

Remarks on the Ural spider fauna (Arachnida: Aranei). 11. New faunistic records

Заметки по фауне пауков Урала (Arachnida: Aranei). 11. Новые фаунистические находки

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КЛЮЧЕВЫЕ СЛОВА: пауки, фауна, Урал.

ABSTRACT. New faunistic records of 64 spider species are given. Two species, *Theridion conigerum* Simon, 1914 and *Praestigia duffeyi* Millidge, 1954, are new records for Russia and ten more are new records for the Urals. Two species, *Palliduphantes pallidus* (O. Pickard-Cambridge, 1871) and *Clubiona similis* L. Koch, 1867, are excluded from the Ural fauna. Some misidentifications published earlier in the Ural lists are corrected.

РЕЗЮМЕ. Приведены новые фаунистические находки для 64 видов пауков. Два вида *Theridion conigerum* Simon, 1914 и *Praestigia duffeyi* Millidge, 1954 впервые указываются для России и десять — для Урала. Два вида *Palliduphantes pallidus* (O. Pickard-Cambridge, 1871) и *Clubiona similis* L. Koch, 1867 исключены из фауны Урала. Исправлен ряд ошибочных видовых определений, содержащихся в ранее опубликованных фаунистических списках по Уралу.

Introduction

Since the publication of the last “Remarks ...” [Esyunin *et al.*, 1999], some new specimens consisting of numerous species have been collected from a number of localities in the Urals. Additionally, recondite old spider collections have been re-examined. This paper adds to our knowledge of the Ural spider fauna and clarifies the distribution of a number of species. The following checklist contains 64 species, of which two are new records for the fauna of Russia and ten are new records for the Urals.

Besides the author’s collections abbreviated in the text as (SE), this paper is based on material collected by N.S. Mazura (NM), A.I. Ermakov (AE), V.E. Efimik (VE), T.K. Tuneva (TT), E.L. Vorobeichik (EV) and some others. The specimens are held in the collections of the Zoology Department of Perm State University (PSU).

Records from the Urals given below under “Catalogue” are adopted from Esyunin & Efimik [1996],

with some recent additions. Species distributions follow the catalogue of Esyunin & Efimik [1996], amended as appropriate. The terminology for species distributional patterns is adopted from Gorodkov [1984]: each range name includes both longitudinal and latitudinal components.

Misidentifications

The following previous misidentifications of the Ural spiders should be corrected, based on re-study of the pertinent material.

1. The record of *Bathyphantes parvulus* (Westring, 1851) [Esyunin *et al.*, 1995; Pakhorukov *et al.*, 1995] for the Preduralie Reserve (Perm Area) should be referred to *B. gracilis* (Blackwall, 1841).

2. The records of *Silometopus incurvatus* (O. Pickard-Cambridge, 1873) for Perm [Esyunin *et al.*, 1995] and Chelyabinsk Areas [Pakhorukov & Polyagin, 1987; Polyagin & Pakhorukov, 1988; Esyunin & Pakhorukov, 1992; Polyagin & Lagunov, 1992; Esyunin *et al.*, 1995] are erroneous. The records of *S. incurvatus* in Bashkiria [Pakhorukov & Efimik, 1988; Efimik, 1995] are erroneous and should be referred to *Semljicola thaleri* (Eskov, 1981).

3. All the records of *Clubiona similis* L. Koch, 1866 [Esyunin, 1995; Esyunin & Pakhorukov, 1992] are erroneous and should be assigned to *C. frisia* Wunderlich et Schuett, 1995 (see below for further discussion).

4. The records of *Hilaira jamalensis* Eskov, 1981 from Khadyta-Yakha River (South Yamal) by Esyunin & Efimik [1996] are erroneous and actually refer to *H. pervicax* Hull, 1908.

5. All the records of *Lepthyphantes pallidus* (O. Pickard-Cambridge, 1871) for the Urals [Azheganova *et al.*, 1976; Pakhorukov, 1977; Pakhorukov & Utochkin, 1977; Azheganova & Glukhov, 1981; Pakhorukov & Polyagin, 1987; Pakhorukov & Efimik, 1988; Polyagin & Pakhorukov, 1988; Esyunin, 1991, 1992; Esyun-

nin *et al.*, 1993; Penev *et al.*, 1994; Efimik, 1995, 1997; Efimik & Gulyashchikh, 1995; Esyunin *et al.*, 1996; Ukhova & Esyunin, 1996; Ukhova, 2001] are erroneous (see below for further details).

Checklist of species

ARANEIDAE

Araniella proxima (Kulczynski, 1885)

MATERIAL. North Urals: 1 ♀ (PSU-2696), Ekaterinburg Area, Ivdel Distr., Denezhkin Kamen' Mt., alder thicket (*Alnus*), 07.VI.2001, AE.

CATALOGUE. Middle Urals: Perm Area, mountain region, Ekaterinburg Area [Ukhova & Esyunin, 1996; Esyunin *et al.*, 2001]. South Urals: Orenburg Area, Bashkiria [Efimik, 1997], mountain region, Chelyabinsk Area. **New to the North Urals.**

DISTRIBUTION: Holarctic boreal range.

Larinioides cornutus (Clerck, 1758)

MATERIAL. Polar Urals: 5 ♂♂, 7 ♀♀ (PSU-102), Tyumen Area, Polarnyi Ural station, no habitat data, 15.VII.1979, K.F. Sedykh.

CATALOGUE. South Yamal: Shchyuchya and Khadyta River. Polar Transuralia: Labytnangi. Cispolar Urals: Neroika Mt. North Urals: Komi Republic, Perm Area, mountain region. Middle Urals: Perm Area, mountain region, Ekaterinburg Area [Ukhova & Esyunin, 1996; Ukhova, 2001]. South Urals: Orenburg Area, mountain region, Chelyabinsk Area. **New to the Polar Urals.**

DISTRIBUTION: Holarctic polyzonal range.

CLUBIONIDAE

Clubiona frisia Wunderlich et Schuett, 1995

MATERIAL. Middle Urals: 5 ♂♂, 2 ♀♀ (PSU-1610), Perm City, in house, VII–IX.1991–1995, bank of Kama River, willow-bed (*Salix*), 28.VI–05.VII.1999, V.O. Kozminykh. South Urals: 1 ♂, 1 ♀ (PSU-1612), Chelyabinsk Area, Troitsk Distr., Uii River, banks, 21.V.1993, SE.

REMARKS. *Clubiona frisia* Wunderlich et Schuett, 1995 and *C. similis* L.Koch, 1867 are closely related species, “which differ only by the male” [Mikhailov, 2003: 294]. A re-examination of the Ural specimens has revealed that all the regional records of *C. similis* (see below) were erroneous and actually belong to *C. frisia*. Thus, *C. similis* should be excluded from the Ural regional list.

CATALOGUE (all sub *C. similis*): Middle Urals: Perm Area [Esyunin, 1995]. South Urals: Chelyabinsk Area [Utochkin & Golovashkina, 1977; Esyunin & Pakhorukov, 1992]. **New to the Urals.**

DISTRIBUTION: European nemoral range.

DICTYNIDAE

Dictyna dunini Danilov, 2000

Dictyna dunini Danilov, 2000: p. 38, figs 7–8 (♀).

MATERIAL. Middle Urals: 1 ♀ (PSU-2150), Ekaterinburg Area, environs of Asbest Town, Reftinskii, *Pinus* forest, 20.08.1989, E.L.Vorobeichik.

