

## Spiders (Aranei) of the southern tundra in the Russian Plain

## Пауки (Aranei) южных тундр Русской равнины

Andrei V. Tanasevitch<sup>1</sup> & Seppo Koponen<sup>2</sup>  
А.В. Танасевич<sup>1</sup>, Сеппо Копонен<sup>2</sup><sup>1</sup>Centre for Forest Ecology and Production, Russian Academy of Sciences, Profsoyuznaya Str. 84/32, Moscow 117997 Russia.  
E-mail: atan@orc.ru.

Центр по проблемам экологии и продуктивности лесов РАН, Профсоюзная ул. 84/32, Москва 117997 Россия.

<sup>2</sup>Zoological Museum, University of Turku, FI-20014 Turku Finland. E-mail: sepko@utu.fi.

Зоологический музей, университет г. Турку, FI-20014 Турку Финляндия.

KEY WORDS: Spiders, tundra, Russian Plain, chorology.

КЛЮЧЕВЫЕ СЛОВА: Пауки, тундра, Русская равнина, хорология.

**ABSTRACT.** The southern tundra spider fauna of the Russian Plain, NE Europe (216 species of 13 families) is analyzed based on the type of zonal-landscape distribution. The fauna has a clear European character with predominance of widespread and European boreal and boreo-nemoral species. A significant part of the tundra fauna are the species which are restricted to river valleys only and not living on watersheds (23%). The bulk of the watershed spider fauna (166 species) are species associated with intrazonal plant communities (45%) and species occurring in zonal and in intrazonal communities, but preferring the last one (35%). Typical zonal component (20%) consists mainly of widespread boreal species; the Arctic element here is minor and formed basically by Thomisidae. The main part of the Arctic elements in southern tundra is associated exclusively with intrazonal communities. A list of 240 species which have been found in the southern tundra and forest tundra of European Russia is presented. For each species collecting localities are given, and the type of areal and zonal-landscape distribution is determined. *Agyneta tibialis* Tanasevitch, 2005, *Erigone arctica* Chamberlin et Ivie, 1947, *Hypselistes semiflavus* (L. Koch, 1879) and *Porrhomma boreale* (Banks, 1899) are recorded in the European fauna for the first time; *Erigone whymeri* O. Pickard-Cambridge, 1877, *Semljicola caliginosus* (Falconer, 1910) and *Silometopus ambiguus* (O. Pickard-Cambridge, 1905) are new to the Russian fauna. Diagnostic figures for *Erigone whymeri* are given based on new material.

Entering of boreal and ubiquitous species to zonal areas and penetration of the Arctic fauna into the southern tundra using intrazonal communities, mentioned by K. Eskov [1986] for Siberian araneofauna, is here confirmed in the European tundra. It means that processes of zonal-landscape distribution of spiders in Holarctic are the same and do not depend on the regional component.

**РЕЗЮМЕ.** С позиций зонально-ландшафтного распределения проанализирована фауна пауков южных тундр Русской равнины, насчитывающая не менее 216 видов из 13 семейств. Фауна имеет ярко выраженный европейский характер с преобладанием широкоареальных, европейских бореальных и бореально-неморальных видов. Значительную часть фауны тундр составляют виды, приуроченные к речным долинам и не выходящие на водораздел (23%). Основу населения плакоров (166 видов) составляют виды интразональных сообществ (45%), а также виды, встречающиеся как в зональных, так и в интразональных биотопах, но предпочитающие последние (35%). Типично зональный компонент (20%) составлен преимущественно широкоареальными бореальными видами; арктические элементы присутствуют здесь лишь малой долей и представлены в основном Thomisidae. Основная часть арктических элементов южных тундр приурочена исключительно к интразональным сообществам. Приведен список из 240 видов пауков, найденных в южных тундрах Русской равнины, а также в лесотундре. Для каждого вида дан список локалитетов, определен тип ареала и зонально-ландшафтного распределения. *Agyneta tibialis* Tanasevitch, 2005, *Erigone arctica* Chamberlin et Ivie, 1947, *Hypselistes semiflavus* (L. Koch, 1879) и *Porrhomma boreale* (Banks, 1899) впервые отмечены в Европейской фауне; *Erigone whymeri* O. Pickard-Cambridge, 1877, *Semljicola caliginosus* (Falconer, 1910) и *Silometopus ambiguus* (O. Pickard-Cambridge, 1905) — новые для фауны России.

Выход на зональную арену бореальных видов и видов-убиквистов, а также проникновение арктической фауны в южные тундры по интразональным биотопам, отмеченное К. Еськовым [1986] для сибирской аранеофауны, в точности нашло свое подтверждение и для европейских тундр. Это говорит

о том, что процессы зонально-ландшафтного распределения пауков в Гипоарктике едины и не зависят от региональной составляющей.

## Introduction

The tundra zone extends in the North of the Russian Plain from the Kanin Peninsula, in the West, to the Urals in the East. The continental tundra is traditionally divided into two parts: Malozemelskaya tundra, westward of Pechora River, and Bolshezemelskaya tundra, to the East of the river. The Yugorskiy Peninsula does not belong to the Bolshezemelskaya tundra and is considered as a part of the Urals region (see a map). The Kanin Peninsula is out of our view as an absolutely unexplored territory.

Malozemelskaya and Bolshezemelskaya tundra are not similar and differ by some zonal-landscape peculiarities. The first one is characterized by presence of high portion of flat-hill peatbogs on watershed. Seacoast tundra communities lie often just on the sandy bed, which makes soil well drained and so prevents developing of moss cover. Bolshezemelskaya tundra is occupying much more territory and is characterized by presence of expansive watershed areas, with moss-shrubby and moss-undershrub tundra communities, especially in its eastern part. The main territory of the Bolshezemelskaya tundra is represented by gently sloping flat hills with zonal type of vegetation.

Recently, the European tundra was a large white, unstudied spot on map of Russia. Just in 1981, the first information appeared on spiders of the eastern part of Bolshezemelskaya tundra, based on the collections of Roman Kuperman (1979) and Andrei Tanasevitch (1980–1986). However, this information concerned only descriptions of new species and/or new findings of some representatives of several genera, and this scanty and fragmentary data on tundra spiders was scattered in many taxonomic and faunistic publications: Eskov [1981a,b, 1985, 1986a,b, 1988a,b,c], Koponen et al. [1998], Marusik [1991], Mikhailov [1987], Tanasevitch [1982, 1983, 1984a,b, 1989, 2000], Tanasevitch & Eskov [1987].

The first papers listing spiders of the Russian Plain tundra were published by Mazura [2000] and Mazura & Eshyunin [2001], and these are a great advance in the investigation of the tundra fauna. Unfortunately, these studies are concerned a few number of localities of Malozemelskaya tundra, and they give poor ecological information about species. Therefore these papers do not give us a more or less complete picture nor of fauna or biotope distribution of the spiders in tundra. The main reason that the majority of material was collected in the Pechora River Delta (mostly in intrazonal habitats, see below). So it cannot reflect tundra spider fauna correctly, because the zonal landscapes were not dealt with. Nevertheless these authors compiled a list of 117 species for Russian Plain tundra belt, including data on spiders of Yugorskiy Peninsula.

The huge material from the Russian Plain tundra, collected during seven summer seasons (1980–1986) by A. Tanasevitch, is now completely processed and is a subject of the present paper.

## Terms and definitions

We have to make definitions for some terms to be clearly understood, because some of them can be differently treated by different schools in different countries.

**Arctic.** The term “Arctic” usually means tree-less territories north of the timberline (Arctic sensu lato), or polar desert belt (subbelt) in Arctic Archipelagos and some northernmost parts on continental area (Arctic sensu stricto). Later we will use term “Arctic” in wide content.

**Hypoarctic** — a latitudinal category, including southern tundra, forest tundra and partly northern taiga zones (after Chernov [1978]).

**Subarctic** — a latitudinal category, territorially more or less corresponding to tundra zone: all areas between the Arctic deserts and Northern taiga.

**Watershed** — a geomorphological term for flat interfluvial territories. In the tundra, watersheds form gently sloping flat hill landscapes with medium snow accumulation on slopes. On watersheds vegetation and soil cover most fully corresponds to the zonal landscape.

**Tundra** (from Finnish “tunturi” — woodless, naked fjeld) — a biome in Hypoarctic presenting woodless territories to the North of the taiga forest zone. This natural belt is usually divided into three subbelts: arctic, typical, and southern (shrubby) tundra.

**Southern tundra** is characterized by the presence a shrubby layer of vegetation on watersheds, composed usually of dwarf birch (*Betula nana*), willows shrubs (*Salix* spp.), as well as of wild rosemary (*Ledum*), juniper (*Juniperus communis*), and sometimes of rose (*Rosa*). Height of shrubs depends on the microrelief: in hollows they can reach 1 m or more (some willows), on tops of hills the shrubs can be transformed to creeping form. The undershrub layer is composed of *Vaccinium* spp. (mainly *V. uliginosum*), *Empetrum nigrum*, *Arctous* (= *Arctostaphylos*) *alpinus*, etc. The lowest level is lichen-moss and composed of *Aulacomnium*, *Dicranum*, *Hylocomium*, *Hypnum*, *Polytrichum*, *Cladonia* s.l., etc.

**Typical tundra** is characterized by the absence of the shrubs on watersheds, little portion of undershrubs, as well as by presence of open soil surface.

Almost all tundra territory of the Russian Plain refers to the southern tundra subzone. Only outlying districts refer to typical tundra. Both southern and typical tundra, possess some same characters, which accentuated similarity of the tundra zone. The most important character is the leading part of mosses in plant cover. Mosses form an insulating layer: it allows to proceed cryogenic processes for forming underground

permafrost, which in turn defines tundra landscapes and the relief.

**Forest tundra** — the northern part of forest biome: usually sparse spruce forest with parts of shrubby tundra communities among trees (on watersheds).

For description of tundra communities we keep to the following rule: the last word in word-combination defines dominant element, e.g., lichen-moss tundra means moss tundra with some lichens; birch-spruce forest means spruce forest with birch, etc.

For study of the zonal-landscape distribution of tundra spiders we use the scheme proposed in details by Chernov [1978] for dividing plant communities in the Subarctic. Based on this classification there are three main zonal types of communities in tundra.

**Zonal communities** — plant communities distributed into one zone and situated at watershed. Just they define the vegetation zonal face of the landscape. For southern tundra this is the polyvariant lichen-moss-undershrub-dwarf birch (or willow-dwarf birch) tundra. In zonal communities the abiotic factors are more extreme, than in intrazonal communities, and living conditions therefore are here more pessimal.

**Intrazonal communities** — communities distributed in one or several zones, the typical representatives of this type are swamps and peatbogs. The river valley vegetation usually is represented by a full assortment of intrazonal communities: these are willow stands on floodplains, meadows, pebble banks, rocky and/or grassy slopes, forest stands on river banks or river terraces, etc. Commonly, parts of intrazonal type of communities are situated on watersheds among zonal type of vegetation: there are willow stands in depressions, shrubby banks of lakes, flat-hill peatbogs with sedge fens or sphagnum bogs in hollows, grassy slopes of small brooks, etc. The intrazonal communities are smoothing gradient of the climatic factors (especially, temperature and humidity), making living conditions less pessimal. Some rivers penetrate several zones/subzones and river valleys are powerful channels for penetration of southern forms to the North and vice versa. Some of southern species can, using intrazonal biotopes, come to watersheds and belong to tundra fauna.

**Extrazonal** — parts of the zonal type of community which are situated outside of them distribution at watershed, e.g. wood stands in southern tundra.

**Distributional pattern** of taxa is defined as follows: the large zoogeographical regions like Holarctic, Palaearctic, etc., are treated in common sense, but some patterns are explained here.

Fennoscandian-Siberian — Siberian species which distributed in Fennoscandia and, as a rule, occur in the North of Russian Plain.

European-Ancient Mediterranean — European species which penetrate to Asia by the mountains of South Palaearctic.

European — widespread in Europe and may occur in West Siberia.

West Nearctic — from Alaska maximally to Hudson Bay in the East.

## Material and methods

Our investigation involves 10 localities and their environs in the Russian Plain tundra (see Map): Belushie, Volonga, Indiga and Tobseda Villages (Malozemel'skaya tundra); Narian-Mar, upper reaches of Shapkinina River, Vorkuta Region, Khalmer-Yu and Sivaya Maska Villages (Bolshezemel'skaya tundra). Also two forest tundra localities, e.g., environs of Nizhnyaya Peshha and Sivomaskinskiy Villages, were investigated.

Spiders were collected by all known methods: sifting of moss and litter, pitfall traps, sweeping, hand collection, ecollectors, etc. Total processed material collected during 1980–1986 consists of more than 80 000 spiders. The material is temporary deposited in the personal collection of A. Tanasevitch, and will be stored in the Zoological museum of the Moscow State University (ZMMU), Moscow, Russia. Abbreviation in the figures: EP — embolus proper, scale line = 0.1 mm

## Short description of localities

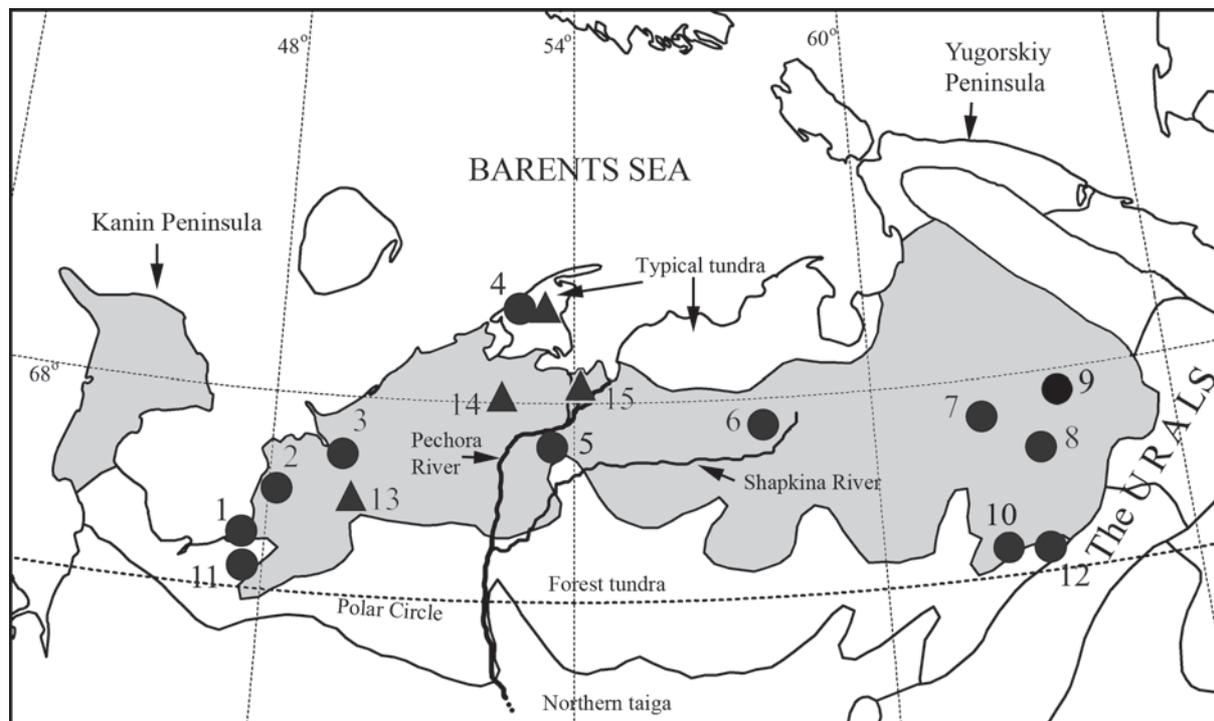
### *Tundra localities*

BELUSHIE (Map: 1), 66°53' N, 47°36' E, date of collection: 8–17.VII.1983.

Belushie Village is the most southwestern point of Malozemel'skaya tundra, and situated in the mouth of Peshha River on the southern coast of Cheshskaya Bay (Barents Sea). This region is characterized by high portion of flat-hill peatbogs and sedge-sphagnum bogs. Occurrence of zonal type of tundra — lichen-moss-undershrub willow-dwarf birch tundra — is fragmentary. The bedrock is sand, therefore moss and lichen cover is thin and dry. Seacoasts have wide marshes covered with grass, and herb meadow-like communities with willow stands. Seacoast tundra represented mostly by moss-lichen *Arctous-Empetrum* associations on sand. Floodlands of the river and brooks are mostly swampy with willow shrubs/trees, often with *Alnus* sp. & *Sorbus* sp.

VOLONGA (Map: 2), 66°07' N, 47°46' E, date of collection: 18–30.VII.1983.

Volonga Village is situated in the mouth of Volonga River. Watersheds are polyvariant willow-dwarf birch tundra, flat-hill peatbogs are well-developed, depressions and hollows with sphagnum-sedge bogs. Seacoast parts of tundra are represented by moss-lichen *Arctous-Empetrum* associations, often with sedge and cotton grass. Lichen layer is thin, bedrock is sand. Lower river terraces with sparse moss-undershrub spruce-birch forest alternating with *Betula* forest with fern-*Cornus* or diverse herbs. Undershrubs: *Vaccinium myrtillus* (mainly), *V. uliginosum* & *V. vitis-idea*. Clearings with moss-willow-dwarf birch associations and swamps. On floodlands there are willow stands with



Map. Localities in tundra (1–10, 13–15) & forest tundra (11, 12): 1 — Belushie, 2 — Volonga, 3 — Indiga, 4 — Tobseda (combined with Peschanka-To locality of Mazura & Esyunin [2001]), 5 — Narian-Mar & Iskatelei, 6 — upper reaches of Shapkina River, 7 — Diya-Ty Lake, 8 — Vorkuta, 9 — Khalmer-Yu, 10 — Sivaya Maska, 11 — Nizhniaya Pesh, 12 — Sivomaskinskiy, 13 — upper reaches of Indiga River, 14 — “Henets Hill”, 15 — Pechora River Delta (13–15 after Mazura [2000] and Mazura & Esyunin [2001]). Grey painted space is southern tundra territory. Zonal division after Ogureeva et al. [2004].

Карта. Точки сборов в тундре (1–10, 13–15) и лесотундре (11, 12): 1 — Белушье, 2 — Волонга, 3 — Индига, 4 — Тобседа (объединено с точкой «Песчанка-То» по Мазура, Есюнин [2001]), 5 — Нарьян-Мар и пос. Искателей, 6 — верховья р. Шапкина, 7 — оз. Дия-Ты, 8 — Воркута, 9 — Хальмер-Ю, 10 — Сивая Маска, 11 — Нижняя Пёша, 12 — Сивомаскинский, 13 — верховья р. Индига, 14 — «Ненецкая гряда», 15 — дельта р. Печора (13–15 по Мазура [2000] и Мазура, Есюнин [2001]). Затененная область — подзона южных тундр. Зональное деление по Огуреевой и др. [2004].

diverse herbs and grass, also abundantly sedge-sphagnum bogs.

INDIGA (Map: 3), 67°39' N, 49°02' E, date of collection: 19–26.VII.1984.

Indiga Village is situated in Bolshaya Stchelikh River mouth. Watersheds with moss-lichen-undershrub (mostly *Empetrum*) willow-dwarf birch tundra, commonly with *Juniperus*. *Polytrichum* sp. is dominating in the moss cover, true-moss patches are small in area. Some slopes with moss-willow tundra, the shrubs can be up to 2 m high. Flat-hill peatbogs with well-developed cloudberry (*Rubus chamaemorus*) associations, the sedge-sphagnum hollows almost absent. Floodlands of the river and big brooks with willow stands, gentle slopes with grassy meadow-like associations. Steep river slopes covered with lichen-undershrub (*Empetrum*, *Arctous*) associations. Sand uncoverings are rare and occur on river banks only.

TOBSEDA (Map: 4). This point is situated in 30 km W of Tobseda Village, and 4 km S of Pestchanka-To Lake, 68°42' N, 53°10' E (ca 120 air km N of Narian-Mar). Date of collection: 2-9.VII.1984.

The territory is mostly covered by flat-hill peatbogs on sand, with large sedge-sphagnum hollows. Peat hills

up to 1.5 m high, covered mainly with *Cladonia* spp. associations, partly with *Polytrichum* mosses and *Rubus chamaemorus* parcels. The edges of peat hills framed with *Betula nana* shrubs up to 1 m in high. Hollows usually open, partly with sphagnum-sedge bogs. There are often sand uncoverings on steep slopes and tops of hills, which are covered partly by thin layer of lichens (2–3 cm), and the mosaic, composed of patches of *Empetrum*, *Arctous* and creeping twigs of *B. nana*. Zonal tundra is fragmentary: the soil cover layer is composed mainly of *Cladonia* spp., *Polytrichum* mosses dominating over true mosses. Willow stands with diverse herbs and/or sedges, as well as meadow-like communities are on the lakes banks.

