

# New data on the spider fauna (Arachnida, Aranei) of the Altai Territory

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A checklist of 30 spider species recorded from the Tigirek State Nature Reserve (the Altai Territory) is provided, of which four species are recorded from the reserve for the first time and one is new to the Altai Mts. Also, the family Uloboridae was first recorded for the reserve.

## Introduction

The Tigirek State Nature Reserve is situated in the northwestern part of the Altai Mts. Its territory lies at the altitude ranging from 500 to 2000 m a.s.l. Most of the reserve relief is middle-mountain, with dome-shaped peaks.

Special studies of the reserve's spider fauna began relatively recently. The first annotated checklist of spiders of the Tigirek Reserve was published by Trilikauskas and included 132 species (Volynkin et al., 2011). Later, the number of species was increased to 153 thanks to a series of publications by Azarkina & Trilikauskas (2012, 2013a, b; Trilikauskas, 2014). The latest paper by Fomichev [2016] already contains information on 175 spider species recorded from the territory of the Tigirek Reserve. Nevertheless, the spider fauna of the reserve remains poorly inventoried.

## Methods

This paper is based on the spider material collected by the senior author, A.S. Slepnev and A.E. Naydenov in the period of 1-13 July, 2016. The spider species recorded from the Tigirek Reserve for the first time are marked with an asterisk (\*), and those that are new to the Altai Mts with two asterisks (\*\*). The studied material has been deposited in the collection of the Institute of Systematic and Ecology of Animals SB RAS, Novosibirsk, Russia (curator: G.N. Azarkina).

## Species List

Family **AGELENIDAE**

*Agelena labyrinthica* (Clerck, 1758)

MATERIAL. c. 3 km NW of Tigirek Vil., Mayak Mt. (51°10'N, 83°00'E), 700-750 m, 01.VII.2016 (Sidorov V.V.), 1♂.

DISTRIBUTION. Trans-Palaeartic nemoral range [Marusik et al., 2000].

Family **ARANEIDAE**

*Aculepeira ceropegia* (Walckenaer, 1802)

MATERIAL EXAMINED. c. 3 km NW of Tigirek Vil., Mayak Mt. (51°10'N, 83°00'E), 700-750 m, 01.VII.2016 (Sidorov V.V. & Slepnev A.S.), 6♀; Tigirek Mt. Range, Razrabotnaya Mt. (51°01'N,

83°01'E), 1800–1960 m, 13.VII.2016 (Sidorov V.V.), 3♀.

DISTRIBUTION. Euro-Siberian polyzonal range [WSC, 2019].

***Araniella displicata*** (Hentz, 1847)

MATERIAL EXAMINED. Vicinity of Tigirek Vil. (51°08'N, 83°02'E), 500 m, 01.VII.2016 (Sidorov V.V. & Naydenov A.E.), 3♂ 5♀; c. 3 km NW of Tigirek Vil., Mayak Mt. (51°10'N, 83°00'E), 700–750 m, 01.VII.2016 (Sidorov V.V.), 3♀; Tigirek Mt. Range, the upper reaches of Babii Klyuch River (51°02'N, 82°57'E), 1400–1500 m, 07–10.VII.16 (Sidorov V.V. & Slepnev A.S.), 1♀.

DISTRIBUTION. Circum-Holarctic boreo-nemoral range [Marusik et al., 2000].

***Larinioides cornutus*** (Clerck, 1758)

MATERIAL EXAMINED. c. 3 km NW of Tigirek Vil., Mayak Mt. (51°10'N, 83°00'E), 700–750 m, 01.VII.2016 (Sidorov V.V.), 1♂.

DISTRIBUTION. Circum-Holarctic polyzonal range [Marusik et al., 2000].

***Larinioides patagiatus*** (Clerck, 1758)

MATERIAL EXAMINED. c. 3 km NW of Tigirek Vil., Mayak Mt. (51°10'N, 83°00'E), 700–750 m, 01.VII.2016 (Sidorov V.V.), 1♀.

