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New data on spider fauna (Aranei) of the Russian Altai, part III: families Mimetidae, Miturgidae, Oxyopidae, Philodromidae, Pholcidae, Pisauridae, Salticidae, Sparassidae, Tetragnathidae, Theridiidae, Thomisidae, Titanoecidae, Uloboridae and Zoridae

Новые данные о фауне пауков (Aranei) российского Алтая, часть III: семейства Mimetidae, Miturgidae, Oxyopidae, Philodromidae, Pholcidae, Pisauridae, Salticidae, Sparassidae, Tetragnathidae, Theridiidae, Thomisidae, Titanoecidae, Uloboridae и Zoridae

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Key words: the Altai, fauna, check-list, new records.
Ключевые слова: Алтай, фауна, чек-лист, новые находки.

Abstract. An annotated check-list of 105 spider species of 50 genera and 14 families, Mimetidae, Miturgidae, Oxyopidae, Philodromidae, Pholcidae, Pisauridae, Salticidae, Sparassidae, Tetragnathidae, Theridiidae, Thomisidae, Titanoecidae, Uloboridae and Zoridae, from Altaiskii Krai and Republic of Altai is given. 14 species are firstly recorded from the Altai. One species with unknown taxonomical status is figured: *Philodromus* cf. *margaritatus* (Clerck, 1757) (female).

Резюме. В III части статьи приводится аннотированный список пауков Алтайского края и Республики Алтай, насчитывающий 105 видов из 50 родов, относящихся к 14 семействам: Mimetidae, Miturgidae, Oxyopidae, Philodromidae, Pholcidae, Pisauridae, Salticidae, Sparassidae, Tetragnathidae, Theridiidae, Thomisidae, Titanoecidae, Uloboridae и Zoridae. 14 видов впервые отмечены для Алтая. Приводятся рисунки для одного вида с неясным таксономическим статусом: *Philodromus* cf. *margaritatus* (Clerck, 1757) (самка).

Introduction

This paper presents third part of check-list of spiders of Altai, collected during last 14 years.

First and second parts include new data on spider fauna of 6 (Agelenidae, Araneidae, Clubionidae, Corinnidae, Dictynidae and Eresidae) and 5 (Gnaphosidae, Hahniidae, Linyphiidae, Liocranidae and Lycosidae) families, respectively. A total 2583 specimens belonging to 275 species, 118 genera and 25 families has been studied in all three parts of paper.

Material and methods

A total of 601 specimens belonging to 105 species of 50 genera and 14 families have been studied. The majority of listed species is deposited in the Institute of Systematics and Ecology of Animals (ISEA), some materials have been placed to the Zoological Museum of Moscow State University (ZMMU) and to the private collection of L.A. Trilikauskas (PCLA). The nomenclature used in this paper follows the World Spider Catalog by N.I. Platnick [2012]. Each listed species is provided with the information about its general distribution and habitat preferences. Each species recorded from the Altai for the first time is marked with an asterisk (*). Reference lists include only the works devoted to or containing the information on spiders of the Altai; for comprehensive reference lists for each species see Platnick [2012].

List of localities see in the first part [Azarkina, Trilikauskas, 2012], but this paper contained the mistaken data on the locality no.31, whereas those on the locality no.32 was missing. The corrected information on both localities is given below: **31** — *Altai Republic*: Ust'-Kan Distr., Korgon Mt. Range, left bank of Kumir [=Kairukun-Suu] River, c. 3 km from the mouth, 51°00' N, 84°18' E, 24.07.1998, G.A., A.Ch. leg., **32** — *Altai Territory*: Charyshskoe Distr., Korgon Mt. Range, right bank of Kumir [=Kairukun-Suu] River, 6–11 km of the mouth, c. 1200 m a.s.l., 50°56' N, 84°15' E, 26–30.07.1998, 6–10.08.1998, G.A., A.Ch. leg., 28.07.1999, N.L. Irisova, K.S. Shcherbinin leg.

Check-list of species

Mimetidae

Ero furcata (Villers, 1789)

Ero furcata: Levina, Mikhailov, 2004: 48.

Material. 1♀ (ISEA) — **4**; 1♀ (ISEA) — **47**.
Habitat. *Abies – Pinus sibirica* taiga, litter.
Distribution. Transpalaearctic boreo-nemoral range [Marusik, Koponen, 2002].

Miturgidae

Cheiracanthium erraticum (Walckenaer, 1802)

Cheiracanthium erraticum: Marusik et al., 1996: 40; Rychkov, 2003: 198.

Material. 2♀♀ (ZMMU) — **29b**.
Habitat. Unknown.
Distribution. Trans-Palearctic polyzonal range.

Cheiracanthium montanum L. Koch, 1878*

Material. 2♂♂ (ISEA) **[27b]**.
Habitat. Unknown.
Distribution. European – West Siberian (?) nemoral range.

Oxyopidae

Oxyopes licenti Schenkel, 1953

= *Oxyopes parvus* Paik, 1969: Marusik et al., 1996: 40–41; *Oxyopes licenti*: Volkovsky, 2006: 8.

Material. 1♀ (ZMMU) — **30e**.
Habitat. Unknown.
Distribution. East Palearctic polyzonal range [Marusik et al., 2000].

Oxyopes ramosus (Martin et Goeze, 1778)

Oxyopes ramosus: Ermolajew, 1937: 601; Marusik et al., 1996: 41; Rychkov, 2003: 199; Volkovsky, 2006: 8.

Material. 1♀ (ISEA) — **26c**; 2♀♀ (ZMMU) — **29b**.
Habitat. Valley meadow.
Distribution. European – West Siberian boreo-nemoral range.

Philodromidae

Philodromus cespitum (Walckenaer, 1802)

Philodromus cespitum: Marusik et al., 1996: 39; Azarkina, 1999: 75; Rychkov, 2003: 199; Levina, Mikhailov, 2004: 48; Volkovsky, Romanenko, 2010: 64; Trilikauskas, 2012: 230.

Material. 1♀ (ISEA) — **2a**; 2♀♀ (ISEA) — **5c**; 2♀♀ (ISEA) — **5f**; 1♀ (ISEA) — **6a**; 1♂ (ISEA) — **8**; 1♂ (ISEA) — **18**; 1♀ (ISEA), 1♀ (ISEA) — **28a**; 1♀ (ZMMU) — **29b**; 1♂ (ISEA) — **50b**.
Habitat. Pine forest, valley meadow, kitchen garden, lake shore.
Distribution. Circum-Holarctic polyzonal range [Marusik et al., 2000].

Philodromus emarginatus (Schranck, 1803)

Philodromus emarginatus: Marusik et al., 1996: 39; Maloletko et al., 2004: 173; Volkovsky, 2006: 8; Volkovsky, Romanenko, 2010: 64.

Material. 1♂, 1♀ (ISEA) — **25a**; 1♀ (ZMMU) — **29b**; 1♂ (PCLT) — **42**.
Habitat. In the 40, 46 localities unknown, in 21 localities were found near the building.
Distribution. Trans-Palearctic nemoral range [Marusik et al., 2000].

Philodromus fallax Sundevall, 1832

Philodromus fallax: Volkovsky, Romanenko, 2010: 64.

Material. 4♀♀ (ISEA) — **12**.
Habitat. Bank of dry salt lake.
Distribution. Trans-Palearctic boreo-nemoral range [Szita, Logunov, 2008].

Philodromus fuscomarginatus (De Gree, 1778)

Philodromus fuscomarginatus: Azarkina, 1999: 75; Maloletko et al., 2004: 173.