NARIAN-MAR (Map: 5). The material is mostly collected near Iskatelei Village, 67°38' N, 53°03' E, not far from Narian-Mar. Date of collection: 26.VI.1984–2.VII.1984, 9–13.VII.1984, 17–19.VII.1984.

This locality is the most western point of the Bolshezemelskaya tundra. The wide river terraces are covered by sparse moss-undershrub birch or spruce-birch forest, sometimes with *Larix*. Height of trees is about 3–5 m. The bedrock is sand, near of surface, often uncovered. Leaf litter thin and dry, moss and



Photo. View to the Bolshezemelskaya tundra from the timberline, 8 km NW of Sivaya Maska Village. Photo A. Tanasevitch, 1981.  
 Фото. Начало Большеземельской тундры. Граница леса, 8 км СЗ пос. Сивая Маска. Фото А. Танасевич, 1981.

lichen cover is fragmented. Moister biotopes are found on banks of lakes and brooks only. In these habitats willow stands, sedge fens and sedge-sphagnum bogs are represented.

**SHAPKINA RIVER** (Map: 6). This locality is situated in upper reaches of Shapkina River, 67°49' N, 56°08' E. Date of collection: 13–17.VII.1984.

The territory is characterized by presence of the well-developed flat-hill peatbogs on watersheds, with numerous wet sedge-sphagnum or open hollows. Peat-bog hills are covered with cloudberry-dwarf birch or moss-lichen associations. Moss-lichen layer is thin, with dense sod of *Polytrichum* mosses, sometimes with spots of *Sphagnum*. True mosses found as small patches under shrubs. Depressions with willow stands, often with diverse herbs. Meadow-like associations present on the brook banks.

**DIYA-TY LAKE** (Map: 7). This locality is in 80 km W of Vorkuta City, 67°46' N, 62°29' E. Date of collection: 5–15.VII.1980.

Lichen-moss-undershrub willow-dwarf birch tundra occupies almost all watershed territory. Banks of lake and brooks with willow stands, peatbogs are rare and minor in area.

**VORKUTA** (Map: 8), 67°30' N, 64°02' E. Date of collection: V–IX.1980–1986, except when collecting in other points of the Russian Plain tundra. Vorkuta district is a chain of small villages united by a road in a circle. Material was collected in the environs of these villages: Vorgashor Village, 67°35' N, 63°47' E; Mulda Village 67°28' N, 63°40' E; Oktiabrskiy Village 67°34' N, 64°07' E; Severnyi Village 67°36' N, 66°06'

E; Tsementnozavodskiy Village 67°36' N, 63°59' E; and Zarechnyi Village 67°31' N, 64°02' E.

This area is a classic model of southern tundra: watersheds are mostly covered with zonal type of vegetation — lichen-moss-undershrub willow-dwarf birch tundra, there are few lakes and swamps, flat-hill peatbogs are relatively rare. The majority of the spider material was collected just in this region.

**KHALMER-YU** (Map: 9), 67°56' N, 64°44' E.

Khalmer-Yu Village was often visited during 1980–1986. The landscapes are similar as near Vorkuta, but hills are higher and slopes steeper, so dwarf birch shrubs are smaller than southward, and there are lots of lichen-undershrub associations with spots of barren soil on the top of hills.

**SIVAYA MASKA** (Map: 10). The site was shortly visited during 1980–1986. The locality is situated 8 km NW of the village 66°41' N, 62°26' E. This is the southernmost point of tundra, near timberline (see Photo). Watersheds with lichen-moss-undershrub willow-dwarf birch tundra with high portions of *Ledum* and *Juniperus*.

#### *Forest tundra localities*

**NIZHNYAYA PESHA** (Map: 11), 66°45' N, 47°45' E, date of collection: 2–7.VII.1983, 31.VII.–7.VIII.1983.

Nizhnyaya Pesha Village is situated on right (high) bank of Pesha River which falls into Cheshskaya Bay. River terraces and watersheds are covered with dry (bedrock is sand) birch or spruce-birch forest, often

with *Pinus*. Ground cover comprises of meadows with diverse herbs, alternated with lichen-moss-undershrub associations (*Empetrum*, *Vaccinium* spp., mostly *V. myrtillus*). Clearings with grassy-shrubs communities, sedge fens and sphagnum bogs. Floodplains of the river with *Salix* sp. trees, with *Alnus* sp. & *Prunus padus*. Sparse grassy layer with sedge and *Equisetum*, leaf litter absence (annually washed away).

SIVOMASKINSKIY (Map: 12), 66°40' N, 62°38' E. This locality is combined of two points: first — 6 km NW of the Sivaya Maska Village. Forest tundra is represented by sparse moss-undershrub-dwarf birch spruce forest with *Betula* sp.; the clearings filled up of shrubby tundra communities. Second point is situated 10 km NE of the Sivomaskinskiy Village, on right bank of Usa River. Watershed is occupied by sparse moss-undershrub (mainly *V. myrtillus*) spruce-birch forest with dwarf birch shrubs. Bank slopes with the same kind of forests, sometimes slopes with meadow-like diverse herb and grass communities.

The tundra localities by previous authors are included, they are marked in map by triangles: 13 — upper reaches of Indiga River, 14 — “Nenets Hill” [Mazura & Esyunin, 2001], 15 — Pechora River Delta [Mazura, 2000]. Localities Pestchanka-To Lake and Narian-Mar by Mazura & Esyunin [2001] correspond to our 4 and 5, respectively.

## List of Spiders

N.B. All spiders are collected by A. Tanasevitch. Tundra localities are mentioned in the first paragraph, forest tundra sites follow in the next paragraph. Not all findings of a species for each locality are listed, only these obtained in different biotopes or at different date.

We also include in the list the species which have been registered in southern tundra by previous authors but have not been found by us.

### Fam. THERIDIIDAE

#### *Robertus lividus* (Blackwall, 1836)

2000 *Robertus lividus*. — Mazura, Pechora Delta: 136. (Map: 15).

2001 *Robertus lividus*. — Mazura & Esyunin, Arthropoda Selecta, 10 (1): 75. (Map: 13).

MATERIAL. VOLONGA: 2 ♂♂, 5 ♀♀, 2 km from Volonga River mouth, fern-*Cornus suecica* birch forest on watershed, in moss, 26.VII.1983; 3 ♀♀, 5 km from Volonga River mouth, birch forest, in moss on bank of brook, 20.VII.1983; 3 ♂♂, 10 km from mouth of Volonga River, birch forest on stony slope of the river, in moss, 19.VII.1983; 2 ♀♀, same, moss-undershrub birch forest on river terrace, in moss, 19.VII.1983; 1 ♀, same, steep bank of Volonga River, rocky slopes, among stones, in crevices, 19.VII.1983; SIVAYA MASKA: 4 ♀♀, 8 km NW of the village, lichen-moss dwarf birch tundra (200 m N of timberline), in moss, 9.VII.1981.

N. PESHA: 1 ♂, 2 ♀♀, near the village, spruce-birch forest with diverse herbs on watershed, 3.VII.1983; 1 ♂, 1 ♀, same, 6.VII.1983; 1 ♀, same, floodplain willow stands with *Prunus padus* trees among Pesho River bank, tussocks of sedge & *Equisetum*, in soil (leaf litter washed away), 2.VII.1983; SIVAYA MASKA: 1 ♀, 6 km NW of the village, sparse moss-dwarf birch spruce-forest, in

moss, 20.VIII.1981; 2 ♂♂, 3 ♀♀, same, birch-spruce forest with diverse herbs, in moss and leaf litter, 10.VII.1981; 1 ♀, near Sivaya Maska Village, spruce-birch forest, in moss and leaf litter, 5.VIII.1982; 1 ♀, 10 km NE of the village, right bank of Usa River, sparse moss-undershrub spruce-birch forest, in moss, 20.VIII.1981.

RANGE. Palaearctic-Alaskan boreo-nemoral.

COMMENTS. The species occurs only in skirts of the southern tundra.

#### *Thymoites oleatus* (L. Koch, 1879)

MATERIAL. KHALMER-YU: 2 ♂♂, 11 ♀♀, near village, willow stands in depression, outcrop of rocks, in crevices, under stones, 1981.

RANGE. Siberian-Nearctic arcto-boreal.

COMMENTS. This is the westernmost locality of the species.

### Fam. LINYPHIIDAE

#### *Abiskoa abiskoensis* (Holm, 1945)

MATERIAL. VORKUTA: 1 ♂, 3 ♀♀, near Tsementnozavodskiy Village, confluence of Yur-Shor Brook and Vorkuta River, rocky slopes, among stones, 12.VII.1986.

RANGE. Fennoscandian-Siberian boreal.

#### *Agyphantes expunctus* (O. Pickard-Cambridge, 1875)

MATERIAL. NARIAN-MAR: 3 ♂♂, near Iskatelei Village, moss-undershrub birch forest, in moss, 10.VII.1984; VORKUTA: 1 ♂, near Tsementnozavodskiy Village, bank of Vorkuta River, under stones, 18.VI.1981; SIVAYA MASKA: 1 ♂, 8 km NW of the village, timberline, in a hut, 30.VII.1981.

SIVOMASKINSKIY: 1 ♀, 6 km NW of the village, sparse moss-dwarf birch spruce forest, on spruce tree, 6.VII.1982; 2 ♀♀, same, in moss, 6.VII.1982; 1 ♀, 10 km NE of the village, right bank of Usa River, sparse moss-undershrub larch-birch forest on terrace, in moss, leaf litter, 29.VII.1981; 15 ♂♂ & ♀♀, same, grassy bank of Usa River, VII.1981.

RANGE. Palaearctic boreo-nemoral.

COMMENTS. The species reaches tundra zone by river valleys.

#### *Agyreta allosubtilis* Loksa, 1965

MATERIAL. BELUSHIE: 2 ♀♀, near the village, willow stands in depression in willow tundra, in leaf litter, 9.VII.1983; 1 ♀, same, lichen-moss dwarf birch tundra, in moss, 13.VII.1983; VOLONGA: 1 ♀, near the village, moist moss-juniper birch forest on bank of Volonga River, in moss, 29.VII.1983; INDIGA: 2 ♀♀, near the village, willow stands in floodplains of B. Stchelikh River, in leaf litter, 19–26.VII.1984; VORKUTA: 1 ♀, near Vorgashor Village, flat-hill peatbog, in leaf litter under shrubs, 18.VII.1982; 1 ♂, 1 ♀, same, willow stands in depression in flat-hill peatbog, in moss, 18.VII.1982; 1 ♂, 1 ♀, same, 29.VI.1981; 1 ♂, same, lichen-moss dwarf birch tundra, in moss, 26–29.VII.1980; 1 ♂, same, willow stands in depression in dwarf birch tundra, in leaf litter, 19.VI.1981; 1 ♀, near Zarechnyi Village, meadow with diverse herbs in floodplains bank of Vorkuta River, under stones, 19.VII.1982; 7 ♀♀, 6 (subad.), same, steep bank of Vorkuta River, rocky slopes, *Salix*, *Betula nana* & *Rosa* with *Vaccinium uliginosum* & *Empetrum*, in leaf litter, 26.VIII.1982; 1 ♀, near Tsementnozavodskiy Village, willow stands in floodplains of Vorkuta River, 5.VII.1982; KHALMER-YU: 1 ♂, 2 ♀♀, near the village, willow stands on bank of brook, 23.VII.1981. SIVAYA MASKA: 3 ♂♂, 8 km NW of the village, lichen-moss dwarf birch tundra, willow stands on watershed, in leaf litter, 9.VII.1981; 5 ♂♂, same, 30.VII.1981.

SIVOMASKINSKIY: 1 ♂, 6 km NW of the village, sparse birch-spruce forest with diverse herbs, in moss & leaf litter, 30.VII.1981; 4 ♂♂, same, 20.VIII.1981; 3 ♂♂, 1 ♀, 10 km NE of the village, right bank of Usa River, sparse moss-undershrub spruce-birch forest, in moss, 5–13.VII.1981; 1 ♂, same, 3.VIII.1982.

RANGE. Siberian-Nearctic arcto-boreal.

*Agyneta conigera* (O. Pickard-Cambridge, 1863)

MATERIAL. VOLONGA: 1 ♀, near the village, willow stands in Volonga River Valley, near seacoast, 28.VII.1983; 1 ♀, same, moist birch forest with diverse herbs near the river, in moss, 29.VII.1983.

RANGE. Palaearctic boreo-nemoral.

COMMENTS. The species reaches tundra zone by river valleys.

*Agyneta gulosa* (L. Koch, 1869)

2000 *Agyneta gulosa*. — Mazura, Pechora Delta: 136. (Map: 15).  
2001 *Agyneta gulosa*. — Mazura & Esyunin, Arthropoda Selecta, 10 (1): 75. (Map: 14).

MATERIAL. BELUSHIE: 1 ♂, 1 ♀, near the village, grassy seacoast marsh, in sod, 12.VII.1983; 1 ♂, 1 ♀, same, *Empetrum-Arctous* lichen tundra on steep sea bank, 11–13.VII.1983; 1 ♂, same, peatbog on lake bank, leaf litter & in moss, 10.VII.1983; VOLONGA: 1 ♂, 1 ♀, near the village, undershrub tundra (*Arctous*, *Empetrum*, *Betula nana*) with sedge & cotton grass on watershed terrace, 28.VII.1983; VORKUTA: 2 ♂♂, near Vorgashor Village, flat-hill peatbogs, in leaf litter & moss under shrubs, 24.VII.1980; 1 ♂, same, lichen-moss dwarf birch tundra, leaf litter under *Betula nana*, 14.VI.1981; 1 ♀, same, lichen-moss dwarf birch tundra, in moss, 9.VIII.1981; 1 ♂, same, lichen-moss dwarf birch tundra, in moss, 28.VII.1982; 1 ♂, 4 ♀♀, same, meadow with diverse herbs on slope of brook, 4.VII.1982; 1 ♂, 1 ♀, near Tsementnozavodskiy Village, steep bank of Vorkuta River, rocky slopes, among stones, 24.VI.1982; 2 ♂♂, 3 ♀♀, same, 27.VIII.1982; 1 ♂, same, willow stands in floodplains of Vorkuta River, 18–30.VI.1981; 2 ♂♂, 1 ♀, same, steep bank of Iz'yurvozh Brook, rocks, among stones, 27.VI.1982; 4 ♂♂, 4 ♀♀, near Zarechnyi Village, steep bank of Vorkuta River, rocky slopes, *Salix*, *Betula nana* & *Rosa* with *Vaccinium uliginosum* & *Empetrum*, in leaf litter, 26.VIII.1982; 1 ♂, 1 ♀, same, meadow with diverse herbs on floodplain bank of Vorkuta River, diverse herbs (sweeping), 19.VII.1982; 1 ♂, 5 ♀♀, near Mulda Village, parts of spotty tundra on top of flat hills, spots of barren soil, among stones & in soil, 6.VII.1982; 1 ♂, 1 ♀, same, willow stands on foot of hills, in moss, 31.VII.1982; 1 ♂, same, lichen-moss associations (*Arctous*, *Empetrum*, *Vaccinium uliginosum*) on top of flat hills in lichen-moss dwarf birch tundra, 21–30.VI.1981; 1 ♂, same, 15–27.VII.1981; KHALMER-YU: 1 ♂, 3 ♀♀, near the village, spotty tundra on top of hills, 13–16.VIII.1984; 1 ♂, 3 ♀♀, same, spots of lichen tundra with *Arctous* & *Empetrum* on top of hills in moss-dwarf birch tundra, 13–16.VIII.1984; SIVAYA MASKA: 2 ♂♂, 8 km NW of the village, lichen-moss dwarf birch tundra (200 m N of timberline), in moss, 20.VIII.1981.

RANGE. Palaearctic boreo-nemoral.

*Agyneta maritima* (Emerton, 1919)

MATERIAL. VORKUTA: 1 ♂, near Vorgashor, meadow with diverse herbs on slope of brook, 4.VII.1982; 1 ♂, near Mulda Village, lichen-undershrub tundra on top of flat hills, 11.IX.1983.

RANGE. Siberian-Nearctic arcto-alpine.

*Agyneta mollis* (O. Pickard-Cambridge, 1871)

2000 *Agyneta mollis*. — Mazura, Pechora Delta: 136. (Map: 15).

2001 *Agyneta mollis*. — Mazura & Esyunin, Arthropoda Selecta, 10 (1): 75. (Map: 14).

MATERIAL. VOLONGA: 1 ♀, 2 km from mouth of Volonga River, fern-*Cornus suecica* birch forest on bank of the river, in leaf litter, 26.VII.1983.

RANGE. Palaearctic-Alaskan boreo-nemoral.

COMMENTS. The species reaches tundra zone by river valleys.

*Agyneta mossica* (Schikora, 1993)

MATERIAL. BELUSHIE: 1 ♀, in village, in hut, 12.VII.1983; INDIGA: 2 ♂♂, same, meadow with diverse herbs on bank of M. Stchelikhha River, 19–26.VII.1984; VORKUTA: 1 ♀, near Vorgashor Village, lichen-moss dwarf birch tundra, in moss, 25–27.VII.1981; 1 ♀, same, flat-hill peatbogs, hollow, in tussocks of sedge, 2.VII.1982; 1 ♀, near Mulda Village, willow stands on foot of hills, in moss, 31.VII.1982; 1 ♀, same, diverse herb-grass depression in lichen-moss dwarf birch tundra, in sod, 30.VIII.1982; KHALMER-YU: 1 ♂, near the village, willow stands in depression, sedge-moss bog, 13–16.VIII.1984.

RANGE. West Palaearctic boreal.

*Agyneta nigripes* (Simon, 1884)

MATERIAL. TOBSEDA: 2 ♂♂, 4 ♀♀, lichen-moss associations with *Arctous*, *Empetrum*, *Betula nana* on sand, 2–9.VII.1984.

RANGE. Holarctic arcto-boreal.

*Agyneta olivacea* (Emerton, 1882)

1986 *Agyneta cauta*. — Eskov, Southern tundra of Taimyr: 181. (Map: 8).

2000 *Agyneta olivacea*. — Mazura, Pechora Delta: 136. (Map: 15).  
MATERIAL. SIVOMASKINSKIY: 2 ♂♂, 6 ♀♀, 10 km NE of the village, right bank of Usa River, sparse moss-undershrub spruce forest on watershed terrace, in moss, 3.VIII.1982.

RANGE. Holarctic boreo-nemoral.

*Agyneta ripariensis* Tanasevitch, 1984

1984 *Agyneta ripariensis*. — Tanasevitch, Biol. Nauki, 5: 48. (Map: 8).

2000 *Agyneta ripariensis*. — Mazura, Pechora Delta: 136. (Map: 15).

MATERIAL. VOLONGA: 6 ♂♂, 8 ♀♀, near the village, undershrub tundra (*Arctous*, *Empetrum*, *Betula nana*, *Ledum*) on watershed terrace near seacoast, 28.VII.1983. TOBSEDA: 1 ♂, 1 ♀, dry lichen-moss dwarf birch associations on sand, 2–9.VII.1984. VORKUTA: 9 ♂♂, 80 km NW of Vorkuta, bank of Diya-Ty Lake, grassy meadow in dwarf birch tundra, 18.VII.1980; 6 ♂♂, 2 ♀♀, near Vorgashor, lichen-moss dwarf birch tundra, in pitfall traps, 26–9.VII–29.VII.1980; 2 ♂♂, flat-hill peatbogs, in pitfall traps, 1.VII.1981; 4 ♂♂, near Vorgashor, willow stands with diverse herbs in depression, 1.VII.1981; 6 ♂♂, 2 ♀♀, same, 19.VII.1981; 1 ♂, 1 ♀, same, 28.VIII.1981; 3 ♂♂, 4 ♀♀, near Mulda Village, spotty tundra on top of flat hills, spots of barren soil, among stones & in soil, 6.VII.1982.

RANGE. Siberian arcto-boreal.

COMMENTS. Volonga is the westernmost locality of the species.

*Agyneta similis* (Kulczyński, 1926)

2000 *Agyneta similis*. — Tanasevitch, Arthropoda Selecta, 8 (3): 204&205. (Map: 4, 6, 8).

2000 *Agyneta similis*. — Mazura, Pechora Delta: 136. (Map: 15).

MATERIAL. TOBSEDA: 1 ♂, dry lichen-moss dwarf birch associations on sand, 2–9.VII.1984. SHAPKINA RIVER: 1 ♂, dwarf birch shrubs in flat-hill peatbog, in moss, 13–17.VII.1984. VORKUTA: 1 ♂, near Vorgashor Village, under trash on garbage

piles, 7–10.VI.1981; 1 ♂, same, lichen-moss dwarf birch tundra, in moss, 23–25.VIII.1983; 5 ♂♂, 1 ♀, near Mulda Village, lichen-moss-undershrub tundra (*Arctous*, *Empetrum*, *Betula nana*) on top of flat hills, 11.IX.1983; 1 ♂, same, 15–27.VII.1981; 1 ♂, 1 ♀, same, 29.VII.1986.