DISTRIBUTION. Circum-Holarctic polyzonal range [Marusik et al., 2000].

***Mangora acalypha*** (Walckenaer, 1802)

MATERIAL EXAMINED. c. 3 km NW of Tigirek Vil., Mayak Mt. (51°10'N, 83°00'E), 700–750 m, 01.VII.2016 (Sidorov V.V.), 1♀.

DISTRIBUTION. European-Altai range [Azarkina & Trilikauskas, 2012].

***Singa nitidula*** C.L. Koch, 1844

MATERIAL EXAMINED. Vicinity of Tigirek Vil. (51°08'N, 83°02'E), 500 m, 01.VII.2016 (Sidorov V.V. & Naydenov A.E.), 1♀.

DISTRIBUTION. Trans-Palaearctic (?) boreo-nemoral range [Marusik et al., 2000].

Family **CHEIRACANTHIIDAE**

***Cheiracanthium erraticum***

MATERIAL EXAMINED. Tigirek Mt. Range, the upper reaches of Babii Klyuch River (51°02'N, 82°57'E), 1400–1500 m, 07–10.VII.16 (Sidorov V.V. & Slepnev A.S.), 1♀.

DISTRIBUTION. Trans-Palaearctic polyzonal range [WSC, 2019].

\****Cheiracanthium mpennyi*** O. Pickard-Cambridge, 1873

MATERIAL EXAMINED. Tigirek Mt. Range, the upper reaches of Babii Klyuch River (51°02'N, 82°57'E), 1400–1500 m, 07–10.VII.16 (Sidorov V.V. & Slepnev A.S.), 1♂.

DISTRIBUTION. Euro-Siberian polyzonal range [WSC, 2019].

\****Cheiracanthium punctorium*** (Villers, 1789)

MATERIAL EXAMINED. c. 3 km NW of Tigirek Vil., Mayak Mt. (51°10'N, 83°00'E), 700–750 m, 01.VII.2016 (Sidorov V.V.), 1♂.

DISTRIBUTION. West Palaearctic temperate range [WSC, 2019].

Family **CLUBIONIDAE**

***Clubiona pseudosaxatilis*** Mikhailov, 1992

MATERIAL EXAMINED. Tigirek Mt. Range, the upper reaches of Babii Klyuch River (51°02'N, 82°57'E), 1400–1500 m, 07–10.VII.16 (Sidorov V.V. & Slepencov A.S.), 10♀; Tigirek Mt. Range, Razrabotnaya Mt. (51°01'N, 83°01'E), 1800–1960 m, 13.VII.2016 (Slepencov A.S.), 7♀.

DISTRIBUTION. West Mongolian range [Mikhailov, 1992].

Family **GNAPHOSIDAE**

***Drassodes cupreus*** (Blackwall, 1834)

MATERIAL EXAMINED. Tigirek Mt. Range, the upper reaches of Babii Klyuch River (51°02'N, 82°57'E), 1400–1500 m, 07–10.VII.16 (Sidorov V.V. & Slepencov A.S.), 1♀.

DISTRIBUTION. Trans-Palaearctic boreo-nemoral range [Marusik et al., 2000].

***Gnaphosa banini*** Marusik et Koponen, 2001

MATERIAL EXAMINED. Tigirek Mt. Range, Razrabotnaya Mt. (51°01'N, 83°01'E), 1800–1960 m, 13.VII.2016 (Sidorov V.V.), 5♀.

DISTRIBUTION. Altai-Mongolian mountain range [Azarkina & Trilikauskas, 2013a].

***Parasyrisca volynkini*** (Fomichev, 2016)

MATERIAL EXAMINED. Tigirek Mt. Range, Razrabotnaya Mt. (51°01'N, 83°01'E), 1800–1960 m, 13.VII.2016 (Sidorov V.V.), 2♀, 2♀ subad.

DISTRIBUTION. The type locality only [Fomichev, 2016; Fomichev, Marusik & Sidorov, 2018].