Material. 3♀♀ (ISEA) — **2a**; 1♀ (ISEA) — **6b**.
Habitat. Pine forest.
Distribution. Trans-Palearctic boreal range [Marusik et al., 2000].
Comments. Azarkina [1999] registered this species from the middle reaches of the Kumir River — **32**. The only female and juvenile were found. The female is also subadult and therefore this identification needs verification.

Philodromus histrio (Latreille, 1819)*

Material. 1♀ (ISEA) — **18**.
Habitat. Unknown.
Distribution. Circum-Holarctic boreo-nemoral range [Szita, Logunov, 2008].

Philodromus cf. *margaritatus* (Clerck, 1757)

Figs 1–2.

Philodromus margaritatus: Azarkina, 1999: 75; Volkovsky, Romanenko, 2010: 64.

Material. 3♀♀ (ISEA) — **28b**; 1♀ (ZMMU) — **31**.
Habitat. Unknown.
Distribution. Trans-Palearctic boreo-nemoral range [Marusik et al., 2000].
Comments. The studied females are similar to *P. margaritatus*, but differ in the shape of their copulatory openings (Fig. 1) and the receptaculae (Fig. 2). The status of this species can be resolved by the finding of the male.

Philodromus marusiki (Logunov, 1997)

Artanes marusiki Logunov, 1997: Azarkina, 1999: 75.

Material. 1♂ (ZMMU) — **20;** 1♀ (ISEA) — **26**; 2♀♀ (ZMMU) — **29b**; 1♀ (ZMMU) — **31**; 1♀ (ZMMU) — **32**.
Habitat. Rocks.
Distribution. Mongolian range [Marusik et al., 2000].

Philodromus poecilus (Thorell, 1872)

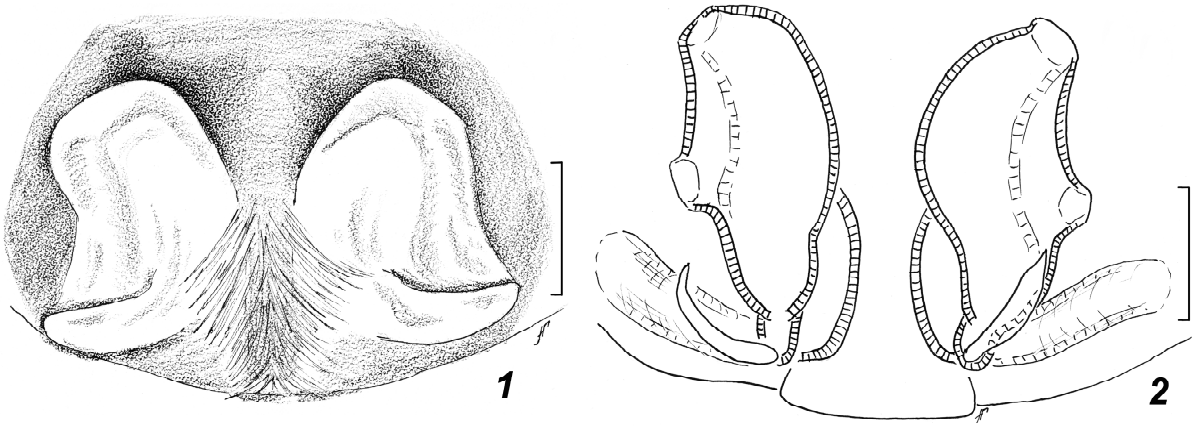
Philodromus poecilus: Marusik et al., 1996: 39.

Material. 3♀♀ (ISEA) — **2b**; 4♀♀ (ISEA) — **5c**; 1♀ (ISEA) — **5e**; 1♀ (ISEA) — **11b**.
Habitat. Valley forest, dry pine forest.
Distribution. Trans-Palearctic (?) boreo-nemoral range [Marusik et al., 2000].

Philodromus rufus Walckenaer, 1826

Philodromus rufus: Marusik et al., 1996: 39; Levina, Mikhailov, 2004: 48; Trilikauskas, 2012: 230.

Material. 1♀ (ISEA) — **25a**.
Habitat. Unknown.
Distribution. Circum-Holarctic boreo-nemoral range [Marusik et al., 2000].



Figs 1–2. *Philodromus* cf. *margaritatus*, female: 1 — epigyne, ventral view; 2 — spermathecae. Scale bars 0.1 mm.
Рис. 1–2. *Philodromus* cf. *margaritatus*, самка: 1 — эпигина, вентрально; 2 — сперматека. Масштабные линейки 0,1 мм.

Tibellus maritimus (Menge, 1875)

Tibellus maritimus: Efimik, 1999: 115.

Material. 1♀ (ISEA) — **5e**; 1♀ (ISEA) — **6b**; 2♀♀ (ISEA) — **28a**; 2♂♂, 2♀♀ (ISEA) — **28b**.
Habitat. Mountain ridge.
Distribution. Circum-Holarctic polyzonal [Marusik et al., 2000].

Tibellus oblongus (Walckenaer, 1802)

Tibellus oblongus: Azarkina, 1999: 75; Rychkov, 2003: 199; Levina, Mikhailov, 2004: 49; Maloletko et al., 2004: 173.

Material. 1♂ (ISEA) — **2b**; 1♂ (ISEA) — **19**; 1♀ (ISEA) — **18**; 1♂ (ISEA) — **17**; 1♀ (ISEA) — **26c**; 1♂, 4♀♀ (ZMMU) — **29b**; 1♂, 2♀♀ (ZMMU) — **32**; 1♂ (ISEA) — **33**.
Habitat. Steppe slope and valley meadow, valley forest.
Distribution. Circum-Holarctic boreo-nemoral range [Marusik et al., 2000].

Thanatus arcticus Thorell, 1872

Thanatus arcticus: Marusik, Logunov, 2009: 151.

Material. 7♂♂, 1♀ (ISEA) — **30b**; 4♂♂, 2♀♀ (ISEA) — **54**; 1♀ (ISEA) — **56b**; 4♂♂, 6♀♀ (ISEA) — **57a**; 1♂ (ISEA) — **57b**.
Habitat. Goltsy.
Distribution. Circum-Holarctic polyzonal (?) range [Marusik et al., 2000].

Thanatus coloradensis Keyserling, 1880

Thanatus coloradensis: Logunov, 1996: 152; Marusik et al., 1996: 40; Levina, Mikhailov, 2004: 48; Marusik, Logunov, 2009: 151.

Material. 3♀♀ (ISEA) — **56b**; 1♂, 3♀♀ (ISEA) — **57a**.
Habitat. Unknnown.
Distribution. Holarctic disjunctive boreo-montano-alpine range [Marusik et al., 2000].

Thanatus mikhailovi Logunov, 1996

Thanatus mikhailovi Logunov, 1996: 190.

Material. 1♂, 1♀ (ISEA) — **12**.
Habitat. Bank of dry salt lake.
Distribution. Southern steppic areas of Western Siberia [Logunov, 1996].

Thanatus sabulosus (Menge, 1875)*

Material. 1♀ (ISEA) — **6d**.
Habitat. Pine forest.
Distribution. European-South-West Siberian range [Logunov, 1996].

Thanatus striatus C.L. Koch, 1845

Thanatus striatus: Logunov, 1996: 192; Marusik et al., 1996: 40; Azarkina, 1999: 75; Levina, Mikhailov, 2004: 48.

Material. 1♀ (ISEA) — **57a**.
Habitat. Unknown.
Distribution. Circum-Holarctic polyzonal range [Marusik et al., 2000].