RANGE. Palaearctic arcto-boreal.

### *Agyneta tibialis* Tanasevitch, 2005

MATERIAL. NARIAN-MAR: 1 ♂, 4 ♀♀, near the village, moss-undershrub birch forest, in moss, 10.VII.1984; SHAPKINA RIVER: 4 ♂♂, spots of *Arctous* associations in lichen-dwarf birch tundra, 14.VII.1984.

RANGE. Siberian arcto-alpine.

COMMENTS. This species has been recently described from Altai Mts., South Siberia (Tanasevitch, 2005). Narian-Mar is the westernmost locality of the species.

This is a species new to the European fauna.

### *Allomengea scopigera* (Grube, 1859)

2000 *Allomengea scopigera*. — Mazura, Pechora Delta: 136. (Map: 15).

2001 *Allomengea scopigera*. — Mazura & Eshyunin, Arthropoda Selecta, 10 (1): 75. (Map: 14 & 15).

MATERIAL. BELUSHIE: 1 ♀, near the village, willow stands on grassy seacoast meadow, in leaf litter, 12.VII.1983; 2 ♀♀, same, grassy seacoast marsh, in sod, 17.VII.1983; VOLONGA: 1 ♂, 1 ♀, near the village, moist moss-juniper birch forest on river bank, in moss, 29.VII.1983; 1 ♀, 2 km from mouth of Volonga River, fern-*Cornus suecica* birch forest on watershed, in moss, 26.VII.1983; 3 ♀♀, same, *Poa*-herb meadow on floodplain, 26.VII.1983; 1 ♀, same, moist birch forest with diverse herbs near river, leaf litter, 29.VII.1983; INDIGA: 5 ♀♀, near the village, willow stands on floodplains of B. Stchelikhha River, in leaf litter, 19–26.VII.1984; 1 ♀, same, diverse herb-grass meadow on B. Stchelikhha River bank, 19–26.VII.1984; NARIAN-MAR: 1 ♀, near the village, willow stands with hummocks of sedge on lake bank, 10.VII.1984; 2 ♀♀, same, moss-sedge bog on lake bank, in *Sphagnum* & sedge tussocks, 18.VII.1984; VORKUTA: 1 ♀, near Vorgashor Village, agrocoenosis, in pitfall traps, 3.VIII.1980; 3 ♂♂, 6 ♀♀, same, willow stands in agrocoenosis, in leaf litter, 9.VIII.1984; 6 ♂♂, 5 ♀♀, same, lichen-moss dwarf birch tundra, under trash, 1.IX.1981; 7 ♂♂, 6 ♀♀, same, willow stands with diverse herbs in depression, 25.VIII.1981; 1 ♂, same, sedge fen on lake bank, 5.IX.1984; 10 ♀♀, near Zarechnyi Village, steep bank of Vorkuta River, *Salix*, *Betula nana* & *Rosa* with *Vaccinium uliginosum* & *Empetrum*, in leaf litter, 26.VIII.1982; 2 ♂♂, 1 ♀, near Oktiabrskiy Village, willow stands on flood-lands of Vorkuta River, in leaf litter, 1.IX.1982; 3 ♂♂, 1 ♀, near Severnyi Village, dry channel of Ayach-Yaha Brook, under stones, 11.IX.1984; 13 ♀♀, bank of Vorkuta River, *Salix* forest with diverse herbs, in sedge fen, 5.VIII.1985; 3 ♀♀, near Tsementnozavodskiy Village, steep bank of Vorkuta River, among stones, 30.VII.1982; 1 ♂, 1 ♀, same, 27.VIII.1982; 1 ♂, same, willow stands on floodplain of Vorkuta River, 23.VIII.1982; 15 ♂♂, 11 ♀♀, same, 31.VIII.1981; 1 ♀, near Mulda Village, diverse herb-grass hollow in lichen-moss dwarf birch tundra, 31.VII.1982; SIVAYA MASKA: 1 ♂, 8 km NW of the village, lichen-moss dwarf birch tundra (200 m N of timberline), willow stands near brook, 20.VIII.1981.

N. PESHA: 3 ♂♂, 4 ♀♀, near the village, diverse herb-grass meadow in willow stands, 3.VIII.1983; 3 ♂♂, 3 ♀♀, same, sedge fen, 1.VIII.1983; 2 ♂♂, 2 ♀♀, same, moist willow stands with *Alnus* & *Ribes*, in moss & leaf litter, 3.VIII.1983.

RANGE. Palaearctic-W-Nearctic boreo-nemoral.

### *Araeoncus vorkutensis* Tanasevitch, 1984

1984 *Araeoncus vorkutensis*. — Tanasevitch, Zool. zhurn., 63 (3): 387. (Map: 8).

2000 *Araeoncus vorkutensis*. — Mazura, Pechora Delta: 136. (Map: 15).

MATERIAL. VOLONGA: 14 ♂♂, 16 ♀♀, near the village, watershed terrace, willow stands with diverse herbs in depression, 24.VII.1983; 1 ♂, 5 km from mouth of Volonga River, birch forest on river bank, under stones, 20.VII.1983; 1 ♂, 14 ♀♀, 10 km from mouth of Volonga River, steep bank of the river, rocky slopes, among stones, in crevices, 19.VII.1983; INDIGA: 2 ♂♂, 4 ♀♀, near the village, willow stands in floodplains of B. Stchelikhha River, in leaf litter, 19–26.VII.1984; 1 ♂, 4 ♀♀, same, willow tundra on steep slopes of hills, 19–26.VII.1984; 2 ♂♂, 3 ♀♀, same, willow tundra, in leaf litter, 19–26.VII.1984; SHAPKINA RIVER: 8 ♂♂, 20 ♀♀, willow stands in depression in flat-hill peatbog, in leaf litter & moss under shrubs, 13–17.VII.1984; 1 ♂, 11 ♀♀, meadow with diverse herbs on brook bank, 13–17.VII.1984; 1 ♂, 2 ♀♀, sedge fen among flat-hill peatbog, 13–17.VII.1984; VORKUTA: 5 ♀♀, 80 km NW of Vorkuta, bank of Diya-Ty Lake, willow stands, in leaf litter, 13.VII.1980; 1 ♂, 1 ♀, near Vorgashor Village, lichen-moss dwarf birch tundra, in pitfall traps, 22.VII.1980; 29 ♂♂, 76 ♀♀, same, willow stands in depression, in pitfall traps, 9–22.VII.1980; 1 ♀, same, agrocoenosis, in pitfall traps, 22.VII.1980; 1 ♀, same, lichen-moss dwarf birch tundra, leaf litter under *Betula nana* shrubs, 14.VI.1981; 12 ♂♂, 16 ♀♀, same, willow stands in agrocoenosis, in leaf litter, 9.VIII.1984; 4 ♀♀, lichen-moss willow-dwarf birch tundra, in moss, 29.VI.1982; 3 ♂♂, 18 ♀♀, same, willow stands with diverse herbs on brook bank, in leaf litter, 4.VII.1982; 3 ♂♂, 7 ♀♀, same, willow stands in depression in flat-hill peatbog, in leaf litter & moss under shrubs, in moss, 18.VII.1982; 1 ♂, 2 ♀♀, near Oktiabrskiy Village, willow stands in floodplains of Vorkuta River, in leaf litter, 1.IX.1982; 1 ♀, same, steep bank of Iz'yurovzh Brook, rocky slopes, among stones, 22.VII.1982; 3 ♀♀, near Tsementnozavodskiy Village, willow stands in floodplains of Vorkuta River, 20.VIII.1984; 4 ♀♀, 2 ♂♂ (subad.), same, 28.VI.1982; 14 ♂♂, 27 ♀♀, same, 23.VIII.1982; 1 ♀, same, 18–30.VI.1981; 1 ♀, same, bank of Vorkuta River, under stones, 24.VI.1982; 18 ♀♀, near Severnyi Village, bank of Vorkuta River, *Salix* forest with diverse herbs, in litter, 5.VIII.1985; 3 ♂♂, 3 ♀♀, near Mulda Village, diverse herb-grass meadow in depression in lichen-moss dwarf birch tundra, in turf, 30.VIII.1982; KHALMER-YU: 9 ♂♂, 5 ♀♀, near the village, willow stands in depression, 13–16.VIII.1984; 1 ♂, 3 ♀♀, same, willow stands in depression, outcrop of rocks, in crevices, under stones, 13–16.VIII.1984; 1 ♀, same, willow stands in depression on brook bank, 23.VII.1981; SIVAYA MASKA: 1 ♂, 1 ♀, 8 km NW of the village, lichen-moss dwarf birch tundra (200 m N of timberline), willow stands near brook, 20.VIII.1981.

SIVOMASKINSKIY: 1 ♂, near the village, hummocky sedge fen, 10.VIII.1982; 1 ♂, 10 km NE of the village, right bank of Usa River, pebble bank of the river, under stones, 29.VII.1981.

RANGE. Siberian boreal.

COMMENTS. Volonga is the westernmost locality of the species.

### *Bathyphantes approximatus* (O. Pickard-Cambridge, 1871)

MATERIAL. BELUSHIE: 2 ♀♀, near the village, willow stands with diverse herbs in depression near seacoast, in leaf litter, 9.VII.1983; NARIAN-MAR: 4 ♂♂, 6 ♀♀, near the village, sedge fen on lake bank, VII.1984; 1 ♀, same, willow stands on lake bank, leaf litter, VII.1984.

N. PESHA: 1 ♀, near the village, swampy willow stands with *Alnus*, in moss & leaf litter, 2.VIII.1983; 1 ♂, 2 ♀♀, in the village, in a hut, 1.VIII.1983; SIVOMASKINSKIY: 1 ♂, 1 ♀, 10 km NE of the village, right bank of Usa River, grassy slope on bank of the river, 5.VII.1981.

RANGE. European boreo-nemoral.

COMMENTS. The species reaches tundra zone by river valleys.

### *Bathyphantes eumenis* (L. Koch, 1879)

2000 *Bathyphantes simillimus*. — Mazura, Pechora Delta: 136. (Map: 15).

2001 *Bathyphantes simillimus*. — Mazura & Esyunin, Arthropoda Selecta, 10 (1): 76. (Map: 15).

MATERIAL. NARIAN-MAR: 1 ♂, 1 ♀, near the village, sedge fen on lake bank, VII.1984; 1 ♀, same, willow stands on lake bank, leaf litter, VII.1984; SHAPKINA RIVER: 1 ♀, willow stands in depression, sedge fen, 14.VII.1984; VORKUTA: 2 ♀♀, 80 km NW of Vorkuta, bank of Diya-Ty Lake, willow stands, in leaf litter, 14.VII.1980; 1 ♀, near Vorgashor Village, sedge fen on lake bank, 5.IX.1983; SIVAYA MASKA: 1 ♀, 8 km NW of the village, lichen-moss dwarf birch tundra (200 m N of timberline), willow bush on watershed, 20.VIII.1981.

SIVOMASKINSKIY: 1 ♀, 6 km NW of the village, spruce-birch forest, in moss & leaf litter, 5.VIII.1982; 1 ♀, 10 km NE of the village, right bank of Usa River, sparse moss-undershrub larch-birch sparse forest on river terrace, leaf litter, 3.VIII.1982.

RANGE. Holarctic boreal.

### *Bathyphantes gracilis* (Blackwall, 1841)

2000 *Bathyphantes gracilis*. — Mazura, Pechora Delta: 136. (Map: 15).

2001 *Bathyphantes gracilis*. — Mazura & Esyunin, Arthropoda Selecta, 10 (1): 75. (Map: 15).

MATERIAL. BELUSHIE: 2 ♀♀, near the village, willow stands on diverse herb-grass meadow, leaf litter, 12.VII.1983; 1 ♀, same, willow stands with diverse herbs in depression near seacoast, in leaf litter, 9.VII.1983; INDIGA: 1 ♂, 2 ♀♀, near the village, willow stands in floodplains of B. Stchelikhha River, in leaf litter, 20.VII.1984; 2 ♂♂, 3 ♀♀, same, willow bush on slope of hills, in leaf litter, 20.VII.1984; TOBSEDA: 1 ♂, dry sod hollow in flat-hill peatbog, 5.VII.1984; 2 ♀♀, hollow, in tussocks of sedge, 4.VII.1984; NARIAN-MAR: 1 ♀, near Iskatelei Village, sedge fen on lake bank, VII.1984; VORKUTA: 1 ♀, near Tsementnozavodskiy village, steep bank of Iz'yurovzh Brook, rocky slopes, among stones, 27.VI.1982; 5 ♀♀, near Vorgashor Village, lichen-moss-dwarf birch tundra, under trash, 14.VI.1981; 1 ♀, same, sedge-moss bog on lake bank, 5.IX.1983; 1 ♂, near Severnyi Village, bank of Vorkuta River, *Salix* forest, in sedge fen, 5.VIII.1985; KHALMER-YU: 1 ♀, near the village, wet willow stands, in litter, 13–16.VIII.1984.

N. PESHA: 2 ♂♂, near the village, diverse herb-grass meadow in willow stands, 3.VIII.1983; 2 ♀♀, same, moist willow stands with diverse herbs and *Alnus* & *Ribes*, in moss & leaf litter, 3.VIII.1983; 1 ♂, 1 ♀, same, spruce-birch forest with diverse herbs on watershed, 3.VII.1983; 1 ♀, same, floodplain willow stands with trees on Peshha River bank, in tussocks of sedge & *Equisetum*, in soil (leaf litter washed away), 2.VII.1983; 1 ♀, same, sedge fen, 1.VIII.1983; SIVOMASKINSKIY: 1 ♂, 5 ♀♀, near the village, swampy parts of spruce-birch forest (northern taiga forest), in tussocks of sedge & moss, 10.VIII.1982.

RANGE. Holarctic polyzonal.

### *Bathyphantes humilis* (L.Koch, 1879)

MATERIAL. BELUSHIE: 1 ♀, near the village, seacoast grassy marsh, under trash, 9.VII.1983.

RANGE. Siberian boreal.

COMMENTS. This is the westernmost locality of the species.

### *Bathyphantes nigrinus* (Westring, 1851)

2000 *Bathyphantes nigrinus*. — Mazura, Pechora Delta: 136. (Map: 15).

2001 *Bathyphantes nigrinus*. — Mazura & Esyunin, Arthropoda Selecta, 10 (1): 75. (Map: 15).

MATERIAL. N. PESHA: 1 ♀, near the village, floodplain willow stands with *Prunus padus* trees on Peshha River bank, tussocks of sedge & *Equisetum*, in soil (leaf litter washed away), 2.VII.1983; 1 ♂, 3 ♀♀, same, moist willow stands with herbs, with *Alnus* sp. and *Ribes* sp., in moss & leaf litter, 3.VIII.1983.

RANGE. European boreo-nemoral.

COMMENTS. The species reaches tundra zone by river valleys.

### *Bathyphantes reprobis* (Kulczyński, 1916)

MATERIAL. VOLONGA: 1 ♀, 5 km from mouth of Volonga River, moss-undershrub birch forest on river terrace, in moss, 20.VII.1983; 1 ♀, 10 km from mouth of Volonga River, steep slope of rocky bank, among stones, in crevices, 19.VII.1983; VORKUTA: 1 ♂, 3 ♀♀, near Tsementnozavodskiy Village, steep bank of Vorkuta River, rocky slopes, *Salix*, *Betula nana*, & *Rosa* with *Vaccinium uliginosum* & *Empetrum*, in leaf litter, 24–27.VI.1982; 2 ♂♂, same, 30.VII.1982; 1 ♂, near Zarechniy Village, meadow with diverse herbs on floodplain bank of Vorkuta River, under stones, 19.VII.1982; 2 ♀♀, near Severnyi Village, bank of Vorkuta River, *Salix* forest with diverse herbs, in litter, 30.VII.1985.

SIVOMASKINSKIY: 1 ♀, 6 km NW of the village, birch-spruce forest with diverse herbs, in moss & leaf litter, 9.VII.1981.

RANGE. Holarctic boreal.

### *Bathyphantes setiger* F. O. Pickard-Cambridge, 1894

2000 *Bathyphantes setiger*. — Mazura, Pechora Delta: 136. (Map: 15).

2001 *Bathyphantes setiger*. — Mazura & Esyunin, Arthropoda Selecta, 10 (1): 76. (Map: 15).

MATERIAL. NARIAN-MAR: 3 ♂♂, 2 ♀♀, near Iskatelei village, sedge fen on lake bank, VII.1984; VORKUTA: 1 ♂, near Vorgashor Village, sedge fen on lake bank, 4.IX.1984; KHALMER-YU: 1 ♀, near the village, swampy willow stands, 13–16.VIII.1984.

N. PESHA: 1 ♀, near the village, under trash on garbage piles, 6.VII.1983.

RANGE. Palaearctic boreo-nemoral.

### *Bolephthyphantes index* (Thorell, 1856)

MATERIAL. BELUSHIE: 1 ♀, near the village, steep slope of peat hills near seacoast, in crevices of peat, 9.VII.1983; 1 ♀, same, lichen-*Empetrum-Arctous* tundra on steep bank of seacoast, 11.VII.1983; VOLONGA: 1 ♀, near the village, moist birch forest with diverse herbs on the river bank, 29.VII.1983; SHAPKINA RIVER: 3 ♀♀, dwarf birch shrubs in flat-hill peatbogs, in moss, 13–17.VII.1984; VORKUTA: 1 ♀, near Vorgashor Village, lichen-moss dwarf birch tundra, in moss, 19.VII.1981; 1 ♀, same, near Tsementnozavodskiy Village, willow stands on floodplains of Vorkuta River, 28.VI.1982; 1 ♀, same, 23.VIII.1982.

SIVOMASKINSKIY: 1 ♀, near the village, spruce-birch forest, in moss & leaf litter, 5.VIII.1982.

RANGE. Palaearctic boreo-nemoral. Introduced to Greenland [Marusik et al., 2006].

### *Bolyphantes alticeps* (Sundevall, 1832)

MATERIAL. N. PESHA: 1 ♀, near the village, birch forest with diverse herbs, leaf litter, 2.VIII.1983; SIVOMASKINSKIY: 2 ♀♀, near the village, hummocky sedge fen, 10.VIII.1982.

RANGE. Palaearctic boreo-nemoral.

COMMENTS. This species has not been found in tundra.

### *Bolyphantes luteolus* (Blackwall, 1833)

MATERIAL. BELUSHIE: 1 ♀, near the village, willow stands on diverse herb-grass meadow, leaf litter, 12.VII.1983; VOLONGA: 1 ♀, 5 km from Volonga River mouth, birch forest, bank of brook, in moss, 20.VII.1983; 2 ♂♂, 3 ♀♀, 10 km from mouth of Volonga River, stony slope of the river, birch forest, leaf litter & moss, 19.VII.1983; INDIGA: 1 ♀, near the village, steep limestone slope of B. Stchelikhha River, among stones, in crevices, 19–

26.VII.1984; 1 ♂, same, lichen-moss-undershrub dwarf birch tundra, in moss, 24.VII.1984; NARIAN-MAR: 2 ♂♂, 1 ♀, near Iskatelei Village, moss-undershrub birch forest, in moss, 10.VII.1984.

N. PESHA: 1 ♂, near the village, diverse herb-grass meadow in willow stands, 3.VIII.1983; SIVOMASKINSKIY: 1 ♀, 10 km NE of the village, right bank of Usa River, pebble bank of the river, under stones, 3.VIII.1982; 1 ♀, same, meadow with diverse herbs on the bank river, 1980.

RANGE. Palaearctic boreo-nemoral.

COMMENTS. The species reaches tundra zone by river valleys.

#### *Carorita limnaea* (Crosby et Bishop, 1927)

MATERIAL. SHAPKINA RIVER: 5 ♀♀, sedge-sphagnum bog, in *Sphagnum*, 15.VII.1984.

RANGE. Holarctic boreal.

#### *Centromerus arcanus* (O. Pickard-Cambridge, 1873)

2000 *Centromerus arcanus*. — Mazura, Pechora Delta: 136. (Map: 15).

2001 *Centromerus arcanus*. — Mazura & Esyunin, Arthropoda Selecta, 10 (1): 76. (Map: 13 & 15).

