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Spiders (Aranei) of Middle Siberia, an updated check-list with a special reference to the Mirnoye Field Station

Пауки (Aranei) Средней Сибири, обновлённый список, особенно по стационару Мирное

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КЛЮЧЕВЫЕ СЛОВА: пауки, фанистические находки, Средняя Сибирь, новый вид, *Micaria*.

ABSTRACT: Altogether 496 species are listed from Middle Siberia and 283 from the Mirnoye Field Station. Records of species new to these areas are presented; 39 species are reported for the first time in Middle Siberia, *Porrhomma campbelli* F.O. Pickard-Cambridge, 1894 is new to Asia and Russia. *Micaria yeniseica* Marusik & Koponen sp.n. (♂) (closely related to *M. silesiaca* L. Koch, 1875) is described and diagnostic figures of the palp given for *Pardosa masurae* Esyunin & Efimik, 1998. Fourteen species are excluded from the previous list. The structure and special features of the fauna of Middle Siberia and that of the Mirnoye Field Station are compared with other northern faunas.

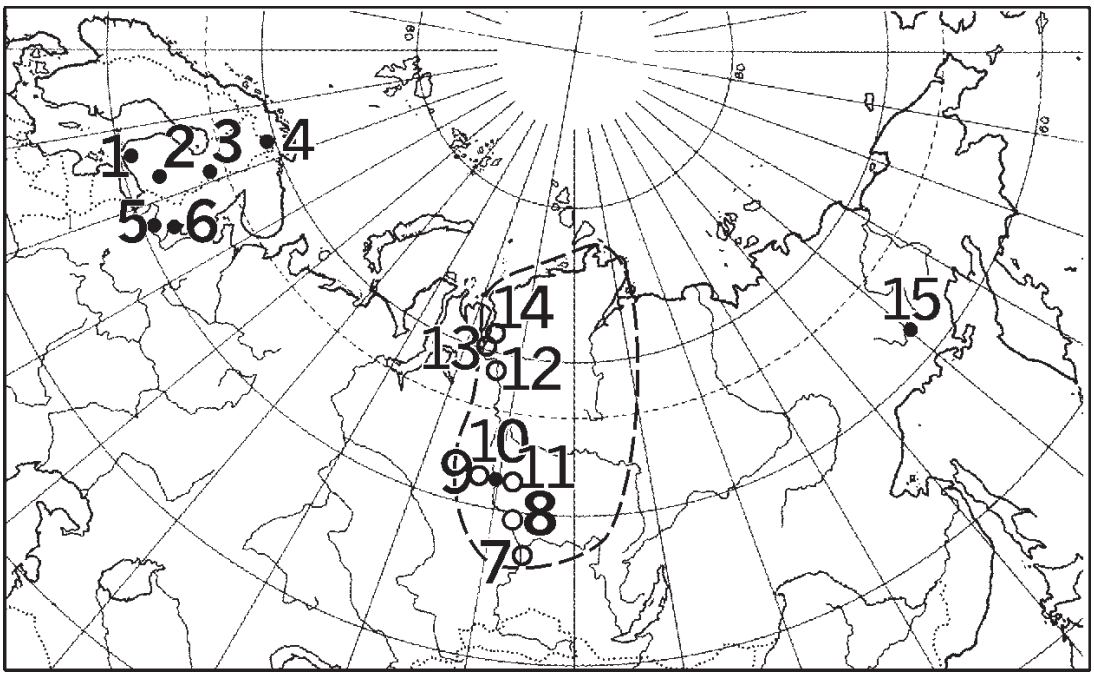
РЕЗЮМЕ: 496 видов отмечены в Средней Сибири и 283 из них в окрестностях стационара "Мирное". 39 видов впервые отмечены в Средней Сибири, а *Porrhomma campbelli* F.O. Pickard-Cambridge, 1894 является видом новым для фауны России и Азии. Описан новый вид *Micaria yeniseica* Marusik & Koponen sp.n. (♂), близкий к *M. silesiaca* L. Koch, 1875 и приведено переописание самцов *Pardosa masurae* Esyunin & Efimik, 1998. Четырнадцать видов исключены из списка фауны. Обсуждается структура фауны Средней Сибири и стационара "Мирное", приводится сравнение с другими северными фаунами.

Introduction

Siberia has been the subject of intensive research on spider diversity during the two last decades. As a result of this study several faunistic surveys of different parts of Siberia have been published: Middle Siberia (427 species, Eskov, 1988), northeast Siberia (549, Marusik et al., 1992a), the Sakhalin Area (450, Marusik et al., 1992b), Yakutia (424, Marusik et al., 1993), the Urals (780, Esyunin & Efimik, 1996), Altai (280, Marusik et al., 1996), the Polar Urals (174, Koponen et al., 1997), Tuva (614, Logunov et al., 1998; Marusik et al., 2000), Transbaikalia (432, Danilov, 1999), Mongolia (320, Marusik & Logunov, 1998). Since publication the first surveys many species have been described and nomenclatorial changes made, and many new finds reported. So a revision of the earlier data is badly needed to facilitate a more detailed zoogeographical analysis of the eastern Palaearctic.

To provide essential zoogeographical analysis it is very important to know the diversity of species in some local faunas, optionally lying at the same latitude or at least in the same biotic zone. Unfortunately such data is almost completely unavailable (cf. Marusik & Koponen, 2000) for Siberia. There are only two publications describing the diversity and spatial distribution of spiders in local faunas within Siberia: the Mirnoye Field Station (251 species, Eskov, 1981) and the Aborigen Field Station (ca. 350 species, Marusik, 1988). Although there are no check-lists in these publications, it is not difficult to compile lists from two other papers [Eskov, 1988 and Marusik, 1994], both of which were published in small and poorly distributed books.

In the westernmost part of the taiga zone, Finland, there are several well-studied localities. These local



Map. Well known local faunas in boreal zone (1–6, 10 & 15) and collecting sites (7–14) in Middle Siberia (- -). 1 — Tvärminne, 2 — Mäntyharju, 3 — Kuusamo, 4 — Kevo, 5 — Nizhnesvirski Resrve, 6 — Kivach, 7 — Peredvinsk, 8 — Ust-Pit, 9 — Yelogui, 10 — Mirnoye, 11 — Biropchana, 12 — Potapovo, 13 — Karaul, 14 — Vorontsovo, 15 — Aborigen. Filled circles — well studied local faunas, open circles — areas of collection in Middle Siberia by Rybalov.

Карта. Наиболее хорошо изученные фауны бореальной зоны Евразии (1–6, 10 & 15) и места сборов (5–12) в Средней Сибири (- -). 1 — Tvärminne, 2 — Mäntyharju, 3 — Kuusamo, 4 — Kevo, 5 — Нижнесвирский заповедник, 6 — заповедник Кивач, 7 — Передвинск, 8 — Усть-Пит, 9 — Елогуй, 10 — Мирное, 11 — Биропчана, 12 — Потапово, 13 — Караул, 14 — Воронцово, 15 — Абориген. Заполненные кружки — хорошо изученные локальные фауны, открытые кружки — места коллектирования в Средней Сибири.

faunas include Tvärminne [60°N, 425 species; Palmgren, 1972], Mäntyharju [61°15'N, 317 species; Palmgren, 1977), Kuusamo [66°N, 240 species; Koponen & Viramo, 1998] and Kevo [69°45'N, 165 species; Koponen, 1984]. In eastern Fennoscandia there are two other well-studied local faunas: the Kivach Reserve (62°18'N) in Karelia with 275 species of spiders known [Tsellarius, 1993], and the Nizhnesvirski Reserve (ca 60°50'N) in the Leningrad Area with 354 species [Oliger, 1996].

The goal of this work is to 1) present an updated list of spiders occurring in Middle Siberia, 2) make survey of spiders at the Mirnoye field station, 3) list new material and species records from the region, 4) compare the present faunas with other well-known northern faunas.

Material and methods

The area covered in this survey is slightly larger than those in Eskov's [1988] check-list. Eskov's survey covered areas north of 62°N, while here we treat spiders living north of 57°N. The longitudinal limits of Middle Siberia are: 80°–110°E.

Material treated herein was collected by L.B. Rybalov and I.G. Vorobyeva from 1989 to 1997 in several localities within the Krasnoyarsk Province of Russia:

1) Yenisei River middle flow, Mirnoye Field Station, 62°19'N 89°02'E, 1988–1989; belongs to subzone of middle taiga.

2) Birobchana River [right tributary of the middle Yenisei) 120 km E of Mirnoye Vill., ca 62°20'N 91°30'E, Summer 1989; belongs to subzone of middle taiga.

3) Yelogui River (left tributary of the middle Yenisei) 120 km W of Mirnoye Vill., ca 62°30'N 87°E, Summer 1990; belongs to subzone of middle taiga.

4) Yenisei River middle flow, Peredvinsk Vill., 57°N 93°30'E, June 1995; belongs to subzone of subboreal forests (Siberian analogues of the European mixed forests).

5) Yenisei River middle flow, Ust'-Pit Vill., 58°55'N 91°55'E, 07.1995; belongs to subzone of southern taiga.

6) Yenisei River down flow, Goroshykha Vill, ca 400 km upstream from Dudinka, 66°N 87°E, July–August, 1994–1995; belongs to subzone of northern taiga.

7) Taimyr Region, Yenisei River down flow, Potapovo Vill., 68°42°N 86°15'E, August 1995; belongs to taiga-tundra zone.

8) Yenisei River mouth, right bank, Karaul Vill., 70°08'N 83°13'E, August 1994; belongs to subzone of southern tundra.

9) Taimyr, Yenisei River down flow, Vorontsovo Vill., 71°30'N 83°E, August 1995; belongs to subzone of typical tundra.

Spiders were collected by square sampling (around 600 samples taken by 25x25 cm square and hand sorting) and pitfall trapping. Three localities (Mirnoye, Yelogui and Birobchana) were studied in detail. Spatial distribution of spiders in these localities will be described in a separate paper [Rybalov & Vorobyeva, 2002].

Most of the linyphiid spiders were identified by A.V. Tanasevitch, all others (over 4000 adult specimens, over 3200 of them were from Mirnoye) by Yu.M. Marusik. Identified material was shared between Zoological Museum of the Moscow State University (ZMMU), Zoological Museum of

University of Turku, Finland (ZMUT), Institute for Biological Problems of the North (IBPN, Magadan), Siberian Zoological Museum (ISEA, Novosibirsk) and Naturhistoriska Riksmuseet Stockholm, Sweden (NRS).

Most of the unidentified species listed by Eskov [1988] were subsequently described as new. Nevertheless, the status of some species known only from females still remains unclear. We omit almost all of these from the presented list, especially if their generic placement is unclear.

Survey of species

Species new to the Middle Siberia

AGELENIDAE (1)

Paracoelotes birulai (Ermolajev, 1926)

COMMENTS. This species has a Siberio-Central Asian boreo-montane range: from Kyrgyzstan north to West Sayan and along South Siberia eastward to Khabarovsk Prov. [Marusik et al., 2000]. The new record extends the northern limit of its range about 5°.

CLUBIONIDAE (1)

Clubiona caerulescens L.Koch, 1887

COMMENTS. This species is new both to Middle Siberia and Mirnoye. It has a trans-Palaearctic boreo-nemoral range and occurs from Europe (north to southern Fennoscandia) to north Cisokhotia and Sakhalin, north to the northern Urals, southward to Azerbaijan, Kazakhstan and Inner Mongolia [Marusik et al., 2000]. The record from Mirnoye is the northernmost locality of this species in Siberia, and coincides with those in the northern Urals.

DICTYNIDAE (1)

Mastigusa macrophthalma (Kulczyński, 1897)*

COMMENTS. It is a species new to both Middle Siberia and Mirnoye. As mentioned by Roberts [1995], this species may be a junior synonym of *M. arietina* (Thorell, 1872). The two species differ only in eye sizes and interdistances. Specimens from Peredvinsk and Mirnoye without doubt belong to the large-eyed form. Previously *M. arietina* was known to occur west of Ural. The new record extends the known range more than 30° east. It seems that the Yenisei River represents the eastern limit of distribution for this species, as it does for many other West Palaearctic taxa.

GNAPHOSIDAE (5)

Callilepis nocturna (Linnaeus, 1758)

COMMENTS. It has a trans-Palaearctic polyzonal range and occurs from Europe, north to Swedish Lapland and the Lena River, northeast to the upper Kolyma River and southward to Hokkaido and Russian Far East [Marusik et al., 2000]. This new record does not extend the northern limit of distribution in Siberia, which is the middle reaches of the Lena River [ca 65°N, Marusik et al., 1993],

Haplodrassus cognatus (Westring, 1862)

COMMENTS. It has a trans-Palaearctic boreo-nemoral range and occurs from western Europe to Hokkaido, north to the northern Urals and Tomsk, and south to Greece [Marusik et al., 2000]. The record of this species from Novaya Zemlya [Holm, 1973] requires confirmation and may refer to an arctomontane species, *H. hiemalis* (Emerton, 1909). *H. cognatus* was once reported from Middle Siberia [Eskov, 1986], but this record has been questioned [Eskov, 1988].

Micaria aenea Thorell, 1871

COMMENTS. This species is new both to Middle Siberia and Mirnoye. It has a circum-Holarctic boreo-nemoral range and occurs in Eurasia from Central and Northern Europe toward Tuva, Altai and Mongolia, northeast to the upper Kolyma River [Marusik et al., 2000] and north to the middle Lena River [Marusik et al., 1993].

Micaria yeniseica Marusik & Koponen, sp.n.

COMMENTS. This is a new species, a description of which is given below. So far it is known only from the Mirnoye Field Station.

Zelotes clivicola (L.Koch, 1870)

COMMENTS. This species has a Euro-Baikalian boreo-nemoral distribution. The new locality is its northernmost in east Palaearctic, exceeding previous northern Urals and Transbaikalian records.