REMARKS. **New to the Urals.** Originally this species was described from Buryatia and Irkutsk Area [Danilov, 2000].

Lathys humilis (Blackwall, 1855)

MATERIAL. North Urals: 8 ♀♀ (PSU-1807), Perm Area, Sepol, *Pinus* forest with reindeer moss (*Cladonia*), 15.VIII.1999, VE. Middle Urals: 1 ♀ (PSU-2076), Ekaterinburg Area, environs Asbest Town, Reftinskii, *Pinus* forest, 16.08.1989, E.L.Vorobeichik.

CATALOGUE. Middle Urals: Perm Area. South Urals: Orenburg Area, Bashkiria [Efimik, 1997], Chelyabinsk Area. **New to the North Urals and Ekaterinburg Area.**

DISTRIBUTION: Euro-Central Asian nemoral range.

GNAPHOSIDAE

Micaria nivosa L. Koch, 1866

MATERIAL. North Urals: 1 ♀ (PSU-2725), Ekaterinburg Area, Severourals Distr., Vsevolodo-Blagodatskoe, no habitat data, 08.VI.2001, AE.

CATALOGUE. Middle Urals: Perm Area. South Urals: Bashkiria [Efimik, 1997]. **New to the North Urals and Ekaterinburg Area.**

DISTRIBUTION: Euro-Middle Siberian nemoral range.

Zelotes potanini Schenkel, 1963

MATERIAL. Middle Urals: 1 ♀ (PSU-3348), Perm Area, Preduralie Reserve, burned *Pinus* forest, VII.2003, Tvorogov S.V.

CATALOGUE. South Urals: Bashkiria [Efimik, 1996]. **New to Middle Urals and Perm Area.**

DISTRIBUTION. Central-East Palaearctic nemoral-steppe range: from the Urals to Japan.

LINYPHIIDAE

Agyneta ripariensis Tanasevitch, 1984

MATERIAL. North Urals: 2 ♂♂ (PSU-429), Ekaterinburg Area, Ivdel Distr., Denezhkin Kamen' Range, Rubel Mountain, 1300 m a.s.l., mountain tundra with sedge (*Carex*) and moss, 20.VI & 06.VIII.1998, AE.

CATALOGUE. Polar Cisuralia: Vorkuta. Polar Urals: Sob River. Cispolar Urals: Neroika Mountain. **New to the North Urals.**

DISTRIBUTION. Siberian boreal range.

Agyneta simplicatarsis (Simon, 1884)

Meioneta simplicatarsis: Roberts, 1987: 124, fig. 62d (♂♀). *Agyneta simplicatarsis*: Tanasevitch, 2005a: 166, figs 15–19 (♂).

MATERIAL. South Urals: 1 ♂, 1 ♀ (PSU-2419: det. by A.V. Tanasevitch), Chelyabinsk Area, Troitsk Distr., Troitskii Reserve, shore of Lake Kukai, 19.VI.1992, P. Durmanov.

REMARKS. **New to the Urals.** In Russia, this European nemoral species has hitherto been recorded from the Samara Area only [Krasnobaev & Matveev, 1993; Krasnobaev, 2004].

Allomengea dentisetis (Grube, 1861)

MATERIAL. North Urals: 6 ♂♂, 1 ♀ (PSU-742), Perm Area, Kochev Distr., Sepol, paludal birch forest, 19.VIII.1999,

VE. Middle Urals: 1 ♀ (PSU-2162), Perm City, meadow, IX.2001, Ya.E. Butina.

CATALOGUE. South Urals: Bashkiria [Efimik, 1996]. **New to North and Middle Urals.**

DISTRIBUTION. Sub-Holarctic temperate range, with a disjunction in Europe and an isolated population in North Tien-Shan [Tanasevitch, 1989].

Allomengea vidua (L. Koch, 1879)

MATERIAL. South Urals: 1 ♀ (PSU-85), Chelyabinsk Area, Troitsk Distr., Troitskii Reserve, reedstand on lake shore, 03.VII.1995, SE.

CATALOGUE. North Urals: Perm & Ekaterinburg Area. Middle Urals: Perm Area. **New to the South Urals and Chelyabinsk Area.**

DISTRIBUTION. Holarctic temperate range.

Araeoncus humilis (Blackwall, 1841)

MATERIAL. North Urals: 1 ♂ (PSU-3281), Komi Republic, Pechoro-Ilychskii Reserve, bog with alder (*Alnus*), 22–26.IX.2003, O. Makarova.

CATALOGUE. Middle Urals: Perm Area, mountain region, Ekaterinburg Area [Belskaya & Esyunin, 2003]. **New to the North Urals.**

DISTRIBUTION. European nemoral range.

Bathyphantes setiger F.O. Pickard-Cambridge, 1894

MATERIAL. North Urals: 2 ♂♂, 2 ♀♀ (PSU-3272), Komi Republic, Pechoro-Ilychskii Reserve, Yaksha, gravel bank, 23.IX.2003, O. Makarova; 1 ♂ (PSU-917), Ekaterinburg Area, Karpinsk Distr., Kosvinskii Kamen Mt., mountain tundra, 18.VI.1981, O.N. Fileva.

CATALOGUE. South Yamal: Khadyta River. Middle Urals: Perm Area, mountain region. South Urals: mountain region, Chelyabinsk Area. **New to the North Urals and Ekaterinburg Area.**

DISTRIBUTION. Trans-Eurasian boreal range.

Caviphantes saxetorum (Hull, 1914)

MATERIAL. Middle Urals: 1 ♂ (PSU-2149), Ekaterinburg Area, Nizhniy Tagil, no habitat data, 1989, EV.

REMARKS. **New to the Urals.** America-European nemoral species: in Eurasia, eastward of the Altai (South Siberia) [Marusik *et al.*, 1996].

Centromerus aequalis (Westring, 1851)

MATERIAL. Middle Urals: 1 ♀ (PSU-1380), Perm Area, Suksun Distr., Chekarda, mixed forest, VIII.2000, TT.

REMARKS. **New to the Urals.** This species is widespread in Europe and has also been recorded from Kazakhstan.

Ceratinella brevipes (Westring, 1851)

MATERIAL. North Urals: 1 ♀ (PSU-3280), Komi Republic, Pechoro-Ilychskii Reserve, bog with *Alnus*, 26.IX.2003, O. Makarova. South Urals: 1 ♀ (PSU-2840), Orenburg Area, Kuvandyk Distr., Aituar, birch forest, 26.V.1996, NM.

CATALOGUE. Middle Urals: Perm Area, mountain region, Ekaterinburg Area [Ukhova & Esyunin, 1996; Ukhova, 2001]. South Urals: Chelyabinsk Area. **New to the North Urals and Orenburg Area.**

DISTRIBUTION. Trans-Eurasian nemoral range.

Drepanotylus uncatus (O. Pickard-Cambridge, 1873)

MATERIAL. North Urals: 2 ♀♀ (PSU-3282), Komi Republic, Pechoro-Ilychskii Reserve, *Picea* forest with peat-moss, bog with *Alnus*, 22–26.IX.2003, O. Makarova.

CATALOGUE. Polar Transuralia: Labytnangi [Koponen *et al.*, 1997]. Middle Urals: Perm Area, mountain region [Efimik & Esyunin, 1997]. **New to the North Urals.**

DISTRIBUTION. Euro-West Siberian boreal range.

Entelecara acuminata (Wider, 1834)

MATERIAL. North Urals: 1 ♀ (PSU-2722), Ekaterinburg Area, Severouralsk Distr., Vsevolodo-Blagodatskoe, no habitat data, 08.VI.2001, AE.