MATERIAL. VOLONGA: 1 ♀, near the village, moist moss-juniper birch forest on bank of river, in moss, 29.VII.1983; 3 ♀♀, same, watershed terrace, willow bush with diverse herbs in depression, 24.VII.1983; 12 ♀♀, 2 km from mouth of Volonga River, fern-*Cornus suecica* birch forest on watershed, in moss, 26.VII.1983; 12 ♀♀, 5 km from Volonga River mouth, in moss on brook bank in birch forest, 20.VII.1983; 3 ♀♀, 10 km from mouth of Volonga River, moss-undershrub birch forest on river terrace, in moss, 19.VII.1983; 14 ♀♀, same, stony slope of the river, birch forest, in moss, 19.VII.1983; 25 ♀♀, same, moss-undershrub birch forest on river terrace, in moss, 19.VII.1983; NARIAN-MAR: 1 ♀, near Iskatelei Village, sphagnum bog on lake bank, in *Sphagnum*, 27.VI.1984; SIVAYA MASKA: 2 ♂♂, 8 km NW of the village, lichen-moss-undershrub dwarf birch tundra (200 m N of timberline), in moss, 20.VIII.1981; 3 ♂♂, 1 ♀, same, 9–13.VII.1981; 2 ♂♂, same, willow stands on watershed, 13.VII.1981.

N. PESHA: 1 ♀, near the village, birch-spruce forest with pine, in moss, 6.VII.1983; 1 ♀, same, moss-undershrub birch forest with spruce, in moss, 2.VII.1983; SIVOMASKINSKIY: 1 ♀, 6 km NW of the village, sparse moss-dwarf birch spruce forest, in moss, 20.VIII.1981; 3 ♂♂, same, birch-spruce forest with diverse herbs, in moss & leaf litter, 30.VII.1981; near Sivaya Maska Village, hummocky sedge fen; 1 ♀, same, spruce-birch forest, in moss & leaf litter, 5.VIII.1982; 2 ♂♂, 10 km NE of the village, right bank of Usa River, sparse moss-undershrub larch-birch forest, in moss, 5–13.VII.1981; 1 ♀, same, 29.VII.1981; 1 ♀, same, 3.VIII.1982.

RANGE. Palaearctic boreo-nemoral.

COMMENTS. The species occurs only in skirts of the southern tundra, but by the Pechora River Valley it penetrates through the southern tundra up to the Barents Sea in the North.

#### *Centromerus incilium* (L. Koch, 1881)

2000 *Centromerus incilium*. — Mazura, Pechora Delta: 136. (Map: 15).

2001 *Centromerus incilium*. — Mazura & Esyunin, Arthropoda Selecta, 10 (1): 76. (Map: 14).

RANGE. European boreal-nemoral.

COMMENTS. This species is not presented in our material.

#### *Centromerus sylvaticus* (Blackwall, 1841)

2000 *Centromerus sylvaticus*. — Mazura, Pechora Delta: 136. (Map: 15).

2001 *Centromerus sylvaticus*. — Mazura & Esyunin, Arthropoda Selecta, 10 (1): 76. (Map: 15).

MATERIAL. INDIGA: 4 ♀♀, near the village, lichen-moss dwarf birch tundra with *Ledum*, in moss, 21.VII.1984; SIVAYA MASKA: 3 ♂♂, 8 km NW of the village, lichen-moss dwarf birch tundra (200 m N of timberline), willow stands, 20.VIII.1981.

N. PESHA: 1 ♀, near the village, diverse herb-grass meadow in willow stands on river terrace, 3.VIII.1983; SIVOMASKINSKIY: 2 ♀♀, near the village, spruce-birch forest (northern taiga forest), in moss, 10.VIII.1982.

RANGE. Holarctic polyzonal.

COMMENTS. The species occurs only in skirts of the southern tundra, but by the Pechora River Valley it penetrates through the southern tundra up to the Barents Sea in the North.

#### *Ceratinella brevipes* (Westring, 1851)

MATERIAL. BELUSHIE: 1 ♀, near the village, willow stands in depression in willow-dwarf birch tundra, in leaf litter, 9.VII.1983; 1 ♀, same, willow stands with diverse herbs in depression near seacoast, in leaf litter, 9.VII.1983; INDIGA: 1 ♂, near the village, willow stands on floodplains of B. Stchelikh River, in leaf litter, 20.VII.1984; NARIAN-MAR: 1 ♂, near the village in heap of lake drift, 28.VII.1984; VORKUTA: 1 ♂, 2 ♀♀, near Tsementnozavodskiy Village, floodplain willow stands on bank of Vorkuta River, leaf litter, 20.VIII.1984; 1 ♂, 2 ♀♀, same, 28.VI.1982.

RANGE. Palaearctic polyzonal.

#### *Cnephalocotes obscurus* (Blackwall, 1834)

MATERIAL. VOLONGA: 1 ♂, near the village, *Poa*-herb meadow on floodplain, 26.VII.1983. VORKUTA: 1 ♂, near Vorghashor Village, willow tundra on hill slopes, in leaf litter, 9.VIII.1984; 1 ♀, same, willow stands in depression, in leaf litter, 22.VII.1980; 1 ♀, near Mulda Village, moss-herb depression in willow-dwarf birch tundra, in moss, 20.VIII.1982; 1 ♀, same, lichen-moss dwarf birch tundra, in moss, 27.VIII.1981; SIVAYA MASKA: 1 ♀, 8 km NW of the village, lichen-moss dwarf birch tundra (300 m N of timberline), in moss, 9–30.VII.1981; 1 ♂, same, 6.VIII.1982.

N. PESHA: 1 ♂, near the village, birch forest with diverse herbs, in moss, 6.VII.1983; 1 ♀, near the village, dry moss-*Vaccinium vitis-idaea* spruce-birch forest, in moss & leaf litter, 3.VIII.1983; 2 ♀♀, same, moss-*V. myrtillus* birch forest, in moss, leaf litter, 2.VIII.1983.

RANGE. Holarctic polyzonal.

#### *Dactylopiastes mirificus* (Georgescu, 1976)

MATERIAL. BELUSHIE: 2 ♂♂, 3 ♀♀, near the village, willow stands on diverse herb-grass meadow, leaf litter, 12&15.VII.1983; 3 ♀♀, same, meadow with diverse herbs in the village, 11.VII.1983.

RANGE. European nemoral.

COMMENTS. The species reaches tundra zone by river valleys.

This is the northernmost locality of the species.

#### *Dactylopiastes video* (Chamberlin et Ivie, 1947)

1984 *Scytiella komi*. — Tanasevitch, Zool. zhurn., 63 (3): 390. (Map: 8).

2000 *Dactylopiastes video*. — Mazura, Pechora Delta: 136. (Map: 15).

**MATERIAL.** VORKUTA: 1 ♀, near Tsementnozavodskiy Village, steep bank of Vorkuta River, rocky slope, *Salix*, *Betula nana*, & *Rosa* with *Vaccinium uliginosum* & *Empetrum*, in leaf litter, 27.VIII.1982; 1 ♂, 1 ♀, same, 27.VIII.1982; 3 ♂♂, 7 ♀♀, near Zarechniy Village, steep bank of Vorkuta River, rocky slopes, *Salix*, *Betula nana*, & *Rosa* with *Vaccinium uliginosum* & *Empetrum*, in leaf litter, 26.VIII.1982; 2 ♂♂, near Severnyi Village, dry channel of Ayach-Yaha Brook, under stones, 17.VII.1985; 1 ♂, near Mulda Village, lichen-moss associations (*Arctous*, *Empetrum*, *Vaccinium uliginosum*) on top of flat hills, 24.VIII.1984; KHALMER-YU: 1 ♂, 1 ♀, near the village, spots of lichen-under-shrub tundra (*Arctous*, *Empetrum*) in lichen-moss dwarf birch tundra on hill slopes, 13–16.VIII.1984.

**RANGE.** Siberian-W-Nearctic boreal.

**COMMENTS.** The Pechora River Delta is the westernmost locality of the species.

### *Decipiphantes decipiens* (L. Koch, 1879)

**MATERIAL.** VOLONGA: 2 ♀♀, 2 km from mouth of Volonga River, fern-*Cornus suecica* birch forest on watershed, in moss, 26.VII.1983; 1 ♂, 4 ♀♀, same, lichen-moss willow-dwarf birch tundra, in moss, 27.VII.1983; 2 ♀♀, 10 km from mouth of Volonga River, stony slope of the river, birch forest, in leaf litter, 19.VII.1983; INDIGA: 1 ♀, near the village, lichen-moss dwarf birch tundra with *Ledum*, in moss, 19–26.VII.1984; NARIAN-MAR: 1 ♀, near Iskatelei Village, moss-under-shrub birch forest, 10.VII.1984; VORKUTA: 1 ♀, near Tsementnozavodskiy Village, steep bank of Vorkuta River, rocky slopes, *Salix*, *Betula nana*, & *Rosa* with *Vaccinium uliginosum* & *Empetrum*, in leaf litter, 27.VI.1982; 1 ♀, same, willow stands on floodplains of Vorkuta River, 19.VII.1982; SIVAYA MASKA: 1 ♀, 8 km NW of the village, moss-under-shrub-dwarf birch spruce forest, in moss, 6.VII.1982.

**N. PESHA:** 3 ♀♀, near the village, dry lichen-moss-under-shrub spruce-pine forest, in moss, 6.VII.1983; 1 ♀, birch forest with diverse herbs, leaf litter, 6.VII.1983; 4 ♀♀, same, moss-*Vaccinium myrtillus* birch forest, in moss, leaf litter, 2.VIII.1983; 2 ♀♀, same, dry moss-*Vaccinium vitis-idaea* spruce-birch forest, in moss & leaf litter, 3.VIII.1983; SIVOMASKINSKIY: 1 ♀, 10 km NE of the village, right bank of Usa River, moss-under-shrub spruce-birch forest, in moss, 29.VII.1981; 2 ♂♂, 9 ♀♀, same, moss-under-shrub larch-birch forest on watershed, leaf litter, 3.VIII.1982; 3 ♀♀, same, slope bank of Usa River, in moss, 3.VIII.1982; 1 ♂, same, sparse moss-under-shrub spruce forest on watershed, in pitfall traps, 20.VIII.1981.

**RANGE.** Fennoscandian-Siberian boreal.

### *Diplocentria bidentata* (Emerton, 1882)

1988 *Diplocentria bidentata*. — Eskov, Eskov, Inst. Evol. Morphol. Ecol. Anim.: 111. (Map: 8).

2000 *Diplocentria bidentata*. — Mazura, Pechora Delta: 136. (Map: 15).

**MATERIAL.** BELUSHIE: 1 ♀, near the village, willow-dwarf birch tundra, in moss, 16.VII.1983; VOLONGA: 1 ♀, near the village, watershed terrace, willow stands with diverse herbs in depression, 24.VII.1983; INDIGA: 3 ♀♀, near the village, lichen-moss dwarf birch tundra with *Ledum*, in moss, 19–26.VII.1984; 5 ♀♀, same, lichen-moss dwarf birch tundra, in moss, 19–26.VII.1984; NARIAN-MAR: 11 ♀♀, near Iskatelei village, moss-under-shrub birch forest, in moss, 10,18.VII.1984; SHAPKINA RIVER: 1 ♂, willow stands in depression in flat-hill peatbog, in leaf litter & moss under shrubs, 13–17.VII.1984; VORKUTA: 2 ♀♀, near Vorghashor Village, lichen-moss dwarf birch tundra, in moss, 27.VI–2.VII.1980; 5 ♂♂, 4 ♀♀, same, 20–25.VI.1981; 8 ♂♂, 28 ♀♀, same, 23–25.VIII.1983; 1 ♀, same, lichen-moss dwarf birch tundra, under trash, 14.VI.1981; 2 ♀♀, same, 25–27.VII.1981; 8 ♂♂, 6 ♀♀, same, willow stands on hill slope, in leaf litter, 9.VIII.1984; 1 ♀, same, flat-hill peatbog, hollow, in tussocks of sedge, 2.VII.1982; 5 ♀♀, same, flat-hill peatbog, willow stands in depression, in moss, 18.VII.1982; 2 ♂♂, 2 ♀♀, same, lichen-moss dwarf birch tundra,

in moss, 4.IX.1984; 1 ♂, near Zarechniy Village, steep bank of Vorkuta River, rocky slopes, *Salix*, *Betula nana*, & *Rosa* with *Vaccinium uliginosum* & *Empetrum*, in leaf litter, 17.VIII.1984; 1 ♂, 2 ♀♀, near Severnyi Village, bank of Vorkuta River, *Salix* forest with diverse herbs, in litter, 30.VII.1985; 1 ♀, near Mulda Village, willow stands on foot of hills, in moss, 31.VII.1982.

**N. PESHA:** 1 ♀, near the village, birch forest with diverse herbs, leaf litter, 6.VII.1983; 1 ♀, spruce-birch forest with diverse herbs, in moss, 3.VII.1983; SIVOMASKINSKIY: 2 ♀♀, 6 km NW of the village, birch-spruce forest with diverse herbs, in moss & leaf litter, 10.VII.1981; 4 ♀♀, same, 6.VII.1982; 1 ♂, 1 ♀, same, hummocky sedge fen, 10.VIII.1982; 4 ♂♂, 10 km NE of the village, right bank of Usa River, bank slope with moss-under-shrub larch stands, in moss, 3.VIII.1982; 1 ♂, 2 ♀♀, same, moss-under-shrub larch-birch forest on watershed, in moss, leaf litter, 3.VIII.1982; 1 ♀, same, 5.VII.1981.

**RANGE.** Holarctic boreal.

### *Diplocephalus cristatus* (Blackwall, 1833)

**MATERIAL.** BELUSHIE: 1 ♀, near the village, grassy meadow, under stones, 14.VII.1983; VOLONGA: 1 ♀, 5 km from mouth of Volonga River, moss-under-shrub birch forest on river terrace, in moss, 20.VII.1983; 1 ♂, 9 ♀♀, 7 km from mouth of Volonga River, dry channel, among stones, 18.VII.1983; 1 ♂, 15 ♀♀, 10 km from Volonga River mouth, rocky bank, in crevices, among stones, 18–19.VII.1983; VORKUTA: 6 ♀♀, near Zarechniy Village, bank of Vorkuta River, under stones on rocky slopes, 17.VIII.1984.

SIVOMASKINSKIY: 12 ♀♀, 10 km NE of the village, right bank of Usa River, under stones on bank, 5.VII.1981.

**RANGE.** European boreo-nemoral.

**COMMENTS.** The species reaches tundra zone by river valleys.

### *Diplocephalus picinus* (Blackwall, 1841)

2000 *Diplocephalus picinus*. — Mazura, Pechora Delta: 136. (Map: 15).

2001 *Diplocephalus picinus*. — Mazura & Eshunin, Arthropoda Selecta, 10 (1): 76. (Map: 15).

**RANGE.** European boreo-nemoral.

**COMMENTS.** The species reaches tundra zone by river valleys.

This species is not presented in our material.

### *Diplocephalus subrostratus* (O. Pickard-Cambridge, 1873)

**MATERIAL.** VORKUTA: 20 ♂♂ & ♀♀, near Severnyi Village, bank of Vorkuta River, *Salix* forest with diverse herbs, leaf litter, 30.VII.1985.

**RANGE.** Siberian-Nearctic boreo-nemoral.

### *Dismodicus bifrons* (Blackwall, 1841)

2000 *Dismodicus bifrons*. — Mazura, Pechora Delta: 136. (Map: 15).

2001 *Dismodicus bifrons*. — Mazura & Eshunin, Arthropoda Selecta, 10 (1): 76. (Map: 13 & 15).

**MATERIAL.** SIVAYA MASKA: 1 ♂, 8 km NW of the village, lichen-moss-under-shrub dwarf birch tundra (200 m N of timberline), willow bush on watershed, 30.VII.1981.

**N. PESHA:** 1 ♀, near the village, meadow with diverse herbs in willow stands, 3.VIII.1983.

**RANGE.** Palaearctic boreo-nemoral.

**COMMENTS.** The species occurs only in skirts of the southern tundra, but by the Pechora River Valley it penetrates through the southern tundra up to the Barents Sea in the North.

*Dismodicus elevatus* (C. L. Koch, 1838)

2000 *Dismodicus elevatus*. — Mazura, Pechora Delta: 136. (Map: 15).

2001 *Dismodicus elevatus*. — Mazura & Esyunin, Arthropoda Selecta, 10 (1): 76. (Map: 13).

RANGE. European boreo-nemoral.

COMMENTS. The species occurs only in skirts of the southern tundra, but by the Pechora River Valley it penetrates through the southern tundra up to the Barents Sea in the North.

This species is not presented in our material.

*Drepanotylus borealis* (Holm, 1945)

2000 *Drepanotylus borealis*. — Mazura, Pechora Delta: 136. (Map: 15).

2001 *Drepanotylus borealis*. — Mazura & Esyunin, Arthropoda Selecta, 10 (1): 76. (Map: 15).

MATERIAL. VOLONGA: 1 ♀, 7 km from Volonga River mouth, steep bank, rocky slope, in crevices, among stones, 18.VII.1983; NARIAN-MAR: 1 ♂, 1 ♀, near Iskatelei Village, willow stands with sedge on lake bank, 10.VII.1984; SHAPKINA RIVER: 1 ♀, willow stands in depression in flat-hill peatbog, in leaf litter & moss under shrubs, 13.VII.1984; VORKUTA: 7 ♂♂, 4 ♀♀, near Vorgashor Village, sedge fen on lake bank, 5.IX.1983; 1 ♂, 1 ♀, same, moss-sedge bog in lichen-moss dwarf birch tundra, in moss, 29.VI.1982; 1 ♂, same, flat-hill peatbog, hollow, in *Sphagnum*, 2.VII.1982; 1 ♂, 1 ♀, same, 2.VII.1982; 1 ♂, same, flat-hill peatbog, in leaf litter under shrubs, 18.VII.1982; 7 ♀♀, near Zarechnyi Village, steep bank of Vorkuta River, rocky slopes, among stones, 17.VIII.1984; 1 ♀, same, meadow with diverse herbs on floodplains of Vorkuta River, under stones, 19.VII.1982; 1 ♀, near Severnyi Village, willow stands on brook bank, Ayach-Yaha Brook, in leaf litter, 17.VII.1985; 2 ♂♂, same, bank of Vorkuta River, *Salix* forest with diverse herbs, in sedge fen, 5.VIII.1985; 1 ♂, 2 ♀♀, near Tsementnozavodskiy Village, willow stands on floodplains of Vorkuta River, 23.VIII.1982; 4 ♀♀, same, willow stands on floodplains of Vorkuta River, 20.VIII.1984; 2 ♀♀, same, 28.VI.1982; 2 ♂♂, 13 ♀♀, same, 5–7.VII.1982; 1 ♂, same, steep bank of Vorkuta River, rocks, among stones, 24.VI.1982; 6 ♂♂, 8 ♀♀, near Mulda Village, bank of lake, sedge fen, 11.IX.1983; KHALMER-YU: 1 ♂, 1 ♀, near the village, sedge-moss bog in willow stands, in depression, 13–16.VIII.1984.

SIVOMASKINSKIY: 3 ♂♂, 6 km NW of the village, sparse moss-undershrub dwarf birch spruce forest, in moss, 10.VIII.1985.

RANGE. Fennoscandian-Siberian boreal.

*Drepanotylus uncatu*s (O. Pickard-Cambridge, 1872)

2000 *Drepanotylus uncatu*s. — Mazura, Pechora Delta: 136. (Map: 15).

2001 *Drepanotylus uncatu*s. — Mazura & Esyunin, Arthropoda Selecta, 10 (1): 76. (Map: 13).

RANGE. European boreal.

COMMENTS. The species occurs only in skirts of the southern tundra, but by the Pechora River Valley it penetrates through the southern tundra up to the Barents Sea in the North.

This species is not presented in our material.

*Entelecara erythropus* (Westring, 1851)

MATERIAL. NARIAN-MAR: 2 ♀♀, near Iskatelei Village, birch forest, in litter, 10.VII.1984.

SIVOMASKINSKIY: 1 ♂, 10 km NE of the village, right bank of Usa River, sparse moss-undershrub-dwarf birch spruce forest on bank, slope, in pitfall traps, 5.VII.1981.

RANGE. Palaearctic polyzonal.

COMMENTS. The species reaches tundra zone by river valleys.

*Erigone arctica palaeartica* Braendegaard, 1934

MATERIAL. VOLONGA: 1 ♂, in the village, in a hut, 24.VII.1983; INDIGA: 1 ♂, 4 ♀♀, near village, bank of B. Stechlikha River, under stones, 20.VII.1984; VORKUTA: 1 ♂, 2 ♀♀, near Severnyi Village, dry channel of Ayach-Yaha Brook, under stones, 17.VII.1985.

RANGE. European arctic.

*Erigone arctica* Chamberlin et Ivie, 1947

MATERIAL. VORKUTA: 1 ♂, 3 ♀♀, near Vorgashor Village, sedge-moss bog on lake bank, 5.IX.1983; KHALMER-YU: 1 ♂, near the village, on brook bank, 20–23.VII.1981; 1 ♂, 4 ♀♀, same, under stones, 13–16.VIII.1984.

