* Svaton, Pekar & Pridavka, 2000. Chelyabinsk region: Satka district: Satka town: *Picea* forest with grasses: 1♀, 24 June 1984, leg. N. M. Pakhorukov; grass meadow: 1♂, 18 June 1984, leg. N. M. Pakhorukov; herb meadow on slope with southern exposition: 14♂, 13♀, 1 July 1984, leg. N. M. Pakhorukov; meadow: 1♀, 21 June 1984, leg. N. M. Pakhorukov; Sibirka village: herb meadow: 1♂, 8♀, 20 June 1984, leg. N. M. Pakhorukov; Republic of Bashkortostan: Beloretsk district: summit Maliy Iremel: faunistic record: 1♂, 3♀, 2 July 1985, leg. ABP.

*X. ulmi* (Hahn, 1831). Republic of Bashkortostan: Beloretsk district: summit Bolshoy Iremel: grass-moss alpine tundra: 1 ad., 21 June 2015, leg. MYE&AIE.

*X. viduus* Kulczyński, 1898. Republic of Bashkortostan: Beloretsk district: summit Iremel: mountain meadow: 1♂, 20 July 1984, leg. ABP; mountain tundra with stones: 1♂, 20 July 1987, leg. ABP; summit Maliy Iremel: faunistic record: 1♂, 04 July 1985, leg. ABP; 2♂, 06 August 1985, leg. ABP; rock river: 2♂, 20 July 1987, leg. ABP.

#### Order Opiliones Family Phalangiidae

*Homolophus nordensheldi* (C. L. Koch, 1879). Chelyabinsk region: Katav-Ivanovsk district: summit Kruglaya (Malaya Poperechnaya): grass-moss alpine tundra: 1♂, 1♀, 9 August 2023, leg. MYE; Satka district: summit Bolshoy Nurgush: grass-moss alpine tundra: 5 juv., 6 July 2015, leg. MYE&AIE; 4 ad., 18 August 2022, leg. MYE; Zlatoust town: summit Dalniy Taganay: shrub-lichen alpine tundra: 3 juv., 8 July 2008, leg. MYE; 8 juv., 14 July 2015, leg. AIE; 5 juv., 19 June 2016, leg. MYE&AIE; 43 juv., 9 July 2023, leg. MYE&AIE; summit Kruglitsa: moss-grass-shrub alpine tundra: 28 juv., 20 June 2016, leg. MYE&AIE; 27 juv., 8 July 2023, leg. MYE&AIE; Republic of Bashkortostan: Beloretsk district: summit Bolshoy Shelom: grass-moss alpine tundra: 22 ad., 13 July 2024, leg. MYE.

*Lacinius ephippiatus* (C. L. Koch, 1835). Chelyabinsk region: Katav-Ivanovsk district: summit Kruglaya (Malaya Poperechnaya): treeline ecotone (lower level): 1♀, 1♂, 10 August 2023, leg. MYE; treeline ecotone (middle level): 1♀, 10 August 2023, leg. MYE.

*Mitopus morio* (Fabricius, 1779). Chelyabinsk region: Katav-Ivanovsk district: summit Kruglaya (Malaya Poperechnaya): treeline ecotone (lower level): 4♂, 1♀, 10 August 2023, leg. MYE; treeline ecotone (middle level): 11♂, 2♀, 10 August 2023, leg. MYE; Satka district: summit Bolshoy Nurgush: grass-moss alpine tundra: 1 ad., 18 August 2022, leg. MYE; Zlatoust town: summit Dalniy Taganay: shrub-lichen alpine tundra: 3 ad., 8 July 2008, leg. MYE; 2 ad., 14 July 2015, leg. AIE; 28 ad., 19 June 2016, leg. MYE&AIE; summit Kruglitsa: moss-grass-shrub alpine tundra: 4 ad., 20 June 2016, leg. MYE&AIE; 3 ad., 8 July 2023,

leg. MYE&AIE; Republic of Bashkortostan: Beloretsk district: summit Bolshoy Iremel: grass-moss alpine tundra: 2 ad., 20 June 2008, leg. MYE; 18 ad., 21 June 2015,

leg. MYE&AIE; summit Maliy Iremel: grass-moss alpine tundra: 12 ad., 19 June 2008, leg. MYE; 2 ad., 20 June 2015, leg. MYE&AIE.

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