CATALOGUE. Middle Urals: Perm Area, mountain region, Ekaterinburg Area [Esyunin & Ukhova, 2001]. South Urals: Orenburg Area [Efimik *et al.*, 1997], Bashkiria [Efimik *et al.*, 1997], Chelyabinsk Area. **New to the North Urals.**

DISTRIBUTION. Holarctic disjunct nemoral range: distributed in the West Palaearctic (from Europe to South Siberia, south to Kirghizia) and the Pacific Nearctic.

Entelecara congenera (O. Pickard-Cambridge, 1879)

MATERIAL. North Urals: 1 ♂ (PSU-957), Ekaterinburg Area, Karpinsk Distr., Kosvinskii Kamen Mt., 900 m a.s.l., mountain tundra, 07.VII.1996, AE.

CATALOGUE. Middle Urals: Perm Area, mountain region, Ekaterinburg Area. South Urals: Bashkiria, mountain region. **New to the North Urals.**

DISTRIBUTION. European nemoral range.

Erigone dentigera O. Pickard-Cambridge, 1874

MATERIAL. Polar Urals: 1 ♂ (PSU-94), [Tyumen Area] expeditions to the North Urals, right bank of Sob, sample No 36, 04.VII.1925, V. Fridolin.

REMARKS. **New to the Urals.** Holarctic temperate range.

Floronia bucculenta (Clerck, 1758)

MATERIAL. North Urals: 2 ♂♂, 4 ♀♀ (PSU-1789), Perm Area, Kochev Distr., Sepol, bottomland meadow, 14.VIII.1999, VE. Middle Urals: 1 ♂ (PSU-1899), Ekaterinburg Area, Visimskii Reserve, *Picea–Abies* forest, 19.VIII.2001, L.S. Shumilovskikh.

CATALOGUE. Middle Urals: Perm Area. South Urals: Chelyabinsk Area [Polyanin, 1998]. **New to the North Urals and Ekaterinburg Area.**

DISTRIBUTION. Trans-Palaearctic nemoral range.

Gnathonarium dentatum (Wider, 1834)

MATERIAL. North Urals: 1 ♀ (PSU-1761), Perm Area, Kochev Distr., Sepol, bottomland meadow, 14.VIII.1999, VE.

CATALOGUE. Middle Urals: Perm Area, Ekaterinburg Area [Ukhova & Esyunin, 1996; Ukhova, 2001]. South Urals: Chelyabinsk Area. **New to the North Urals.**

DISTRIBUTION. Trans-Eurasian nemoral range.

Gongyliellum murcidum Simon, 1884

MATERIAL. Middle Urals: 1 ♀ (PSU-2074), Ekaterinburg Area, environs of Revda Town, *Picea* forest, 17.VI.1989, EV.

CATALOGUE. Middle Urals: Perm Area. South Urals: Chelyabinsk Area. **New to Ekaterinburg Area.**

DISTRIBUTION. Euro-Central Asian nemoral range.

Gongylidium rufipes (Linnaeus, 1758)

MATERIAL. North Urals: 1 ♂, 5 ♀♀ (PSU-1788), Perm Area, Kochev Distr., Sepol, paludal birch forest and bottomland willow-bed (*Salix*), 12–17.VIII.1999, VE.

CATALOGUE. Cispolar Urals: Berezovo. Middle Urals: Perm Area. South Urals: Orenburg Area [Efimik *et al.*, 1997], Bashkiria, Chelyabinsk Area [Efimik & Zolotarev, 1998]. **New to the North Urals.**

DISTRIBUTION. Trans-Eurasian temperate range.

Hilaira glacialis (Thorell, 1872)

MATERIAL. Cispolar Urals: 1 ♂, 3 ♀♀ (PSU-752), Tyumen Area, Berezovo Distr., Neroika Mt., 950 m a.s.l., tundra with grass and moss, 06.VII.1990, A. Malozemov.

CATALOGUE. Polar Ural and Cisuralia [Koponen *et al.*, 1997]. **New to Cispolar Urals.**

DISTRIBUTION. Siberian hypoarcto-boreal range.

Hilaira nubigena Hull, 1911

MATERIAL. North Urals: 3 ♀♀ (PSU-839), Perm Area, Krasnovishersk Distr., Kvarkush Range, *Betula* forest, 17.VII.1996, NM.

CATALOGUE. South Yamal: Shchyuchia & Khadyta Rivers. **New to the North Urals.**

DISTRIBUTION. Holarctic boreal range.

Hilaira pervicax Hull, 1908

MATERIAL. North Urals: 2 ♀♀ (PSU-772), Perm Area, Krasnovishersk Distr., Kvarkush Range, elfin woodland (*Betula*), multiherbaceous meadow, 18.VII.1996, NM.

CATALOGUE. South Yamal: Shchyuchia & Khadyta Rivers [Esyunin & Efimik, 1996: sub *H. jamalensis*]. Polar Urals: mountain region [Koponen *et al.*, 1997]. Middle Urals. **New to the North Urals.**

DISTRIBUTION. Trans-Eurasian boreal range.

Incestophantes incestus (L. Koch, 1879)

MATERIAL. North Urals: 3 ♀♀ (PSU-987), Ekaterinburg Area, Denezhkin Kamen' Mt., 1300 m a.s.l., tundra with *Carex* and moss, VIII.1999 and 13.VI.2001, AE.

CATALOGUE. South Yamal: Khadyta River. Polar Urals: Sob River. South Urals: mountain region. **New to the North Urals.**

DISTRIBUTION. Siberian boreo-mountain range.

Leptothrix hardyi (Blackwall, 1850)

MATERIAL. North Urals: 1 ♂, 1 ♀ (PSU-3271), Komi Republic, Pechoro-Ilychskii Reserve, Yaksha, gravel bank, 23.IX.2003, O. Makarova.

CATALOGUE. Middle Urals: Perm Area. **New to the North Urals.**

DISTRIBUTION. European nemoral range.

Mecynargus monticola (Holm, 1943)

MATERIAL. North Urals: 2 ♂♂ (PSU-993), Ekaterinburg Area, Karpinsk Distr., Kosvinskii Kamen mt., tundra, 18.VI.1981, O.N. Fileva.

CATALOGUE. South Yamal: Shchyuchia & Khadyta Rivers. Polar Cisuralia: Vorkuta. Polar and Cispolar Urals. **New to the North Urals.**

DISTRIBUTION. Sub-Holarctic hypoarcto-boreal range, with a disjunction in Central and East Nearctic.

Metapanamomops kaestneri (Wiehle, 1961)

MATERIAL. Middle Urals: 1 ♂ (PSU-439), Perm Area, Chaikovsk Distr., Saigatka River, *Pinus* forest, 23.VI.1997, N.Yu. Shadrina.

REMARKS. **New to the Urals.** European nemoral range. In Russia, this species has hitherto been recorded from Samara Area only [Krasnobaev, 1990, 2004].

Metopobactus prominulus (O. Pickard-Cambridge, 1872)

MATERIAL. North Urals: 1 ♂, 1 ♀ (PSU-994), Ekaterinburg Area, Denezhkin Kamen' Mt., no habitat data, 11.VI.1999, AE.

CATALOGUE. North Urals: Perm Area. Middle Urals: Perm Area, mountain region. South Urals: Bashkiria, mountain region, Chelyabinsk Area. **New to Ekaterinburg Area.**

DISTRIBUTION. Sub-Holarctic temperate range with disjunction on West Nearctic.