RANGE. Siberian-Alaskan arcto-alpine.

COMMENTS. Vorkuta is the westernmost locality of the species.

This is a species new to the European fauna.

*Erigone atra* Blackwall, 1833

2000 *Erigone atra*. — Mazura, Pechora Delta: 136. (Map: 15).  
2001 *Erigone atra*. — Mazura & Esyunin, Arthropoda Selecta, 10 (1): 76. (Map: 4, 13, 14, 15).

MATERIAL. BELUSHIE: 1 ♀, in the village, in a hut, 12.VII.1983; 3 ♀♀, near the village, peatbog on lake bank, in leaf litter & moss, 10.VII.1983; VOLONGA: 1 ♀, near the village, willow stands in depression near seacoast, 28.VII.1983; 2 ♀♀, same, *Poa*-herb meadow on floodplain, 26.VII.1983; 2 ♀♀, 5 km from Volonga River mouth, floodplain of Volonga River, among herbs and stones, 19.VII.1983; VORKUTA: 1 ♀, near Zarechnyi Village, meadow with diverse herbs on floodplain bank of Vorkuta River, (sweeping), 19.VII.1982; 1 ♂, same, bank of Vorkuta River, rocky slopes, under stones, 17.VIII.1984; 1 ♂, near Mulda Village, willow stands in hollow, in lichen-moss dwarf birch tundra, 20.VIII.1982; 1 ♂, same, wet hollow in dwarf-birch tundra, 20.VIII.1982; 1 ♂, near Tsementnozavodskiy Village, willow stands on Vorkuta River bank, in leaf litter, 1.IX.1982.

N. PESHA: 2 ♂♂, 1 ♀, in the village, under trash on garbage piles, 6.VII.1983; 1 ♀, near the village, floodplain willow stands on Pasha River bank, in soil (leaf litter washed away), 2.VII.1983.

RANGE. Holarctic polyzonal.

*Erigone capra* Simon, 1884

2001 *Erigone dentigera*. — Mazura & Esyunin, Arthropoda Selecta, 10 (1): 76. (Map: 13).

MATERIAL. BELUSHIE: 1 ♀, near the village, peatbog on lake bank, in leaf litter & moss, 10.VII.1983; NARIAN-MAR: 1 ♂, near Iskatelei Village, moss-sedge bog on lake bank, in *Sphagnum*, 18.VII.1984; 2 ♀♀, same, near the village, sphagnum bog on lake bank, in *Sphagnum*, 27.VI.1984; VORKUTA: near Vorgashor Village, sedge fen on lake bank, 4.IX.1984; near Tsementnozavodskiy Village, floodplain willow stands, in leaf litter, 2.IX.1982; 1 ♀, near Mulda Village, hollow with willow stands in lichen-moss dwarf birch tundra, in leaf litter, 20.VIII.1982; KHALMER-YU: near the village, dry channel of brook, under stones, 13–16.VIII.1983.

RANGE. Palaearctic-W-Nearctic boreo-nemoral.

COMMENTS. Following Buckle et al. [2001] we consider *Erigone capra* and *Erigone dentigera* O. Pickard-Cambridge, 1874 as separate species. The material from the European tundra corresponds *Erigone capra* sensu Locket [1964, figs A & C].

*Erigone dentipalpis* (Wider, 1834)

2000 *Erigone dentipalpis*. — Mazura, Pechora Delta: 136. (Map: 15).

2001 *Erigone dentipalpis*. — Mazura & Esyunin, Arthropoda Selecta, 10 (1): 76. (Map: 13).

MATERIAL. VORKUTA: 1 ♂, near Zarechnyi Village, steep bank of Vorkuta River, rocky slopes, *Salix*, *Betula nana*, & *Rosa* with *Vaccinium uliginosum* & *Empetrum*, in leaf litter, 17.VIII.1984.

SIVOMASKINSKIY: 1 ♀, 10 km N of the village, bank of Usa River, under stones, 29.VII.1981.

RANGE. Holarctic polyzonal.

*Erigone hypoarctica* Eskov, 1989

MATERIAL. NARIAN-MAR: 1 ♂, near Iskatelei Village, in heap of lake drift, 28.VII.1984; VORKUTA: 1 ♀, near Tsementnozavodskiy Village, bank of Vorkuta River, under stones, 24.VI.1982; 2 ♂♂, 1 ♀, near Severnyi Village, dry channel of Ayach-Yaha Brook, under stones, 28.VI.1982; 2 ♂♂, 5 ♀♀, near Zarechnyi Village, bank of Vorkuta River, steep banks, under stones, 17.VIII.1984; 4 ♂♂, 2 ♀♀, near Oktiabrskiy Village, pebble bank of Vorkuta River, under stones, 1.IX.1982.

N. PESHA: 1 ♀, near the village, floodplain willow stands, in soil (leaf litter washed away), 2.VII.1983; SIVOMASKINSKIY: 1 ♂, 3 ♀♀, 10 km NE of the village, right bank of Usa River, pebble bank of the river, under stones, 3.VIII.1982.

RANGE. Siberian boreal.

COMMENTS. N. Pesha is the westernmost locality of the species.

*Erigone longipalpis* (Sundevall, 1830)

2000 *Erigone longipalpis*. — Mazura, Pechora Delta: 136. (Map: 15).

2001 *Erigone longipalpis*. — Mazura & Esyunin, Arthropoda Selecta, 10 (1): 76. (Map: 4 & 15).

MATERIAL. BELUSHIE: 2 ♂♂, near the village, in a hut, 9.VII.1983; INDIGA: 1 ♂, 3 ♀♀, near the village, willow stands on floodplains of B. Stchelikh River, in leaf litter, 19–26.VII.1984; 1 ♂, 3 km from mouth of B. Stchelikh River, bank of river, under stones, 19–26.VII.1984; VORKUTA: 1 ♀, 80 km NW of Vorkuta, bank of Diya-Ty Lake, willow stands, in leaf litter, 12–18.VII.1980; 1 ♀, 10 km W of Vorgashor Village, near Yanei-Ty Lake, lichen-moss tundra, in moss, 6.VII.1980; 109 ♂♂, 31 ♀, near Vorgashor Village, agrocoenosis, in pitfall traps, 22.VII–3.VIII.1980; 4 ♂♂, same, under trash on garbage piles in agrocoenosis, 7.VII.1980; 1 ♀, same, on a road in dwarf birch tundra, 28.VI.1980; 6 ♂♂, 1 ♀, same, grassy meadow in dwarf birch tundra, 18.VII.1980; 1 ♂, 1 ♀, same, sedge hummocks on bank of brook in agrocoenosis, 4.VII.1982; 2 ♀♀, same, meadow with diverse herbs on slope to brook, 4.VII.1982; 5 ♂♂, 3 ♀♀, same, under trash, 7–10.VI.1981; 3 ♂♂, 2 ♀♀, same, lichen-moss dwarf birch tundra, under trash, 14.VI.1981; 16 ♂♂, 1 ♀, same, willow stands with diverse herbs in depression, 1.VII.1981; 1 ♂, 1 ♀, same, sedge fen on lake bank, 5.IX.1983; 2 ♀♀, meadow with diverse herbs on slope to brook, 4.VII.1982; 1 ♂, near Zarechnyi Village, bank of Vorkuta River, rocky slopes, under stones, 19.VII.1982; 1 ♀, near Severnyi Village, dry channel of Ayach-Yaha Brook, under stones, 10.IX.1984; 1 ♂, same, 17.VII.1985; 4 ♂♂, 6 ♀♀, near Oktiabrskiy Village, channel of Vorkuta River, pebble, under stones, 1.IX.1982; 1 ♂, 2 ♀♀, same, willow bush on floodlands of Vorkuta River, in leaf litter, 1.IX.1982.

N. PESHA: 1 ♂, near the village, floodplain willow stands, in soil (leaf litter washed away), 2.VII.1983; 3 ♂♂, in the village, under trash on garbage piles, 6.VII.1983.

RANGE. Palaearctic boreal.

*Erigone psychrophila* Thorell, 1872

1986 *Erigone psychrophila*. — Eskov, Southern tundra of Taimyr: 177. (Map: 8).

2000 *Erigone psychrophila*. — Mazura, Pechora Delta: 136. (Map: 15).

MATERIAL. VORKUTA: more than 100 ♂♂ & ♀♀, near Vorgashor Village, agrocoenosis, in pitfall traps, 22.VII–3.VIII.1980.

RANGE. Holarctic arcto-alpine.

*Erigone remota* L. Koch, 1869

MATERIAL. INDIGA: 1 ♂, near the village, bank of B. Stchelikh River, under stones, 25.VII.1984; VORKUTA: 1 ♂, in Vorgashor village, under trash, 10.VI.1981; 1 ♂, near Tsementnozavodskiy Village, bank of Vorkuta River, under stones, 24.VI.1982.

RANGE. Palaearctic arcto-alpine.

*Erigone svenssoni* Holm, 1975

MATERIAL. VORKUTA: 1 ♂, 6 ♀♀, near Vorgashor Village, sedge fen on lake bank, 4.IX.1984; 2 ♂♂, 1 ♀, same, 5.XI.1983.

RANGE. European boreal.

*Erigone tirolensis* L.Koch, 1872

2000 *Erigone tirolensis*. — Mazura, Pechora Delta: 136. (Map: 15).

2001 *Erigone tirolensis*. — Mazura & Esyunin, Arthropoda Selecta, 10 (1): 76. (Map: 4).

MATERIAL. KHALMER-YU: 1 ♂, near the village, dry brook channel, under stones, 13–16.VIII.1984.

RANGE. Holarctic arcto-alpine.

*Erigone whymperi* O. Pickard-Cambridge, 1877

Figs 1–20.

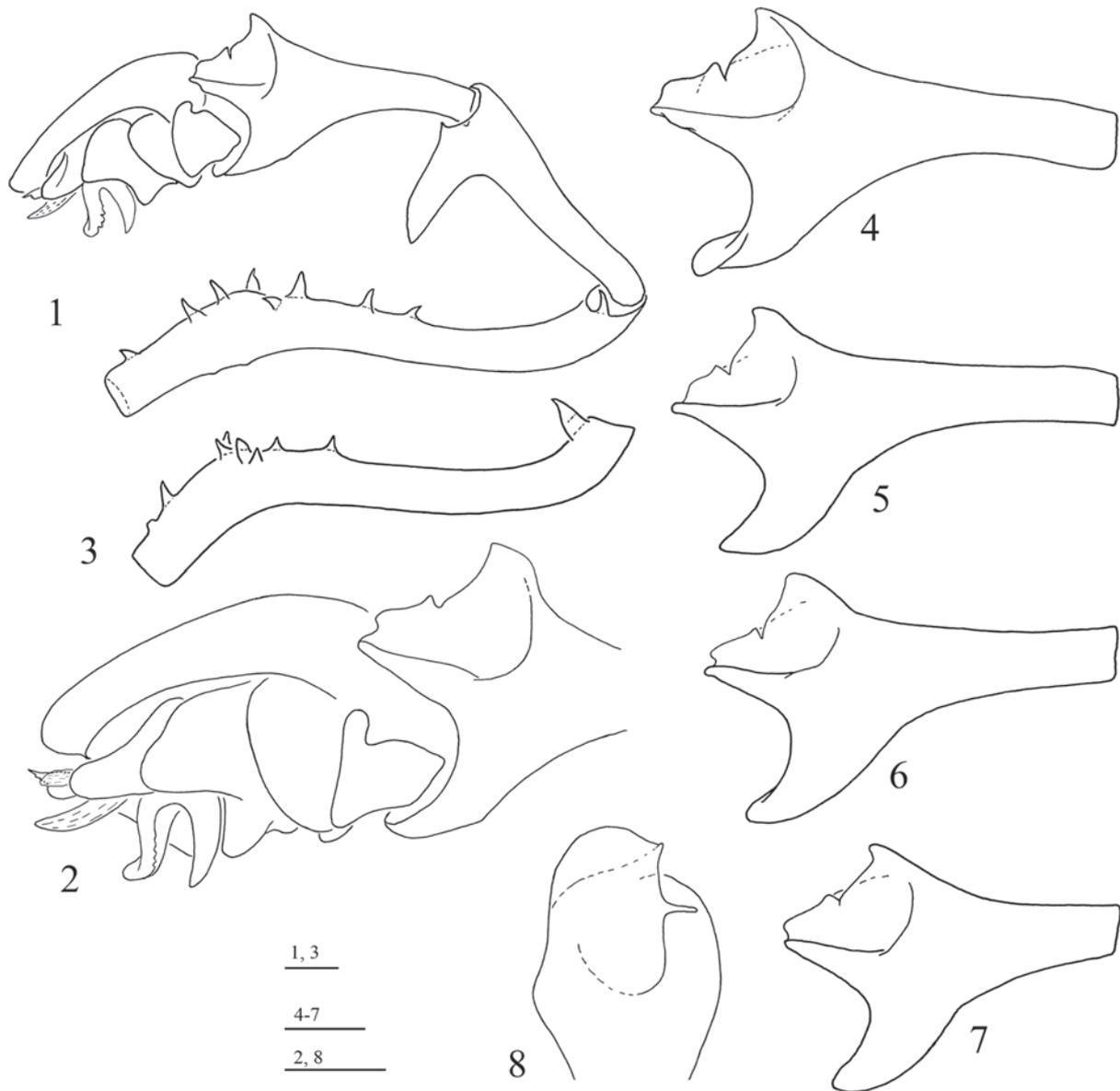
MATERIAL. SHAPKINA RIVER: 3 ♀♀, sphagnum bog on lake bank, 15.VII.1984; VORKUTA: 1 ♂, near Zarechnyi Village, meadow with diverse herbs on floodplains bank of Vorkuta River, (sweeping), 19.VII.1982; 1 ♂, same, bank of Vorkuta River, meadow with diverse herbs (sweeping), 19.VII.1982; 40 ♂♂ & ♀♀, near Vorgashor Village, agrocoenosis, in pitfall traps, 22.VII–3.VIII.1980; 3 ♂♂, 1 ♀, same, grassy meadow in dwarf birch tundra, 18.VII.1980; 1 ♀, same, under trash, 7–10.VI.1981; 1 ♂, 7 ♀♀, same, bank of brook, sedge hummock, 4.VII.1982; 1 ♂, same, willow stands with diverse herbs on bank of brook, in leaf litter, 4.VII.1982; 4 ♀♀, same, meadow with diverse herbs on slope to brook, 4.VII.1982; 1 ♀, same, willow stands in depression, in leaf litter, 21.VIII.1982; 2 ♂♂, same, willow stands with diverse herbs in depression, 1.VII.1981; 2 ♂♂, near Severnyi Village, dry channel of Ayach-Yaha Brook, under stones, 11.IX.1984; 1 ♂, 1 ♀, Zarechnyi Village, meadow with diverse herbs on bank of Vorkuta River (sweeping), 19.VII.1982; KHALMER-YU: 1 ♂, near the village, dry brook channel, under stones, 13–16.VIII.1984.

N. PESHA: 1 ♀, near the village, sphagnum bog, 7.VII.1983; SIVOMASKINSKIY: 2 ♂♂, 1 ♀, 10 km NE of the village, right bank of Usa River, pebble bank of the river, under stones, 3.VIII.1982.

COMPARATIVE MATERIAL. 4 ♂♂, 5 ♀♀ (ZMMU), West Greenland, Godthåbsfjord, Qooqut, ca 64°30' N, 51°15' W, 11.VIII.1999, leg. J. Böcher.

REMARKS. The comparison of our material from European Plain tundra with the material from Greenland (where *E. whymperi* was described from), showed them completely identical.

This species seems to be most similar to *E. alettris* Crosby et Bishop, 1928, but differs well by bigger size, as well as by the absence of a deep and wide notch in the embolic division (arrow in Fig. 10). *E. whymperi* is also very similar to *E. tirolensis*, but *E. whymperi* has thin and sharp embolus proper (Fig. 9), whereas in *E. tirolensis* the embolus proper is thick and blunt-pointed.



Figs 1–8. *Erigone whymperi* O. Pickard-Cambridge, 1877, Vorkuta Area: 1, 2 — left palp, 3 — palpal femur, 4–7 — variability of palpal tibia (lateral view), 8 — distal part of palpal tibia (dorsal view).

Рис. 1–8. *Erigone whymperi* O. Pickard-Cambridge, 1877, Воркута: 1, 2 — левая пальпа, 3 — бедро пальпы, 4–7 — изменчивость голени пальпы (вид сбоку), 8 — дистальная часть голени пальпы (вид сверху).

**VARIABILITY.** Samples from the European Plain tundra and from Greenland both show variability in the number of teeth and its arrangement on palpal femur (cf. Figs 1 & 3), length of the palpal tibia (cf. Figs 4–7), shape of *a*- & *b*-tooth in the embolic division (sensu Crosby & Bishop [1928]), as well as in shape of the central capsule (= dorsal plate) and direction of the receptacula in epigyne (cf. 15–20). See also SEM photos in Marusik et al. [2006].

**COMMENTS.** This species has hitherto been known only from the Nearctic: Alaska, Canada & Greenland [Buckle et al., 2001, Marusik et al. 2006].

**RANGE.** Holarctic arctic. This is a species new to the Palearctic, European and Russian fauna.

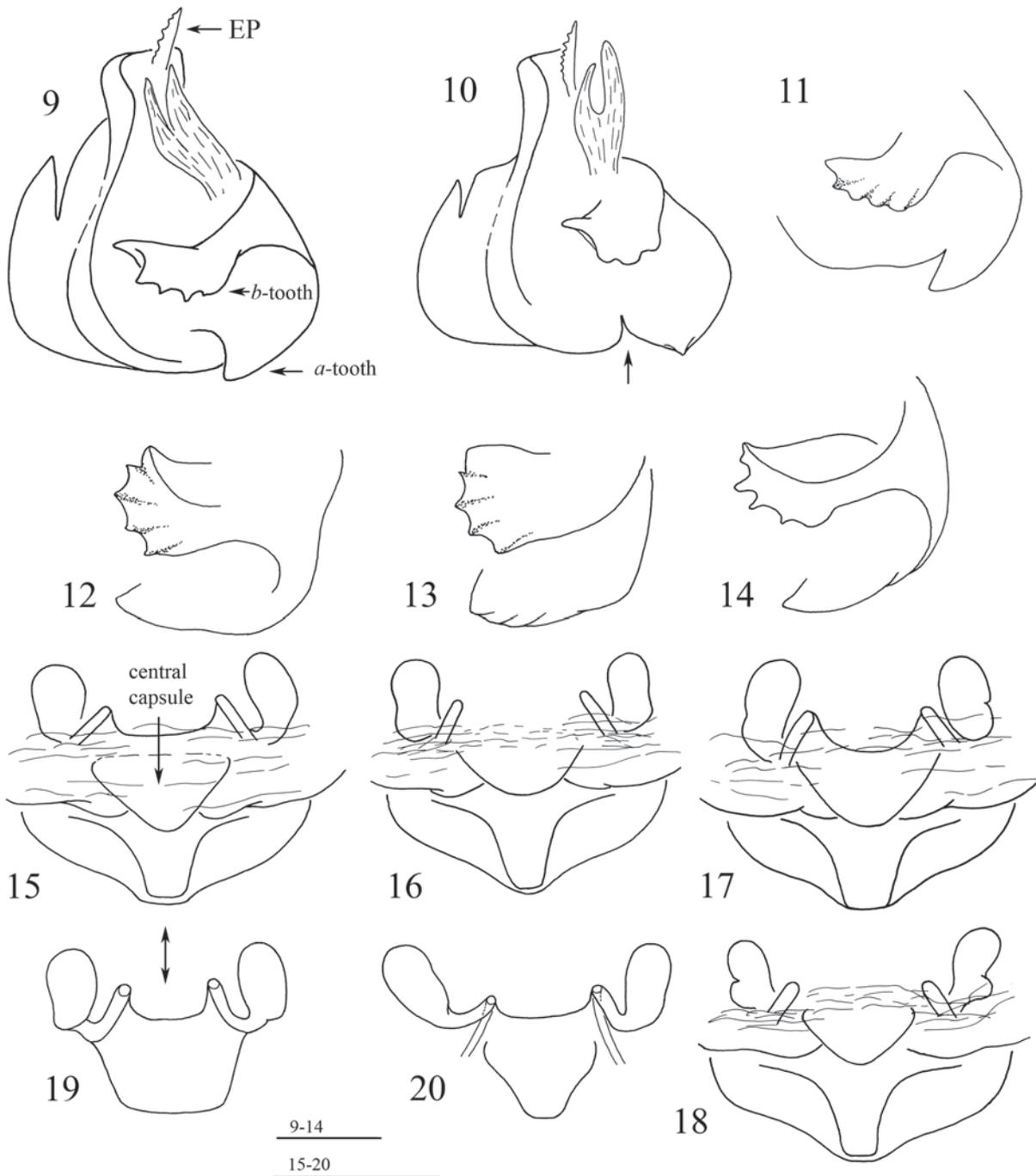
*Erigonella hiemalis* (Blackwall, 1841)

2000 *Erigonella hiemalis*. — Mazura, Pechora Delta: 136. (Map: 15).