Pholcidae

Pholcus phalangioides (Fuesslin, 1775)

Pholcus cf. *phalangioides*: Levina, Mikhailov, 2004: 49; *Pholcus phalangioides*: Rychkov, 2003: 198.

Material. 1♂, 2♀♀ (ISEA) — **5f**; 1♀ (ISEA) — **42**.
Habitat. Buildings.
Distribution. Cosmopolitan [Platnick, 2012].

Pisauridae

Dolomedes fimbriatus (Clerck, 1758)

Dolomedes fimbriatus: Trilikauskas, 2012: 230.

Material. 1♀ (ISEA) — **6c**.
Habitat. Unknown.
Distribution. West-Palaearctic boreo-nemoral range.

Pisaura mirabilis (Clerck, 1758)

Pisaura mirabilis: Marusik et al., 1996: 42; Rychkov, 2003: 199.

Material. 1♂ (ISEA) — **5e**; 1♀ (ISEA) — **27**; 1♂ (ISEA) — **28b**; 1♀ (ZMMU) — **32**.
Habitat. Unknown.
Distribution. European – West Siberian [Marusik et al., 1996] boreo-nemoral range.

Salticidae

Aelurillus v-insignitus (Clerck, 1757)

Aelurillus v-insignitus: Logunov, Marusik, 2000b: 280.

Material. 1♀ (ISEA) — **50b**; 6♂♂, 6♀♀ (ISEA) — **57a**.
Habitat. Unknown.
Distribution. Palaearctic boreo-nemoral range [Logunov, Marusik, 2000a].

Asianellus festivus (C.L. Koch, 1834)

Asianellus festivus: Logunov, Hęciak, 1996: 106; Logunov, Marusik, 2000b: 280; Maloletko et al., 2004: 174; Marusik, Logunov, 2009: 151; Trilikauskas, 2012: 230;
Langona festiva: Marusik et al., 1996: 37.

Material. 1♂ (ISEA) — **6b**; 1♂ (ISEA) — **50b**.
Habitat. Unknown.
Distribution. Palaearctic boreo-nemoral range [Logunov, Marusik, 2000a].

Chalcoscirtus alpicola (L. Koch, 1876)*

Material. 1♂ (ISEA) — **47**; 1♂ (ISEA) — **48b**.
Habitat. Stone mountain tundra
Distribution. Circum-Holarctic hypoarcto-boreo-montane range [Logunov, Marusik, 2000a].

Dendryphantes rudis (Sundevall, 1833)

Dendryphantes rudis: Levina, Mikhailov, 2004: 49.

Material. 1♂ (ISEA) — **45**.
Habitat. *Abies – Pinus sibirica* forest, on the stinging-nettle.
Distribution. Palaearctic boreo-nemoral range [Logunov, Marusik, 2000a].

Euoprhys frontalis (Walckenaer, 1802)

Euophrys frontalis: Levina, Mikhailov, 2004: 49; Trilikauskas, 2012: 230.

Material. 1♂ (ISEA) — **35a**; 1♂ (ISEA) — **35b**; 1♀ (ISEA) — **44**.
Habitat. Meadows, fields.
Distribution. Palaearctic boreo-nemoral range [Logunov, Marusik, 2000a].

Evarcha arcuata (Clerck, 1758)

Evarcha arcuata: Marusik et al., 1996: 37; Logunov, Marusik, 2000b: 282; Levina, Mikhailov, 2004: 49; Maloletko et al., 2004: 174.

Material. 2♂♂, 2♀♀ (ISEA) — **28a**; 1♀ (ISEA) — **29b**; 1♂ (ISEA) — **35a**.
Habitat. *Pinus sibirica* forest, meadow, sweeping.
Distribution. Palaearctic boreo-nemoral range [Logunov, Marusik, 2000a].

Evarcha falcata (Clerck, 1758)

Evarcha falcata: Marusik et al., 1996: 37; Marusik, Logunov, 1998: 96; Azarkina, 1999: 75; Logunov, Marusik, 2000a: 87; Logunov, Marusik, 2000b: 282; Levina, Mikhailov, 2004: 49; Volkovsky, 2006: 9; Volkovsky, Romanenko, 2010: 64; Trilikauskas, 2012: 230.

Material. 1♀ (ISEA) — **2a**; 1♂ (ISEA) — **5c**; 3♂♂, 2♀♀ (ISEA) — **6b**; 2♀♀ (ISEA) — **9**; 2♂♂, 1♀ (ISEA) — **28b**; 1♀ (ISEA) — **43a**; 2♂♂ (ISEA) — **44**; 1♂ (ISEA) — **46**; 1♂, 3♀♀ (ISEA) — **47**.
Habitat. Pine forest and its edge, valley forest, rocks, clearing of the *Abies – Pinus sibirica* taiga, small-leaved forest.
Distribution. European – West Siberian boreo-nemoral range [Logunov, Marusik, 2000a].

Evarcha laetabunda (C.L. Koch, 1846)

Evarcha laetabunda: Azarkina, 1999: 75; Logunov, Marusik, 2000a: 90; Logunov, Marusik, 2000b: 282; Maloletko et al., 2004: 174; Volkovsky, 2006: 8.

Material. 1♂ (ISEA) — **44**.
Habitat. Pine forest.
Distribution. Palaearctic boreo-nemoral range [Marusik, Logunov, 2000a].

Evarcha michailovi Logunov, 1992

Evarcha michailovi: Marusik et al., 1996: 37; Logunov, Marusik, 2000b: 282; Volkovsky, 2006: 8;
Phlegra fuscipes: Azarkina, 1999: 75.

Material. 1♂ (ISEA) — **29a**.
Habitat. Meadow, sweeping.
Distribution. European-Siberian – Central Asian subboreal range [Logunov, Marusik, 2000a].

Heliophanus auratus C.L. Koch, 1835

Heliophanus auratus: Marusik et al., 1996: 37; Azarkina, 1999: 75; Logunov, Marusik, 2000b: 283; Levina, Mikhailov, 2004: 49; Trilikauskas, 2012: 230.

Material. 1♂, 1♀ (ISEA) — **5e**; 1♂ (ISEA) — **17**; 2♂♂ (ISEA) — **31**.
Habitat. Garden.
Distribution. European-Siberian – Central Asian boreo-nemoral range [Logunov, Marusik, 2000a].

Heliophanus dubius C.L. Koch, 1835

Heliophanus dubius: Marusik et al., 1996: 37; Logunov, Marusik, 2000b: 284; Volkovsky, 2006: 8.

Material. 1♂ (ISEA) — **5e**.
Habitat. Garden.
Distribution. Palaearctic boreo-nemoral range [Logunov, Marusik, 2000a].

Heliophanus flavipes (Hahn, 1832)

Heliophanus flavipes: Marusik et al., 1996: 37; Rychkov, 2003: 198; Logunov, Marusik, 2000a: 113; Logunov, Marusik, 2000b: 284; Levina, Mikhailov, 2004: 49.

Material. 1♀ (ISEA) — **50a**.
Habitat. Unknown.
Distribution. Trans-Palaearctic nemoral range [Logunov, Marusik, 2000a].

Marpissa pomatia (Walckenaer, 1802)

Marpissa pomatia: Azarkina, 1999: 74; Logunov, Marusik, 2000b: 285; Levina, Mikhailov, 2004: 49.

Material. 2♀♀ (ISEA) — **25a**; 1♀ (ISEA) — **29b**.
Habitat. Unknown.
Distribution. Palaearctic nemoral range [Logunov, Marusik, 2000a].