LINYPHIIDAE (16)

Abiskoa abiskoensis (Holm, 1945)

COMMENTS. While this species has a trans-Palaearctic range [Marusik et al., 2000] it has not been previously reported from Middle Siberia.

Agyneta decora (O.P.-Cambridge, 1870)*

COMMENTS. This species, new to Siberia, was known to be distributed from Western Europe to the Urals [Eskov, 1994].

Allomengea dentisetis (Grube, 1861)

COMMENTS. While this species has a Siberio-northern Nearctic range [Eskov, 1994; Buckle et al., 2001] it was previously unknown in Middle Siberia.

Baryphyma gowerense (Locket, 1965)

COMMENTS. Previously known to be distributed west of South Yamal in the Palaearctic and in the Nearctic [Eskov, 1994]. The Yenisei River is the easternmost point of distribution within Asia, and the Mirnoye Field Station is the first record for Middle Siberia.

Bathyphantes parvulus (Westring, 1851)

COMMENTS. While this species has a trans-Palaearctic range, it was not previously recorded from Middle Siberia.

Hilaira nubigena Hull, 1911

COMMENTS. It is new both to Middle Siberia and Mirnoye, it is known from western Europe to Chukotka [Eskov, 1994].

Lepthyphantes distichus Tanasevitch, 1986

COMMENTS. This species was described and known only from the south part of Krasnoyarsk Province, therefore the record from Goroshykha is the northernmost point of the range.

Palliduphantes alutaceus (Simon, 1884)

COMMENTS. This species was known to be distributed from France to western Siberia [cf. Eskov, 1994], therefore Ust'-Pit is the north-easternmost locality of the range.

Table 1. List of spiders from Middle Siberia and material collected by Rybalov. (p — previously recorded species, N — species new to Middle Siberia, m and f — male and female respectively).
Таблица 1. Список пауков средней Сибири и материал собранный Рыбаловым (p — ранее зарегистрированные виды, N — вид новый для Средней Сибири, m и f — самка и самец соответственно).

	MS	Peredvinsk 57°N 93,5°E	U.Pit 58°55'N 91°55'E	Mirnoye 62°19'N 89°02'E	Birobchana 62,45°N 91.5°E	Yelogui 62,5°N 87°E	Goroshykha 66°N 87°E	Potapovo 68,50°N 86,25°E	Karaul 70°08'N 83°13'E	Vorontsovo 71,5°N 83°E	Comments and how species was listed in Eskov [1988]
AGELENIDAE (1)											
Paracoelotes birulai (Ermolajev, 1926)	N	25mf									
AMAUROBIIDAE (1)											
Arctobius agelenoides (Emerton, 1919)	p										
ARANEIDAE (16)											
Aculepeira carbonarioides (Keyserling, 1892)	p										
Aculepeira packardi (Thorell, 1989)	p										
Araneus alsine Walckenaer, 1802	p			p							
Araneus nordmanni (Thorell, 1870)	p			p							
Araneus quadratus Clerck,1758	p			p							
Araneus washingtoni Levi, 1971	p										
Araniella displicata (Hentz, 1847)	p			1m							
Araniella proxima (Kulczynski, 1885)	p										
Cercidia prominens (Westring, 1851)	p			2m							
Cyclosa conica (Pallas, 1772)	p										
Cyphepeira silvicultrix (C.L.Koch, 1835)	p		1f	p							
Gibbaranea omoeda (Thorell, 1870)	p		2mf								
Hypsosinga albovittata (Westring, 1851)	p			p							
Larinioides cornutus (Clerck, 1757)	p			p							
Larinioides patagiatus (Clerck, 1757)	p		1m	2mf	1f						
Singa hamata (Clerck, 1757)	p			p							
CLUBIONIDAE (11)											
Clubiona caerulescens L.Koch, 1886	N			8m							
Clubiona diversa (O.P.-Cambridge, 1862)	p										
Clubiona germanica Thorell, 1870	p			1m							
Clubiona interjecta L.Koch, 1879	p										
Clubiona kulczynskii Lessert, 1905	p	1m	1m	17mf	1f	2mf		1m			
Clubiona lutescens Westring, 1851	p			18mf							
Clubiona pallidula (Clerck, 1757)	p	1m		1m							
Clubiona reclusa O.P.-Cambridge, 1863	p			7mf							
Clubiona stagnatilis Kulczynski, 1897	p			p							
Clubiona subsultans Thorell, 1875	N	1m	1m	4mf							
Clubiona trivialis C.L.Koch, 1834	p			p							

Table 1 (contituing).
Таблица 1 (продолжение).

	MS	Peredvinsk 57°N 93,5°E	U.Pit 58°55'N 91°55'E	Mirnoye 62°19'N 89°02'E	Birobchana 62,45°N 91.5°E	Yelogui 62,5°N 87°E	Goroshykha 66°N 87°E	Potapovo 68,50°N 86,25°E	Karaul 70°08'N 83°13'E	Vorontsovo 71,5°N 83°E	Comments and how species was listed in Eskov [1988]
DICTYNIDAE (8)											
Arctella lapponica (Holm, 1945)	p										
Dictyna arundinacea (Linnaeus, 1758)	p			2m							
Dictyna major Menge, 1869	p										= *D. hamifera* Thorell, 1872
Dictyna pusilla Thorell, 1856	p			p							
Dictyna uncinata Thorell, 1856	p			p							*D. unicata* [lapsus]
Emblyna mitis Thorell, 1875	p			p							*Dictyna m.*
Hackmania prominula (Tullgren, 1948)	p			9mf				4mf			*Argenna p.*
Mastigusa macropthalma (Kulczynski, 1897)	N	1m		2f							
DOLOMEDIDAE (1)											
Dolomedes fimbriatus (Clerck, 1757)	p		1f	p							
GNAPHOSIDAE (22)											
Callilepis nocturna (Linnaeus, 1758)	N			1f							
Gnaphosa borea Kulczynski, 1908	p							1m			
Gnaphosa chola Ovtsharenko & Marusik, 1988	p										*G. antipola* Chamberlin, 1933
Gnaphosa gracilior Kulczynski, 1901	p										
Gnaphosa microps Holm, 1939	p			p				1m			*G. brumalis* Thorell, 1875
Gnaphosa muscorum L.Koch, 1866	p				1m	1m		1m			
Gnaphosa orites Chamberlin, 1922	p							7mf	2mf		
Gnaphosa sticta Kulczynski, 1908	p										
Haplodrassus cognatus (Westring, 1862)	N	1m		35mf		1m					
Haplodrassus hiemalis (Emerton, 1909)	p							12m			
Haplodrassus moderatus (Kulczynski, 1897)	p	2m	1m	35mf		2m					
Haplodrassus soerenseni (Strand, 1900)	p	12mf	5m	212mf							
Micaria aenea Thorell, 1871	N			16mf							
Micaria alpina L.Koch, 1872	p			13mf							
Micaria nivosa L. Koch, 1866	p			8mf							
Micaria pulicaria Sundevall, 1831	p	1f		58mf							
Micaria tripunctata Holm, 1979	p			2mf							
Micaria yeniseica sp.n.	N			1m							
Zelotes clivicola (L.Koch, 1870)	N	1m		5mf							
Zelotes fratris Chamberlin, 1920	p		1m	17mf	1f	1f					

Table 1 (contituing).
Таблица 1 (продолжение).

	MS	Peredvinsk 57°N 93,5°E	U.Pit 58°55'N 91°55'E	Mirnoye 62°19'N 89°02'E	Birobchana 62,45°N 91.5°E	Yelogui 62,5°N 87°E	Goroshykha 66°N 87°E	Potapovo 68,50°N 86,25°E	Karaul 70°08'N 83°13'E	Vorontsovo 71,5°N 83°E	Comments and how species was listed in Eskov [1988]
Zelotes latreillei (Simon, 1878)	p			1m	1m						
Zelotes lutetianus (L.Koch, 1866)	p			p							
HAHNIIDAE (5)											
Antistea elegans (Blackwall, 1841)	p			p							
Cryphoeca silvicola (C.L.Koch, 1834)	p			14mf							
Hahnia cf. *ononidum* Simon, 1875	p			21mf	10mf	3mf					*H. ononidum* & *Hahnia* sp. 1
Hahnia nava (Blackwall, 1841)	p			p		2mf					
Hahnia sibirica Marusik & al., 1996	p			10mf							*H. glacialis* Soerensen, 1898
LINYPHIIDAE (305)											
Abiskoa abiskoensis (Holm, 1945)	N		1m								*Lepthyphantes a.*
Acartauchenius pilifrons (L.Koch, 1879)	p										
Agyneta affinis (Kulczynski, 1898)	p			p							*mollis* (O.P.-Cambridge, 1894)
Agyneta affinisoides (Tanasevitch,1984)	p			80mf							
Agyneta alaskensis (Holm, 1960)	p										*A. alascensis*
Agyneta allosubtilis Loksa, 1965	p	1m	13mf	p		1m					
Agyneta birulai (Kulczynski, 1908)	p										
Agyneta brusnewi (Kulczynski, 1908)	p										
Agyneta cf. *gulosa* (L.Koch, 1869)	p										*A. gulosa*
Agyneta conigera (O.P.-Cambridge, 1863)	p			1m							
Agyneta decora (O.P.-Cambridge, 1870	N		1m	13mf							
Agyneta levii (Tanasevitch, 1984)	p			1m							
Agyneta mossica Schikora, 1993	p										*A. saxatilis* (Blackwall, 1834)
Agyneta nigripes (Simon, 1884)	p										
Agyneta olivacea (Emerton, 1882)	p	1m	11mf	36mf		1m					
Agyneta pseudosaxatilis (Tanasevitch, 1984)	p										
Agyneta ripariensis (Tanasevitch, 1984)	p					1m					
Agyneta similis (Kulczynski, 1926)	p										
Agyneta sp. 1	p			3m							
Agyneta sp. 2	p										
Agyneta trifurcata Hippa & Oksala, 1985	p										
Allomengea dentisetis (Grube, 1861)	N		2mf								

Table 1 (contituing).
Таблица 1 (продолжение).

	MS	Peredvinsk 57°N 93,5°E	U.Pit 58°55'N 91°55'E	Mirnoye 62°19'N 89°02'E	Birobchana 62,45°N 91.5°E	Yelogui 62,5°N 87°E	Goroshykha 66°N 87°E	Potapovo 68,50°N 86,25°E	Karaul 70°08'N 83°13'E	Vorontsovo 71,5°N 83°E	Comments and how species was listed in Eskov [1988]
LINYPHIIDAE (continuing)											
Allomengea scopigera (Grube, 1859)	p	58mf	18mf	p			113mf	60mf			
Allomengea vidua (L.Koch, 1879)	p			2f							
Anguliphantes cerinus (L.Koch, 1879)	p	1m	5mf	42mf							*Lepthyphantes c.*
Anguliphantes dybowskii (O.P.-Cambridge, 1873)	p			6mf							*Lepthyphantes d.*
Anguliphantes sibiricus Tanasevitch, 1986	p	2mf	7mf	1m			2f	1f			*Lepthyphantes s.*
Aphileta misera (O.P.-Cambridge, 1882)	p			p							
Araeoncus crassiceps (Westring, 861)	p			p							
Araeoncus vorkutensis Tanasevitch, 1984	p			p							
Archaraeoncus sibiricus Eskov, 1988	p										
Baryphyma gowerense (Locket, 1965)	N			4f							
Bathyphantes approximatus (O.P.Cambridge, 1871)	p			p							
Bathyphantes canadensis (Emerton, 1882)	p										
Bathyphantes eumenis (L.Koch, 1879)	p										
Bathyphantes gracilis (Blackwall, 1841)	p			p							
Bathyphantes humilis (L.Koch, 1879)	p										
Bathyphantes jeniseicus Eskov, 1979	p			p							
Bathyphantes parvulus (Westring, 1851)	N		1f	2m							
Bathyphantes reprobus Kulczynski, 1916	p			5mf							
Bathyphantes setiger (O.P.Cambridge, 1894)	p			p							
Bathyphantes simillimus (L.Koch, 1879)	p	6f	15mf	p					3m		= *eumenoides* Holm 1967
Bathyphantes sp. 1	p										? = *simillimus*
Bishopiana hypoarctica Eskov, 1988	p										
Bolyphantes alticeps (Sundevall, 1832)	p			p							
Bolyphantes index (Thorell, 1856)	p										
Bolyphantes luteolus (Blackwall, 1833)	p										
Carorita limnaea Crosby & Bishop, 1927	p			p							
Centromerus arcanus (O.P.-Cambridge, 1871)	p			3mf							
Centromerus clarus (L.Koch, 1879)	p	2f	5mf	16mf			2f	2mf			
Centromerus levitarsis (Simon, 1884)	p			p							
Centromerus semiater (L.Koch, 1879)	p										
Centromerus silvaticus (Blackwall, 184)	p	1f		p							
Ceraticelus bulbosus (Emerton, 1882)	p		1f	p							*C. sibiricus* Eskov, 1987

Table 1 (contituing).
Таблица 1 (продолжение).