2001 *Erigonella hiemalis*. — Mazura & Eshyunin, Arthropoda Selecta, 10 (1): 76. (Map: 14 & 15).

**RANGE.** European boreo-nemoral.

**COMMENTS.** This species is not presented in our material.



Figs 9–20. *Erigone whymperei* O. Pickard-Cambridge, 1877, Vorkuta Area: 9, 10 — embolus proper, same specimen, different angles, 11–14 — *a*- & *b*-tooth of embolus proper, different samples, different angles, 15–18 — variability of epigyne (dorsal view), 19, 20 — central capsule & receptacles (dorsal view), 15 & 19 — same specimen, different angles. Abbreviation: EP — embolus proper.

Рис. 9–20. *Erigone whymperei* O. Pickard-Cambridge, 1877, Воркута: 9, 10 — эмболюсный отдел, один и тот же экземпляр, под разными углами, 11–14 — *a*- & *b*-зубцы эмболюсного отдела, разные экземпляры, под разными углами, 15–18 — изменчивость эпигины (вид сверху), 19, 20 — центральная капсула и рецептакулы (вид сверху), 15 & 19 — один и тот же экземпляр, под разными углами. Сокращение: EP — собственно эмболюс.

*Erigonella ignobilis* (O. Pickard-Cambridge, 1871)

2000 *Erigonella ignobilis*. — Mazura, Pechora Delta: 136. (Map: 15).

2001 *Erigonella ignobilis*. — Mazura & Esyunin, Arthropoda Selecta, 10 (1): 76. (Map: 14 & 15).

RANGE. European boreo-nemoral.

COMMENTS. This species is not presented in our material.

*Flagelliphantes bergstroemi* (Schenkel, 1931)

MATERIAL. VOLONGA: 1 ♀, 5 km from Volonga River mouth, birch forest on river bank, under stones, 20.VII.1983; 1 ♀, 7 km from Volonga River mouth, rocky slopes on steep bank, in crevices, among stones, 18.VII.1983; 1 ♀, 10 km from mouth of Volonga River, birch forest on stony slope of the river, in moss, 19.VII.1983; VORKUTA: 1 ♀, near Tsementnozavodskiy Village, steep bank of Vorkuta River, rocks, among stones, 24.VI.1982; 1 ♀, same, 5.VII.1982; 3 ♀♀, same, confluence of Yur-Shor Brook and Vorkuta River, rocks, among stones, 12.VII.1986.

SIVOMASKINSKIY: 1 ♂, 1 ♀, 6 km NW of the village, birch-spruce forest with diverse herbs, in moss and leaf litter, 6.VII.1982.

RANGE. Fennoscandian-Siberian boreal.

*Gonatium rubellum* (Blackwall, 1841)

2000 *Gonatium rubellum*. — Mazura, Pechora Delta: 136. (Map: 15).

2001 *Gonatium rubellum*. — Mazura & Esyunin, Arthropoda Selecta, 10 (1): 76. (Map: 13).

RANGE. Palaearctic boreo-nemoral.

COMMENTS. The species occurs only in skirts of the southern tundra, but by the Pechora River Valley it penetrates through the southern tundra up to the Barents Sea in the North.

This species is not presented in our material.

*Gonatium rubens* (Blackwall, 1833)

MATERIAL. INDIGA: 1 ♂, near the village, willow stands on floodplains of B. Stchelikh River, in leaf litter, 19–26.VII.1984; NARIAN-MAR: 1 ♀, near the village, dry birch forest, in moss, 28.VI.1984; SHAPKINA RIVER: 1 ♂, willow stands in depression in flat-hill peatbog, in leaf litter & moss under shrubs, 13–17.VII.1984; VORKUTA: 15 ♂♂ & ♀♀, 80 km NW of Vorkuta, Diya-Ty Lake, lichen-moss dwarf birch tundra, in moss, 12–18.VII.1980; 2 ♀♀, near Vorgashor Village, lichen-moss dwarf birch tundra, in moss, 27.VI–2.VII.1980; 31 ♂, 37 ♀♀, same, in pitfall traps, 9.VII.1980; 7 ♂♂, 2 ♀♀, same, in pitfall traps, 5.VIII.1980; 1 ♂, 2 ♀♀, same, 25–27.VII.1981; 14 ♀♀, same, 20–29.VI.1981; 1 ♂, near Zarechniy Village, steep bank of Vorkuta River, rocky slopes, *Salix*, *Betula nana* & *Rosa* with *Vaccinium uliginosum* & *Empetrum*, in leaf litter, 17.VIII.1984; 2 ♀♀, near Tsementnozavodskiy Village, steep bank of Vorkuta River, among stones, 30.VII.1982; 1 ♀, near Mulda Village, willow stands on foot of hills, in moss, 31.VII.1982; KHALMER-YU: 2 ♀♀, near the village, lichen-moss dwarf birch tundra on slopes of hills, 17.VIII.1981; 2 ♀♀, same, willow stands on watershed, 17.VIII.1981; SIVAYA MASKA: 1 ♂, 8 km NW of the village, lichen-moss dwarf birch tundra (200 m N of timberline), in moss, 30.VII.1981; 2 ♂♂, 1 ♀, same, 20.VIII.1981.

SIVOMASKINSKIY: 1 ♂, 6 km NW of the village, sparse moss-dwarf birch spruce forest, in moss, 20.VIII.1981.

RANGE. Palaearctic polyzonal.

*Halorates caliginosus* (L. Koch, 1879)

MATERIAL. VORKUTA: 1 ♀, 80 km NW of Vorkuta, Diya-Ty Lake, on bank among stones, 18.VII.1980; ~ 50 ♂♂ & ♀♀, near

Vorgashor Village, willow tundra, leaf litter, summer, 1981; 20 ♂♂ & ♀♀, same, willow stands with diverse herbs on brook bank, in leaf litter, 4.VII.1982.

RANGE. Siberian boreal.

*Halorates distinctus* (Simon, 1884)

2000 *Collinsia distincta*. — Mazura, Pechora Delta: 136. (Map: 15).

2001 *Collinsia distincta*. — Mazura & Esyunin, Arthropoda Selecta, 10 (1): 76. (Map: 4).

MATERIAL. VOLONGA: 3 ♀♀, near the village, bank of Volonga River, under stones, 23.VII.1983; 1 ♀, 5 km from mouth of Volonga River, birch forest on river bank, under stones, 20.VII.1983; NARIAN-MAR: 1 ♂, near the village, in heap of lake drift, 28.VII.1984; VORKUTA: 1 ♂, near Vorgashor Village, bank of brook, sedge hummock, 4.VII.1982; 1 ♂, near Zarechniy Village, meadow with diverse herbs on floodplain bank of Vorkuta River, under stones, 19.VII.1982; 9 ♂♂, 21 ♀♀, same, steep bank of Vorkuta River, rocks, among stones, 17.VIII.1984; 30 ♂♂ & ♀♀, near Oktiabrskiy Village, bank of Vorkuta River, pebble, among stones, 1.IX.1982; 2 ♂♂, 1 ♀, same, willow bush on flood-lands of Vorkuta River, in leaf litter, 1.IX.1982; 3 ♀♀, near Tsementnozavodskiy Village, bank of Vorkuta River, under stones, 24.VI.1982; 3 ♀♀, same, steep bank of Iz'yurvozh Brook, rocky slopes, among stones, 22.VII.1982; 3 ♂♂, 5 ♀♀, same, 27.VI.1982; 1 ♀, near Severnyi Village, dry channel of Ayach-Yaha Brook, under stones, 11.IX.1984, 17.VII.1984; 3 ♂♂, 5 ♀♀, same, willow stands on brook bank, in leaf litter, 17.VII.1985; KHALMER-YU: 1 ♀, near the village, dry channel of brook, under stones, 13–16.VIII.1984.

N. PESHA: 1 ♀, near the village, floodplain willow stands with *Prunus padus* trees on Pesha River bank, tussocks of sedge & *Equisetum*, in soil (leaf litter washed away), 2.VII.1983; SIVOMASKINSKIY: 1 ♂, 10 km NE of the village, right bank of Usa River, pebble bank of the river, under stones, 3.VIII.1982.

RANGE. Palaearctic boreal.

*Halorates holmgreni* (Thorell, 1871)

MATERIAL. VORKUTA: 1 ♂, near Vorgashor Village, willow bush, leaf litter, summer, 1981; near Mulda Village, lichen-moss dwarf birch tundra, in moss, 6.VII.1982; 5 ♂♂, 3 ♀♀, same, diverse herb-grass meadow in depression in lichen-moss dwarf birch tundra, in sod, 20.VIII.1982; 1 ♂, 1 ♀, same, 30.VIII.1982.

RANGE. Holarctic arctic.

*Halorates spetsbergensis* (Thorell, 1872)

1986 *Collinsia spetsbergensis*. — Eskov, Southern tundra of Taimyr: 177. (Map: 8).

2000 *Collinsia spetsbergensis*. — Mazura, Pechora Delta: 136. (Map: 15).

RANGE. Holarctic arctic.

COMMENTS. This species is not presented in our material.

*Helophora insignis* (Blackwall, 1841)

MATERIAL. VORKUTA: near Severnyi Village, bank of Vorkuta River, *Salix* forest with diverse herbs, on trees, 30.VII.1985.

N. PESHA: 1 ♂, 3 ♀♀, near the village, dry moss-*Vaccinium vitis-idaea* spruce-birch forest, in moss & leaf litter, 3.VIII.1983; 2 ♀♀, same, birch forest with diverse herbs, leaf litter, 2.VIII.1983; SIVOMASKINSKIY: 1 ♂, 4 ♀♀, 10 km NE of the village, right bank of Usa River, bank slope, in moss, 3.VIII.1982; 1 ♀, same, right bank of Usa River, moss-undershrub larch-birch forest on watershed, in moss, 3.VIII.1982.

RANGE. Holarctic polyzonal.

COMMENTS. The species reaches tundra zone by river valleys.

*Hilaira gibbosa* Tanasevitch, 1982

1982 *Hilaira gibbosa*. — Tanasevitch, Zool. zhurn., 61 (10): 1505. (Map: 8).

2000 *Hilaira gibbosa*. — Mazura, Pechora Delta: 136. (Map: 15).

MATERIAL. VORKUTA: 1 ♀, near Vorgashor Village, lichen-moss dwarf birch tundra, in moss, 4.IX.1984; 2 ♂♂, 6 ♀♀, same, 23–25.VIII.1983; 2 ♀♀, near Mulda Village, lichen-moss dwarf birch tundra, in moss, 6.VII.1982; 1 ♂, 1 ♀, same, flat-hill peatbog, willow stands in deep hollow, in moss, 26.VII.1982; 2 ♀♀, willow stands on foot of hills, in moss, 31.VII.1982; SIVAYA MASKA: 1 ♀, 8 km NW of the village, lichen-moss dwarf birch tundra (200 m N of timberline), in moss, 3.VIII.1982.

SIVOMASKINSKIY: 1 ♂, 6 km NW of the village, sparse moss-undershrub-dwarf birch spruce forest, in moss, 6.VII.1982.

RANGE. Siberian-Nearctic boreal.

*Hilaira glacialis* (Thorell, 1871)

2000 *Hilaira glacialis*. — Mazura, Pechora Delta: 136. (Map: 15).

2001 *Hilaira glacialis*. — Mazura & Esysunin, Arthropoda Selecta, 10 (1): 76. (Map: 4 & 14).

MATERIAL. TOBSEDA: 1 ♂, flat-hill peatbog, *Cladonia* associations, 5.VII.1984; KHALMER-YU: 3 ♂♂, 3 ♀♀, near the village, spotty tundra on top of hills with *Arctous*, *Empetrum*, *Betula nana*, 13–16.VIII.1984.

RANGE. Siberian arcto-boreal.

*Hilaira herniosa* (Thorell, 1875)

1981 *H. herniosa*. — Eskov, Zool. zhurn., 60 (11): 1629. (Map: 8).

1986 *H. herniosa*. — Eskov, Southern tundra of Taimyr, 179. (Map: 8).

2000 *Hilaira herniosa*. — Mazura, Pechora Delta: 136. (Map: 15).

MATERIAL. VOLONGA: 1 ♂, 2 ♀♀, near the village, moist moss-juniper birch forest on bank of river, in moss, 29.VII.1983; 1 ♀, 10 km from mouth of Volonga River, stony slope of the river, birch forest, in moss, 19.VII.1983; 1 ♀, same, moss-undershrub birch forest on river terrace, in moss, 19.VII.1983; INDIGA: 4 ♀♀, near the village, willow tundra on steep slopes, 19–26.VII.1984; 6 ♀♀, lichen-moss dwarf birch tundra with *Ledum*, in moss, 19–26.VII.1984; 1 ♂, 1 ♀, same, lichen-moss dwarf birch tundra, in moss, 19–26.VII.1984; NARIAN-MAR: 1 ♀, near the village, willow stands with sedge on lake bank, 10.VII.1984; 1 ♂, 4 ♀♀, same, moss-undershrub birch forest, in moss, 18.VII.1984; SHAPKINA RIVER: 1 ♀, dwarf birch shrubs in flat-hill peatbog, in moss, 13–17.VII.1984; VORKUTA: 1 ♂, 1 ♀, near Vorgashor Village, lichen-moss dwarf birch tundra, under trash, 15.VI.1981; 1 ♀, same, 25–27.VII.1981; 3 ♂♂, same, lichen-moss dwarf birch tundra, in moss, 23–25.VIII.1983; 18 ♂♂, 9 ♀♀, same, willow stands in depression, in pitfall traps, 9–22.VII.1980; 1 ♂, same, in leaf litter, 23–29.VI.1981; 1 ♂, flat-hill peatbog, in moss, 24.VII.1980; 2 ♀♀, near Zarechniy Village, steep bank of Vorkuta River, rocky slopes, *Salix*, *Betula nana* & *Rosa* with *Vaccinium uliginosum* & *Empetrum*, in leaf litter, 17.VIII.1984; 1 ♀, 2 ♀♀, near Tsementnozavodskiy Village, willow stands on floodplains of Vorkuta River, 20.VIII.1984; 1 ♂, same, 7.VII.1982; 6 ♂♂, 4 ♀♀, same, 18–30.VI.1981; SIVAYA MASKA: 3 ♀♀, 8 km NW of the village, lichen-moss dwarf birch tundra (200 m N of timberline), willow tundra on watershed, 20.VIII.1981.

SIVOMASKINSKIY: 2 ♂♂, 6 km NW of the village, sparse moss-undershrub-dwarf birch spruce forest, in moss, 30.VII.1981; 2 ♀♀, same, birch-spruce forest with diverse herbs, in moss & leaf litter, 10–13.VII.1981; 3 ♂♂, 4 ♀♀, same, 20.VIII.1981; 1 ♂, 10

km NE of the village, right bank of Usa River, bank slope, moss-undershrub-dwarf birch spruce forest, in moss, 3.VIII.1982.

RANGE. Holarctic boreal.

*Hilaira incondita* (L. Koch, 1879)

2000 *Hilaira incondita*. — Mazura, Pechora Delta: 136. (Map: 15).

RANGE. Siberian-Nearctic arcto-boreal.

COMMENTS. The Pechora River Delta is the westernmost locality of the species.

This species is not presented in our material.

*Hilaira nubigena* Hull, 1911

2000 *Hilaira nubigena*. — Mazura, Pechora Delta: 136. (Map: 15).

2001 *Hilaira nubigena*. — Mazura & Esysunin, Arthropoda Selecta, 10 (1): 76. (Map: 4, 14, 15).

MATERIAL. BELUSHIE: 1 ♀, near the village, willow stands in depression in dwarf birch tundra, in leaf litter, 9.VII.1983; INDIGA: 2 ♀♀, near the village, willow stands on floodplains of B. Stchelikh River, in leaf litter, 19–26.VII.1984; SHAPKINA RIVER: 1 ♂, 4 ♀♀, willow stands in depression in flat-hill peatbog, in leaf litter & moss under shrubs, 13.VII.1984; 2 ♀♀, sphagnum bog in flat-hill peatbog, in *Sphagnum*, 13–17.VII.1984; 1 ♀, willow stands with diverse herbs, in moss, 16.VII.1984; VORKUTA: 2 ♀♀, near Vorgashor Village, moss-sedge bog in lichen-moss dwarf birch tundra, in moss, 29.VI.1982; 2 ♀♀, near Mulda Village, moss-herb meadow in hollow in willow-dwarf birch tundra, 20.VIII.1982; KHALMER-YU: 1 ♀, near the village, sedge-moss bog in willow stands in depression, 13–16.VIII.1984.

RANGE. Palaearctic-Alaskan boreal.

*Hilaira pervicax* Hull, 1908

2001 *Hilaira pervicax*. — Mazura & Esysunin, Arthropoda Selecta, 10 (1): 76. (Map: 13).

MATERIAL. SIVOMASKINSKIY: 1 ♂, 1 ♀, near the village, forest tundra, sedge fen, 10.VIII.1982.

RANGE. Palaearctic boreo-nemoral.

COMMENTS. The species occurs only in skirts of the southern tundra.

*Horcotes strandi* (Sytshevskaja, 1935)

MATERIAL. VOLONGA: 7 ♂♂, 9 ♀♀, near the village, undershrub tundra (*Arctous*, *Empetrum*, *Betula nana*, *Ledum*) on Volonga River terrace, 23–29.VII.1983; INDIGA: 3 ♂♂, 1 ♀, near the village, undershrub tundra (*Arctous*, *Empetrum*, *Betula nana*) on top of flat hills, 19–26.VII.1984; TOBSEDA: 7 ♂♂, 24 ♀♀, dry lichen-moss dwarf birch associations on sand, 2–9.VII.1984; 3 ♂♂, 11 ♀♀, flat-hill peatbog, dwarf birch shrubs, in moss, 2–9.VII.1984; SHAPKINA RIVER: 2 ♂♂, 8 ♀♀, spots of *Arctous* in lichen-dwarf birch associations in flat-hill peatbog, 13–17.VII.1984; VORKUTA: 1 ♀, near Vorgashor Village, flat-hill peatbog, in leaf litter under shrubs, 18.VII.1982; 3 ♂♂, 6 ♀♀, same, lichen-moss dwarf birch tundra, in moss, 28.VII.1982; 1 ♂, near Mulda Village, lichen-moss dwarf birch tundra, in moss, 6.VII.1982; 1 ♀, same, willow stands on foot of hills, in moss, 31.VII.1982; 4 ♀♀, same, lichen-moss associations with *Arctous*, *Empetrum*, *Vaccinium uliginosum* on top of flat hills, 11.IX.1983; 3 ♂♂, same, 15–27.VII.1981; KHALMER-YU: 4 ♀♀, near the village, spotty tundra on top of hills, 13–16.VIII.1984; 3 ♂♂, 18 ♀♀, same, lichen-moss dwarf birch tundra, in moss, 13–16.VIII.1984; 3 ♂♂, same, lichen-moss dwarf birch tundra on slopes on hills, 17.VIII.1981; 3 ♂♂, 18 ♀♀, same, spots of lichen-undershrub tundra (*Arctous*, *Empetrum*) in lichen-moss dwarf-birch tundra on tops of hills, 17.VIII.1981; 4 ♀♀, same, spots of lichen tundra (*Arctous*, *Empetrum*) in dwarf birch tundra on top of hills, 13–16.VIII.1984.

SIVOMASKINSKIY: 5 ♂♂, 2 ♀♀, 6 km NW of the village, sparse moss-undershrub dwarf birch spruce forest, in moss, 10.VIII.1985.

RANGE. Fennoscandian-Siberian-W-Nearctic boreal.

*Hybauchenidium aquilonare* (L. Koch, 1879)

2000 *Hybauchenidium aquilonare*. — Mazura, Pechora Delta: 136. (Map: 15).

2001 *Hybauchenidium aquilonare*. — Mazura & Eyunin, Arthropoda Selecta, 10 (1): 76. (Map: 14).

RANGE. Siberian-Alaskan arcto-boreal.

COMMENTS. This species is not presented in our material.

*Hybauchenidium ferrumequinum* (Grube, 1861)

MATERIAL. INDIGA: 3 ♂♂, near the village, lichen-moss dwarf birch tundra with *Ledum*, in moss, 19–26.VII.1984.