Pellenes ignifrons (Grube, 1861)

Pellenes ignifrons: Marusik et al., 1996: 37; Logunov, Marusik, 2000a: 155.

Material. 5♂♂, 1♀ (ISEA) — **50b**.
Habitat. Unknown.
Distribution. Siberio-American boreal range [Logunov, Marusik, 2000a].

Pellenes lapponicus Sundevall, 1832*

Material. 1♀ (ISEA) — **56a**.
Habitat. Unknown.
Distribution. Holarctic boreo-montane range [Logunov, Marusik, 2000a].

Pellenes limbatus Kulczyński, 1895

Pellenes limbatus: Marusik et al., 1996: 37; Levina, Mikhailov, 2004: 49.

Material. 1♂ (ISEA) — **57a**.

Habitat. Unknown.
Distribution. Siberian boreo-nemoral range [Logunov, Marusik, 2000a].

Pellenes logunovi Marusik, Hippa et Koponen, 1996

Pellenes logunovi Marusik et al., 1996: 28; Levina, Mikhailov, 2004: 49.

Material. 5♂♂, 4♀♀ (ISEA) — **47**; 6♂♂, 5♀ (ISEA) — **48b**; 7♂♂, 11♀♀ (ISEA) — **54**; 1♂, 1♀ (ISEA) — **56a**; 4♀♀ (ISEA) — **57a**; 1♀ (ISEA) — **57b**.
Habitat. Stone tundra.
Distribution. South Siberian subboreal range (Siberian endemic) [Logunov, Marusik, 2000a].

Pellenes sibiricus Logunov et Marusik, 1994

Pellenes sibiricus: Marusik et al., 1996: 37; Levina, Mikhailov, 2004: 49; Logunov, Marusik, 2000b: 286; Marusik, Logunov, 2009: 151.

Material. 1♀ (ISEA) — **50b**.
Habitat. Unknown.
Distribution. European-Siberian boreo-nemoral range [Logunov, Marusik, 2000a].

Phlegra fasciata (Hahn, 1826)

Phlegra fasciata: Marusik, Logunov, 2009: 151.

Material. 1♀ (ISEA) — **39**.
Habitat. Unknown.
Distribution. Palaearctic boreo-nemoral-subtropical range [Logunov, Marusik, 2000a].

Pseudeuophrys erratica (Walckenaer, 1826)

Euophrys erratica Walckenaer, 1826: Logunov et al., 1993: 104;
Pseudeuophrys erratica: Logunov, Marusik, 2000a: 185; Levina, Mikhailov, 2004: 49; Volkovsky, 2006: 9;
Pseudemathis erratica: Volkovsky, Romanenko, 2010: 64 (inadvertent error).

Material. 1♂ (ISEA) — **28b**; 1♂ (ISEA) — **44**.
Habitat. Shaking off *Abies sibirica*, *Picea obovata* and *Pinus sibirica.*
Distribution. Palaearctic boreo-nemorale range [Logunov, Marusik, 2000a].

Salticus cingulatus (Panzer, 1797)

Salticus cingulatus: Marusik et al., 1996: 37; Logunov, Marusik, 2000b: 288.

Material. 1♀ (ISEA) — **5e**.
Habitat. Unknown.
Distribution. Palaearctic boreo-nemoral range [Logunov, Marusik, 2000a].

Sitticus distinguendus (Simon, 1868)

Sitticus distinguendus: Marusik et al., 1996: 37; Azarkina, 1999: 75; Trilikauskas, 2012: 231;
Sitticus avocator (O. Pickard-Cambridge, 1885): Logunov, 1998: 81 (misidentification).

Material. 1♂ (ISEA) — **20**; 1♂ (ISEA) — **29b**.
Habitat. Unknown.
Distribution. Palaearctic boreo-nemoral range [Logunov, Marusik, 2000a].

Talavera aequipes (O. Pickard-Cambridge, 1871)

Talavera aequipes: Marusik et al., 1996: 38.

Material. 1♂ (ISEA) — **28b**; 1♂ (ISEA) — **44**.
Habitat. Meadows, prealpine sparse forest.
Distribution. European-Siberio – Central Asian boreo-nemoral range [Logunov, Marusik, 2000a].

Yllenus vittatus Thorell, 1875

Yllenus vittatus: Logunov, Marusik, 2003: 82.

Material. 1♂ (ISEA) — **32**.
Habitat. Sweeping valley forest.
Distribution. European-Siberian subboreal range, known from Slovakia and Romania in the west to East Kazakhstan in the east [Logunov, Marusik, 2003].

Sparassidae

Micrommata virescens (Clerck, 1758)

Micromata virescens: Ermolajew, 1937: 605; Volkovsky, 2006: 8;
Micrommata virescens: Marusik et al., 1996: 42; Trilikauskas, 2012: 226;
= *Micrommata roseum* (Clerck, 1757): Azarkina, 1999: 74; Rychkov, 2003: 199; Levina, Mikhailov, 2004: 43.

Material. 1♂ (ISEA) — **17**; 1♂ (ISEA) — **18**; 1♂ (ISEA) — **22**; 2♀♀ (ISEA) — **25a**; 1♀ (ISEA) — **26a**; 1♀ (ISEA) — **29a**; 2♀♀ (ISEA) — **29b**; 1♀ (ISEA) — **30g**; 1♀ (ZMMU) — **32**.
Habitat. Dark coniferous taiga.
Distribution. Trans-Palearctic nemoral range [Marusik et al., 2000].

Tetragnathidae

Pachygnatha degeeri Sundevall, 1823

Pachygnatha degeeri: Marusik et al., 1996: 40; Rychkov, 2003: 198; Levina, Mikhailov, 2004: 50; Maloletko et al., 2004: 174; Volkovsky, Romanenko, 2010: 62; Trilikauskas, 2012: 231.

Material. 1♂ (ISEA) — **5c**; 1♀ (ISEA) — **19**; 1♀ (ZMMU) — **29b**; 5♂♂, 1♀ (ISEA) — **35a**; 1♂, 1♀ (ISEA) — **44**; 1♂ (ISEA) — **45**.
Habitat. Bank of river.
Distribution. Trans-Palearctic nemoral range [Marusik et al., 2000].

Pachygnatha listeri Sundevall, 1830

Pachygnatha listeri: Marusik et al., 1996: 40; Levina, Mikhailov, 2004: 50; Volkovsky, 2006: 9; Volkovsky, Romanenko, 2010: 62; Trilikauskas, 2012: 231.

Material. 1♂ (ISEA) — **6c**; 4♂♂, 2♀♀ (ISEA) — **35a**; 1♀ (ISEA) — **43a**; 8♂♂, 11♀♀ (ISEA) — **44**; 2♂♂ (ISEA) — **46**.
Habitat. Valley meadow, lowland bog.
Distribution. Trans-Palearctic nemoral range [Marusik et al., 2000].

Tetragnatha dearmata Thorell, 1873

Tetragnatha dearmata: Marusik et al., 1996: 40.

Material. 1♂ (ISEA) — **25a**.
Habitat. Unknown.
Distribution. Circum-Holarctic boreo-nemoral range [Marusik et al., 2000].

Tetragnatha extensa (Linnaeus, 1758)

Tetragnatha extensa: Ermolajew, 1937: 604; Marusik et al., 1996: 40; Rychkov, 2003: 198, 199; Levina, Mikhailov, 2004: 50; Maloletko et al., 2004: 174.

Material. 3♂♂, 2♀♀ (ISEA) — **6c**; 1♀ (ISEA) — **28b**; 1♀ (ISEA) — **29b**; 1♀ (ZMMU) — **30e**.
Habitat. Valley meadow.