Minicia marginella (Wider, 1834)

MATERIAL. North Urals: 1 ♀ (PSU-998), Ekaterinburg Area, Vsevolodo-Blagodatskoe, multiherbaceous meadow, 10.VI.1999, AE.

CATALOGUE. Middle Urals: mountain region, Ekaterinburg Area. South Urals: Bashkiria, mountain region, Chelyabinsk Area. **New to the North Urals.**

DISTRIBUTION. Trans-Eurasian temperate range.

Palliduphantes alutacius (Simon, 1884)

Lepthyphantes pallidus (nec O. P.-Cambridge, 1871): Pakhorukov & Utochkin, 1977: p. 909, fig. 14 (♂).

Palliduphantes alutacius: Saaristo et Tanasevitch, 2001: p. 14, figs 6: G, H, L, M; 7: D–F, J–L (♂♀).

MATERIAL. North Urals: 3 ♂♂, 4 ♀♀ (PSU-3424), Perm Area, Krasnovishersk Distr., Visherskii Reserve, birch (*Betula*) and spruce (*Picea*) forests, *Sphagnum* bog, 20.VI–31.VII.1995, NM; 2 ♂♂, 2 ♀♀ (PSU-3426), Perm Area, Krasnovishersk Distr., Kvarkush Mountain, *Picea* open and elfin woodlands, meadow, 06–18.VII.1996, NM. Middle Urals: 2 ♂♂, 2 ♀♀ (PSU-2596), Perm Area, Perm Distr., Kachka, spruce (*Picea*) forest, 12–22.VI.2002, SE; 1 ♀ (PSU-1737), Perm Area, Kishert Distr., Preduralie Reserve, spruce (*Picea*) forest, 13.VI.2001, SE; 1 ♀ (PSU-2164), Perm Area, Dobryanka Distr., Polazna, *Pinus–Picea* forest, 02.VI–13.VII.2001, Kozminykh V.O.; 5 ♂♂ (PSU-3323), Perm Area, Berezov Distr., spruce (*Picea*) forest, 06–12.IX.1998, coll.?: 1 ♀ (PSU-3428), Perm Area, Kungur Distr., Spasskaya Gora Reserve, *Ulmus–Tilia–Betula* forest, 03.VI.1990, SE; 1 ♀ (PSU-3429), Perm Area, Barda Distr., Sarashi, oak (*Quercus*) forest, 25.IX.1991, SE; 14 ♂♂, 10 ♀♀ (PSU-1260), Perm Area, Gornozavodsk Distr., Basegi Reserve, *Abies–Picea* forest, *Picea* open woodland, meadow, VII–IX.1990, SE; 4 ♂♂, 5 ♀♀ (PSU-3427), Ekaterinburg Area, Kirovgrad Distr., Visimskii Reserve, birch (*Betula*) and spruce (*Picea*) forests, 17.VIII.1994, SE & NM; 1 ♀ (PSU-2146), Ekaterinburg Area, Krasnouralsk, no habitat data, 02.VIII.1988, EV. South Urals: 2 ♂♂, 2 ♀♀ (PSU-3425), Chelyabinsk Area, Ilmenskii Reserve, *Pinus–Betula* and *Betula* forests, 16.VI–17.VIII.1992, TT & Kichigina S.; 1 ♂ (PSU-2147), Chelyabinsk Area, Asha, no habitat data, 1988, EV.

REMARKS. *Palliduphantes alutacius* (Simon, 1884) and *P. pallidus* (O. Pickard-Cambridge, 1871) "seem to be very closely related sister-species" [Saaristo & Tanasevitch, 2001: 14]. A re-examination of the Ural specimens has revealed that all the regional records of *Lepthyphantes pallidus* (see below) are erroneous and actually belong to *P. alutacius*, and thus the former species must be excluded from the Ural regional list.

CATALOGUE (all sub *L. pallidus*). **North** Urals: Komi Republic [Pakhorukov & Utochkin, 1977b], Perm Area, mountain region and Ekaterinburg Area [Pakhorukov, 1977]. **Middle** Urals: Perm Area [Azheganova *et al.*, 1976; Azheganova & Glukhov, 1981; Esyunin, 1992e; Esyunin *et al.*, 1993; Penev *et al.*, 1994], mountain region [Esyunin, 1991], Ekaterinburg Area [Esyunin *et al.*, 1996; Ukhova & Esyunin, 1996; Ukhova, 2001]. **South** Urals: Bashkiria [Pakhorukov & Efimik, 1988; Esyunin, 1992e; Esyunin *et al.*, 1993; Penev *et al.*, 1994; Efimik, 1995; Efimik & Gulyashchikh, 1995; Efimik, 1997], Chelyabinsk Area [Pakhorukov & Polyagin, 1987; Polyagin & Pakhorukov, 1988]. **New to the Urals.**

DISTRIBUTION. Euro-West Siberian nemoral range.

Panamomops tauricornis (Simon, 1881)

MATERIAL. **North** Urals: 1 ♀ (PSU-432), Ekaterinburg Area, Ivdel Distr., Denezhkin Kamen' Mt., 1250 m a.s.l., tundra, 20.VI.1998, AE; 1 ♀ (PSU-1013), Ekaterinburg Area, Karpinsk Distr., Kosvinskii Kamen Mt., 900 m a.s.l., tundra, 7.VII.1996, AE.

CATALOGUE. **Middle** Urals: Perm Area, mountain region. **South** Urals: mountain region. **New to the North Urals and Ekaterinburg Area.**

DISTRIBUTION. Trans-Eurasian boreo-mountain range.

Pelecopsis parallela (Wider, 1834)

MATERIAL. **Middle** Urals: 2 ♀♀ (PSU-1630), Perm City, bank of River Kama, sea-buckthorn shrub, 03.IX–12.X.2000, V.O. Kozminykh.

CATALOGUE. **Polar Cisuralia**: Vorkuta [Koponen *et al.*, 1997]. **Polar** Urals: Sob River [Koponen *et al.*, 1997]. **Cispolar** Urals: mountain region. **South** Urals: Bashkiria [Efimik, 1997], Chelyabinsk Area. **New to Middle Urals.**

DISTRIBUTION. Trans-Eurasian hypoarcto-boreal range.

Perregrinus deformis (Tanasevitch, 1982)

MATERIAL. **North** Urals: 1 ♀ (PSU-430), Ekaterinburg Area, Ivdel Distr., Denezhkin Kamen' Mt., 1300 m a.s.l., tundra with *Carex* and moss, 20.VI.1998, AE; 1 ♀ (PSU-1015), Ekaterinburg Area, Karpinsk Distr., Kosvinskii Kamen Mt., 1500 m a.s.l., tundra with *Carex* and moss, 9.VII.1996, AE.

CATALOGUE. **South Yamal**: Khadyta River. **Polar Cisuralia**: Vorkuta. **Polar** Urals: Sob River. **New to the North Urals.**

DISTRIBUTION. Siberio-American hypoarcto-boreal range.

Praestigia duffeyi Millidge, 1954

Praestigia duffeyi: Wiehle, 1961: s. 172, Abb. 1–11 (♂♀).

MATERIAL. **North** Urals: 2 ♂♂ (PSU-2708), Ekaterinburg Area, Ivdel Distr., Denezhkin Kamen' Mt., tundra with *Carex* and moss, 06.VI.2001, AE.