SIVOMASKINSKIY: 1 ♂, 3 ♀♀, 6 km NW of the village, sparse moss-undershrub dwarf birch spruce forest, in moss, 10.VIII.1985.

RANGE. Fennoscandian-Siberian-Nearctic arcto-boreal.

*Hypomma bituberculatum* (Wider, 1834)

2000 *Hypomma bituberculatum*. — Mazura, Pechora Delta: 136. (Map: 15).

2001 *Hypomma bituberculatum*. — Mazura & Eyunin, Arthropoda Selecta, 10 (1): 76. (Map: 15).

MATERIAL. BELUSHIE: 2 ♀♀, near the village, seacoast marsh with diverse herbs, under trash, 9.VII.1983; 1 ♀, same, willow stands on diverse herb-grass meadow, leaf litter, 12.VII.1983; VOLONGA: 1 ♀, near the village, *Poa*-herb meadow on floodplain, 26.VII.1983; VORKUTA: 1 ♀, 80 km NW of Vorkuta, bank of Diya-Ty Lake, willow stands, in leaf litter, 13.VII.1980; 1 ♀, near Tsementnozavodskiy Village, willow stands on floodplains of Vorkuta River, 28.VI.1982; 1 ♀, near Vorgashor Village, willow stands in depression, VII.1981; 1 ♀, same, willow stands with diverse herbs, in pitfall traps, 22.VII.1980.

RANGE. Palaearctic polyzonal.

*Hypselistes jacksoni* (O. Pickard-Cambridge, 1902)

MATERIAL. TOBSEDA: 2 ♀♀, dry lichen-moss dwarf birch associations on sand, 2–9.VII.1984; 1 ♂, 2 ♀♀, flat-hill peatbog, thin layer of lichens, 2–9.VII.1984.

RANGE. Palaearctic-W-Nearctic boreo-nemoral.

*Hypselistes semiflavus* (L. Koch, 1879)

MATERIAL. SIVAYA MASKA: 1 ♀, 8 km NW of the village, moss-lichen *Ledum* shrubs in lichen-moss dwarf birch tundra (400 m to N of timberline), in moss, 13.VII.1981.

SIVOMASKINSKIY: 1 ♀, 6 km NW of the village, sparse moss-undershrub spruce forest, in moss, 30.VII.1981.

RANGE. Siberian-W-Nearctic boreal.

COMMENTS. The species occurs only in skirts of the southern tundra.

This is the westernmost locality of the species. This is a species new to the European fauna.

*Impropheles complicatus* (Emerton, 1882)

MATERIAL. BELUSHIE: 1 ♀, near the village, flat-hill peatbog, lichens associations, 15.VII.1983; VOLONGA: 1 ♂, 5 ♀♀, 10 km from mouth of Volonga River, moss-undershrub birch forest on river terrace, in moss, 19.VII.1983; 1 ♂, 1 ♀, near the village, undershrub tundra (*Arctous*, *Empetrum*, *Betula nana*, *Ledum*) on

river terrace near seacoast, 23–29.VII.1983; SHAPKINA RIVER: 1 ♂, dwarf birch shrubs in flat-hill peatbog, in moss, 13–17.VII.1984; VORKUTA: 3 ♀♀, near Tsementnozavodskiy Village, steep bank of Iz'yurvozh Brook, rocky slopes, among stones, 27.VI.1982; 1 ♀, same, 22.VII.1982; 3 ♀♀, same, confluence of Yur-Shor Brock and Vorkuta River, rocky slopes, among stones, 12.VII.1986.

SIVOMASKINSKIY: 1 ♀, 6 km NW of the village, birch-spruce forest with diverse herbs, in moss & leaf litter, 30.VII.1981; 3 ♀♀, same, 9.VII.1981; 3 ♂♂, 9 ♀♀, same, moss-undershrub spruce forest on terrace, in moss & leaf litter, summer, 1982.

RANGE. Holarctic boreo-nemoral.

*Incestophantes kochiellus* (Strand, 1900)

MATERIAL. SIVOMASKINSKIY: 1 ♀, 6 km NW of the village, birch-spruce forest with diverse herbs, in moss & leaf litter, 9.VII.1981.

RANGE. Fennoscandian-Siberian boreal.

COMMENTS. This species has not been found in tundra.

*Incestophantes laricetorum* (Tanasevitch et Eskov, 1987)

1987 *Lepthyphantes laricetorum*. — Tanasevitch & Eskov, Zool. zhurn., 66 (2): 187. (Map: 9).

2000 *Lepthyphantes laricetorum*. — Mazura, Pechora Delta: 136. (Map: 15).

MATERIAL. SHAPKINA RIVER: 1 ♀, dwarf birch shrubs in flat-hill peatbog, in moss, 13–17.VII.1984; KHALMER-YU: 1 ♀, near the village, lichen-moss dwarf birch tundra on slopes of hills, in moss, 13–16.VIII.1984.

RANGE. Siberian boreal.

COMMENTS. The Pechora River Delta is the westernmost locality of the species.

*Islandiana falsifica* (Keyserling, 1886)

MATERIAL. VORKUTA: 1 ♂, 1 ♀, near Oktiabrskiy Village, bank of Vorkuta River, pebble, among stones, 1.IX.1982; 1 ♂, 2 ♀♀, near Zarechniy Village, bank of Vorkuta River, rocky slopes, under stones, 17.VIII.1984; KHALMER-YU: 3 ♂♂, 3 ♀♀, near the village, dry channel of brook, under stones, 13–16.VIII.1984.

RANGE. Fennoscandian-Siberian-W-Nearctic boreal.

*Kaestneria pullata* (O. Pickard-Cambridge, 1863)

2000 *Kaestneria pullata*. — Mazura, Pechora Delta: 136. (Map: 15).

2001 *Kaestneria pullata*. — Mazura & Eyunin, Arthropoda Selecta, 10 (1): 76. (Map: 15).

MATERIAL. BELUSHIE: 1 ♂, near the village, seacoast marsh with diverse herbs, under trash, 9.VII.1983; 1 ♂, same, willow stands on diverse herb-grass meadow, leaf litter, 12.VII.1983; VOLONGA: 4 ♀♀, near the village, meadow with diverse herbs on seacoast, under trash, 29.VII.1983; INDIGA: 2 ♂♂, 2 ♀♀, near the village, willow stands on floodplains of B. Stchelikh River, in leaf litter, 19–26.VII.1984; 1 ♂, same, willow tundra on steep hill slope, 19–26.VII.1984; NARIAN-MAR: 2 ♀♀, near the village, willow stands on lake bank, in litter, 10.VII.1984; VORKUTA: 1 ♀, near Zarechniy Village, steep bank of Vorkuta River, rocky slopes, among stones, 17.VIII.1984; 2 ♂♂, 2 ♀♀, same, meadow with diverse herbs on floodplain bank of Vorkuta River, diverse herbs (sweeping), 19.VII.1982.

N. PESHA: 1 ♀, near the village, sedge fen, 7.VII.1983; 1 ♀, same, floodplain willow stands with *Prunus padus* trees on Pasha River bank, tussocks of sedge & *Equisetum*, in soil (leaf litter washed away), 2.VII.1983; 1 ♀, same, sphagnum bog, in tussocks of sedge, 1.VIII.1983; SIVOMASKINSKIY: 1 ♀, in Sivaya Maska Village, sedge fen, 6.VII.1981; 1 ♂, 3 ♀♀, 10 km NE of the

village, right bank of Usa River, diverse herbs on river bank, 5.VII.1981.

RANGE. Holarctic polyzonal.

*Leptorhoptrum robustum* (Westring, 1851)

1986 *Leptorhoptrum robustum*. — Eskov, Southern tundra of Taimyr: 179. (Map: 8).

2000 *Leptorhoptrum robustum*. — Mazura, Pechora Delta: 137. (Map: 15).

MATERIAL. VOLONGA: 1 ♀, near the village, watershed terrace, willow stands with diverse herbs in depression, 24.VII.1983; 1 ♀, same, moist birch forest with diverse herbs on river bank, leaf litter, 29.VII.1983; INDIGA: 1 ♂, 1 ♀, near the village, willow stands on floodplains of B. Stchelikha River, in leaf litter, 19–26.VII.1984; 3 ♀♀, same, willow tundra on hill slopes, 19–26.VII.1984; SHAPKINA RIVER: 1 ♂, 3 ♀♀, sedge fen in flat-hill peatbog, 13–17.VII.1984; VORKUTA: 11 ♀♀, 80 km NW of Vorkuta, bank of Diya-Ty Lake, willow stands, in leaf litter, 13.VII.1980; 36 ♂♂, 11 ♀♀, near Vorgashor Village, willow stands in depression, in pitfall traps, 9.VII–5.VIII.1980; 1 ♀, same, willow stands in agrocoenosis, in leaf litter, 9.VIII.1984; 21 ♂♂, 2 ♀♀, same, willow stands with diverse herbs in depression, 25.VIII.1981; 1 ♂, same, willow stands with diverse herbs on brook bank, in leaf litter, 4.VII.1982; 1 ♂, 11 ♀♀, same, 9.VIII.1981; 1 ♀, near Oktiabrskiy Village, willow bush on flood-lands of Vorkuta River, in leaf litter, 1.IX.1982; 2 ♀♀, near Tsementnozavodskiy Village, willow stands on floodplains of Vorkuta River, 7.VII.1982; 1 ♂, same, 19.VII.1982; 2 ♂♂, same, 31.VIII.1981; 8 ♀♀, near Severnyi Village, bank of Vorkuta River, *Salix* forest with diverse herbs, in litter, 5.VIII.1985; 1 ♀, near Mulda Village, wet hollow in dwarf birch tundra, 20.VIII.1982; KHALMER-YU: 1 ♂, 4 ♀♀, near the village, willow stands in depression, 13–16.VIII.1984; 1 ♀, same, dry channel of brook, under stones, 13–16.VIII.1984; 1 ♀, same, willow stands in depression, outcrop of rocks, in crevices, under stones, 13–16.VIII.1984; 1 ♂, 2 ♀♀, same, willow stands in depression on brook bank, 23.VII.1981; SIVAYA MASKA: 4 ♂♂, 8 km NW of the village, lichen-moss dwarf birch tundra (200 m N of timberline), in moss, 20.VIII.1981; 8 ♂♂, 2 ♀♀, same, willow stands on brook bank, 20.VIII.1981; 12 ♂♂, same, willow bush on watershed, 20.VIII.1981.

N. PESHA: 1 ♂, 1 ♀, near the village, floodplain willow stands with *Prunus padus* trees on Pasha River bank, tussocks of sedge & *Equisetum*, in soil (leaf litter washed away), 2.VII.1983; 2 ♀♀, same, moist willow stands with diverse herbs with *Alnus* & *Ribes*, in moss & leaf litter, 3.VIII.1983; 1 ♀, same, birch-spruce forest with pine, in moss, 6.VII.1983; SIVOMASKINSKIY: 1 ♂, 1 ♀, near the village, hummocky sedge fen, 10.VIII.1982; 3 ♂♂, same, birch-spruce forest with diverse herbs, in moss & leaf litter, 30.VII.1981.

RANGE. Palearctic boreo-nemoral.

*Lophomma punctatum* (Blackwall, 1841)

MATERIAL. SHAPKINA RIVER: 1 ♂, 2 ♀♀, sedge fen in flat-hill peatbog, 13–17.VII.1984.

RANGE. European boreo-nemoral.

*Macrargus multesimus* (O. Pickard-Cambridge, 1875)

1985 *Macrargus multesimus*. — Eskov, Trudy Zool. Inst. Akad. nauk SSSR: 126. (Map: 8).

1988 *Macrargus multesimus*. — Eskov, Inst. Evol. Morphol. Ecol. Anim.: 120. (Map: 8).

2000 *Macrargus multesimus*. — Mazura, Pechora Delta: 137. (Map: 15).

MATERIAL. BELUSHIE: 5 ♀♀, near the village, flood-lands of Pasha River, willow stands with *Betula* sp. & *Sorbus*, leaf litter & moss, 10.VII.1983; 2 ♀♀, same, willow stands on grassy coastal meadow, in leaf litter, 12.VII.1983; VOLONGA: 1 ♀, near the

village, moist birch forest with diverse herbs on the river bank, 29.VII.1983; 1 ♀, same, willow stands in depression near seacoast, 28.VII.1983; 2 ♀♀, same, floodplain willow stands, in leaf litter, 27.VII.1983; 1 ♀, same, watershed lichen-moss willow-dwarf birch tundra, in moss, 27.VII.1983; 1 ♀, 2 km from mouth of Volonga River, fern-*Cornus suecica* birch forest on watershed, in moss, 26.VII.1983; 1 ♂, 1 ♀, 7 km from mouth of Volonga River, dry channel of brook, among stones, 18.VII.1983; 1 ♀, same, rocks on steep bank slope, in crevices, among stones, 18.VII.1983; 1 ♂, 1 ♀, 10 km from mouth of Volonga River, moss-undershrub birch forest on river terrace, in moss, 19.VII.1983; 1 ♀, same, stony slope to the river, birch forest, in leaf litter & moss, 19.VII.1983; INDIGA: 2 ♂♂, near the village, meadow with diverse herbs on M. Stchelikha River bank, 19–26.VII.1984; NARIAN-MAR: 3 ♀♀, near the village, moss-undershrub birch forest, in moss, 10.VII.1984; VORKUTA: 5 ♂♂, 7 ♀♀, near Vorgashor Village, lichen-moss dwarf birch tundra, in pitfall traps, 9.VII.1980; 2 ♀♀, same, flat-hill peatbog, in leaf litter & moss under shrubs, 24.VII.1980; 3 ♀♀, same, lichen-moss dwarf birch tundra, under trash, 1.IX.1981; 1 ♀, same, willow-dwarf birch tundra, in moss, 29.VI.1982; 3 ♀♀, same, 3–9.IX.1983; 1 ♂, 1 ♀, same, willow stands in depression in lichen-moss dwarf birch tundra, in leaf litter, 31.VIII.1982; 2 ♀♀, same, flat-hill peatbog, peat hills, leaf litter under shrubs, 2.VII.1982; 1 ♂, 2 ♀♀, near Zarechnyi Village, steep bank of Vorkuta River, rocky slopes, *Salix*, *Betula nana*, & *Rosa* with *Vaccinium uliginosum* & *Empetrum*, in leaf litter, 17.VIII.1984; 5 ♂♂, 4 ♀♀, same, 26.VIII.1982; 1 ♀, near Tsementnozavodskiy Village, willow stands on floodplains of Vorkuta River, 20.VIII.1984; 2 ♂♂, 1 ♀, same, 23.VIII.1982; 1 ♀, same, under stones on bank, 18.VI.1981; 1 ♂, same, steep bank of Vorkuta River, among stones, 30.VII.1982; 4 ♀♀, near Severnyi Village, bank of Vorkuta River, *Salix* forest with diverse herbs, in litter, 5.VIII.1985; 1 ♂, near Mulda Village, lichen-moss associations (*Arctos*, *Empetrum*, *Vaccinium uliginosum*) on top of flat hills in lichen-moss dwarf birch tundra, 21–30.VI.1981; KHALMER-YU: 4 ♂♂, 2 ♀♀, near the village, willow stands in depression, in leaf litter, 13–16.VIII.1984; 1 ♂, 1 ♀, same, willow stands in depression, outcrop of rocks, in crevices, under stones, 13–16.VIII.1984; 1 ♀, same, willow tundra on watershed, 17.VIII.1981.

N. PESHA: 6 ♀♀, near the village, dry lichen-moss-undershrub spruce-pine forest, in moss, 6.VII.1983; 1 ♂, same, birch forest with diverse herbs, in moss, 6.VII.1983; 1 ♂, 8 ♀♀, same, birch forest with diverse herbs, leaf litter, 2.VIII.1983; 1 ♀, same, floodplain willow stands with *Prunus padus* trees, tussocks of sedge & *Equisetum*, in soil (leaf litter washed away), 2.VIII.1983; 6 ♀♀, same, moss-*Vaccinium myrtillus* birch forest, in moss, leaf litter, 2.VIII.1983; 2 ♂♂, 3 ♀♀, same, dry moss-*Vaccinium vitis-idaea* spruce-birch forest, in moss & leaf litter, 3.VIII.1983; SIVOMASKINSKIY: 1 ♂, 2 ♀♀, 6 km NW of the village, sparse moss-undershrub-dwarf birch spruce forest, in moss, 6.VII.1982; 1 ♀, same, spruce-birch forest, in moss & leaf litter, 5.VIII.1982; 1 ♂, 1 ♀, 10 km NE of the village, right bank of Usa River, bank slope, in moss, 3.VIII.1982; 3 ♂♂, 8 ♀♀, right bank of Usa River, moss-undershrub larch-birch forest on terrace, in moss & leaf litter, 3.VIII.1982.

RANGE. Holarctic boreal.

*Macrargus rufus* (Wider, 1834)

MATERIAL. SIVOMASKINSKIY: 1 ♂, 1 ♀, 10 km NE of the village, right bank of Usa River, sparse spruce-birch forest, in moss, 20.VIII.1981.

RANGE. European boreo-nemoral.

COMMENTS. This species has not been found in tundra.

*Maro minutus* O. Pickard-Cambridge, 1906

MATERIAL. VOLONGA: 1 ♂, 2 ♀♀, near the village, watershed terrace, willow stands with diverse herbs in depression, 24.VII.1983.

RANGE. European boreo-nemoral.

COMMENTS. The species occurs only in skirts of the southern tundra.

*Maro sibiricus* Eskov, 1980

MATERIAL. SHAPKINA RIVER: 1 ♀, dwarf birch shrubs, in litter, 13–17.VII.1984.

RANGE. Siberian boreal.

COMMENTS. This is the westernmost locality of the species.

*Mecynargus borealis* (Jackson, 1930)

1988 *Mecynargus borealis*. — Eskov, Zool. zhurn., 67 (12): 1830. (Map: 4, 6, 8).

MATERIAL. BELUSHIE: 4 ♀♀, near the village, flat-hill peatbog, lichens associations, 15.VII.1983; 1 ♂, same, willow-dwarf birch tundra, in moss, 16.VII.1983; VOLONGA: 13 ♂♂, 17 ♀♀, near the village, undershrub tundra with *Arctous*, *Empetrum*, *Betula nana*, *Ledum* etc., on river terrace near seacoast, 23–29.VII.1983; INDIGA: 7 ♂♂, 3 ♀♀, near the village, undershrub tundra on top of flat hills, 19–26.VII.1984; TOBSEDA: 2 ♂♂, 11 ♀♀, dry lichen-moss dwarf birch associations on sand, 2–9.VII.1984; 5 ♀♀, flat-hill peatbog, thin layer of lichens, 2–9.VII.1984; 1 ♀, flat-hill peatbog, dwarf birch shrubs, in moss, 2–9.VII.1984; 1 ♂, 2 ♀♀, grassy meadow, in grass, 2–9.VII.1984; SHAPKINA RIVER: 5 ♂♂, 8 ♀♀, spots of *Arctous* in lichen-dwarf birch associations in flat-hill peatbog, in leaf litter & moss under shrubs, 13–17.VII.1984; 5 ♀♀, sedge fen in flat-hill peatbog, 13–17.VII.1984; VORKUTA: 1 ♂, near Mulda Village, lichen-moss associations with *Arctous*, *Empetrum*, *Vaccinium uliginosum* on top of flat hills, 24.VIII.1984; 2 ♂♂, 6 ♀♀, same, 11.IX.1983; 1 ♂, 4 ♀♀, same, 29.VII.1986; 1 ♀, same, hollow in lichen-moss dwarf birch tundra, in moss, 20.VIII.1982; KHALMER-YU: 6 ♀♀, near the village, spotty tundra on top of hills, 13–16.VIII.1984; 5 ♂♂, 9 ♀♀, same, lichen-moss dwarf birch tundra, in moss, 13–16.VIII.1984; 3 ♂♂, 4 ♀♀, same, lichen-moss dwarf birch tundra on slopes of hills, 23.VII.1981; 5 ♂♂, 9 ♀♀, same, 13–16.VIII.1984; 6 ♀♀, same, spots of lichen tundra with *Arctous* & *Empetrum* in lichen-moss dwarf birch tundra on top of hills, 13–16.VIII.1984; 1 ♂, 1 ♀, same, moss-sedge bog in depression, 13–16.VIII.1984.

RANGE. Holarctic boreal.

*Mecynargus monticola* (Holm, 1943)

1988 *Rhaebothorax monticola*. — Eskov, Zool. zhurn., 67 (12): 1830 (Map: 3, 6, 8).

2000 *Mecynargus monticola*. — Mazura, Pechora Delta: 137. (Map: 15).