	MS	Peredvinsk 57°N 93,5°E	U.Pit 58°55'N 91°55'E	Mirnoye 62°19'N 89°02'E	Birobchana 62,45°N 91.5°E	Yelogui 62,5°N 87°E	Goroshykha 66°N 87°E	Potapovo 68,50°N 86,25°E	Karaul 70°08'N 83°13'E	Vorontsovo 71,5°N 83°E	Comments and how species was listed in Eskov [1988]
LINYPHIIDAE (continuing)											
Ceratinella alaskae Chamberlin & Gertsch, 1947)	p										
Ceratinella brevis (Wider, 1834)	p			p							
Ceratinella sp.1	p			p							
Ceratinella sp.2	p			p							
Ceratinella wideri (Thorell, 1871)	p		1f	p				2f			
Cnephalocotes obscurus (Blackwall, 1834)	p			3mf	3						
Collinsia borea (L.Koch, 1879)	p										
Collinsia caliginosa (L.Koch, 1879)	p			p							
Collinsia dentata Eskov, 1990	p										*Collinsia* sp. 1
Collinsia distincta (Simon, 1884)	p			p							
Collinsia holmgreni (Thorell, 1872)	p										
Collinsia jeniseica Eskov, 1989	p										
Collinsia spetsbergensis (Thorell, 1872)	p										
Collinsia submissa (L.Koch, 1879)	p			p							
Concavocephalus rubens Eskov, 1989	p										
Connithorax barbatus (Eskov, 1988)	p							4mf	1m		
Crosbylonia borealis Eskov, 1988	p										
Dactilopisthes video (Chamberlin & Ivie, 1947)	p										*Scytiella v.; S. komi* Tanasevitch, 1984
Decipiphantes decipiens (L.Koch, 1879)	p		3f	p			3f	1f			*Lepthyphantes d.*
Dicymbium facetum (L.Koch, 1879)	p			p			1f				
Dicymbium libidinosum (Kulczynski, 1926)	p			p							
Diplocentria bidentata (Emerton, 1882)	p			4mf			7mf				
Diplocentria rectangulata (Emerton, 1915)	p										*Microcentria pusilla* (Schenkel, 1925)
Diplocephalus barbatus (L.Koch, 1879)	p										
Diplocephalus connatus Bertkau, 1889	p										
Diplocephalus cristatus angusticeps Holm, 1973	p			p							
Diplocephalus mirabilis Eskov, 1988	p										
Diplocephalus montanus Eskov, 1988	p										
Diplocephalus sphagnicolus Eskov, 1988	p										
Diplocephalus subrostratus (O.P.-Cambridge,1873)	p		6m	p							
Diplocephalus uliginosus Eskov, 1988	p										
Diplostyla concolor (Wider, 1834)	p			p							

Table 1 (contituing).
Таблица 1 (продолжение).

	MS	Peredvinsk 57°N 93,5°E	U.Pit 58°55'N 91°55'E	Mirnoye 62°19'N 89°02'E	Birobchana 62,45°N 91.5°E	Yelogui 62,5°N 87°E	Goroshykha 66°N 87°E	Potapovo 68,50°N 86,25°E	Karaul 70°08'N 83°13'E	Vorontsovo 71,5°N 83°E	Comments and how species was listed in Eskov [1988]
LINYPHIIDAE (continuing)											
Dismodicus bifrons (Blackwall, 1841)	p			p							
Drapetisca socialis (Sundevall, 1832)	p?			4f							
Drepanotylus borealis Holm, 1945	p			p							
Drepanotylus holmi (Eskov, 1981)	p										
Entelecara erythropus (Westring, 1851)	p			p							
Entelecara sombra (Chamberlin & Ivie, 1947)	p			p							*E. errata* (O.P.-Cambridge, 1913)
Erigone arctica sibirica Kulczynski, 1908	p			p						3m	
Erigone atra Blackwall, 1883	p			p							
Erigone dentipalpis Wider, 1834	p										
Erigone hypoarctica Eskov, 1989	p										*Erigone* sp. 1
Erigone psychrophila Thorell, 1872	p										
Erigone remota L.Koch, 1869	p										
Erigone tirolensis L.Koch, 1872	p										
Erigonella hiemalis (Blackwall, 1841)	p										
Erigonella ignobilis (O.P.-Cambridge, 1871)	p										
Estrandia grandaeva (Keyserling, 1886)	p			p							*Linyphia g.*
Flagelliphantes bergstroemi (Schenkel, 1931)	p		1m	2mf							*Lepthyphantes b.*
Gibothorax chemovi Eskov, 1989	p							4mf	1m		*Rhaebothorax* sp. 3
Glyphesis asiaticus Eskov, 1989	p										*Glyphesis* sp. 1
Glyphesis cottonae (La Touche, 1946)	p			p							
Gnathonarium dentatum (Wider, 1834)	p										
Gnathonarium suppositum (Kulczynski, 1885)	p										
Gnathonarium taczanowskii (O.P.-Cambridge, 1873)	p			p							
Gonatium rubellum (Blackwall, 1841)	p			p							
Gonatium rubens (Blackwall, 1841)	p			p							
Gongylidium rufipes (Linnaeus, 1758)	p										
Helophora insignis (Blackwall, 1841)	p		1f	p			4mf				
Hilaira asiatica Eskov, 1987	p										
Hilaira cf. *tatrica* Kulczynski, 1915	p	1f		p			7mf	1f			*H. tatrica tatrica*
Hilaira devitata Eskov, 1987	p										
Hilaira gibbosa Tanasevitch, 1982	p			3mf							

Table 1 (contituing).
Таблица 1 (продолжение).

	MS	Peredvinsk 57°N 93,5°E	U.Pit 58°55'N 91°55'E	Mirnoye 62°19'N 89°02'E	Birobchana 62,45°N 91.5°E	Yelogui 62,5°N 87°E	Goroshykha 66°N 87°E	Potapovo 68,50°N 86,25°E	Karaul 70°08'N 83°13'E	Vorontsovo 71,5°N 83°E	Comments and how species was listed in Eskov [1988]
LINYPHIIDAE (continuing)											
Hilaira glacialis (Thorell, 1872)	p									1m	
Hilaira hemiosa (Thorell, 1875)	p			1f		2mf			27mf		
Hilaira incondita (L.Koch, 1879)	p										
Hilaira intercepta (O.P.-Cambridge, 1873)	p			1m							
Hilaira jamalensis Eskov, 1981	p										
Hilaira leviceps (L.Koch, 1879)	p										
Hilaira minuta Eskov, 1979	p			p							
Hilaira nivalis Holm, 1939	p										
Hilaira nubigena Hull, 1911	N				1f						
Hilaira pervicax Hull, 1908	p			p							
Hilaira proletaria (L.Koch, 1879)	p										
Hilaira sibirica Eskov, 1987	p										
Hilaira syrojeczkovskii Eskov, 1981	p			p							
Hilaira vexatrix (O.P.-Cambridge, 1877)	p										
Holminaria pallida Eskov, 1991	p										
Holminaria prolata (O.P.-Cambridge, 1873)	p										
Holminaria sibirica Eskov, 1991	p			p							
Horcotes strandi (Sytchevskaya, 1935)	p										*Saloca s.*
Hybauchenidium aquilonare (L.Koch, 1879)	p									4mf	
Hybauchenidium ferrumequinum (Grube, 1861)	p						1m	2mf			
Hypomma bituberculatum (Wider, 1934)	p			p							
Hypomma cornutum (Blackwall, 1833)	p										
Hypselistes jacksoni (O.P.-Cambridge, 1902)	p			1f							
Hypselistes kolymensis Marusik & Leech, 1993	p										
Hypselistes semiflavus (L.Koch, 1879)	p		2f	p							
Improphantes complicatus (Emerton, 1882)	p			p					1f		*Lepthyphantes c.*
Improphantes flexilis Tanasevitch, 1986	p			p			1f				*Lepthyphantes f.*
Incestophantes incestus (L.Koch, 1879)	p										
Incestophantes kochiellus (Strand, 1900)	p		1f	p							*Lepthyphantes i.*
Islandiana cristata Eskov, 1987	p										
Islandiana falsifica (Keyserling, 1886)	p										*I. alata* (Emerton, 1902)
Kaestneria dorsalis (Wider, 1834)	p			p							
Kaestneria pullata (O.P.-Cambridge, 1863)	p			p							
Kikimora palustris Eskov, 1988	p										

Table 1 (contituing).
Таблица 1 (продолжение).

	MS	Peredvinsk 57°N 93,5°E	U.Pit 58°55'N 91°55'E	Mirnoye 62°19'N 89°02'E	Birobchana 62,45°N 91.5°E	Yelogui 62,5°N 87°E	Goroshykha 66°N 87°E	Potapovo 68,50°N 86,25°E	Karaul 70°08'N 83°13'E	Vorontsovo 71,5°N 83°E	Comments and how species was listed in Eskov [1988]
LINYPHIIDAE (continuing)											
Lasiargus hirsutus (Menge, 1869)	p								1m		
Lasiargus pilipes (Kulczynski, 1908)	p			p							*Lasiargus* sp. 1
Lepthyphantes distichus Tanasevitch, 1986	N						1f				
Lepthyphantes expunctus (O.P.-Cambridge, 1875)	p						1f				
Lepthyphantes laricetorum Tanasevitch & Eskov, 1987	p							1m			
Lepthyphantes luteipes (L.Koch, 1879)	p			p							
Lepthyphantes nenilini Tanasevitch, 1987	p										
Lepthyphantes terrenus (L.Koch, 1879)	p										
Leptorhoptrum robustum (Westring, 1851)	p		61mf	p	5mf		1f	147mf	20mf		
Linyphia triangularis (Clerck, 1757)	p										
Linyphiidae (Erigoninae) gen.1 sp.1	p			p							
Lophomma cognatum Holm, 1962	p										
Lophomma punctatum (Blackwall, 1841)	p			p							
Macrargus multesimus (O.P.-Cambridge, 1875)	p	2f	1f	1f	1f		4mf	3f			
Maro borealis Eskov, 1991	p										*Maro* sp. 1
Maro flavescens (O.P.-Cambridge, 1873)	p		2f	p							
Maro saaristoi Eskov, 1980	p			p			1m				
Maro sibiricus Eskov, 1980	p			p							
Masikia indistincta (Kulczynski, 1908)	p										*"Minyriolus" i.*
Maso sundevalli (Westring, 1851)	p							1f			
Mecynargus borealis (Jackson, 1930)	p							1f		1m	
Mecynargus hypnicola Eskov, 1988	p										*Rhaebothorax* sp. 1
Mecynargus monticola (Holm, 1943)	p			p							*Rhaebothorax m.*
Mecynargus paetulus (O.P.-Cambridge, 1875)	p										*Rhaebothorax p.*
Mecynargus sphagnicola (Holm, 1939)	p										*= M. jamalensis*
Mecynargus tundricola Eskov, 1988	p										*Rhaebothorax* sp. 3
Mecynargus tungusicus (Eskov, 1981)	p										*Rhaebothorax t.*
Megalepthyphantes nebulosus (Sundevall, 1829)	p										*Lepthyphantes n.*
Micrargus herbigradus (Blackwall, 1854)	p		1f	1f							
Microlinyphia pusilla (Sundevall, 1829)	p			p							*Linyphia pusila*

Table 1 (contituing).
Таблица 1 (продолжение).

	MS	Peredvinsk 57°N 93,5°E	U.Pit 58°55'N 91°55'E	Mirnoye 62°19'N 89°02'E	Birobchana 62,45°N 91.5°E	Yelogui 62,5°N 87°E	Goroshykha 66°N 87°E	Potapovo 68,50°N 86,25°E	Karaul 70°08'N 83°13'E	Vorontsovo 71,5°N 83°E	Comments and how species was listed in Eskov [1988]
LINYPHIIDAE (continuing)											
Microneta viaria (Blackwall,1841)	p	2f	3f	5mf							
Minyrioloides trifrons (O.P.-Cambridge, 1863)	p			p							
Minyriolus pusillus (Wider, 1834)	p			p							*M. pusilus*
Monocerellus montanus Tanasevitch, 1983	p										
Mughiphantes suffusus Strand, 1900	p										*Lepthyphantes s.*
Mughiphantes taczanowskii (O.P.-Cambridge, 1873)	p			p							*Lepthyphantes t.*
Nenilinium asiaticum Eskov, 1988	p										
Neriene clathrata (Sundevall, 1829)	p			p							*Linyphia c*
Neriene emphana (Walckenaer, 1841)	p	1f	11f								
Neriene montana (Clerck, 1757)	p		1f	p							*Linyphia m.*
Notioscopus jamalensis Grese, 1909	p			p							
Notioscopus sarcinatus (O.P.-Cambridge, 1872)	p			p							
Obsuriphantes pseudoobscurus (Marusik & al., 1996)	p			p							*Lepthyphantes obscurus* (Blackwall, 1841)
Oedothorax agrestis (Blackwall, 1853)	p										
Oedothorax gibbosus (Blackwall, 1841)	p			p							
Oedothorax retusus (Westring, 1851)	p			4mf							
Oreonetides helsdingeni Eskov, 1984	p										
Oreonetides sajanensis Eskov, 1991	p										
Oreonetides vaginatus (Thorell, 1872)	p	1f		p							
Oryphantes geminus (Tanasevitch, 1982)	p			p		1f					*Lepthyphantes g.*
Palliduphantes alutaceus Simon, 1884	N		1f								
Panamomops dybowskii (O.P.-Cambridge, 1873)	p		15mf	17mf			27mf	5f			
Paraeboria jeniseica (Eskov, 1981)	p			p							*Typhochrestus jeniseicus*
Paraglyphesis polaris Eskov, 1991	p										
Pelecopsis dorniana Heimer, 1987	p			1m		1m					
Pelecopsis mengei (Simon, 1884)	p			p							
Pelecopsis parallela (Wider, 1834)	p			p						4mf	
Perregrinus deformis Tanasevitch, 1982	p						1m				*Peregrinus d*
Perro putoranica Eskov, 1986	p										
Pityohyphantes phrygianus (C.L.Koch, 1836)	p		1f	p							
Pocadicnemis pumila (Blackwall, 1841)	p			p							

Table 1 (contituing).
Таблица 1 (продолжение).