REMARKS. **New to Russia.** This species is distributed in Europe, and the above locality seems to be its easternmost record. However, it is possible that the Ural specimens belong

to a new species. This opinion is based on the fact that the Ural population is considerably separated from the main range. Furthermore, spiders of different populations dwell in quite different biotopes (cf. Heimer, Nentwig, 1991: damp and saline coasts). According to Millidge [1977], the genus *Praestigia* Millidge, 1954 is a junior synonym of *Baryphma* Simon, 1884. We disagree with this opinion and follow Eskov [1994] who treated *Praestigia* as an independent genus.

Styloctetor stativa (Simon, 1881)

MATERIAL. **Middle** Urals: 2 ♂♂ (PSU-2557), Perm Area, Perm Distr., Kachka, meadow, 02–13.VI.2001, SE. **South** Urals: 2 ♀♀ (PSU-2081), Bashkiria, Ishimbai Distr., Akhmerovo, *Quercus*–*Tilia* forest, 09.VII.1988, EV.

CATALOGUE. **South**: Chelyabinsk Area. **New to Middle Urals, Bashkiria and Perm Area.**

DISTRIBUTION. Holarctic temperate range.

Tapinocyba pallens (O. Pickard-Cambridge, 1872)

MATERIAL. **North** Urals: 6 ♀♀ (PSU-388), Perm Area, Krasnovishersk Distr., Kvarkush Range, open woodland, 10.VII.1996, NM.

REMARKS. **New to the Urals.** Euro-West Siberian nemoral range (Tanasevitch, 2005b).

Taranucnus setosus (O.P.-Cambridge, 1863)

MATERIAL. **North** Urals: 1 ♂ (PSU-1768), Perm Area, Kochev Distr., Sepol, *Pinus*–*Betula* forest, 18.VIII.1999, VE.

CATALOGUE. **South** Urals: mountain region. **New to the North Urals.**

DISTRIBUTION. Euro-West Siberian nemoral range.

Tmeticus affinis (Blackwall, 1855)

MATERIAL. **South Yamal**: 1 ♂, 1 ♀ (PSU-97), Tyumen Area, Khadyta-Yakha River, sand bank, rubbish-alluvium, 26.VII.1981, SE.

REMARKS. The records of this species from South Yamal [Eskov, 1986b, 1988d] were considered erroneous by Eskov & Marusik [1994], but the aforementioned material corroborates the regional record.

DISTRIBUTION. Trans-Eurasian temperate range.

Typhochrestus latithorax (Strand, 1907)

MATERIAL. **North** Urals: 1 ♂ (PSU-413), Ekaterinburg Area, Ivdel Distr., Denezhkin Kamen' Mt., 1300 m a.s.l., tundra with *Carex* and moss, 23.VI.1998, AE.

CATALOGUE. **Polar Cisuralia**: Vorkuta. **Polar Urals**: Sob River. **New to the North Urals.**

DISTRIBUTION. Sub-Holarctic hypoarctic range, with a disjunction in Europe.

Walckenaeria cucullata (C.L. Koch, 1836)

MATERIAL. **North** Urals: 1 ♂, 3 ♀♀ (PSU-1787), Perm Area, Kochev Distr., Sepol, *Pinus* and *Pinus*–*Picea* forests, 15.VIII.1999, VE. **Middle** Urals: 1 ♂, 2 ♀♀ (PSU-2091), Ekaterinburg Area, environs of Asbest Town, Reftinskii, *Pinus* forest, 19–23.08.1989, E.L. Vorobeichik.

CATALOGUE. **North** Urals: Komi Republic. **Middle** Urals: Perm Area. **South** Urals: Chelyabinsk Area. **New to Ekaterinburg Area.**

DISTRIBUTION. Euro-Middle Siberian temperate range.

Walckenaeria korobeinikovi Esyunin et Efimik in Efimik et Esyunin, 1996

MATERIAL. North Urals: 1 ♀ (PSU-2714), Ekaterinburg Area, Ivdel Distr., Denezhkin Kamen' Mt., tundra with *Carex* and moss, 06.VI.2001, AE.

CATALOGUE. South Yamal: Shchyuchya & Khadyta Rivers [Efimik & Esyunin, 1996]. Polar Cisuralia: Vorkuta [Koponen *et al.*, 1997]. Polar and Cispolar Urals [Efimik & Esyunin, 1996]. **New to the North Urals.**

DISTRIBUTION. Siberian (?Trans-Eurasian) hypoarcto-boreal range.

Walckenaeria mitrata (Menge, 1868)

MATERIAL. North Urals: 1 ♂ (PSU-1035), Ekaterinburg Area, Ivdel Distr., Denezhkin Kamen' Mt., no habitat data, sweeping, 11.VI.1999, AE.

CATALOGUE. Middle Urals: Perm Area. South Urals: Bashkiria, mountain region. **New to Ekaterinburg Area.**

DISTRIBUTION. Euro-Middle Siberian nemoral range.

Walckenaeria vigilax (Blackwall, 1853)

MATERIAL. South Urals: 1 ♂, 1 ♀ (PSU-2853), Orenburg Area, Kuvandyk Distr., Aituar, birch forest with *Carex*, 30.V.1996, NM.

CATALOGUE. Middle Urals: Perm Area, Ekaterinburg Area [Belskaya & Esyunin, 2003]. South Urals: mountain region, Chelyabinsk Area. **New to Ekaterinburg and Orenburg Areas.**

DISTRIBUTION. Holarctic nemoral range.

LIOCRANIDAE

Agroeca proxima (O. Pickard-Cambridge, 1871)

MATERIAL. North Urals: 3 ♂♂, 2 ♀♀ (PSU-764), Perm Area, Kochev Distr., Sepol, *Picea-Pinus* forest with *Vaccinium myrtillus* and moss, 20.VIII.1999, VE.

CATALOGUE. Middle Urals: Perm Area, mountain region, Ekaterinburg Area [Esyunin *et al.*, 1999; Esyunin & Ukhova, 2001; Ukhova, 2001]. South Urals: Bashkiria, mountain region, Chelyabinsk Area. **New to the North Urals.**

DISTRIBUTION: Euro-Middle Siberian nemoral range.

Phrurolithus festivus (C.L. Koch, 1835)

MATERIAL. North Urals: 1 ♀ (PSU-1009), Ekaterinburg Area, Karpinsk Distr., Kosvinskii Kamen Mt., 900 m a.s.l., tundra, 10.VII.1996, AE.

CATALOGUE. Middle Urals: Perm Area. South Urals: Bashkiria [Efimik, 1997], mountain region, Chelyabinsk Area. **New to the North Urals and Ekaterinburg Area.**

DISTRIBUTION: Trans-Palaeartic temperate range.

LYCOSIDAE

Hygrolycosa rubrofasciata (Ohlert, 1865)

MATERIAL. Middle Urals: 1 ♂, 1 ♀ (PSU-730), Ekaterinburg Area, Prigorodnyi Distr., Visimskii Reserve, meadow, 1.VII.1999, N.L. Ukhova.

CATALOGUE. North Urals: Komi Republic, mountain region. Middle Urals: Perm Area. South Urals: Bashkiria [Efimik, 1997]. **New to Ekaterinburg Area.**

DISTRIBUTION. Euro-Middle Siberian nemoral range: eastward to Yenisei River.

Pardosa atrata (Thorell, 1872)

MATERIAL. North Urals: 1 ♀ (PSU-2763), Komi Republic, Pechoro-Ilychskii Reserve, Yaksha, no habitat data, 30.V.1999, AE.