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

Tetragnatha montana Simon, 1874

Tetragnatha montana: Levina, Mikhailov, 2004: 50; Volkovsky, 2006: 8; Trilikauskas, 2012: 231.

Material. 1♀ (ISEA) — **6b**; 1♀ (ISEA) — **25a**; 1♂ (ISEA) — **26a**; 1♂ (ISEA) — **29b**.

Habitat. Forest, forb meadow.

Distribution. Trans-Palearctic nemoral range.

Tetragnatha obtusa C.L. Koch, 1870

Tetragnatha obtusa: Ermolajew, 1937: 604; Marusik et al., 1996: 40; Volkovsky, 2006: 9.

Material. 1♂, 2♀♀ (ZMMU) — **32**.

Habitat. Unknown.

Distribution. Trans-Palearctic (?) nemoral range [Marusik et al., 2000].

Tetragnatha pinicola L. Koch, 1878

Tetragnatha pinicola: Ermolajew, 1937: 604; Marusik et al., 1996: 40; Levina, Mikhailov, 2004: 50; Volkovsky, 2006: 9; Marusik, Logunov, 2009: 151; Trilikauskas, 2012: 231.

Material. 2♂♂, 2♀♀ (ISEA) — **2b**; 1♀ (ISEA) — **21**; 1♂ (ISEA) — **25a**; 3♀♀ (ISEA) — **28b**; 1♀ (ISEA) — **29a**; 1♀ (ZMMU) — **29b**; 1♂ (ZMMU) — **30c**; 2♀♀ (ZMMU) — **32**; 1♀ (ISEA) — **42**.

Habitat. Rocks, shrubs, stones, sweeping forb meadow, flood plain, valley forest, forb meadow.

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

Theridiidae

Cryptachaea riparia (Blackwall, 1834)

Thymoites sp.: Azarkina, 1999: 75 (in part, misidentification);

Achzearanea riparia: Rychkov, 2003: 198 (inadvertent error);

Achaearanea riparia: Levina, Mikhailov, 2004: 50;

Cryptachaea riparia: Trilikauskas, 2012: 231.

Material. 2♀♀ — **5c**; 1♂ (ISEA) — **30g**; 1♀ (ISEA) — **31**; 1♂ (ISEA) — **44**; 1♂ (ISEA) — **46**.

Habitat. Dark coniferous taiga, crevices in rocks.

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

Episinus angulatus (Blackwall, 1836)*

Material. 1♂ (ISEA) — **6b**; 1♂ (ISEA) — **29b**.

Habitat. Unknown.

Distribution. European-West Siberian nemoral range. Probably easternmost locality.

Euryopis flavomaculata (C.L. Koch, 1836)

Euryopis flavomaculata: Marusik et al., 1996: 38; Levina, Mikhailov, 2004: 50.

Material. 1♂ (ISEA) — **29b**; 8♂♂, 2♀♀ (ISEA) — **35a**; 5♂♂, 1♀ (ISEA) — **35b**; 1♂ (ISEA) — **44**.

Habitat. Steppe slope.

Distribution. Trans-Palearctic nemoral range.

Latrodectus tredecimguttatus (Rossi, 1790)*

Material. 1♀ (ISEA) — **5c**; 1♂, 2♀♀ (ISEA) — **12**.

Habitat. Bank of dry salt lake.

Distribution. Mediterranean to North-Western China steppe-desert range.

Comments. In their work, Levina and Mikhailov [2004] reported *Latrodectus mactans* (Fabricius, 1775) as occurring in the Altai on the basis of an unnamed literature source. As we have failed to trace any literature-derived data on this species from the Altai, the present record seems to be the first evidence of the occurrence of a *Latrodectus* species here.

Neottiura bimaculata (Linnaeus, 1767)

Neottiura bimaculata: Marusik et al., 1996: 38; Rychkov, 2001: 209;

Theridion bimaculata: Rychkov, 2003: 198;

Theridion bimaculatum: Levina, Mikhailov, 2004: 50.

Material. 1♀ (ISEA) — **29a**; 1♂ (ISEA) — **29b**.

Habitat. Steppe slope.

Distribution. Trans-Palearctic – NorthWestern Nearctic nemoral range [Marusik et al., 2000].

Parasteatoda simulans (Thorell, 1875)

Achaearanea simulans (Thorell, 1875): Marusik et al., 1996: 38; Volkovsky, 2006: 8.

Material. 1♀ (ISEA) — **2b**; 1♀ (ZMMU) — **29b**.

Habitat. Valley forest (on trunks).

Distribution. Trans-Palearctic nemoral range [Marusik et al.,1996].

Parasteatoda tabulata Levi, 1980

Achaearanea tabulata: Levina, Mikhailov, 2004: 50;

Parasteatoda tabulata: Trilikauskas, 2012: 231;

Achaearanea tepidariorum (C.L. Koch, 1841): Azarkina, 1999: 75 (misidentification).

Material. 4♀♀ (ISEA) — **20**; 1♀ (ISEA) — **29b**; 1♀ (ISEA) — **31**.

Habitat. Entrance into a cave, crevices in rocks.

Distribution. Holarctic [Platnick, 2012] nemoral range.

Parasteatoda tepidariorum (C.L. Koch, 1841)

Achaearanea tepidariorum: Levina, Mikhailov, 2004: 50.

Material. 3♂♂ (ISEA) — **29b**.

Habitat. Rocks, forest, forb meadow.

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

Phylloneta impressa (L. Koch, 1881)

Theridium impressum (L. Koch, 1881): Ermolajew, 1937: 601; Rychkov, 2001: 209;

Theridion impressum L. Koch, 1881: Marusik et al., 1996: 38; Rychkov, 2003: 198; Levina, Mikhailov, 2004: 50; Maloletko et al., 2004: 173;

Phylloneta impressa: Marusik, Logunov, 2009: 151; Trilikauskas, 2012: 231.

Material. 6♀♀ (ISEA) — **5c**; 1♀ (ISEA) — **28b**; 1♀ (ISEA) — **29b**; 1♀ (ISEA) — **30c**; 2♀♀ (ISEA) — **30e**; 1♀ (ISEA) — **30f**; 1♀ (ISEA) — **32**.

Habitat. Slope of mountain.

Distribution. Trans-Palearctic – NorthWest Nearctic polyzonal range [Marusik et al., 2000].

Robertus arundineti
(O. Pickard-Cambridgei, 1871)*

Material. 1♀ (ISEA) — **1**; 1♀ (ISEA) — **35a**.

Habitat. Lake shore.

Distribution. European-Siberio – Central Asian range [Eskov, 1987].

Comments. The new records represent the easternmost locality.

Robertus lividus (Blackwall, 1836)

Robertus lividus: Marusik et al., 1996: 38; Levina, Mikhailov, 2004: 50; Volkovsky, Romanenko, 2010: 62; Trilikauskas, 2012: 231.

Material. 1♂ (ISEA) — **35a**; 1♂, 1♀ (ISEA) — **35b**; 1♂ (ISEA) — **43a**; 1♂, 1♀ (ISEA) — **46**.
Habitat. Meadows, fields, Birch-Aspen forest.
Distribution. Trans-Palaearctic-Alaskan range [Marusik et al., 2000].

Rugathodes aurantius (Emerton, 1915)*

Material. 1♂ (ISEA) — **29b**.
Habitat. Rocks.
Distribution. Circum-Holarctic boreal range [Marusik et al., 2000].