Family **LYCOSIDAE**

***Acantholycosa cf. altaiensis*** Marusik, Azarkina et Koponen, 2004

MATERIAL EXAMINED. Tigirek Mt. Range, the upper reaches of Babii Klyuch River (51°02'N, 82°57'E), 1400–1500 m, 07–10.VII.16 (Sidorov V.V. & Slepencov A.S.), 2♂, 1♀; Tigirek Mt. Range, Razrabotnaya Mt. (51°01'N, 83°01'E), 1800–1960 m, 13.VII.2016 (Slepencov A.S.), 2♂, 1♀.

DISTRIBUTION. Endemic of North-Western Altai [Marusik et al., 2004].

COMMENTS. Collected specimens resembles *Acantholycosa altaiensis*, but slightly different in palpal characters. They most likely belong to a new species and needs further attention, which is beyond scope of this paper.

***Alopecosa aculeata*** (Clerck, 1758)

MATERIAL EXAMINED. Tigirek Mt. Range, the upper reaches of Babii Klyuch River (51°02'N, 82°57'E), 1400–1500 m, 07–10.VII.16 (Sidorov V.V. & Slepencov A.S.), 4♀.

DISTRIBUTION. Circum-Holarctic polyzonal range [Marusik et al., 2000].

***Pardosa agrestis* / *plumipes***

MATERIAL EXAMINED. Vicinity of Tigirek Vil. (51°08'N, 83°02'E), 500 m, 01.VII.2016 (Sidorov V.V. & Naydenov A.E.), 2♀.

DISTRIBUTION. West Palaerctic – West Siberian nemoral range [Marusik et al., 1996].

COMMENTS. Males of two species, *Pardosa agrestis* (Westring, 1861) and *P. plumipes* (Thorell, 1875), can be easily distinguished by formation of first legs; males of *P. plumipes* have long and dense hairs on tibiae, metatarsi and tarsi of first legs, while in *P. agrestis* this character is absent. Females of these two species are hardly distinguishable from each other. The only way to identify females is collect it with males (Azarkina, personal data).

***Pardosa lugubris*** (Walckenaer, 1802)

MATERIAL EXAMINED. Vicinity of Tigirek Vil. (51°08'N, 83°02'E), 500 m, 01.VII.2016 (Sidorov V.V. & Naydenov A.E.), 1♀; Tigirek Mt. Range, the upper reaches of Babii Klyuch River (51°02'N, 82°57'E), 1400–1500 m, 07–10.VII.16 (Sidorov V.V. & Slepencov A.S.), 1♀.

DISTRIBUTION. West Palaearctic temperate range [WSC, 2019].

Family **PHILODROMIDAE*****Philodromus cespitum*** (Walckenaer, 1802)

MATERIAL EXAMINED. Vicinity of Tigirek Vil. (51°08'N, 83°02'E), 500 m, 01.VII.2016 (Sidorov V.V. & Naydenov A.E.), 1♂, 2♀; c. 4 km NW of Tigirek Vil., (51°09'N, 82°59'E), 600–700 m, 03.VII.2016 (Sidorov V.V.), 1♂.

DISTRIBUTION. Circum-Holarctic polyzonal range [Marusik et al., 2000].

***Philodromus emarginatus*** (Schrank, 1803)

MATERIAL EXAMINED. Vicinity of Tigirek Vil. (51°08'N, 83°02'E), 500 m, 01.VII.2016 (Sidorov V.V. & Naydenov A.E.), 1♂.

DISTRIBUTION. Trans-Palaearctic nemoral range [Marusik et al., 2000].

Family **SALTICIDAE*****Calositticus floricola*** (C. L. Koch, 1837)

MATERIAL EXAMINED. Tigirek Mt. Range, the upper reaches of Babii Klyuch River (51°02'N, 82°57'E), 1400–1500 m, 07–10.VII.16 (Sidorov V.V. & Slepencov A.S.), 6♀.