	MS	Peredvinsk 57°N 93,5°E	U.Pit 58°55'N 91°55'E	Mirnoye 62°19'N 89°02'E	Birobchana 62,45°N 91.5°E	Yelogui 62,5°N 87°E	Goroshykha 66°N 87°E	Potapovo 68,50°N 86,25°E	Karaul 70°08'N 83°13'E	Vorontsovo 71,5°N 83°E	Comments and how species was listed in Eskov [1988]
LINYPHIIDAE (continuing)											
Poeciloneta pallida Kulczynski, 1908	p										
Poeciloneta vakkhanka Tanasevitch, 1989	N			1f							
Poeciloneta variegata (Blackwall, 1841)	p			p							
Porrhomma borealis Banks, 1892	p			p							
Porrhomma campbelli F.O.P-Cambridge, 1894	N			9mf							
Porrhomma montanum Jackson, 1913	p			p							
Porrhomma pallidum Jackson, 1913	p			p							
Porrhomma pygmaeum (Blackwall, 1841)	p										
Praestigia groenlandica Holm, 1967	p										
Praestigia kulczynskii Eskov, 1979	p			p							
Praestigia pini (Holm, 1950)	p			p							
Praestigia sp. 1	p										
Procerocymbium yeniseicum Marusik & Koponen, 2001	p										?
Proislandiana pallida (Kulczynski, 1908)	p										
Pseudocyba miracula Tanasevitch, 1984	p			p							
Pseudomaro (?) sp. 1	p			p							
Pseudowubana wagae (O.P.-Cambridge, 1973)	p			p							*Veles w.*
Savignia borea Eskov, 1988	p										
Savignia frontata Blackwall, 1833	p			p						1f	
Savignia nenilini Marusik, 1988	p										*S. birostrum* (Chamberlin & Ivie, 1947)
Savignia producta Holm, 1977	p			p							
Scandichrestus tenuis (Holm, 1943)	N			6mf							
Sciastes hyperboreus (Kulczynski, 1908)	p										
Scotinotylus alpigenus (L.Koch, 1869)	p			p							
Scotinotylus alpinus (Banks, 1896)	p										
Scotinotylus evansi (O.P.-Cambridge, 1894)	p										
Scotinotylus protervus (L.Koch, 1879)	p			p							
Scotinotylus sacer (Crosby, 1929)	p										
Semljicola angulatus (Holm, 1963)	p			p							*Eboria angulata*
Semljicola arcticus (Eskov, 1989)	p										*Latithorax* sp. 1
Semljicola barbiger (L.Koch, 1879)	p										*Eboria assimilis* (Holm, 1945)
Semljicola faustus (O.P.-Cambridge, 1900)	N			3m							

Table 1 (contituing).
Таблица 1 (продолжение).

	MS	Peredvinsk 57°N 93,5°E	U.Pit 58°55'N 91°55'E	Mirnoye 62°19'N 89°02'E	Birobchana 62,45°N 91.5°E	Yelogui 62,5°N 87°E	Goroshykha 66°N 87°E	Potapovo 68,50°N 86,25°E	Karaul 70°08'N 83°13'E	Vorontsovo 71,5°N 83°E	Comments and how species was listed in Eskov [1988]
LINYPHIIDAE (continuing)	p										
Semljicola lapponicus (Holm, 1939)	p										*Eboria lapponica*
Semljicola latus (Holm, 1939)	p			p							*Latithorax l.*
Semljicola simplex (Kulczynski, 1908)	p										*Eboria s.*
Semljicola thaleri (Eskov, 1981)	p		4mf	p							*Latithorax t.*
Sibirocyba incerta Kulczynski, 1916	p										*Tapinocyba l.*
Silometopoides sphagnicolus Eskov & Marusik, 1992	p										
Silometopus elegans (O.P.-Cambridge, 1872)	p			p							
Silometopus reussi (Thorell, 1871)	p			p							
Silometopus uralensis Tanasevitch, 1985	p										
Sisicus apertus (Holm, 1939)	p										
Stemonyphantes conspersus (L.Koch, 1879)	p			1m							
Stemonyphantes sibiricus (Grube,1861)	p		1m	p					4m		*S. lineatus* (Linnaeus, 1758)
Styloctetor romana (O.P.-Cambridge, 1872)	p										*Ceratinopsis romanus*
Styloctetor stativa (Simon, 1881)	p			p							*Ceratinopsis stativus*
Tallusia experta (O.P.-Cambridge, 1871)	p			p							*Centromerus expertus*
Tanasevitchia uralensis (Tanasevitch, 1983)	p										
Taranuncus setosus (O.P.-Cambridge, 1863)	p										
Tenuiphantes alacris (Blackwall, 1853)	N		2m	1m							*Lepthyphantes a.*
Tenuiphantes mengei (Kulczynski, 1887)	p			p							*Lepthyphantes m.*
Tenuiphantes nigriventris (L.Koch, 1879)	p	3f	40mf	1f	1m		1f	38mf	16f		*Lepthyphantes n.*
Tenuiphantes tenuis (Blackwall, 1852)	N			9mf							
Thaleria evenkiensis Eskov & Marusik, 1992	p										*Thaleria* sp. 1
Thaleria orientalis Tanasevitch, 1984	p			p							
Thyreostenius biovatus (O.P.-Cambridge, 1875)	N			8f							
Thyreostenius parasiticus (Westring, 1851)	p			p							
Tibioploides arcuatus (Tullgren, 1955)	p		1m	p							
Tibioplus diversus (L.Koch, 1879)	p		3mf	1m			4mf	1f			
Tiso aestivus (L.Koch, 1872)	p			p							
Tmeticus affinis (Blackwall, 1855)	p			p							
Tmeticus nigriceps (Kulczynski, 1916)	p										
Tmeticus tolli Kulczynski, 1908	p			p							
Troxochrus scabriculus (Westring, 1851)	p			4mf							

Table 1 (contituing).
Таблица 1 (продолжение).

	MS	Peredvinsk 57°N 93,5°E	U.Pit 58°55'N 91°55'E	Mirnoye 62°19'N 89°02'E	Birobchana 62,45°N 91.5°E	Yelogui 62,5°N 87°E	Goroshykha 66°N 87°E	Potapovo 68,50°N 86,25°E	Karaul 70°08'N 83°13'E	Vorontsovo 71,5°N 83°E	Comments and how species was listed in Eskov [1988]
LINYPHIIDAE (continuing)											
Tubercithorax subarcticus (Tanasevitch, 1984)	p								11mf	1f	*Rhaebothorax s.*
Tunagyna debilis (Banks, 1892)	p										
Typhochraestus latithorax (Strand, 1905)	p										
Typhochrestoides baikalensis Eskov, 1990	p										
Ummeliata sibirica (Eskov, 1980)	p			p							
Victorium putoranicum Eskov, 1989	p										
Wabasso hilaroides Eskov, 1998	p										
Wabasso millidgei Eskov, 1988	p										
Wabasso questio (Chamberlin, 1948)	p										
Wabasso tungusicus Eskov, 1988	p										
Walckenaeria alticeps (Denis, 1952)	N										
Walckenaeria antica (Wider, 1834)	p			p							
Walckenaeria atrotibialis O.P.-Cambridge, 1878	p		10mf	p							
Walckenaeria capito (Westring, 1861)	p			p							
Walckenaeria cucullata (C.L.Koch, 1836)	p										
Walckenaeria cuspidata Blackwall, 1833	p										
Walckenaeria fraudatrix Millidge, 1983	p			p		1m					
Walckenaeria karpinski (O.P.-Cambridge, 1873)	p						1m				
Walckenaeria kochi (O.P.-Cambridge, 1872)	p			p							
Walckenaeria koenboutjei Baert, 1994	N						1m				*W. (Tigellinus)* sp. 1
Walckenaeria korobeinikovi Esyunin & Efimik, 1996	p			p							*W. clavicornis* (Emerton, 1882)
Walckenaeria lepida (Kulczynski, 1885)	p			p							*W. unicornis* (O.P.-Cambridge, 1861)
Walckenaeria nodosa (O.P.-Cambridge, 1873)	p			p				1f			
Walckenaeria nudipalpis (Westring, 1851)	p			p							
Walckenaeria palmgreni Eskov & Marusik, 1994	p			p							*W. (Trachynella)* sp. 2
Walckenaeria picetorum (Palmgren, 1976)	p		1f	p							
Wubanoides fissus (Kulczynski, 1926)	p										
Wubanoides uralensis (Pakhorukov, 1981)	p			p							*W. longicornis* Eskov, 1986
Zornella cultrigera (L.Koch, 1879)	p		2mf	2f			7mf	1f	1f		

Table 1 (contituing).
Таблица 1 (продолжение).

	MS	Peredvinsk 57°N 93,5°E	U.Pit 58°55'N 91°55'E	Mirnoye 62°19'N 89°02'E	Birobchana 62,45°N 91.5°E	Yelogui 62,5°N 87°E	Goroshykha 66°N 87°E	Potapovo 68,50°N 86,25°E	Karaul 70°08'N 83°13'E	Vorontsovo 71,5°N 83°E	Comments and how species was listed in Eskov [1988]
LIOCRANIDAE (4)											
Agroeca brunnea (Blackwall, 1833)	p	5f	8f	~90mf		1f					
Agroeca maculata (L.Koch, 1879)	p			p							
Agroeca ornata Banks, 1892	N	1m	1f	~30f							
Agroeca proxima (O.P.-Cambridge, 1871)	N			~30m							
LYCOSIDAE (50)											
Acantholycosa lignaria (Clerck, 1757)	N	1m									
Acantholycosa norvegica (Thorell, 1875)	p			3mf							
Acantholycosa sibirica (Kulczynski, 1908)	p										
Alopecosa aculeata (Clerck, 1757)	p			90mf	18mf	7mf		1f			
Alopecosa aff. *pulverulenta* (Clerck, 1757)	N			85mf		2mf					
Alopecosa albostriata (Grube, 1861)	p			1m			1f				
Alopecosa borea (Kulczynski, 1908)	p							3f			*A. solivaga borea*
Alopecosa cf. *pictilis* (Emerton, 1885)	p										*A. pictilis*
Alopecosa hirtipes (Kulczynski, 1907)	p								6f		
Alopecosa mutabilis (Kulczynski, 1908)	N							1f			
Alopecosa pulverulenta (Clerck, 1757)	p			p	16mf						
Alopecosa sibirica (Kulczynski, 1908	p										
Alopecosa solivaga (Kulczynski, 1901)	p										*A. solivaga solivaga*
Alopecosa taeniata (C.L.Koch, 1835)	p	86mf	1m								missed
Arctosa stigmosa (Thorell, 1872)	p			p							
Hygrolycosa rubrofasciata (Ohlert, 1865)	N			4mf	3mf						
Pardosa adustella (Roewer, 1951)	p										
Pardosa agricola (Thorell, 1856)	p			47mf							
Pardosa algens (Kulczynski, 1908)	p										
Pardosa atrata (Thorell, 1873)	p										
Pardosa cf. *lugubris* (Walckenaer, 1802)	p	3mf	1f								
Pardosa chionophila L.Koch, 1879	p										
Pardosa eiseni (Thorell, 1875)	p				2f			2f			
Pardosa fulvipes (Collett, 1875)	p										
Pardosa hyperborea (Thorell, 1872)	p			8mf							
Pardosa indecora L.Koch, 1879	p							5f	4f		missed
Pardosa jeniseica Eskov & Marusik, 1995	p			p							*Pardosa* sp. 2

Table 1 (contituing).
Таблица 1 (продолжение).

	MS	Peredvinsk 57°N 93,5°E	U.Pit 58°55'N 91°55'E	Mirnoye 62°19'N 89°02'E	Birobchana 62,45°N 91.5°E	Yelogui 62,5°N 87°E	Goroshykha 66°N 87°E	Potapovo 68,50°N 86,25°E	Karaul 70°08'N 83°13'E	Vorontsovo 71,5°N 83°E	Comments and how species was listed in Eskov [1988]
LYCOSIDAE (continuing)											
Pardosa lapponica (Thorell, 1872)	p										
Pardosa lasciva (L.Koch, 1879)	p	4mf		498mf	16mf	19mf					
Pardosa lyrata (Odenwall, 1901)	p										
Pardosa masurae Esyunin & Efimik, 1998	N?			33mfj							?*Pardosa* sp. 4
Pardosa oksalai Marusik & al., 1996	N				8mf						
Pardosa oljunae Lobanova, 1978	N			5mf				1f			
Pardosa palustris (Linnaeus, 1758)	p			87mf							
Pardosa riparia (C.L.Koch, 1833)	p			25mf							
Pardosa schenkeli Lessert, 1904	p										
Pardosa septentrionalis (Westring, 1861)	p							1m 39f	3f	2m	
Pardosa sodalis Holm, 1970	p										
Pardosa sp.	p			p							*Pardosa* sp. 1 or *Pardosa* sp. 3
Pardosa sp. (cf. *lapponica*)	N							49f			
Pardosa sphagnicola (F.Dahl, 1908)	p			8mf	76mf						
Pardosa tesquorum (Odenwall, 1901)	p										
Pirata hygrophilus (Thorell, 1872)	p		57f	9mf							
Pirata insularis Emerton, 1885	p			p							*P. piccolo* (F.Dahl, 1908)
Pirata piraticus (Clerck, 1757)	p			8mf		1m					
Pirata piscatorius (Clerck, 1757)	N			1f							
Tricca alpigena (Doleschall, 1852)	p				12mf				3f		
Trochosa spinipalpis (F.O.P.-Cambridge, 1895)	N				4mf						
Trochosa terricola Thorell, 1856	p			223mf							
Xerolycosa nemoralis (Westring, 1862)	p			1m							
MIMETIDAE (2)											
Ero cambridgei Kulczynski, 1911	N			3f							
Ero furcata (Villers, 1789)	p	1m	2mf	4mf		1f					
OXYOPIDAE (1)											
Oxyopes ramosus (Martini & Goeze, 1778)	p			p							
PHILODROMIDAE (6)											
Philodromus alascensis Keyserling, 1884	p										
Philodromus cespitum (Walckenaer, 1902)	p			3mf							
Philodromus fuscomarginatus (De Geer, 1778)	p			1f							

Table 1 (contituing).
Таблица 1 (продолжение).