Steatoda albomaculata (De Geer, 1778)

Lithyphantes albomaculatus: Ermolajew, 1937: 601;
Steatoda albomaculata: Marusik et al., 1996: 38; Marusik, Logunov, 2009: 151;
Thymoites sp.: Azarkina, 1999: 75 (in part, misidentification).

Material. 1♀ (ISEA) — **6b**; 2♀♀ (ISEA) — **26b**; 1♀ (ISEA) — **54**.
Habitat. Entrance into a cave.
Distribution. Circum-Holarctic polyzonal range [Marusik et al., 2000].

Steatoda bipunctata (Linnaeus, 1758)

Steatoda bipunctata: Marusik et al., 1996: 38; Rychkov, 2001: 209; Rychkov, 2003: 198; Volkovsky, 2006: 8;
Steatoda castanea: Azarkina, 1999: 75 (misidentification).

Material. 1♀ (ISEA) — **2a**; 1♂, 1♀ (ISEA) — **45**.
Habitat. Pine forest, valley forest, building.
Distribution. East Nearctic – Trans-Palearctic nemoral range [Marusik et al., 2000].

Steatoda castanea (Clerck, 1758)

Steatoda castanea: Rychkov, 2003: 198.

Material. 3♀♀ (ISEA) **[4f]**.
Habitat. Into a building.
Distribution. Trans-Palearctic range.

Steatoda grossa (C.L. Koch, 1838)

Teutana grossa: Rychkov, 2001: 209;
Steatoda grossa: Rychkov, 2003: 198; Levina, Mikhailov, 2004: 50.

Material. 3♀♀ (ISEA) — **5f**; 3♂♂, 3♀♀ (ISEA) — **5g**; 1♂ (ISEA) — **35a**.
Habitat. Into a building.
Distribution. Cosmopolitan [Platnick, 2012], synantropic species, common in Siberia [Marusik et al., 2000].

Steatoda cf. *triangulosa* (Walckenaer, 1802)

Teutana triangulosa: Ermolajew, 1937: 601;
Steatoda triangulosa: Levina, Mikhailov, 2004: 50.

Material. 1♀ (ISEA) — **29b**; 1♀ (ISEA) — **40**.
Habitat. Rocks.
Comment. Probably new species (Gromov, pers. communication).

Theridion varians (Hahn, 1833)

Theridium varians: Ermolajew, 1937: 601; Rychkov, 2001: 209;
Theridion varians: Marusik et al., 1996: 38; Rychkov, 2003: 198; Levina, Mikhailov, 2004: 50; Volkovsky, 2006: 8.

Material. 6♀♀ (ISEA) — **2b**; 1♀ (ISEA) — **6b**.
Habitat. Valley forest, edge of pine-forest.
Distribution. Trans-Palearctic – West Nearctic boreo-nemoral range [Marusik et al., 2000].

Thomisidae

Coriarachne depressa (C.L. Koch, 1837)

Coriarachne depressa: Marusik et al., 1996: 38; Volkovsky, 2006: 8.

Material. 1♂ (ISEA) — **5g**; 1♀ (ISEA) — **10**.
Habitat. Forest, crown of *Larix* sp., pine forest.
Distribution. Trans-Palearctic nemoral range [Marusik et al., 2000].

Ebrechtella tricuspidata (Fabricius, 1775)

Misumenops tricuspidatus: Rychkov, 2003: 198; Levina, Mikhailov, 2004: 51.

Material. 1♂ (ISEA) — **5c**; 1♀ (ISEA) — **5e**; 1♀ (ISEA) — **6b**; 1♀ (ZMMU) — **12**; 1♂ (ISEA) — **19**.
Habitat. Bank of salt lake.
Distribution. Trans-Palearctic [Logunov, Marusik, 1994] nemoral range.

Heriaeus melloteei Simon, 1886*

Material. 1♀ (ISEA) — **18**.
Habitat. Unknown.
Distribution. Siberio-Manchurian nemoral range [Marusik et al., 2000].

Lysiteles maius Ono, 1979

Lysiteles maius: Logunov, Marusik, 1994: 179; Marusik et al., 1996: 38; Levina, Mikhailov, 2004: 50;
Lysiteles maior: Trilikauskas, 2012: 232 (inadvertent error).

Material. 1♂ (ZMMU) — **30e**.
Habitat. Unknown.
Distribution. Altaian-Nepalo-Manchurian disjunctive nemoral range.

Misumena vatia (Clerck, 1758)

Misumena vatia: Ermolajew, 1937: 605; Logunov, Marusik, 1994: 179; Marusik et al., 1996: 38; Azarkina, 1999: 75; Levina, Mikhailov, 2004: 51; Maloletko et al., 2004: 173; Volkovsky, 2006: 8; Trilikauskas, 2012: 232.

Material. 1♀ (ISEA) — **2a**; 1♀ (ISEA) — **14**; 1♂, 1♀ (ISEA) — **25a**; 1♂ (ISEA) — **18**; 1♂ (ISEA) — **26b**; 1♀ (ISEA); 1♀ (ISEA) — **28a**; 1♂ (ISEA) — **28b**; 1♀ (ZMMU) — **29b**; 1♀ (ZMMU) — **31**; 1♀ (ZMMU) — **32**.
Habitat. Pine forest, sweeping valley forest, sweeping flood plain, mixed forest.
Distribution. Circum-Holarctic polyzonal range [Marusik et al., 2000].

Ozyptila brevipes (Hahn, 1826)

Oxyptila brevipes: Logunov, Marusik, 1994: 180;
Ozyptila brevipes: Marusik et al., 1996: 38; Levina, Mikhailov, 2004: 51.

Material. 1♀ (PCLT) — **40**.
Habitat. Abies forest.
Distribution. European – West Siberian (?) range [Marusik et al., 2000].

Ozyptila trux (Blackwall, 1846)

Ozyptila trux: Levina, Mikhailov, 2004: 51; Trilikauskas, 2012: 232.

Material. 1♀ (ISEA) — **44**.

Habitat. Lowland bog.
Distribution. Trans-Palearctic nemoral range [Marusik et al., 2000].

Thomisus onustus Walckenaer, 1805

= *Thomisus albus* (Gmelin, 1789): Rychkov, 2003: 198; Trilikauskas, 2012: 232;
Thomisus onustus: Logunov, Marusik, 1994: 181; Marusik et al., 1996: 38; Maloletko et al., 2004: 173.

Material. 1♂ (ISEA) — **11b**; 2♀♀ (ISEA) — **12**.
Habitat. Bank of dry salt lake, dry pine forest.
Distribution. Trans-Palearctic nemoral range [Marusik et al., 2000].

Tmarus piger (Walckenaer, 1802)

Tmarus piger: Logunov, Marusik, 1994: 182; Marusik et al., 1996: 38; Volkovsky, Romanenko, 2010: 62.

Material. 1♀ (ISEA) — **6a**; 2♂♂ (ISEA) — **36**.
Habitat. Pine forest, sweeping.
Distribution. Trans-Palaearctic range [Marusik er al., 2000].

Xysticus audax (Schrank, 1803)

Xysticus audax: Logunov, Marusik, 1994: 182; Azarkina, 1999: 75; Azarkina, Logunov, 2001: 139–143; Rychkov, 2003: 198; Levina, Mikhailov, 2004: 51; Volkovsky, Romanenko, 2010: 62; Trilikauskas, 2012: 232.