DISTRIBUTION. Trans-Palaearctic boreo-nemoral range [Marusik et al., 2000].

Family **SPARASSIDAE**

***Micrommata virescens*** (Clerk, 1757)

MATERIAL EXAMINED. Vicinity of Tigirek Vil. (51°08'N, 83°02'E), 500 m, 01.VII.2016 (Sidorov V.V. & Naydenov A.E.), 1♂.

DISTRIBUTION. Trans-Palearctic nemoral range [Marusik et al., 2000].

Family **THERIDIIDAE**

***Parasteatoda tepidariorum*** (C.L. Koch, 1841)

MATERIAL EXAMINED. c. 4 km NW of Tigirek Vil., (51°09'N, 82°59'E), 600–700 m, 03.VII.2016 (Sidorov V.V.), 1♀.

DISTRIBUTION. Cosmopolitan range [Marusik et al., 2000].

***Phylloneta impressa*** (L. Koch, 1881)

MATERIAL EXAMINED. c. 3 km NW of Tigirek Vil., Mayak Mt. (51°10'N, 83°00'E), 700–750 m, 01.VII.2016 (Sidorov V.V.), 2♀.

DISTRIBUTION. Trans-Palearctic – North-West Nearctic polyzonal range [Marusik et al., 2000].

Family **THOMISIDAE**

***Lysiteles maius*** Ono, 1979

MATERIAL EXAMINED. Tigirek Mt. Range, Razrabotnaya Mt. (51°01'N, 83°01'E), 1800–1960 m, 13.VII.2016 (Sidorov V.V.), 1♂.

DISTRIBUTION. Altaian-Nepalo-Manchurian disjunctive nemoral range [Azarkina & Trilikauskas, 2013b].

**\*\**Xysticus lanio*** C. L. Koch, 1835 (Fig. 1)

MATERIAL EXAMINED. Tigirek Mt. Range, Razrabotnaya Mt. (51°01'N, 83°01'E), 1800–1960 m, 13.VII.2016 (Slepenkov A.S.), 1♂.

DISTRIBUTION. West Palaearctic temperate range [WSC, 2019].

***Xysticus ulmi*** (Hahn, 1831)

MATERIAL EXAMINED. Vicinity of Tigirek Vil. (51°08'N, 83°02'E), 500 m, 01.VII.2016 (Sidorov V.V. & Naydenov A.E.), 1♀.

DISTRIBUTION. West-Central Palaearctic temperate range [Esyunin et al., 2013].

***Xysticus obscurus*** (Collett, 1877)

MATERIAL EXAMINED. Tigirek Mt. Range, the upper reaches of Babii Klyuch River (51°02'N, 82°57'E), 1400–1500 m, 07–10.VII.16 (Sidorov V.V. & Slepenkov A.S.), 1♀.

DISTRIBUTION. Circum-Holarctic boreo-alpine range [Marusik et al., 2000].

***Psammitis bonneti*** (Denis, 1938)



MATERIAL EXAMINED. Tigirek Mt. Range, the upper reaches of Babii Klyuch River (51°02'N, 82°57'E), 1400–1500 m, 07–10.VII.16 (Sidorov V.V. & Slepnev A.S.), 2♀.