	MS	Peredvinsk 57°N 93,5°E	U.Pit 58°55'N 91°55'E	Mirnoye 62°19'N 89°02'E	Birobchana 62,45°N 91.5°E	Yelogui 62,5°N 87°E	Goroshykha 66°N 87°E	Potapovo 68,50°N 86,25°E	Karaul 70°08'N 83°13'E	Vorontsovo 71,5°N 83°E	Comments and how species was listed in Eskov [1988]
PHILODROMIDAE (continuing)											
Thanatus arcticus Thorell, 1872	p										
Thanatus bungei (Kulczynski, 1908)	p										
Tibellus maritimus (Menge, 1875)	p			1m							
SALTICIDAE (20)											
Asianellus festivus (C.L.Koch, 1834)	p										*Aelurillus f.*
Bianor aurocinctus (Ohlert, 1867)	p			1f							
Chalcoscirtus alpicola (L.Koch, 1876)	p										*Chalcoscirtus* sp. 1
Dendryphantes czekanowskii Proszynski, 1979	p										
Dendryphantes fusconotatus (Grube, 1861)	p										
Dendryphantes hastatus (Clerck, 1757)	p			p							
Dendryphantes rudis (Sundevall, 1832)	p			p							
Euophrys proszynskii Logunov & al., 1993	p										*Euophris frontalis* (Walckenaer, 1802)
Evarcha arcuata (Clerck, 1757)	p			p							
Evarcha falcata (Clerck, 1757)	p	1m		17mf		1f					
Neon reticulatus (Blackwall, 1853)	p			p		1f					
Pellenes ignifrons (Grube, 1861)	p										
Pseudeuophrys erratica (Walckenaer, 1825)	N	1m	4mf								
Sitticus caricis (Westring, 1861)	p			p							
Sitticus cutleri Proszynski, 1980	p										
Sitticus finschi (L.Koch, 1879)	p			3mf							
Sitticus floricola (C.L.Koch, 1837)	p			1m							
Sitticus penicillatus (Simon, 1875)	p										
Sitticus ranieri (Peckham & Peckham, 1909)	p			p							*S. lineolatus* (Grube, 1861)
Sitticus terebratus (Clerck, 1757)	p			p							
TETRAGNATHIDAE (6)											
Pachygnatha clercki Sundevall, 1823	p			3mf							
Pachygnatha degeeri Sundevall, 1830	p										
Pachygnatha listeri Sundevall, 1830	p		1f	73mf							
Tetragnatha dearmata Thorell, 1873	p			p							
Tetragnatha extensa (Linnaeus, 1758)	p			1m							
Tetragnatha obtusa C.L.Koch, 1837	p			p							
THERIDIIDAE (16)											
Achaearanea saxatilis (C.L.Koch, 1835)	N		1m								

Table 1 (contituing).
Таблица 1 (продолжение).

	MS	Peredvinsk 57°N 93,5°E	U.Pit 58°55'N 91°55'E	Mirnoye 62°19'N 89°02'E	Birobchana 62,45°N 91.5°E	Yelogui 62,5°N 87°E	Goroshykha 66°N 87°E	Potapovo 68,50°N 86,25°E	Karaul 70°08'N 83°13'E	Vorontsovo 71,5°N 83°E	Comments and how species was listed in Eskov [1988]
THERIDIIDAE (continuing)											
Euryopis flavomaculatus (C.L.Koch, 1836)	p			1m		2m					
Robertus arundineti (O.P.-Cambridge, 1871)	p			p	3f						
Robertus kastoni Eskov, 1987	p										
Robertus lividus (Blackwall, 1836)	p	23mf	5mf	49mf	6mf	1m					
Robertus lyrifer Holm, 1939	p										
Robertus neglectus (O.P.-Cambridge, 1871)	p			p							
Robertus sibiricus Eskov, 1987	p										
Steatoda bipunctata (Linnaeus, 1758)	N		1m								
Theridion aurantium Emerton, 1915	p	1m		2mf							
Theridion impressum L.Koch, 1881	p										
Theridion ohlerti Thorell, 1870	p			2mf							*T.o.* & *T.umbraticum* L.Koch, 1872
Theridion pictum Walckenaer, 1802	p			p							
Theridion varians Hahn, 1831	p			p							
Thymoites bellissimum (L.Koch, 1879)	p			p							
Thymoites oleatus (L.Koch, 1879)	p										
THOMISIDAE (19)											
Coriarachne depressa (C.L.Koch, 1837)	p			p							
Misumena vatia (Clerck, 1757)	p			p							
Ozyptila arctica Kulczynski, 1908	p							1f	1f		*Oxyptila a.*
Ozyptila atomaria (Panzer, 1801)	p			p							*Oxyptila a.*
Ozyptila praticola (C.L.Koch, 1837)	N		7mf	3mf							*Oxyptila p.*
Ozyptila rauda Simon, 1875	p			p							*Oxyptila r.*
Ozyptila sincera Kulczynski, 1926	p	1f	4m	127mf							*Oxyptila s.*
Ozyptila trux (Blackwall, 1846)	p		2m	9mf	13mf	23mf					*Oxyptila t.*
Xysticus albidus Grese, 1909	p			p						2mf	
Xysticus audax Thorell, 1875	p		2f	6mf							
Xysticus britcheri Gertsch, 1934	p			5mf	3mf	2m		13mf			
Xysticus canadensis Gertsch, 1934	p										
Xysticus cristatus (Clerck, 1757)	p										
Xysticus lineatus (Westring, 1851)	p			p							
Xysticus luctuosus (Blackwall, 1836)	N	1m		31mf							
Xysticus obscurus Collet, 1877	p			36mf	20mf		1m	1m			
Xysticus sibiricus Kulczynski, 1908	p										
Xysticus ulmi (Hahn, 1831)	p			p							
Xysticus viduus Kulczynski, 1898	p			18mf							
ZORIDAE (2)											
Zora cf. *nemoralis* (Blackwall, 1861)	N			124mf							
Zora spinimana (Sundevall, 1832)	p	3mf	4mf	91mf							

Poeciloneta vakkhanka Tanasevitch, 1989

COMMENTS. It is new both to Middle Siberia and Mirnoye. Previously its distribution was treated as NE Siberio-NW Nearctic boreal. It was known from north Cisokhotia and the upper Kolyma River in Asia [Marusik et al., 1992a; Eskov, 1994] and NW part of the Northwest Territories [Dondale et al., 1997) in the Nearctic. The new records extend its known range 60° to the west.

Porrhomma campbelli F.O. Pickard-Cambridge, 1894

COMMENTS. Previously this species was known from Europe only outside the former Soviet Union. This is a new record for Russia and Asia.

Scandichrestus tenuis (Holm, 1943)*

COMMENTS. It is new to Siberia. Previously *S. tenuis* was known only west of the Urals [Eskov, 1994].

Semljicola faustus (O. Pickard-Cambridge, 1900)

COMMENTS. Until recently it was known to be distributed only west of the Urals [Saaristo & Eskov, 1996]. Thus, the record from the Mirnoye Field Station is the first for Siberia and the easternmost point of its distribution.

Tenuiphantes alacris (Blackwall, 1853)

COMMENTS. It has a trans-Palaearctic range [Eskov, 1994], but was not previously found in Middle Siberia.

Tenuiphantes tenuis (Blackwall, 1852)

COMMENTS. Although it has a cosmopolitan distribution due to transport by man [Platnick, 2000], this is a new record for Siberia, and for Asia east of Tien-Shang (ca 75°E).

Walckenaeria alticeps (Denis, 1952)

COMMENTS. It has a West Palaearctic range [Mikhailov, 2000] and is new both to Middle Siberia and Mirnoye, which is the easternmost point of its distribution.

Walckenaeria koenboutjei Baert, 1994

COMMENTS. It is the first record of this species for both Middle Siberia and Mirnoye. This species was known to occur only in South Siberia, from Khakassia to southern Cisbaikalia (cf. Marusik et al., 2000), so the record from Goroshykha Vill. extends its known range a few degrees to the west and about 15° to the north.

LIOCRANIDAE (2)

Agroeca ornata Banks, 1892

COMMENTS. This species is new both to Middle Siberia and Mirnoye. Previosly, *A. ornata* was known to occur in north Cisokhotia [Marusik et al., 1992a] and the Nearctic [from Alaska to Nova Scotia, southward to California and New Jersey [Dondale & Redner, 1982]. The new localities extend its known range about 60° westward, and more than 2° to the north (in Asia).

Agroeca proxima (O. Pickard-Cambridge, 1871)*

COMMENTS. This species is new to Siberia. It has a West Palaearctic distribution and ranges from Western Europe [Roberts, 1995] to the Yenisei River. The nearest known locality of *A. proxima* lies in the Middle Urals [Esyunin & Efimik, 1996]. The Yenisei record extends its range more than 4° northward; in Fennoscandia it is known northwards to 66°N [Koponen & Viramo 1998].

LYCOSIDAE (9)

Alopecosa aff. *pulverulenta* (Clerck, 1758)*

COMMENTS. Apparently this is a new species resembling *A. pulverulenta*. It is smaller than *A. pulverulenta,* and has striped femora and tibia III and IV.

Hygrolycosa rubrofasciata (Ohlert, 1865)

COMMENTS. It has a West Palaearctic distribution and ranges from Western Europe [Roberts, 1995] to the Yenisei River. The nearest known locality of *H. rubrofasciata* lies in Altai [Marusik et al., 1996]. The new record extends its known range about 3° to the east. The latitude of thenew find coincides with the record from the Urals [Esyunin & Efimik, 1996].

Pardosa masurae Esyunin & Efimik, 1998
Figs. 5–10.

COMMENTS. Until recently this species was known only from the type locality (Orenburg Area). It seems that it has been previously reported from Mirnoye as *Pardosa* sp.4 by Eskov [1988], but the lack of Eskov's material does not allow us to confirm this suggestion. It is possible that the Yenisei population is not conspecific with that from Orenburg Area. This species belongs to the *saltuaria* group sensu Zyuzin [1979]. Because males of this group have very complicated bulb, especially terminal apophysis fused with conductor, and the *P. masurae* male was not properly illustrated, we give SEM figures of this species. Unlike other *Pardosa* species known to us, this species has embolus opening on the ventral side (Figs. 8–9). The embolus is rather short, relatively thick and not flattened. The tegular apophysis is typical for the species group.

Pardosa oksalai Marusik, Hippa & Koponen, 1996

COMMENTS. This species was known from the middle part of Siberia [Altai & West Sayan Mts, Marusik et al., 1996, 2000], but all previous records were below 53°N. The new record extends its known range about 10° to the north.

Pardosa oljunae Lobanova, 1978

COMMENTS. It has a West Siberian range and ranges from South Yamal southward to Altai, Tuva and northwestern Mongolia [Marusik et al., 2000]. In the Nizhnyaya Tunguska River valley this species is replaced by the sibling species *P. adustella* Roewer, 1951. This record fills a gap in the range of *P. oljunae* which was not previously known between the Polar Urals and Tuva.

Pardosa sp. (cf. *lapponica*)*

COMMENTS. This is apparently a new species belonging to the *lapponica* (Thorell, 1872) group sensu Zyuzin [1979]. 49 females of this species were found at Potapovo, as well as several dozens of specimens among Eskov's material from Middle Siberia identified as *P. lapponica*.

Pardosa sp.

COMMENTS. This is apparently a new species listed in Eskov [1988] as *Pardosa* sp. 2, and belonging to the *tesquorum* (Odenwall, 1901) group. It is known for us from the Yenisei River to the Lena River (Kronestedt & Marusik, personal data).

Pirata piscatorius (Clerck, 1758)

COMMENTS. Actually it is not a new species for Middle Siberia. It was already recorded from Podkamennaya Tungus-

ka by Holm [1973], but Eskov's [1988] check-list covered an area north of the Podkamennaya Tunguska River mouth and therefore this species was not listed. In any case this species is new to Mirnoye.

Trochosa spinipalpis (F.O. Pickard-Cambridge, 1895)
COMMENTS. This is a trans-Palaearctic species known from Europe to the Far East [Mikhailov, 1997]. Within Siberia it is known only from the southern parts.

MIMETIDAE (1)
Ero cambridgei Kulczyński, 1911*
COMMENTS. This is a trans-Palaearctic boreo-nemoral species ranging from Western Europe to Japan [Platnick, 2000]. The northern limit of its distribution is 65°N in Finland [Palmgren, 1974] and 62°20'N in Siberia. Previously it was not known from Russia east of the Urals.

THOMISIDAE (2)
Ozyptila praticola (C.L. Koch, 1837)
COMMENTS. It is new both to Middle Siberia and Mirnoye. This species is treated as having a Holarctic range [Platnick, 2000] but it seems to occur in Eurasia eastward only to the Yenisei River. The record of this species from Bratsk, Cisbaikalia [cf. Logunov & Marusik, 1994] is doubtful. In the Nearctic this species is known from two localities, and seems to be introduced [cf. Marusik et al., 1996].

Xysticus luctuosus (Blackwall, 1836)
COMMENTS. It has a circum-Holarctic boreo-nemoral range and occurs from Europe to Kamchatka, northward to north Cisokhotia [Marusik et al., 1992a], southward to Mongolia and Sakhalin [Marusik et al., 2000]. In the Nearctic this species occurs from the Northwest Territories to Quebec and southward to Oregon and Utah [Dondale & Redner, 1978]. The new record does not extend the known range of this species to the north in Siberia, because it is known from the North Urals [ca 62°N, Esyunin & Efimik, 1996].