Material. 1♀ (ISEA) — **25a**; 1♀ (ISEA) — **18**; 1♀ (ISEA) — **26a**; 3♂♂, 2♀♀ (ISEA) — **26c;** 1♀ (ZMMU) — **29b**; 1♀ (ISEA) — **50c**.
Habitat. Steppe slope (sweeping).
Distribution. Trans-Palearctic nemoral range [Marusik et al., 2000].

Xysticus austrosibiricus Logunov et Marusik, 1998

Xysticus austrosibiricus: Levina, Mikhailov, 2004: 51; Marusik, Logunov, 2009: 151.

Material. 6♂♂, 1♀ (ISEA) — **30b**; 1♂ (ISEA) — **30d**; 2♂♂ (ISEA) — **28b**; 2♂♂, 5♀♀ (ISEA) — **57a**.
Habitat. Goltsy.
Distribution. Mongolo-Yakutian range [Marusik et al., 2000].

Xysticus baltistanus (Caporiacco, 1935)*

Material. 1♀ (ISEA) — **30d**.
Habitat. Mountain tundra.
Distribution. East Palaearctic polyzonal range [Marusik et al., 2000].

Xysticus bifasciatus C.L. Koch, 1837

Xysticus bifasciatus: Marusik et al., 1996: 38; Levina, Mikhailov, 2004: 51; Volkovsky, 2006: 9; Volkovsky, Romanenko, 2010: 62.

Material. 1♂ (ISEA) — **17**; 1♀ (ISEA) — **26c**.
Habitat. Unknown.
Distribution. European-Lena boreo-nemoral range [Marusik et al., 2000].

Xysticus bonneti Denis, 1938

Xysticus bonneti: Logunov, Marusik, 1994: 183; Marusik et al., 1996: 38: Levina, Mikhailov, 2004: 51; Marusik, Logunov, 2009: 151; Trilikauskas, 2012: 232.

Material. 1♂, 1♀ (ISEA) — **50a**.
Habitat. Unknown.
Distribution. European-Baikalian disjunctive boreo-alpine range [Marusik et al., 2000].

Xysticus cristatus (Clerck, 1757)

Xysticus cristatus: Marusik et al., 1996: 39; Azarkina, Logunov, 2001: 146; Rychkov, 2003: 198; Levina, Mikhailov, 2004: 51; Maloletko et al., 2004: 173; Volkovsky, Romanenko, 2010: 64.

Material. 1♂, 1♀ (ISEA) — **44**.
Habitat. Meadows.
Distribution. European-Siberian boreo-nemoral range [Azarkina, Logunov, 2001].

Xysticus dzhungaricus Tyshchenko, 1965

Xysticus dzhungaricus: Marusik et al., 1996: 39; Azarkina, 1999: 75.

Material. 1♀ (ZMMU) — **32**; 1♂ (ISEA) — **50a**.
Habitat. On the road.
Distribution. East Palearctic nemoral range (westernmost locality is Central Asia east of 73°E) [Marusik et al., 2000].

Xysticus emertoni Keyserling, 1880

= *Xysticus excellens* (Kuloz, 1885): Ermolajew, 1937: 605;
Xysticus emertoni: Marusik et al., 1996: 39; Levina, Mikhailov, 2004: 51.

Material. 1♀ (ISEA) — **28a**; 1♀ (ISEA) — **28b**; 1♂, 1♀ (ZMMU) — **29b**; 1♂ (ISEA) — **50a**; 1♂ — **50c**; 1♀ (ISEA) — **57a**.
Habitat. Unknown.
Distribution. Siberio-Trans-Nearctic boreo-nemoral range [Marusik et al., 2000].

Xysticus ephippiatus Simon, 1880

Xysticus ephippiatus: Azarkina, 1999: 75; Levina, Mikhailov, 2004: 51; Volkovsky, Romanenko, 2010: 62; Trilikauskas, 2012: 232.

Material. 1♂ (ISEA) — **5e**; 1♂, 1♀ (ZMMU) — **29b**.
Habitat. Steppe slope (sweeping) and valley forest.
Distribution. East Palearctic nemoral range (westernmost locality is Tashkent Region in Central Asia) [Marusik et al., 2000].

Xysticus luctuosus (Blackwall, 1836)

Xysticus luctuosus: Logunov, Marusik, 1994: 186; Marusik et al., 1996: 39; Levina, Mikhailov, 2004: 51; Volkovsky, Romanenko, 2010: 62.

Material. 1♂ (ISEA) — **5e**; 1♀ (ISEA) — **25a**; 1♂, 1♀ (ISEA) — **28b**; 1♂ (ISEA) — **39**; 1♀ (ISEA) — **50c**.
Habitat. Unknown.
Distribution. Circum-Holarctic nemoral range [Marusik et al., 2000].

Xysticus nenilini Marusik, 1989*

Material. 1♂, 1♀ (ISEA) — **54**; 2♀♀ (ISEA) — **57a**.
Habitat. Unknown.
Distribution. Siberio-Mongolian steppe range [Marusik et al., 2000].
Comments. The new records represent the westernmost locality.

Xysticus obscurus Collett, 1877

Xysticus obscurus: Logunov, Marusik, 1994: 188; Marusik et al., 1996: 39; Levina, Mikhailov, 2004: 51.

Material. 1♂ (ISEA) — **50c**.
Habitat. Unknown.
Distribution. Circum-Holarctic boreo-alpine range [Marusik et al., 2000].

Xysticus sibiricus Kulczyński, 1908*

Material. 1♀ (ISEA) — **50c**.
Habitat. Unknown.
Distribution. Siberian boreal range [Marusik et al., 2000].

Xysticus sjostedti Schenkel, 1936

Xysticus sjostedti: Logunov, Marusik, 1994: 192–193; Marusik, Logunov, 2009: 151; Trilikauskas, 2012: 232.

Material. 4♂♂ (ISEA) — **48b**.
Habitat. Stony tundra.
Distribution. Altai-Mongolian range.

Xysticus ulmi (Hahn, 1831)

Xysticus ulmi: Volkovsky, 2006: 8; Volkovsky, Romanenko, 2010: 62.

Material. 1♀ (ZMMU) — **29b**; 17♂♂ (ISEA) — **48a**.
Habitat. Valley forest (sweeping).
Distribution. Euro-Siberian range [Mikhailov, unpublished data].

Titanoecidae

Titanoeca asimilis Song et Zhu, 1985*

Material. 1♀ (ZMMU) — **29b**; 1♀ (ISEA) — **57a**.
Habitat. Unknown.
Distribution. Mongolian range [Marusik et al., 2000].

Titanoeca nivalis Simon, 1874

Titanoeca nivalis: Marusik et al., 1996: 40; Levina, Mikhailov, 2004: 51.

Material. 1♂ (ISEA) — **5e**; 2♂♂ (ISEA) — **11a**.
Habitat. Unknown.
Distribution. Trans-Palearctic – West Nearctic boreo-montane range [Marusik et al., 2000].

Titanoeca quadriguttata (Hahn, 1833)

Titanoeca quadriguttata: Levina, Mikhailov, 2004: 51.

Material. 1♂ (ISEA) **[35b]**.
Habitat. Litter.
Distribution. Palaearctic [Platnick, 2012].

Titanoeca sibirica L. Koch, 1879

Titanoeca sibirica: Azarkina, 1999: 75; Marusik, Logunov, 2009: 151.

Material. 1♀ (ZMMU) — **31**; 1♂ (ISEA) — **57a**.
Habitat. Unknown.
Distribution. Trans-Siberian boreo-montane range [Marusik et al., 2000].

Uloboridae

Uloborus walckenaerius Latreille, 1806

Uloborus walckenaerius: Volkovsky, 2006: 9; Trilikauskas, 2012: 233.