CATALOGUE. South Yamal: Shchyuchya & Khadyta Rivers. Polar Urals and Transuralia [Koponen *et al.*, 1997]. South Urals: mountain region. **New to the North Urals.**

DISTRIBUTION. Trans-Eurasian hypoarcto-boreal range.

Pardosa fulvipes (Collett, 1875)

MATERIAL. North Urals: 2 ♀♀ (PSU-1760), Perm Area, Kochev Distr., Sepol, bottomland meadow, 17.VIII.1999, VE.

CATALOGUE. Middle Urals: Perm Area [Efimik & Ritskova, 2000], mountain region, Ekaterinburg Area [Ukhova & Esyunin, 1996; Ukhova, 2001]. South Urals: Bashkiria [Efimik, 1997], mountain region, Chelyabinsk Area. **New to the North Urals.**

DISTRIBUTION. Euro-Middle Siberian temperate range: east to Yenisei River.

Pardosa plumipes (Thorell, 1875)

MATERIAL. North Urals: 4 ♂♂, 7 ♀♀ (PSU-478), Perm Area, Cherdyn, no habitat data, 1926, D.E. Kharitonov.

CATALOGUE. South Yamal: Khadyta River. Polar Urals: Sob River [Koponen *et al.*, 1997]. Middle Urals: Perm Area, Ekaterinburg Area [Belskaya & Esyunin, 2003]. South Urals: Orenburg Area, Bashkiria, Chelyabinsk Area [Efimik & Zolotarev, 1998]. **New to the North Urals.**

DISTRIBUTION. Trans-Eurasian polyzonal range.

PHILODROMIDAE

Philodromus aryy Marusik, 1991

MATERIAL. Middle Urals: 1 ♂ (PSU-499), Perm, no habitat data, 1926, D.E. Kharitonov.

CATALOGUE. South Urals: Orenburg Area [Esyunin & Efimik, 1996]

REMARKS. **New to the Middle Urals.** This is the second record of the species in the Urals, both localities indicate the westernmost limit of its range. Earlier, it was known from East Siberia [Marusik, 1991] and China (Inner Mongolia) [Tang *et al.*, 2004] only. *P. aryy* is most similar to *Philodromus pseudoexilis* Paik, 1979 described from Korea. The question of the synonymy of these names remains open, because the female copulatory organs are somewhat different.

Philodromus vinokurovi Marusik, 1991

MATERIAL. Middle Urals: 1 ♂ (PSU-501), Perm City, no habitat data, 1926, Kharitonov D.E.

REMARKS. **New to the Urals.** This species was originally described from Yakutia [Marusik, 1991] and later recorded in the Cisbaikalia [Marusik *et al.*, 2000] and China (Inner Mongolia) [Tang *et al.*, 2004]. The Urals seem to represent the westernmost limit of its range.

PHOLCIDAE

Pholcus sogdianae Brignoli, 1978

Pholcus fagei Spassky, 1940: 357, figs 6–8 (♂♀).

Pholcus sogdianae Brignoli, 1978: 489, *nomen novum* for *P. fagei* Spassky, 1940, *praeocc.* (*Pholcus fagei* Kratochvil, 1940).

Pholcus fagei: Efimik, Esysunin, Kuznetsov, 1997: 86, figs 1–4 (♂♀).

MATERIAL. Middle Urals: 1 ♂ (PSU-698), Perm, inside a building, VII.1999, SE.

CATALOGUE. Middle Urals: Orenburg Area. **New to Middle Urals.**

DISTRIBUTION. Middle Asian steppe range: from Kalmykia (Russian Plain) and mountains of Middle Asia to the Middle Urals.

THERIDIIDAE

Dipoena torva (Thorell, 1875)

MATERIAL. North Urals: 1 ♂ (PSU-955), Ekaterinburg Area, Severouralsk Distr., Vsevolodo-Blagodatskoe, multiherbaceous meadow, 05.07.1999, AE.

CATALOGUE. Middle Urals: Perm Area. South Urals: Bashkiria, Chelyabinsk Area. **New to the North Urals and Ekaterinburg Area.**

DISTRIBUTION. Euro-Middle Siberian temperate range: south to Middle Asia.

Episinus truncatus (Latreille, 1809)

MATERIAL. Middle Urals: 1 sub♂ (PSU-251), Perm, Lake Dolgoe, willow-bed (*Salix*), 03.X.1998, SE.

CATALOGUE. South Urals: Chelyabinsk Area. **New to Middle Urals and Perm Area.**

DISTRIBUTION. West Palaearctic nemoral range: south to North Africa.

Euryopsis flavomaculata (C.L. Koch, 1836)

MATERIAL. Middle Urals: 2 ♂♂ (PSU-2454), Ekaterinburg Area, Visimskii Reserve, no habitat data, 25.V.2001, Ukhova N.L.

CATALOGUE. North Urals: Perm Area. Middle Urals: Perm Area, mountain region. South: Bashkiria [Efimik, 1997], Chelyabinsk Area. **New to Ekaterinburg Area.**

DISTRIBUTION. Trans-Eurasian nemoral range.

Theridion conigerum Simon, 1914

?*Theridion conigerum*: Wunderlich, 1973: s. 406, Abb. 1–9 (♂).

Theridion conigerum: Knoflach, 1993: p. 205, figs 1–12 (♂♀).

MATERIAL. Middle Urals: 1 ♂ (PSU-510), Perm, 1926, D.E. Kharitonov.

REMARKS. **New to the Russia.** This rare species is widely distributed in Europe [Knoflach, 1993: Map 1]. The Urals seem to represent the easternmost limit of its range. By body shape, coloration and the structure of the copulatory organs, *T. conigerum* is quite similar to *Theridion xinjiangensis* (Hu et Wu, 1989) known from China [see Hu & Wu, 1989: figs 92:1–5 and Zhu, 1998: figs 121:A–F], but can easily be distinguished by the shorter tibial apophysis (long in *T. xinjiangensis*).

THOMISIDAE

Ozyptila orientalis Kulczynski, 1926

MATERIAL. North Urals: 10 ♂♂, 2 ♀♀ (PSU-423), Ekaterinburg Area, Ivdel Distr., Denezhkin Kamen' Mt., tundra, VI–VIII, 1996–2001, O.N. Fileva & AE.

CATALOGUE. Middle Urals: mountain region. **New to the North Urals.**

DISTRIBUTION. Caucasus-Siberian boreo-mountain range.

Xysticus austrosibiricus Logunov et Marusik, 1998

MATERIAL. North Urals: 9 ♂♂, 2 ♀♀ (PSU-427), Ekaterinburg Area, Ivdel Distr., Denezhkin Kamen' Mt., 1100 m, tundra, 28.VII.1998, AE.

REMARKS. **New to the Urals.** This species was originally described from South Siberia of Russia and Mongolia [Logunov & Marusik, 1998]. The Urals seems to represent the westernmost range limit of this species.

Xysticus bonneti Denis, 1937

MATERIAL. North Urals: 5 ♂♂, 2 ♀♀ (PSU-412), Ekaterinburg Area, Ivdel Distr., Denezhkin Kamen' Mt., 860 m, tundra, 22.VI–03.VIII.1998, AE.

CATALOGUE. Middle Urals: mountain region [Efimik, 1996], Ekaterinburg Area [Esysunin & Ukhova, 1996; Ukhova & Esysunin, 1996]. South Urals: Bashkiria [Efimik, 1997], mountain region [Efimik, 1996], Chelyabinsk Area. **New to the North Urals.**

DISTRIBUTION. Euro-Ural-South Siberian mountain disjunct range.