ZORIDAE (1)
Zora cf. *nemoralis* (Blackwall, 1861)
COMMENTS. Apparently it is a species new to science. It was found from Tuva [Marusik et al., 2000] to northeast Siberia [Marusik et al., 1992a].

Species new to Mirnoye

CLUBIONIDAE
Clubiona pallidula (Clerck, 1758)
COMMENTS. It has a circum-Holarctic nemoral range and occurs in the north from Swedish Lapland and the Middle and South Urals along south and middle Siberia to Sakhalin and southward to Azerbaijan and Uzbekistan [Marusik et al., 2000]. In the Nearctic this species is known from coastal areas of British Columbia and Washington, and from Ontario [Dondale & Redner, 1982]. It has probably been introduced to North America. Within Middle Siberia it has erroneously been reported by Eskov [1988] from Nizhnyaya Tunguska [Mikhailov, 1992].

Clubiona subsultans Thorell, 1875
COMMENTS. It has Euro -Baikalian nemoral range and occurs from Europe to Mongolia [Marusik et al., 2000]. The record of this species from Japan is doubtful. The species has been recorded from Lebed [62°05'N, Holm, 1973] near Mirnoye, but was not included in Eskov's [1988] check-list.

GNAPHOSIDAE
Micaria alpina L. Koch, 1872
COMMENTS. It has a subcircum-Holarctic boreo-hypoarctic range. In Siberia it occurs northeast to upper Amguema (67°N) and the Lena River delta (70°N), and southwest to Tuva [Marusik et al., 2000]. In the Nearctic it was recorded north of 55°N [Platnick & Dondale, 1992]. Within Middle Siberia it was known only from Taimura River [Eskov, 1988].

Micaria nivosa L. Koch, 1866
COMMENTS**.** This species has Euro-Baikalian nemoral range and occurs from Central Europe to Buryatia, north to northern Fennoscandia and Nizhnyaya Tunguska, and south to the East-Kazakhstan Area [Marusik et al., 2000].

HAHNIIDAE
Hahnia sibirica Marusik, Hippa & Koponen, 1996
COMMENTS. It has a trans-Siberian boreo-nemoral range and occurs from the Middle Urals to Nizhnyaya Tunguska and north Cisokhotia, and southward to Altai and Sakhalin [Marusik et al., 1996].

LINYPHIIDAE
Agyneta affinisoides (Tanasevitch,1984)
COMMENTS. It is a Siberian hypoarcto-boreal species ranging from the Polar Urals southward to Uburkhangai, Mongolia, and northeast to the upper Kolyma River [Marusik et al., 2000].

Allomengea vidua (L. Koch, 1879)
COMMENTS. This circum-Holarctic species was known from the Lebed' River near Mirnoye [Eskov & Marusik, 1994] but never reported from the field station.

Anguliphantes cerinus (L. Koch, 1879)
COMMENTS. It has a west-middle Siberian boreal range and occurs from Novosibirsk and East-Kazakhstan Area to western Yakutia, north to the middle Yenisei River [ca 64°N, Eskov, 1988] and the upper Vilyuy River, and south to the East-Kazakhstan Area and Tuva [Marusik et al., 2000].

Bathyphantes humilis (L. Koch, 1879)
COMMENTS. Although this species has a trans-Siberian range, it was not previously recorded from the Mirnoye Field Station.

Bathyphantes reprobus Kulczyński, 1916
COMMENTS. It has a circum-Holarctic distribution [Eskov, 1994]. Within Middle Siberia *B. reprobus* has been reported from the Putorana Plateau [Eskov, 1988].

Drapetisca socialis (Sundevall, 1832)
COMMENTS. It has a trans-Palaearctic boreo-nemoral range [Eskov, 1994]. It was mentioned in Eskov's catalogue [Eskov, 1994] as a species occurring in Middle Siberia, but we were not able to locate any records. In any case *D. socialis* is new to Mirnoye.

Hilaira gibbosa Tanasevitch, 1982
COMMENTS. It has a wide Siberio-NW Nearctic range, occurring from the Polar Urals throughout Siberia to the Yukon Territory, north to the Putorana Plateau, and south-

ward to Tuva and Central Aimak [Marusik et al., 2000], but it has not yet been reported in areas between the Putorana Plateau and Tuva.

Mecynargus sphagnicola (Holm, 1939)
COMMENTS. It has a circum-Holarctic hypoarcto-boreal range and is known from Fennoscandia to the Polar Urals, Taimyr, through Evenkia [Eskov, 1988] to Tuva and Central Mongolia, and northeast to the Chukotka Peninsula [Eskov, 1994]. In the Nearctic it was found in the Yukon Territory, north-western Northwest Territories and Greenland [Dondale et al., 1997].

Pelecopsis dorniana Heimer, 1987
COMMENTS. It was known from Middle Siberia (Eskov, 1988) but not previously reported from Mirnoye.

Stemonyphantes conspersus (L. Koch, 1879)
COMMENTS. Although this species has been described from localities north and south of Mirnoye [cf. Holm, 1973] it was missing in Eskov's [1988] check-list. It has Euro-Baikalian boreo-nemoral range and occurs from Czechia to Cisbaikalia, north to the Polar Urals, and south to the East-Kazakhstan Area [Eskov, 1994].

Thyreostenius biovatus (O. Pickard-Cambridge, 1875)
COMMENTS. This species has a Eurasian distribution but was not previously found at the Mirnoye Field Station.

LYCOSIDAE
Alopecosa aculeata (Clerck, 1758)
COMMENTS. It has circum-Holarctic polyzonal range and is widely distributed in the East Palaearctic: from the Polar Urals and Xinjiang, Altai northward to Noril'sk and northeast to the Chukotka Peninsula, and south to Shandong [Marusik et al., 2000]. In the Nearctic this species is known from Alaska to Newfoundland, south to Arizona and Connecticut [Dondale et al., 1997]. Within Middle Siberia it was recorded from Norilsk and Evenkia [Eskov, 1988].

Alopecosa albostriata (Grube, 1861)
COMMENTS. This species has a Siberian boreal range (from Yenisei River [Eskov, 1988] to the Lena River mouth and upper Kolyma River and south to east Tuva and Transbaikalia [Marusik et al., 1992a, 1993, 2000].

SALTICIDAE
Sitticus finschi (L. Koch, 1879)
COMMENTS. This species has a Siberio-West Nearctic boreal range [Logunov & Marusik, 2000]. Within Middle Siberia it was previously known only from Nizhnyaya Tunguska [Eskov, 1988].

THERIDIIDAE
Euryopis flavomaculata (C.L. Koch, 1836)
COMMENTS. This trans-Palaearctic species has been reported from near Mirnoye at Biropchana and the Malaya Lebedyanka River [Eskov, 1988].

Species excluded from the list

ARANEIDAE
Araniella cucurbitina (Clerck, 1758)
COMMENTS. It seems that the record of Eskov [1988] in fact refers to misidentified *A. proxima* (Kulczyński, 1885) known throughout the whole of Eurasia and northern North America. There are no records, substantiated by specimens, of *A. cucurbitina* in northern Asia east of the Urals.

GNAPHOSIDAE
Gnaphosa antipola Chamberlin, 1933
COMMENTS. The record of this Nearctic species from the Taimura River [Eskov, 1988] refers to *G. microps* Holm, 1939 (cf. Ovtsharenko & Marusik, 1988; Ovtsharenko et al., 1992).

Gnaphosa brumalis Thorell, 1875
COMMENTS. The record of this Nearctic species from the Taimura River [Eskov, 1988] refers to *G. chola* Ovtsharenko & Marusik, 1988 (cf. Ovtsharenko & Marusik, 1988; Ovtsharenko et al., 1992).

Zelotes subterraneus (C.L. Koch, 1833)
COMMENTS. All specimens from Middle Siberia examined belong to the sibling vicariating species *Z. fratris* Chamberlin, 1920.

LINYPHIIDAE
Agyneta mollis (O. Pickard-Cambridge, 1871)
COMMENTS. Study of specimens recorded by Eskov (1988) as *A. mollis*, proved that in fact he dealt with *A affinis* (Kulczyński, 1898).

Erigonella hiemalis (Blackwall, 1841).
COMMENTS. Identification [Eskov, 1988] was corrected to *Araeoncus vorkutensis* Tanasevitch, 1984 [cf. Eskov, 1994].

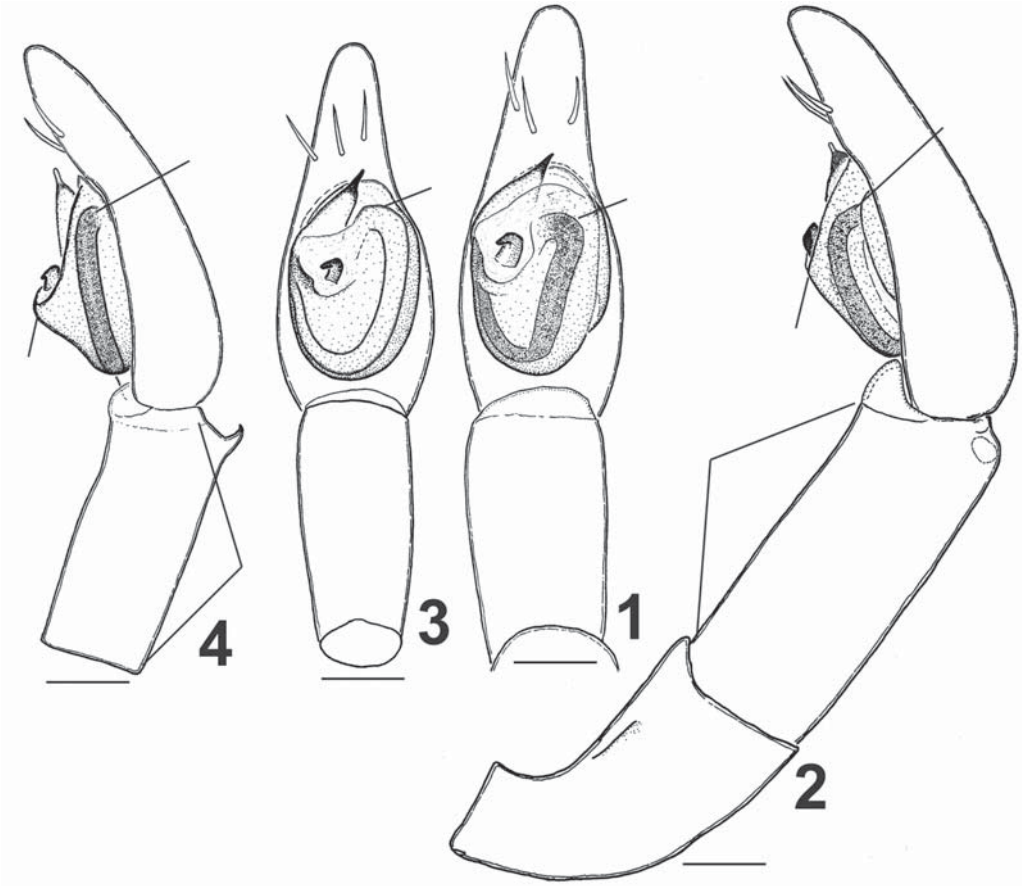
Glyphesis cottonae (La Touche, 1946)
COMMENTS. It was found [cf. Marusik et al., 1993; Eskov, 1994] that all Siberian and Japanese records of this species in fact refer to an undescribed species.

Lepthyphantes whymperi F.O. Pickard-Cambridge, 1894
COMMENTS. The record of this species from Taimyr (Eskov, 1986] refers to *L. expunctus* (cf. Eskov, 1994).

Procerocymbium sibiricum Eskov, 1989
COMMENTS. Study of material from different parts of Siberia revealed the occurrence of three different species within the area (cf. Marusik & Koponen, 2001) and a new species, *P. jeniseicum* Marusik & Koponen, 2001 was erected for the Middle Siberian population.

Stemonyphantes lineatus (Linnaeus, 1758)
COMMENTS. There are some doubts about specific placement of the Yenisei population and the taxonomic status of two sibling Palaearctic species *S.lineatus* and *S. sibiricus* (Grube, 1861). In this paper we follow Eskov's [1994] treatment of this taxon in Middle Siberia and list *S. sibiricus*.

Walckenaeria clavicornis (Emerton, 1882)
COMMENTS. Efimik & Esyunin [1996] showed that *W. clavicornis* occurs only in eastern Chukotka, while other parts of Siberia are inhabited by the sibling *W. korobeinikovi*. Study of new material proved that *W. clavicornis* is not present in Middle Siberia.



Figs. 1–4. Male palps of *Micaria yeniseica* sp.n. (1–2) and *M. silesiaca* L. Koch (3–4): 1, 3 — ventral view; 2, 4 — retrolateral view. Main differences are pointed. Scale = 0.1 mm

Рис. 1–4. Пальпа самцов *Micaria yeniseica* sp.n. (1–2) и *M. silesiaca* L. Koch (3–4): 1, 3 — вид снизу; 2, 4 — вид сбоку-сзади. Диагностические признаки указаны стрелками. Шкала 0,1 мм.

Walckenaeria mayumiae H. Saito, 1986

COMMENTS. The first record of this species from Middle Siberia [Eskov, 1988] was based on misidentification with *W. nodosa* O. Pickard-Cambridge, 1873 (cf. Eskov & Marusik, 1994).

Walckenaeria unicornis O. Pickard-Cambridge, 1861

COMMENTS. Study of specimens recorded by Eskov [1988] as *W. unicornis* from Middle Siberia, and of new material, proved that only the sibling species, *W. lepida* (Kulczyński, 1886) occurs there.