Material. 3♀♀ (ISEA) — **11b**.
Habitat. Dry pine forest.
Distribution. Trans-Palearctic nemoral range [Marusik et al., 2000].

Zoridae

Zora nemoralis Blackwall, 1861

Zora nemoralis: Levina, Mikhailov, 2004: 51.

Material. 1♀ (ISEA) — **28b**; 1♂ (PCLT) — **45**.
Habitat. Bank of Teletskoye Lake.
Distribution. Siberian – West Palaearctic boreo-nemoral range: distributed to cold areas of Hokkaido, Honshu and Kyushu to the East [Ono, 2009].

Zora spinimana (Sundevall, 1832)

Zora spinimana: Volkovsky, Romanenko, 2010: 62; Trilikauskas, 2012: 233.

Material. 1 ♀ (ISEA) — **4d**; 1 ♂ (ISEA) — **24**; 1 ♀ (ISEA) — **29b**; 12♂♂ 3♀♀ (ISEA) — **35a**; 1♂ (ISEA) — **35b**; 19♂♂ 2♀♀ (ISEA) — **44**; 1♂ (ISEA) — **46**; 15♂♂ 1♀ (ISEA) — **47**.
Habitat. Pine forest.
Distribution. Trans-Palearctic nemoral range [Ono, 2009].

Discussion

The araneofauna of Tuva, which is situated east of the Altai, is relatively well-studied [Marusik et al., 2000] and can be compared to that of the Altai. Taxonomic composition of both araneofaunas is similar, consisting of some 600 species: see Marusik et al. [2000] for Tuva, and the reference list given below and unpublished data kindly provided by A.V. Tanasevitch for the Altai. The family composition of both faunas is virtually identical apart from the family Pholcidae, which has not yet been recorded from Tuva but is likely to occur there. Linyphiidae are the most diverse family in both regions. However, if all families are arranged in the order of species decrease, the compared faunas will show clear differences regarding the most diverse spider groups, particularly of the Linyphiidae, Dictynidae, Lycosidae, Agelenidae and Gnaphosidae (see Table 1). Taking into account controversial views on the taxonomy and composition of Agelenidae and a poor state of their knowledge in Tuva, we have refrained from a further comparison of this group.

The number of linyphiid genera in Tuva exceeds that of the Altai in more than 10 genera (Table 2). Although some of them will undoubtedly be found in the Altai later on, this difference is largely due to two groups of genera: (1) those represented by exclusively Mongolian species (e.g., *Bishopiana glumacea* (Gao, Fei, Zhu, 1992) [Gao et al., 1992], *Trichobactrus brevispinosus* Wunderlich, 1995 [Wunderlich, 1995]), and (2) those of which species ranges are at their westernmost limits in Tuva, for example, *Maro flavescens* (O.P. Cambridge, 1873), *Parawubanodes unicornis* (O.P. Cambridge, 1873). Besides, an endemic representative of the monotypic genus *Epigytholus* (*E. tuvensis*) was described from Tuva. Endemism and the aforementioned factors are likely to be the main causes responsible for significant quantitative differences of the Linyphiidae on species level between the Altai and Tuva. In Tuva, there are 51 species more than in the Altai.

Compared to the Altai, the Tuvan fauna of Gnaphosidae has more taxa both of genera and of species (Table 1). The genera *Echemus*, *Phaeocedus* and *Poecilochroa* have not yet been found in the Altai, though the occurrence of two latest of them is highly probable.

Table 1. A comparison of the species diversity of Aranei of the Altai and Tuva
Таблица 1. Сравнение видового богатства пауков Алтая и Тувы

Family	Altai	Tuva
Linyphiidae	170	221
Gnaphosidae	75	72
Salticidae	62	61
Lycosidae	78	54
Thomisidae	42	40
Araneidae	36	32
Theridiidae	33	37
Philodromidae	29	29
Dictynidae	10	20
Clubionidae	12	13
Tetragnathidae	10	9
Titanoecidae	5	4
Agelenidae	5	2
Hahniidae	5	2
Liocranidae	5	2
Miturgidae	5	3
Mimetidae	3	1
Eresidae	2	1
Oxyopidae	2	1
Pisauridae	2	3
Zoridae	2	1
Amaurobiidae	1	1
Corinnidae	1	1
Cybaeidae	1	1
Sparassidae	1	1
Uloboridae	1	1
Pholcidae	1	0
Total	599	613

Table 2. A comparison of the generic diversity of Aranei of the Altai and Tuva
Таблица 2. Сравнение числа родов пауков на Алтае и в Туве

Family	Altai	Tuva
Linyphiidae	104	117
Salticidae	18	19
Theridiidae	18	19
Araneidae	14	13
Lycosidae	14	11
Thomisidae	11	10
Gnaphosidae	9	13
Dictynidae	6	8
Agelenidae	4	2
Hahniidae	3	2
Philodromidae	3	4
Tetragnathidae	3	2
Liocranidae	2	1
Pisauridae	2	2
Amaurobiidae	1	1
Clubionidae	1	1
Corinnidae	1	1
Cybaeidae	1	1
Eresidae	1	1
Mimetidae	1	1
Miturgidae	1	1
Oxyopidae	1	1
Pholcidae	1	0
Sparassidae	1	1
Titanoecidae	1	1
Uloboridae	1	1
Zoridae	1	1
Total	224	235

A difference in the species number is rather low, only six species. According to our data, the genera *Berlandina*, *Micaria* and *Parasyrisca* are more diverse in Tuva, whereas *Callilepis*, *Drassodes*, *Drassylus*, *Gnaphosa*, *Haplodrasus* and *Zelotes* are in the Altai.

Contrary to the Gnaphosidae, the Altaian fauna of wolf-spiders is more speciose. However, the genera *Trochosa* and *Hygrolycosa* which currently absent from the Tuvan list are likely to occur there as well. Far greater differences between two faunas are seen in their species diversity, particularly of the genus *Acantholycosa*, which accounts for 16 Altaian [Marusik et al., 2004] and only for three Tuvan species. The majority of *Acantholycosa* species collected from the Altai are endemics. Finally, such the speciose genera as *Alopecosa* and *Pardosa* have more species in the Altai than in Tuva.

Fauna of jumping spiders similar in both regions, except two genera in Tuva. On of them, Tuvaphantes is endemic of Tuva [Marusik et al., 2000].

It is impossible not to mention the family Dictynidae, which accounts for 19 species in Tuva and only for 11 ones in the Altai (almost a twofold difference; see Table 1). Composition and diversity of the recorded dictynid genera are also different. No representatives of *Archaeodictyna*, *Argenna* and *Emblyna* have been found from the Altai, and no species of *Mastigusa* from Tuva. On the species level, faunal differences are mainly due to the findings of several endemic *Dictyna* species in Tuva (e.g., *D. obydovi*, *D. ubsunurica* and *D. uvs*), as well as of the steppe-desert representatives of *Emblyna* (*E. logunovi* and *E. mongolica*).

Differences in species compostion between relatively small families, such as Hahnidae, Liocranidae,

Mimetidae and others, can be explained either by the incomplete state of knowledge of certain groups (e.g., Hahniidae in Tuva), or by the fact that many of the European-Siberian species have easternmost limits of their ranges in the Altai, so not reaching Tuva (e.g., Liocranidae and Mimetidae).

Too sum up, it is worth noticing that arachnological studies in both Tuva and the Altai are far from complete and thus a better comparison of these faunas is only possible when more spider materials have been collected from both regions.

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