Xysticus lineatus (Westring, 1851)

MATERIAL. Middle Urals: 9 ♂♂ (PSU-739), Ekaterinburg Area, Visimskii Reserve, meadow, VI–VII.1999, N.L. Ukhova.

CATALOGUE. Middle Urals: Perm Area. South Urals: Bashkiria, Chelyabinsk Area. **New to Ekaterinburg Area.**

DISTRIBUTION. Euro-Middle Siberian temperate range.

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References

- Azheganova N.S., Glukhov M.F. 1981. [Fauna and ecology of spiders in the environs of the Biological Station (Verkhnyaya Kvazhva)] // Fauna i ekologiya nasekomykh. Perm. P.21–32 [in Russian].
- Azheganova N.S., Kopyltsova L.S., Parfenova T.V. 1976. [Spiders in the lower forest stratum in the environs of the Biological Station Verkhnyaya Kvazhva] // Biogeografiya i kraevedenie. Perm. Vol.4. P.42–48 [in Russian].
- Belskaya E.A., Esysunin S.L. 2003. [The predatory arachnids (Arachnida) in spring wheat agrocenosis in southern Sverdlovsk Area and the effect of treatment with Decis, a pyrethroid insecticide, on their populations] // Ekologiya. No.5. P.395–398 [in Russian].
- Brignoli P.M. 1978. Ragni di Turchia V. Specie nuove o interessanti, cavernicole ed epigee, di varie famiglie (Araneae) // Revue suisse Zool. T.85. No.3. P.461–541.
- Danilov S.N. 2000. New data on the spiders of the family Dictynidae (Araneae) from Siberia // Ekologia. Vol.19, Suppl.3. P.37–44.

- Efimik V.E. 1995. [Spiders (Aranei) of the Bashkirian State Reserve] // Fauna i ekologiya paukov. Perm, 1994. P.98–116 [in Russian].
- Efimik V.E. 1996. [Pliocene and Pleistocene relict species in spider fauna of the South Urals] // Zool. zhurnal. Vol. 75. No.8. P.1138–1148 [in Russian].
- Efimik V.E. 1997. [Biotopical distribution of the Bashkirian spiders] // Vestnik Permskogo universiteta. No.3. P.128–138 [in Russian with English summary].
- Efimik V.E., Esyunin S.L. 1996. A new subgenus and two new species of *Walckenaeria* Blackwall, 1833 from the Urals with remarks on the distribution of some *unicornis*-group species in the Palaearctic (Aranei Linyphiidae) // Arthropoda Selecta. Vol.5. No.1/2. P.63–73.
- Efimik V.E., Esyunin S.L. 1997. [Preliminary list of spider species of Perm Area need for a protection] // Problemy regional'noi Krasnoy Knigi. Perm. P.46–48 [in Russian].
- Efimik V.E., Gulyashchikh E.V. 1995. [Spider fauna of the pine-broadleaved forests of the South Urals] // Fauna i ekologiya paukov. Perm (for 1994). P.116–131 [in Russian].
- Efimik V.E., Ritskova V.A. 2000. [Materials on the spider fauna and population of the Perm Distr. Perm Area] // Ekolog. osnovy stabilnogo razvitiya Prikami'ya. Perm. P.157–158 [in Russian].
- Efimik V.E., Zolotarev M.P. 1998. [The additional data to fauna and ecology of the spider (Arachnida: Aranei) of the Chelyabinsk Area] // Bespozvonochnye zhivotnye Yuzhnogo Urala i sopredelnykh territoriy. Kurgan. P.140–146 [in Russian].
- Efimik V.E., Esyunin S.L., Kuznetsov S.F. 1997. Remarks on the Urals Spider fauna, 7. New data on the fauna of the Orenburg Area (Arachnida Aranei) // Arthropoda Selecta. Vol.6. No.1/2. P.85–90.
- Eskov K.Yu. 1986. [The spider fauna of the hypoarctic belt of Siberia] // Yuzhnye tundry Taymyra. Leningrad. P.174–191 [in Russian].
- Eskov K.Yu. 1988. [Spiders (Aranei) of Middle Siberia] // Materialy po faune Srednei Sibiri i prilozhaschikh raionov Mongolii. Moscow. 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 p.
- Eskov K.Yu., Marusik Yu.M. 1994. New data on the taxonomy and faunistics of North Asian linyphiid spiders (Aranei Linyphiidae) // Arthropoda selecta. Vol.2 (for 1993). No.4. P.41–79.
- Esyunin S.L. 1991. [Arachnids of the "Baseghi" Reserve (Pseudoscorpiones, Opiliones, Aranei, Parasitiformes: Ixodidae) — annotate check list] // Flora i fauna zapovednikov SSSR. No.38. Moscow. P.3–38 [in Russian].
- Esyunin S.L. 1992. [Spiders (Araneae) inhabiting oak forests of the East European Plain: geozoological analysis]. Moscow. P.1–20 [in Russian].
- Esyunin S.L. 1995. [Spider fauna of dwelling-houses at Perm City] // Ekologiya i okhrana okruzhayushei sredy. Perm. Vol.3. P.13 [in Russian].
- Esyunin S.L., Efimik V.E. 1996. Catalogue of the spiders (Arachnida, Aranei) of the Urals. Moscow: KMK Scientific Press Ltd. 229 p.
- Esyunin S.L., Efimik V.E., Mazura N.S. 1999. Remarks on the Urals spider fauna, 10. New records of spider species (Aranei) // Arthropoda Selecta. Vol. 7 (for 1998). No.4. P.319–327.
- Esyunin S.L., Efimik V.E., Polyaniin A.B. 1995. Remarks on the Ural Spider fauna, 5. New records of spider species of the family Linyphiidae from the Urals (Arachnida Aranei) // Arthropoda selecta. Vol.4. No.2. P.49–71.
- Esyunin S.L., Golovatch S.I., Pevev L.D. 1993. The fauna and zoogeography of spiders inhabiting oak forests of the East European Plain (Arachnida: Araneae) // Ber. nat.-med. Ver. Innsbruck. Bd.80. S.175–249.
- Esyunin S.L., Mazura N.S., Ukhova N.L. 1996. [The structure of litter mesofauna populations in some communities on Visimskii Reserve] // Problemy zapovednogo dela. Ekaterinburg. P.49–50 [in Russian].
- Esyunin S.L., Pakhorukov N.M. 1992. [The spider fauna of the Troitskii Reserve] // Chlenistonogie okhranyaemykh territorii Chelyabinskoi oblasti. Sverdlovsk. P.3–28 [in Russian].
- Esyunin S.L., Ukhova N.L. 1996. [Zoogeographical composition of spider fauna of Visimskii Reserve] // Problemy zapovednogo dela. Ekaterinburg. P.47–48 [in Russian].
- Esyunin S.L., Ukhova N.L. 2001. [The additions to arachnids (Arachnida) fauna of Visimskii Reserve] // Issledovaniya etolonnykh prirodnykh kompleksov Urala. Ekaterinburg. P.98–100 [in Russian].
- Gorodkov K.B. 1984. [Range types of insects of tundra and forest zones of the European part of the USSR] // Arealy nasekomykh Evropeiskoi chasti SSSR. Atlas. Karty 179–221. Leningrad: Nauka. P.3–20 [in Russian].
- Heimer S., Nentwig W. 1991. Spinnen Mitteleuropas: ein Bestimmungsbuch. Berlin, Hamburg: Parey. 543 S.
- Hu J.L., Wu W.G. 1989. Spiders from agricultural regions of Xinjing Ungur Autonomous Region, China. Jinan: Shandong Univ. Publ. 435 p.
- Knoflach B. 1993. *Theridion conigerum* Simon — rediscovered in Austria (Arachnida: Theridiidae) // Bull. Br. arachnol. Soc. Vol.9. No.6. P.205–208.
- Koponen S., Marusik Yu.M., Tanasevitch A.V. 1998. New data on the spider fauna of the Polar Urals (Aranei) // Arthropoda Selecta. 1997. Vol.6. No.3/4. P.109–119.
- Krasnobaev Yu.P. 1990. [New and little known spider in the fauna of the Samarskaya Luka] // Sotsial'no-ekologicheskie problemy Samarskoi Luki. Kuibyshev. P.140–141 [in Russian].
- Krasnobaev Yu.P. 2004. Catalogue of the spiders (Aranei) of the Middle Volga. Samara. 213 p. [in Russian].
- Krasnobaev Yu.P., Matveev N.M. 1993. Catalogue of the spiders of the Middle Volga. Samara. 74 p. [in Russian].
- Logunov D.V., Marusik Yu.M. 1998. A new species of genus *Xysticus* from the mountains of South Siberia and Mongolia (Araneae, Thomisidae) // Bull. Br. arachnol. Soc. Vol.11. Pt.3. P.103–106.
- Marusik Yu.M. 1991. [Crab spiders of the family Philodromidae (Aranei) of East Siberia] // Zool. Zhurnal. Vol.70. No.10. P.48–58 [in Russian].
- Marusik Yu.M., Hippa H., Koponen S. 1996. Spiders (Araneae) from the Altai area, Southern Siberia // Acta Zool. Fennica. Vol.201. P.11–45.
- Marusik Yu.M., Logunov D.V., Koponen S. 2000. Spiders of Tuva, South Siberia. Magadan. 252 p.
- Mikhailov K.G. 2003. The spider genus *Clubiona* Latreille, 1804 (Aranei: Clubionidae) in the fauna of the former USSR: 2003 update // Arthropoda Selecta. Vol.11 (for 2002). No.4. P.283–317.
- Millidge A.F. 1977. The conformation of the male palpal organs of linyphiid spiders, and its application to the taxonomic and phylogenetic analysis of the family (Araneae: Linyphiidae) // Bull. Brit. arachnol. Soc. Vol.4. No.1. P.1–60.
- Pakhorukov N.M. 1977. [Materials on the spider fauna of the eastern slope of the North Urals]. Perm. P.1–26 [in Russian].
- Pakhorukov N.M., Efimik V.E. 1988. [On the spider fauna of the Bashkirskii Reserve] // Fauna i ekologiya paukoobraznykh. Perm. P.15–34 [in Russian].
- Pakhorukov N.M., Polyaniin A.B. 1987. [Materials on the spider fauna of the Ilmenski Reserve] // Fauna, ekologiya bespozvonochnykh zhivotnykh Chelyabinskoy oblasti. Sverdlovsk. P.13–21 [in Russian].
- Pakhorukov N.M., Utochkin A.S. 1977. [Spider species of the family Linyphiidae (Aranei) from the northern Urals, little-known and new to the fauna of the USSR] // Entomol. obozrenie. Vol.56. No.4. P.907–911 [in Russian].
- Pakhorukov N.M., Esyunin S.L., Polyaniin A.B. 1995. [Spider fauna (Arachnida: Aranei) of the Research Forestry "Preduralye"] // Fauna i ekologiya paukov. Perm (for 1994). P.25–38 [in Russian].
- Penev L.D., Esyunin S.L., Golovatch S.I. 1994. Species diversity versus species composition in relation to climate and