Philodromus aureolus (Clerck, 1758)

COMMENTS. It is clear that the record of Eskov [1988] refers to another species. There are no records, proven by specimens, of *P. aureolus* in northern Asia east of the Urals. The Middle Siberian specimen may belong either to *P. cespitum* (Walckenaer, 1802), *P. buxi* Simon, 1884 or *P. praedatus* O. Pickard-Cambridge, 1871.

Species description

Micaria yeniseica Marusik & Koponen, **sp.n**
Figs. 1–2.

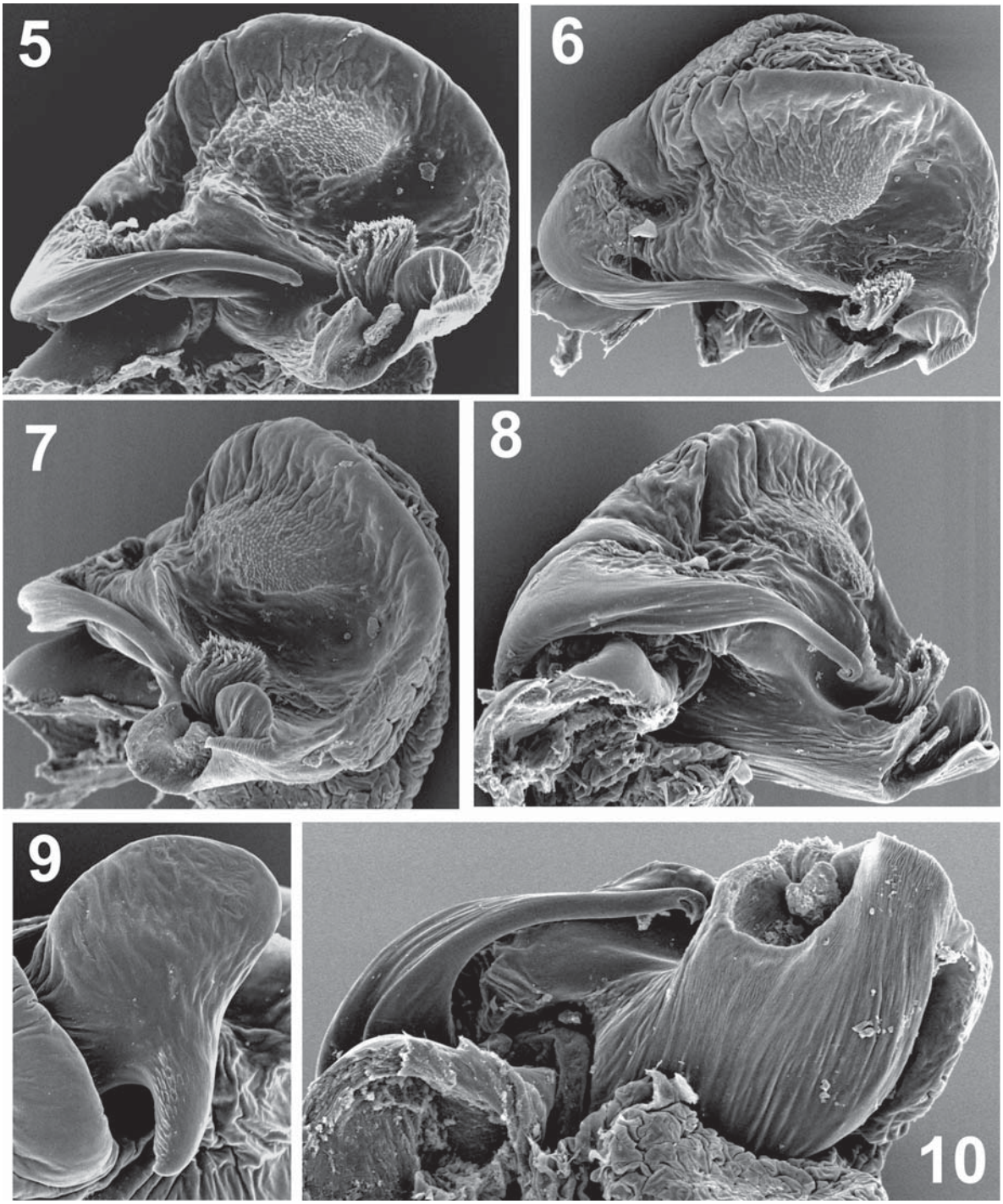
Material examined: Holotype 1 ♂ (ZMMU), RUSSIA, **Krasnoyarsk Province,** Turukhansk Dist., middle Yenisei, Mirnoye Vill., 62°19'N 89°02'E, young birch stand with Graminacea and other grass underneath, sample #159, pitfall traps, 9-19.06.1989 (L.B. Rybalov)

Comparative material: *Micaria silesiaca* L. Koch, 1875, 3 ♂♂ 2 ♀♀ (ZMUT), FINLAND, **Nauvo,** Lökholm, pitfall traps, 1970 (P.T. Lehtinen).

ETYMOLOGY. The specific epithet derived from the type locality.

DESCRIPTION. Male. Total length 3.85 mm. Carapace: 1.86 long, 1.24 wide, length/width ratio 1.49. Coloration of the body exactly the same as in *M. silesiaca*. Abdomen black with pair of sublateral whitish spots formed with hairs in first 1/5 part of abdomen, and 3 spots lying transversely in the middle of abdomen. Legs I missing, and therefore carapace/tibia I, and tibia I/metatarsus I not known. Femur III with 2 dorsal spines and 1 retrolateral. Palp as in Figs. 1–2, with rather long and thick tibia. Tibial apophysis apparently broken. Upper loop of seminal duct coincides with position of median apophysis. Seminal duct makes strong turn in base of tegulum. Palpal cymbium/tibia ratio1.125.

DIAGNOSIS. This new species is very close to *M. silesiaca*, from which can be separated by following characters: 1) palpal tibia length is almost subequal to cymbium, palpal cymbium/patella ratio 1.13 (1.45 in *M. silesiaca*), 2) upper loop of seminal duct is on the level of median apophysis (more distally in *M. silesiaca*), 3) seminal duct sharply turned in the base of tegulum (roundly turned in *M. silesiaca*), 4) seminal



Figs. 5–10. Bulbus parts of *Pardosa masurae* Esyunin & Efimik: 5–9 — different turns of apical terminal part, frontal, apical, retrolateral, and ventral views; 10 — tegular apophysis.

Рис. 5–10. Строение бульбуса *Pardosa masurae* Esyunin & Efimik: 5–9 — разные виды верхней части бульбуса, вид спереди, сверху, сбоку-сзади и снизу; 10 — тегулярный отросток.

duct widely separated, by about one diameter, from the retrolateral edge of tegulum (narrowly separated, by less than one diameter in *M. silesiaca*), 5) femur III with 2 dorsal and 1 retrolateral spines (3 dorsal, 1 pro- and 1 retrolateral in *M. silesiaca*).

DISTRIBUTION. Known only from the type locality. It is possible that this species occurs in Western Siberia and Transbaikalia from where *M. silesiaca* has been reported [2?, sub *M. hospes* Kulczyński, 1882, Ermolajev, 1934; Danilov & Kurtova, 1991; Danilov, 1993]. At our request S. Esyunin checked all specimens collected from the Urals and identified them as *M. silesiaca*. All males studied by him belong to true *M. silesiaca*.

Table 2. Structure of 9 well studied spider faunas of northern Eurasia (species-poor families not included).
Таблица 2. Структура 9 наиболее изученных аранеофаун северной Евразии (семейства с малым числом видов опущены).

	Finland	%	Altai	%	Middle Siberia	%	Tuva	%	Mon-golia	%	Yaku-tia	%	Maga-dan	%	Alaska	%	Yukon	%
Araneidae	31	5	18	6	16	3	30	5	34	6	18	4	20	4	15	4	16	5
Clubionidae	17	3	9	3	11	2	13	2	13	2	8	2	11	2	11	3	9	3
Dictynidae	16	3	6	2	8	2	20	3	13	2	13	3	16	3	9	3	9	3
Gnaphosidae	42	7	37	13	22	4	72	12	89	16	33	8	31	6	19	6	23	8
Hahniidae	7	1	2	1	5	1	2	0	1	0	1	0	4	1	7	2	4	1
Linyphiidae	282	45	96	34	305	61	223	36	185	34	193	47	333	60	175	52	140	46
Liocranidae	10	2	2	1	4	1	3	0	5	1	1	0	2	0	2	1	1	0
Lycosidae	48	8	26	9	50	10	56	9	60	11	39	10	37	7	36	11	33	11
Philodromidae	15	2	12	4	6	2	31	5	30	5	20	5	17	3	9	3	14	5
Salticidae	40	6	24	9	20	4	62	10	68	12	29	7	29	5	8	2	13	4
Tetragnathidae	15	2	7	3	6	1	9	1	9	2	5	1	7	1	8	2	4	1
Theridiidae	43	7	20	7	16	3	37	6	25	5	18	4	26	5	12	4	14	5
Thomisidae	26	4	18	6	19	4	40	6	42	8	25	6	18	3	14	4	18	6
Total number	624	95	307	99	496	98	620	96	549		408	99	545	99	339	96	304	98

Discussion

In comparison to the previously published check-list [Eskov, 1988] the known spider fauna of the Middle Siberia has been increased from 427 to 496 species, and the fauna of the Mirnoye Field Station from 251 to 283 species. Fourteen species have been excluded from the previous check-list. The increase in the number of species from Middle Siberia is only partially caused by the enlargement of area. Only two additional species have been found between 57°N and Mirnoye Field Station, namely *Paracoelotes birulai* and *Trochosa spinipalpis*. All other species new to the Middle Siberia or even to Siberia as whole, come from the latitudes north of 62°. Some of the growth in species numbers is a result of several revisional studies by Eskov, and other Russian and foreign colleagues. Nevertheless, much of the growth of the known species richness comes from the new material studied.

By species diversity, the Middle Siberian fauna is the third largest known fauna east of the Urals (after Tuva and northeast Siberia) (see Table 2 and cf Marusik et al., 2000). Comparison of species composition between the fauna of the Middle Siberia and other northern faunas such as Finland (54% species in common), Altai (50%), Mongolia (35%), northeast Asia (61%), Yakutia (62%) and Tuva (55%) revealed that the level of similarity is evidently higher between Middle Siberia and other boreo-arctic faunas (Yakutia, NE Asia, Finland) than between closely situated more southern faunas (Altai, Mongolia, Tuva). Among boreo-arctic faunas similarity seems to be a function of distance: highest similarity with adjacent Yakutia (62%), slightly lower with northeast Siberia (61%) separated by 30°, and 54% similarity with far separated Finland (50° west of Middle Siberia).

The structure of faunas lying in south Siberia and Mongolia, and in the boreo-arctic zone are shown in the Table 2. The fauna of the Middle Siberia has higher value of linyphiids (61%), while values of such families as Araneidae (3%), Dictynidae (2%), Gnaphosidae (4%), Theridiidae (3%), Thomisidae (4%) are smallest among all species-rich families. While it seems that the level of study of Linyphiidae is rather high due to special interest to this family by collectors such as K.Yu. Eskov, A.B. Ryvkin and some others, and total number of species well reflects their real diversity. Small number and value of gnaphosids and thomisids is most probably is caused by limited usage of pitfall trapping, and poorness of dictynids, theridiids and araneids reflects small usage of sweeping. Judging by the general distribution and fauna of the adjacent regions, the occurrence of the some additional species in Middle Siberia is very probable, such as of Araneidae as: *Araneus marmoreus* Clerck, 1758, *A. saevus* (L. Koch, 1872), *Hypsosinga pygmaea* (Sundevall, 1872), *H. sanguinea* (C.L. Koch, 1844), *Zygiella stroemi* (Thorell, 1870), Dictynidae: *Dictyna alaskae* Chamberlin & Ivie, 1947, *D.* cf. *schmidti* Kulczyński, 1926, *D. tyshchenkoi* Marusik, 1988, *Emblyna annulipes* (Blackwall, 1834), *Lathys* sp., Gnaphosidae: *Drassodes cupreus* (Blackwall, 1834), *D. neglectus* (Keyserling, 1887), *Gnaphosa nigerrima* (L. Koch, 1877), *Micaria guttulata* (C.L. Koch, 1839), *M. rossica* Thorell, 1875, Theridiidae: *Euryopis saukea* Levi, 1951, *Steatoda albomaculata* (De Geer, 1778), *S. grossa* (C.L. Koch, 1838), *S. castanea* (Clerck, 1758), *Theridion sibiricum* Marusik, 1988, Thomisidae: *Ozyptila orientalis* Kulczyński, 1926, *Xysticus austrosibiricus* Logunov & Marusik, 1998, *X. baltistanus* Caporiacco, 1935, *X. bifasciatus* C.L. Koch, 1837, *X. emertoni* Keyserling, 1880, *X. vachoni* Schenkel, 1963. Some

Table 3. Structure of 8 best studied local spider faunas in boreal zone (only species-rich families are shown, % rounded to the integer).
Таблица 3. Структура 8 наиболее изученных локальных аранеофаун бореальной зоны (показаны семейства только с большим числом видов, % округлены до целых чисел).