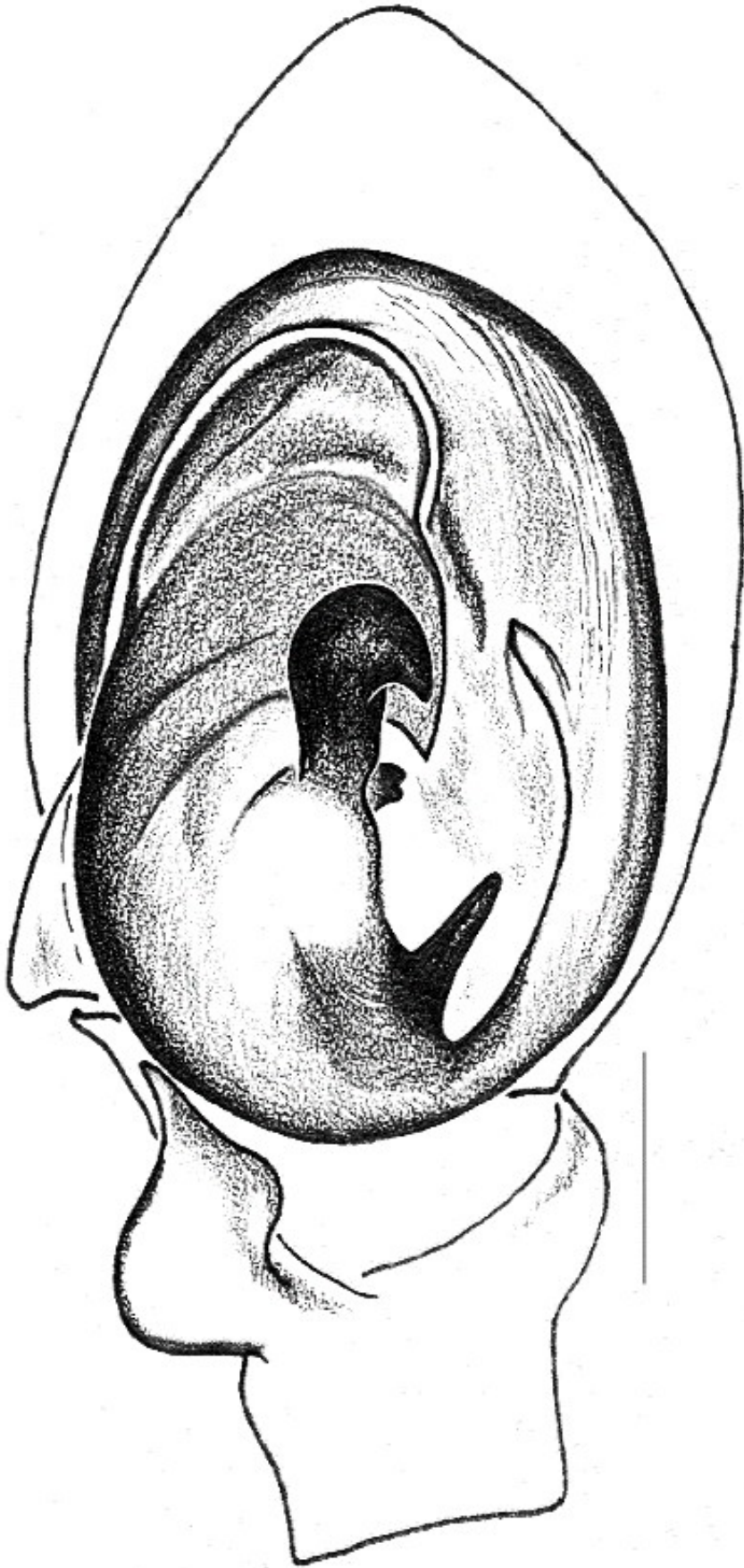
DISTRIBUTION. European-Baikalian disjunctive boreoalpine range [Marusik et al., 2000].

Family **ULOBORIDAE**

\**Uloborus walckenaerius* Latreille, 1806

MATERIAL EXAMINED. c. 3 km NW of Tigirek Vil., Mayak Mt. (51°10'N, 83°00'E), 700–750 m, 01.VII.2016 (Sidorov V.V.), 1♀.

DISTRIBUTION. Trans-Palearctic nemoral range [Marusik et al., 2000].



**Figure 1. Fig. 1.** Male palp of *Xysticus lanio* C. L. Koch, 1835 (ventral view). Scale bar - 0.1 mm.



## Results

The spider fauna of the Tigirek State Nature Reserve is complemented by three additional species and now accounts for 180 species in 98 genera and 23 families. Even so, the araneofauna of the reserve seems to consist of more than 240 species (Fomichev, 2016).

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