- habitat variation: a case study on spider assemblages (Aranei) of the East European oak forest // *Arthropoda selecta*. Vol.3. No.1–2. P.65–99.
- Polyanin A.B. 1998. [To methodology of the investigate of the herbage spiders daily activity] // *Permskiy agrarniy vestnik*. No 2. Perm. P.157–158 [in Russian].
- Polyanin A.B., Lagunov A.V. 1992. [The spiders of the herb layer in meadow of the Ilmenskii Reserve] // *Chlenistonogie okhranyaemykh territorii Chelyabinskoi oblasti*. Sverdlovsk. P.29–41 [in Russian].
- Polyanin A.B., Pakhorukov N.M. 1988. [The spider fauna of the forest zone of southern Transuralia] // *Fauna i ekologiya paukoobraznykh*. Perm. P. 61–80 [in Russian].
- Roberts M.J. 1987. The spiders of Great Britain and Ireland. Vol. 2. Linyphiidae and check list. Edinburgh: Harley Books Publ. 204 p.
- Saaristo M.I., Tanasevitch A.V. 2001. Reclassification of the *pallidus*-, *insignis*- and *spelaeorum*-groups of *Lepthyphantes* Menge, 1866 (sensu lato) (Arachnida: Araneae: Linyphiidae: Micronetinae) // *Reichenbachia*. Bd.34. H.1. S.5–17.
- Spassky S.A. 1940. Araneae palaearticae novae. V // *Folia zool. hydrobiol.* T.10. No.2. P.353–364.
- Tanasevitch A.V. 1989. The linyphiid spiders of Middle Asia (Arachnida: Araneae: Linyphiidae) // *Senckenberg. biol.* Bd.11. H.1/3. S.83–176.
- Tanasevitch A.V. 2005a. New or little-known species of *Agyneta* and *Nippononeta* from Asia (Aranei: Linyphiidae) // *Arthropoda Selecta*. Vol.13 (for 2004). No.3. P.165–170.
- Tanasevitch A.V. 2005b. Linyphiid spiders of the West Siberian Plain (Arachnida: Aranei) // *Arthropoda Selecta*. Vol.14. No.1. P.33–88.
- Tang G.-M., Song D.-X., Zhu M.-S. 2004. [Two new record species and a new discovery of the male genus of *Philodromus* from China (Araneae: Philodromidae)] // *J. Hebei Univ.* Vol.24. No.4. P.394–398 [in Chinese].
- Ukhova N.L. 2001. [The population structure and density of mesofauna in native and derivative biotopes on Visimskii Reserve] // *Issledovaniya etalonnykh prirodnnykh kompleksov Urala*. Ekaterinburg. P.409–439 [in Russian].
- Ukhova N.L., Eyunin S. L. 1996. [To the arachnid fauna (Arachnida) of Visimskii Reserve] // *Problemy zapovednogo dela*. Ekaterinburg. P.110–112 [in Russian].
- Utochkin A.S., Golovashkina L.N. 1977. [To the fauna of and distribution of spiders over the phytocenoses of the Troitskii Reserve] // *Voprosy arakhnoentomologii*. Perm. P.81–92 [in Russian].
- Wiehle H. 1961. Beitrage zur Kenntniss der Deutschen Spinnenfauna II // *Mitt. Zool. Mus. Berlin*. Bd.37. H.2. S.171–188.
- Wunderlich J. 1973. Zur Spinnenfauna Deutschlands, XV. Weitere seltene und bisher unbekannte Arten sowie Anmerkungen zur Taxonomie und Synonymie (Arachnida: Araneae) // *Senckenbergiana biol.* Bd.54. H.4/6. S.405–428.
- Zhu M. 1998. Therididae. Beijing: Science Press. 436 p.