	Tvarminne, 60°N	%	Nizhnesvirski, 60°50'N	%	Mantyharju, 61°15'N	%	Kivach, 62° 18'N	%	Mirnoye, 62°19'N	%	Aborigen, 62°N	%	Kuusamo, 66°N	%	Kevo, 69° 45'N	%
Araneidae	20	5	24	7	20	6	17	6	10	4	16	4	13	5	11	6
Clubionidae	17	4	12	3	9	3	7	3	9	3	7	2	5	2	4	2
Dictynidae	4	1	8	2	5	2	3	1	6	2	10	3	4	2	4	2
Gnaphosidae	28	7	28	8	21	5	19	7	15	6	30	8	10	4	10	6
Hahniidae	6	1	4	1	5	2	4	1	5	2	2	1	5	2	2	1
Linyphiidae	176	41	141	40	145	46	129	47	160	57	198	55	135	56	98	59
Liocranidae	5	1	6	2	4	1	4	1	4	1	1	0	2	1	0	0
Lycosidae	37	9	35	10	24	8	25	9	23	9	24	7	20	8	14	8
Philodromidae	14	3	9	3	8	3	6	2	3	1	10	3	4	2	4	2
Salticidae	33	8	22	6	16	5	14	5	11	4	25	7	9	4	3	2
Tetragnathidae	11	3	12	3	9	3	8	3	5	2	2	1	2	1	1	1
Theridiidae	32	8	21	6	24	6	19	7	9	3	13	4	12	5	5	3
Thomisidae	17	4	18	5	15	5	9	3	15	6	12	3	11	5	5	3
Total number	425		354		315		275		283		357		240		165	

enrichment of the fauna can be achieved by more detailed study of Salticidae and Philodromidae as well.

There are several peculiarities in the Mirnoye fauna. They are as follows: 1) the genus *Gnaphosa* is almost lacking, only 1 species in comparison to 8 in the Aborigen Field Station, or 4 in the Kivach reserve; 2) highest diversity of *Agroeca* in Siberia, 4 species in comparison to two species for all of northeast Siberia, or one species in Yakutia, 3) lack of *Thanatus* and only two species of *Philodromus* (6 and 4 species in the Aborigen Field Station, respectively), 4) poor diversity of Salticidae, 11 species *contra* 22 in the Aborigen Field Station.

Data on variation of the percentage of each family in different faunas are summarised in the Table 4. Two of 8 local faunas compared lie outside of the real boreal zone. Tvärminne is situated in hemiboreal (or subboreal) zone, an intermediate belt between the boreal and nemoral zones, and Kevo Station is located in the subarctic zone (transitional between boreal and tundra zones). Therefore these two faunas show extreme numbers of species richness, 425 and 165 respectively. At the same time the number of species in 6 other faunas ranges from 240 (rather northern fauna) to 357.

In the absolute figures the difference between the highest and lowest value is smallest among Hahniidae and Philodromidae, while the relative range of the value is smallest in Lycosidae and Linyphiidae (1.42–1.48). Small variation of value in these families between different and distant local faunas means that species richness of Lycosidae, Linyphiidae and Philodromidae can be used as a good indicator of the whole spider species diversity in certain fauna. But if to compare these 3 families in relation to 1) absolute richness, 2) required collecting methods, 3) difficulties in identification (or just counting species richness) it is clear that only wolf spiders (Lycosidae) can be used as a good indicator. Linyphiidae is a species rich family comprising more than 100 species in each local fauna, species live in all range of microhabitats and therefore species survey require different collecting methods (pitfall trapping, sifting litter, sweeping, hand picking, etc.). Besides these obstacles, identification of linyphiids requires much experience and is very time consuming. Lycosidae

Table 4. % range of species-rich families within local boreal faunas and ratio (highest/lowest value).
Таблица 4. Вариация доли наиболее крупных семейств в разных локальных фаунах бореальной зоны.

Araneidae	4–7	1.75
Clubionidae	2–4	2
Dictynidae	1–3	3
Gnaphosidae	4–8	2
Hahniidae	1–2	2
Linyphiidae	40–59	1.48
Lycosidae	7–10	1.42
Philodromidae	1–3	3
Salticidae	2–8	4
Tetragnathidae	1–3	3
Theridiidae	3–8	2.7
Thomisidae	3–6	2

has more species than other families, but much less than Linyphiidae, and at the same time are easy to collect and identify. Species richness of wolf spiders can be rather easily revealed by using pitfall traps placed in different biotopes (habitats).

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References

Buckle D.J., Carroll D., Crawford R.L. & Roth V.D. 2001. Linyphiidae and Pimoidae of America north of Mexico: Checklist, synonymy, and literature // Fabreries. Suppl.10. P.89–191.

Danilov S.N. 1993. Spiders of the genus *Micaria* (Araneae, Gnaphosidae) from Siberia // Ann. Naturhist. Mus. Wien. Bd.94/95B. P.427–431.

Danilov S.N. 1999. [Spiders of Transbaikalia] // I.Yu. Koropachinsky & V.M. Korsunov (eds.): Biologicheskoe raznoobrazie Baikal'skoi Sibiri. Novosibirsk: Nauka. P.266–274 [in Russian].

Danilov S.N. & Kurtova O.G. 1991. [Materials on the spider fauna (Aranei) of Sokhondinskiy State Reserve] // Entomol. probl. Baykalskogo regiona. Ulan-Ude: Biologicheskiy Institut Buryatskogo Nauchnogo Tsentra Sibirsk. Otdeleniya AN SSSR. P.34–35 [in Russian].

Dondale C.D. & Redner J.H. 1978. The insects and arachnids of Canada, Part 5. The crab spiders of Canada and Alaska, Araneae: Philodromidae and Thomisidae // Research Branch, Agriculture Canada. Publ. 1663. 255 pp.

Dondale C.D. & Redner J.H. 1982. The insects and arachnids of Canada. Part 9. The sac spiders of Canada and Alaska. Araneae: Clubionidae and Anyphaenidae // Research Branch Agriculture Canada. Publ. 1724. 194 pp.

Dondale C.D., Redner J.H. & Marusik Yu.M. 1997. Spiders (Araneae) of the Yukon // Danks H.V. (ed.) Insects of the Yukon. Ottawa. P.73–113.

Efimik V.E. & Esyunin S.L. 1996. A new subgenus and a new species of *Walckenaeria* Blackwall, 1833, from the Urals with remarks on the distribution of some *unicornis*-group species in the Palearctic (Aranei Linyphiidae) // Arthropoda Selecta. T.5. Vyp.1–2. P.63–73.

Ermolajev W. 1934. Materialen zur Spinnenfauna Westsibiriens. III. Die Spinnen der Stadt Tomsk // Folia zool. hydrobiol. Vol.7. No.1. S.130–147.

Eskov K.Yu. 1981. [Analysis of the spatial distribution of spiders in the Yenisei taiga] // Zool. Zhurn. T.60. Vyp.3. S.353–362 [in Russian, with English summary].

Eskov K.Yu. 1986. [The spider fauna of the hypoarctic belt of Siberia] // Yuznye tundry Taimyra. Leningrad: Nauka Press. S.174-191 [in Russian].

Eskov K.Yu. 1988. [Spiders (Aranei) of Middle Siberia] // Materialy po faune Srednei Sibiri i prilezhashchikh rayonov Mongolii. Moscow: IEMEZh Press. P.101–155 [in Russian]

Eskov K.Yu. 1994. Catalogue of the linyphiid spiders of northern Asia (Arachnida, Araneae, Linyphiidae). Sofia-Moscow: PENSOFT Publ. 144 pp.

Esyunin, S.L. & Efimik, V.E., 1996. Catalogue of the spiders (Arachnida, Aranaei) of the Urals. Moscow: KMK Scientific Press. 229 pp.

Esyunin S.L. & Efimik V.E. 1998. Remarks on the Ural spider fauna, 8. New and unidentified species from steppe landscapes of the South Urals (Arachnida: Aranei) // Arthropoda Selecta. Vol.7. No.2. P.145–152.

Holm Å. 1973. On the spiders collected during the Swedish expeditions to Novaya Zemlya and Yenisey in 1875 and 1876 // Zool. Scripta. Vol.2. P.1–110.

Izmailova M.V. 1989. Fauna of spiders of south part of eastern Siberia. Irkutsk: State Univ. Publ. 184 pp. [in Russian]

Koponen S. 1984. Araneae of Inari Lapland // Kevo Notes. Vol.7. P.15–21.

Koponen S. & Viramo J. 1998. The spiders (Araneae) of the biological province of Koillismaa (Ks), NE Finland // Oulanka Reports. Vol.19. P.51–58.

Koponen S., Marusik Yu.M. & Tanasevitch A.V. 1997. New data on the spider fauna of the Polar Urals (Aranei) // Arthropoda Sel. Vol.6. No.3/4. P.109–119.

Logunov D.V. & Marusik Yu.M. 1994a. A faunistic review of the crab spiders (Araneae, Thomisidae) from the mountains of South Siberia // Bull. Inst. r. Sci. nat. Belg., Entomol. Vol.64. P.177–197.

Logunov D.V. & Marusik Yu.M., Koponen S. 1998. A check-list of the spiders in Tuva, South Siberia with analysis of their habitat distribution // Ber. nat.-med. Verein Innsbruck. Vol.85. P.125–159.

Marusik Yu.M. 1988. [Spider fauna and populations of the upper Kolyma]. Ph. D. abstract. Leningrad: LGU. 18 s. [in Russian]

Marusik Yu.M. 1994. [A systematic list of spiders (Aranei) of the upper Kolyma] // Komplexnyye issledovaniya na statsyonare "Kontakt". Vladivostok: Dalnauka. S.208–225 [in Russian].

Marusik Y.M., Eskov K.Yu. & Kim J.P. 1992a. A check list of spiders (Aranei) of Northeast Asia // Korean Arachnol. Vol.8. No.1/2. P.129–158.

Marusik Yu.M., Eskov K.Yu., Logunov D.V. & Basarukin A.M. 1992b. A check-list of spiders (Arachnida Aranei) from Sakhalin and Kurile Islands // Arthropoda Selecta. Vol.1. No.4. P.73–85.

Marusik Yu.M., Eskov K.Yu., Koponen S. & Vinokurov N.N. 1993. A check-list of the spiders (Aranei) of Yakutia, Siberia // Arthropoda Selecta. Vol.2. No.2. P.63–79.

Marusik Yu.M., Hippa H. & Koponen S. 1996. Spiders from the Altai area, South Siberia // Acta Zoologica Fennica. No.201. P.11–45.

Marusik Yu.M. & Koponen S. 2000. Circumpolar diversity of spiders: implications for research, conservation and management // Ann. Zool. Fennici. Vol.37. P.265–269.

Marusik Yu.M. & Koponen S. 2001. Revision of the Holarctic spider genus *Procerocymbium* Eskov, 1989 (Araneae: Linyphiidae) // Acta Arachnologica Vol.50. No.2. P.145–156.

Marusik Yu.M. & Logunov D.V. 1998. On the spiders (Aranei) collected in Mongolia during a joint American-Mongolian-Russian expedition in 1997 // Arthropoda Selecta. Vol.7. No.3. P.233–254.

Marusik Yu.M., Logunov D.V. & Koponen S. 2000. Spiders of Tuva, South Siberia. Magadan: IBPN FEB RAS. 252 pp.

Mikhailov K.G. 1992. The spider genus *Clubiona* Latreille, 1804 (Arachnida Aranei Clubionidae) in the USSR fauna: a critical review with taxonomical remarks // Arthropoda Selecta. Vol. 1. No.3. P.3–34.

Mikhailov K.G. 1997. Catalogue of the spiders of the territories of the former Soviet Union (Arachnida, Aranei). Moscow: Zoological Museum of the Moscow State University. 416 pp.

Mikhailov K.G. 2000. Catalogue of the spiders of the territories of the former Soviet Union (Arachnida, Aranei). Addendum 3. Moscow: Zoological Museum of the Moscow State University. 33 pp.

Oliger T.I. 1996. [Spiders of the Nizhnesvirski Reserve]. St. Petersburg. 43 pp. [in Russian]

Ovtsharenko V.I., & Marusik Yu.M. 1988. [Spiders of the family Gnaphosidae (Aranei) in North-East USSR (Magadan Area)]

// Entomol. Obozr. T.67. No.1. S.204–217 [in Russian]
Ovtsharenko V.I., Platnick N.I. & Song D.X. 1992. A review of the North Asian ground spiders of the genus *Gnaphosa* (Araneae, Gnaphosidae) // Bull. Amer. Mus. Nat. Hist. No.212. P.1–88.
Palmgren P. 1972. Studies on the spider populations of the surroundings of the Tvärminne Zoological Station, Finland // Comment. biol. Vol.52. P.1–133.
Palmgren P. 1974. Die Spinnenfauna Finnlands und Ostfennoskandiens IV. Argiopidae, Tetragnathidae und Mimetidae // Fauna Fennica. T.24. S.1–70.
Palmgren P. 1977. Studies on spider populations in Mäntyharju, Finland // Comment. biol. Vol.87. P.1–44.
Platnick N.I. 2000: The world spider catalog. American Museum of Natural History: http://research.amnh.org/entomology/spiders/catalog81-87/
Roberts M.J. 1995. Collins Field Guide: Spiders of Britain & Northern Europe. London: Harper Collins. 383 pp.
Rybalov L.B. & Vorobyeva I.G. 2002 [The populations of soil dwelling invertebrates in taiga ecosystems of the Yenisei River middle flow] // E.E. Syroyechkovsky & E.V. Rogacheva (eds.). Izuchenie biologicheskogo raznobraziya na Eniseiskom transekte. Zhivotnyi mir. Moscow. P.9–43 [in Russian].
Saaristo M.I. & Eskov K.Yu. 1996. Taxonomy and zoogeography of the hypoarctic erigonine spider genus *Semljicola* (Araneida, Linyphiidae) // Acta Zool. Fennica. Vol.201. P.47–69.
Tsellarius A.Yu. 1993. Spiders of the "Kivach" Reserve // Flora i fauna zapovednikov. Vyp.51. S.1–30 [in Russian].
Zyuzin A.A. 1979. [A taxonomic study of Palearctic spiders of the genus *Pardosa* (Aranei, Lycosidae). Part 1. The taxonomic structure of the genus] // Entomol. Obozr. T.58. Vyp.2. S.431–447 [in Russian].