MATERIAL. VOLONGA: 1 ♂, 2 ♀♀, 10 km from mouth of Volonga River, birch forest on stony slope to the river, in moss, 19.VII.1983; INDIGA: 4 ♂♂, 3 ♀♀, near the village, lichen-moss dwarf birch tundra, in moss, 24.VII.1984; TOBSEDA: 3 ♂♂, dry lichen-moss dwarf birch associations on sand, 2–9.VII.1984; 1 ♂, 2 ♀♀, same, flat-hill peatbog, thin layer of lichens, 2–9.VII.1984; 1 ♀, flat-hill peatbog, dwarf birch shrubs, in moss, 2–9.VII.1984; SHAPKINA RIVER: 2 ♂♂, 10 ♀♀, dwarf birch shrubs in flat-hill peatbog, in moss, 13–17.VII.1984; VORKUTA: 3 ♀♀, near Vorgashor Village, willow tundra on hill slopes, in leaf litter, 9.VIII.1984; 4 ♀♀, same, lichen-moss dwarf birch tundra, in moss, 4.IX.1984; 2 ♀♀, same, 1.XI.1981; 9 ♂♂, 27 ♀♀, same, 23–25.VIII.1983; 6 ♂♂, 11 ♀♀, same, 3–9.IX.1983; 1 ♂, 3 ♀♀, same, flat-hill peatbog, hollow, in *Sphagnum*, 2.VII.1982; 1 ♀, same, flat-hill peatbog, in leaf litter under shrubs, 18.VII.1982; 2 ♀♀, near Mulda Village, lichen-moss dwarf birch tundra, in moss, 6.VII.1982; 1 ♀, same, flat-hill peatbog, willow stands in deep depression, in moss, 26.VII.1982; 3 ♀♀, same, willow stands on foot of hills, in moss, 31.VII.1982; 3 ♂♂, same, 20.VIII.1982; KHALMER-YU: 3 ♂♂, 11 ♀♀, near the village, lichen-moss dwarf birch tundra, in moss, 13–16.VIII.1984.

N. PESHA: 1 ♀, near the village, sphagnum bog, in tussocks of sedge, 7.VII.1983; SIVOMASKINSKIY: 3 ♂♂, 9 ♀♀, 6 km NW of the village, sparse moss-dwarf birch spruce forest, in moss, 6.VII.1982; 1 ♂, 1 ♀, same, birch-spruce forest with diverse herbs, in moss & leaf litter, 6.VII.1982.

RANGE. Palaearctic-W-Nearctic boreal.

*Mecynargus morulus* (O. Pickard-Cambridge, 1875)

1988 *Rhaebothorax morulus*. — Eskov, Zool. zhurn., 67 (12): 1830. (Map: 2, 3, 8).

2000 *Mecynargus morulus*. — Mazura, Pechora Delta: 137. (Map: 15).

MATERIAL. BELUSHIE: 1 ♂, 10 ♀♀, near the village, willow stands on grassy coastal meadow, in leaf litter, 12.VII.1983; 2 ♀♀, same, flat-hill peatbog, lichen associations, 15.VII.1983; 2 ♂♂, 7 ♀♀, same, willow-dwarf birch tundra, in moss, 16.VII.1983; 3 ♂♂, 6 ♀♀, same, lichen-moss dwarf birch tundra, in moss, 13.VII.1983; 1 ♀, same, lichen-*Empetrum-Arctous* tundra on steep bank of sea, 13.VII.1983; 1 ♀, same, peatbog on lake bank, in leaf litter & moss, 10.VII.1983; VOLONGA: 1 ♂, 4 ♀♀, near the village, undershrub tundra (*Arctous*, *Empetrum*, *Betula nana*, *Ledum*) on river terrace near seacoast, 23.VII.1983; 2 ♂♂, 2 ♀♀, same, floodplain willow stands, in leaf litter, 21.VII.1983; 1 ♀, same, flat peat hills on watershed, tussocks of *Rubus chamaemorus*, 29.VII.1983; 2 ♀♀, 5 km from mouth of Volonga River, moss-undershrub birch forest, on bank slope, in moss, 20.VII.1983; INDIGA: 1 ♂, near the village, undershrub tundra (*Arctous*, *Empetrum*, *Betula nana*) on top of flat hills, 19–26.VII.1984; 2 ♂♂, 4 ♀♀, same, lichen-moss dwarf birch tundra with *Ledum*, in moss, 19–26.VII.1984; KHALMER-YU: 1 ♂, near the village, spotty tundra on top of hills, 13–16.VIII.1984; 3 ♂♂, 6 ♀♀, same, lichen-moss dwarf birch tundra, in moss, 13–16.VIII.1984; 3 ♂♂, 6 ♀♀, same, lichen-moss dwarf birch tundra on slopes of hills, in moss, 13–16.VIII.1984.

RANGE. European boreo-nemoral.

*Mecynargus paetulus* (O. Pickard-Cambridge, 1875)

1988 *Rhaebothorax paetulus*. — Eskov, Zool. zhurn., 67(12): 1830. (Map: 3, 8).

2000 *Mecynargus paetulus*. — Mazura, Pechora Delta: 137. (Map: 15).

MATERIAL. BELUSHIE: 5 ♀♀, near the village, willow stands on grassy coastal meadow, in leaf litter, 12.VII.1983; 2 ♂♂, 7 ♀♀, same, grassy meadow on seacoast, in sod, 17.VII.1983; 1 ♀, same, willow stands on diverse herb-grass meadow, leaf litter, 15.VII.1983; 3 ♀♀, same, 12.VII.1983; 2 ♂♂, 13 ♀♀, meadow in the village, 11–14.VII.1983; 1 ♂, 2 ♀♀, in the village, in a hut, 12.VII.1983; INDIGA: 1 ♀, near the village, diverse herb-grass meadow on B. Stchelikh River bank, 19–26.VII.1984; 1 ♂, same, willow stands on floodplains of B. Stchelikh River, in leaf litter, 19–26.VII.1984; VORKUTA: 3 ♂♂, 1 ♀, near Vorgashor Village, lichen-moss dwarf birch tundra, under trash, 25.VI.1980; 3 ♂♂, same, willow stands in depression, in pitfall traps, 22.VII.1980; 2 ♂♂, 3 ♀♀, same, agrocenosis, in pitfall traps, 22.VII–3.VIII.1980; 1 ♀, same, sedge fen on lake bank, 5.IX.1983; 3 ♂♂, 13 ♀♀, same, lichen-moss dwarf birch tundra, under trash, 14.VI.1981; 1 ♂, same, flat-hill peatbog, in moss, 29.VI.1981; 1 ♀, same, lichen-moss willow-dwarf birch tundra, in moss, 29.VI.1982; 1 ♂, same, grassy meadow on slope of brook, 4.VII.1982; 3 ♂♂, same, willow stands in depression, in leaf litter, 21.VIII.1982; 4 ♂♂, 4 ♀♀, same, in the village, under trash on garbage piles, 7–10.VI.1981; 1 ♂, near Oktiabriskiy Village, Vorkuta River bank, pebble, among stones, 1.IX.1982; 1 ♂, 1 ♀, same, floodplain willow stands on Vorkuta River bank, in leaf litter, 1.IX.1982; 1 ♀, near Tsementnozavodskiy Village, steep bank of Vorkuta River, rocky slopes, among stones, 24.VI.1982; 3 ♀♀, same, willow stands on floodplains of Vorkuta River, 7.VII.1982; 1 ♀, same, steep bank of Iz'yurozh Brook, rocky slopes, among stones, 27.VI.1982; 3 ♀♀, near Tsementnozavodskiy Village, Vorkuta River bank, under stones, VI.1980; 1 ♀, near Mulda Village, spotty tundra on top of flat hills, spots of

barren soil, among stones & in soil, 6.VII.1982; 1 ♂, 1 ♀, same, grassy hollow in dwarf birch tundra, 20.VIII.1982; 2 ♀♀, same, lichen-moss associations (*Arctous*, *Empetrum*, *Vaccinium uliginosum*) on top of flat hills in lichen-moss dwarf birch tundra, 21–30.VI.1981.

N. PESHA: 2 ♂♂, 11 ♀♀, near the village, under trash on garbage piles, 6.VII.1983.

RANGE. Holarctic boreo-nemoral.

### *Mecynargus sphagnicola* (Holm, 1939)

1988 *Rhaebothorax sphagnicola*. — Eskov, Zool. zhurn., 67 (12): 1830. (Map: 3, 8).

2000 *Mecynargus sphagnicola*. — Mazura, Pechora Delta: 137. (Map: 15).

MATERIAL. INDIGA: 1 ♂, 1 ♀, near the village, sphagnum bog, in *Sphagnum*, 19–26.VII.1984; TOBSEDA: 1 ♀, sphagnum bog, in *Sphagnum*, 15.VII.1984; NARIAN-MAR: 1 ♂, 2 ♀♀, near the village, sphagnum bog on lake bank, in *Sphagnum*, 27.VI.1984; SHAPKINA RIVER: 1 ♀, willow stands with diverse herbs, in moss, 16.VII.1984; VORKUTA: 80 km NW of Vorkuta, bank of Diya-Ty Lake, willow stands, in *Sphagnum*, 16.VII.1980; 1 ♀, near Vorgashor Village, lichen-moss dwarf birch tundra, in moss, VII.1980; 3 ♂♂, same, lichen-moss dwarf birch tundra, in moss, 28.VII.1982; 1 ♀, same, lichen-moss dwarf birch tundra, in moss, 23–25.VIII.1983; 1 ♂, same, willow stands in depression in lichen-moss dwarf birch tundra, in litter, 31.VIII.1982; 1 ♀, near Mulda Village, meadow with diverse herbs in depression in dwarf birch tundra, in sod, 30.VIII.1982; 1 ♂, 2 ♀♀, same, lichen-moss dwarf birch tundra, in moss, 6.VII.1982; KHALMER-YU: 2 ♀♀, near the village, spots of lichen-undershrub (*Arctous*, *Empetrum*) tundra in lichen-moss dwarf-birch tundra on tops of hills, 17.VIII.1981.

N. PESHA: 1 ♀, near the village, floodplain willow stands with *Prunus padus* trees on Pesho River bank, tussocks of sedge & *Equisetum*, in soil (leaf litter washed away), 2.VII.1983.

RANGE. Fennoscandian-Siberian-W-Nearctic boreal.

COMMENTS. The Pechora River Delta is the westernmost locality of the species.

### *Mecynargus tungusicus* (Eskov, 1981)

1988 *Rhaebothorax tungusicus*. — Eskov, Zool. zhurn., 67 (12): 1830. (Map: 8).

2000 *Mecynargus tungusicus*. — Mazura, Pechora Delta: 137. (Map: 15).

MATERIAL. VORKUTA: 1 ♀, near Zarechnyi Village, steep bank of Vorkuta River, rocky slopes, *Salix*, *Betula nana*, & *Rosa* with *Vaccinium uliginosum* & *Empetrum*, in leaf litter, 17.VIII.1984; 1 ♂, 2 ♀♀, same, 26.VIII.1982; 2 ♂♂, 5 ♀♀, near Mulda Village, lichen-moss dwarf birch tundra, in moss, 6.VII.1982; 1 ♂, 1 ♀, same, flat-hill peatbog, willow stands in depression, in moss, 26.VII.1982; 4 ♀♀, same, willow stands on foot of hill, in moss, 20.VIII.1982.

SIVOMASKINSKIY: 7 ♂♂, 16 ♀♀, 6 km NW of the village, sparse moss-dwarf birch spruce forest, in moss, 6.VII.1982; 1 ♀, 10 km NE of the village, right bank of Usa River, moss-undershrub larch-birch forest on terrace, in moss, 3.VIII.1982.

RANGE. Siberian-W-Nearctic boreal.

COMMENTS. The Pechora River Delta is the westernmost locality of the species.

### *Metopobactrus prominulus* (O. Pickard-Cambridge, 1872)

MATERIAL. BELUSHIE: 1 ♀, near the village, steep bank of river, in peat, 8.VII.1983.

RANGE. Holarctic polyzonal.

COMMENTS. The species reaches tundra zone by river valleys.

### *Micrargus herbigradus* (Blackwall, 1854)

2000 *Micrargus herbigradus*. — Mazura, Pechora Delta: 137. (Map: 15).

2001 *Micrargus herbigradus*. — Mazura & Eshyunin, Arthropoda Selecta, 10 (1): 76. (Map: 15).

MATERIAL. INDIGA: 1 ♀, near the village, willow stands on floodplains of B. Stchelikh River, in leaf litter, 19–26.VII.1984; 2 ♂♂, same, willow tundra on hill slope, 19–26.VII.1984; NARIAN-MAR: 2 ♀♀, near Iskatelei Village, sphagnum bog on lake bank, in *Sphagnum*, 27.VI.1984; SIVAYA MASKA: 1 ♂, 8 km NW of the village, lichen-moss dwarf birch tundra (200 m N of timberline), in moss, 3.VIII.1982.

N. PESHA: 1 ♂, near the village, diverse herb-grass meadow in willow stands, 3.VIII.1983; SIVOMASKINSKIY: 1 ♀, near the village, spruce-birch forest, in moss, 5.VIII.1982.

RANGE. Palaearctic boreo-nemoral.

### *Minyrioloides trifrons* (O. Pickard-Cambridge, 1863)

2000 *Minyrioloides trifrons*. — Mazura, Pechora Delta: 137. (Map: 15).

2001 *Minyrioloides trifrons*. — Mazura & Eshyunin, Arthropoda Selecta, 10 (1): 76. (Map: 15).

MATERIAL. VOLONGA: 1 ♀, 2 km from mouth of Volonga River, fern-*Cornus suecica* birch forest on watershed, in moss, 26.VII.1983; NARIAN-MAR: 1 ♀, near the village, moss-undershrub birch forest, in moss, 10.VII.1984; SHAPKINA RIVER: 1 ♀, willow stands in depression in flat-hill peatbog, in leaf litter & moss under shrubs, 13.VII.1984; 2 ♀♀, same, meadow with diverse herbs on brook bank, 13–17.VII.1984; VORKUTA: 1 ♂, 80 km NW of Vorkuta, bank of Diya-Ty Lake, meadow with diverse herbs, 14.VII.1980.

N. PESHA: 1 ♀, near the village, sedge fen, 7.VII.1983; 1 ♀, floodplain willow stands with *Prunus padus* trees on Pesho River bank, tussocks of sedge & *Equisetum*, in soil (leaf litter washed away), 2.VII.1983; SIVOMASKINSKIY: 1 ♂, 10 km NE of the village, bank of Usa River, diverse herbs on bank of the river, 5.VII.1981.

RANGE. Holarctic boreo-nemoral.

### *Minyriolus pusillus* (Wider, 1834)

MATERIAL. VOLONGA: 6 ♀♀, 2 km from mouth of Volonga River, fern-*Cornus suecica* birch forest on watershed, in moss, 26.VII.1983.

N. PESHA: 1 ♀, near the village, birch-spruce forest with pine, in moss, 6.VII.1983; 4 ♀♀, dry moss-*Vaccinium vitis-idaea* spruce-birch forest, in moss & leaf litter, 3.VIII.1983; 1 ♀, moss-undershrub birch forest with *Picea*, in moss, 2.VII.1983.

RANGE. Palaearctic boreo-nemoral.

COMMENTS. The species reaches tundra zone by river valleys.

### *Obscuriphantes obscurus* (Blackwall, 1841)

MATERIAL. VOLONGA: 2 ♀♀, 10 km from mouth of Volonga River, stony slope to the river, birch forest, in leaf litter, 19.VII.1983; NARIAN-MAR: 1 ♀, near Iskatelei Village, moss-undershrub birch forest, 10.VII.1984.

RANGE. European polyzonal.

COMMENTS. The species reaches tundra zone by river valleys.

### *Oedothorax agrestis* (Blackwall, 1853)

MATERIAL. VOLONGA: 1 ♂, 4 ♀♀, 5 km from mouth of Volonga River, birch forest on the river bank, under stones, 20.VII.1983; INDIGA: 1 ♂, 3 ♀♀, near the village, 3 km from

mouth of B. Stchelikh River, bank of the river, under stones, 19–26.VII.1984.

RANGE. West Palaearctic polyzonal.

COMMENTS. The species reaches tundra zone by river valleys.

#### *Oedothorax apicatus* (Blackwall, 1850)

MATERIAL. VORKUTA: 1 ♂, near Severnyi Village, dry channel of Ayach-Yaha Brook, under stones, 17.VII.1985.

SIVOMASKINSKIY: 3 ♂♂, in the village, in sedge fen, 1980; 1 ♂, near the village, birch forest with diverse herbs, 1980; 12 ♂♂, 21 ♀♀, 10 km NE of the village, right bank of Usa River, pebble bank of the river, under stones, 3.VIII.1982; 4 ♂♂, 7 ♀♀, same, 5.VII.1981.

RANGE. European-Ancient Mediterranean polyzonal.

#### *Oedothorax retusus* (Westring, 1851)

MATERIAL. VOLONGA: 11 ♀♀, near the village, bank of Volonga River, under stones on bank of the river, 23.VII.1983; 5 ♀♀, 5 km from Volonga River mouth, floodplain of Volonga River, among grass and stones, 19.VII.1983; NARIAN-MAR: 6 ♂♂, 5 ♀♀, near the village, swampy lake bank, hummocky sedge fen, in leaf litter & moss, VII.1984; VORKUTA: 1 ♂, 1 ♀, near Zarechnyi Village, bank of Vorkuta River, under stones, 6. IX.1982.

SIVOMASKINSKIY: 13 ♂♂, 12 ♀♀, 10 km NE of the village, right bank of Usa River, pebble bank of the river, under stones, 3.VIII.1982.

RANGE. Palaearctic polyzonal.

#### *Oreoneta leviceps* (L. Koch, 1879)

MATERIAL. VOLONGA: 7 ♀♀, near the village, undershrub tundra (*Arctous*, *Empetrum*, *Betula nana*, *Ledum*) on watershed terrace not far from seacoast, 23.VII.1983; 2 ♀♀, watershed terrace, willow bush with diverse herbs in depression, 24.VII.1983; INDIGA: 3 ♀♀, near the village, lichen-moss-undershrub dwarf birch tundra with lots of *Ledum*, 21.VII.1984; SHAPKINA RIVER: 3 ♀♀, sedge-sphagnum bog, in *Sphagnum*, 15.VII.1984; VORKUTA: 1 ♀, near Vorgashor Village, willow stands in depression, 9.VII.1980; 1 ♂, 1 ♀, same, lichen-moss dwarf birch tundra, under trash, 25.VII.1981; 1 ♂, 2 ♀♀, near Mulda Village, lichen-moss associations (*Arctous*, *Empetrum*, *Vaccinium uliginosum*) on top of flat hills, 29.VII.1986; KHALMER-YU: 1 ♂, near the village, channel of brook, under stones, 13–16.VIII.1984; SIVAYA MASKA: 1 ♂, 1 ♀, 8 km NW of the village, willow tundra (300 m N of timberline), 30.VII.1981.

RANGE. Siberian-Nearctic arcto-boreal.

#### *Oreoneta uralensis* Saaristo et Marusik, 2004

1981 *Hilaira tatrca tatrca*. — Eskov, Zool. zhurn., 60 (11): 1629. (Map: 8).

1985 *Hilaira tatrca tatrca*. — Trudy Zool. Inst. Akad. nauk SSSR: 126. (Map: 8).

2000 *Hilaira tatrca*. — Mazura, Pechora Delta: 136. (Map: 15).

MATERIAL. VOLONGA: 1 ♂, 3 ♀♀, near the village, watershed terrace, diverse herb-grass willow stands in depression, 24.VII.1983; 2 ♀♀, 10 km from Volonga River mouth, rocks on steep bank slope, in crevices, among stones, 19.VII.1983; INDIGA: 2 ♀♀, near the village, willow stands on floodplains of B. Stchelikh River, in leaf litter, 19–26.VII.1984; 2 ♀♀, same, willow tundra on hill slopes, 19–26.VII.1984; 1 ♂, 1 ♀, same, meadow with diverse herbs on bank of M. Stchelikh River, 19–26.VII.1984; TOBSEDA: 1 ♀, flat-hill peatbog, lichen associations, 2–9.VIII.1984; SHAPKINA RIVER: 1 ♂, willow stands with diverse herbs in depression in flat-hill peatbog, 16.VII.1984; 1 ♂, 4 ♀♀, sphagnum bog on lake bank, 15.VII.1984; VORKUTA: 1 ♂, 3 ♀♀, 80 km NW of Vorkuta, bank of Diya-Ty Lake, willow bush, in leaf litter, 13–

15.VII.1980; 1 ♀, near Vorgashor Village, willow stands in depression, 25.VIII.1981; 26 ♂♂, 1 ♂ subad., 2 ♀♀, same, willow stands in depression, in pitfall traps, 9.VII–5.VIII.1980; 1 ♂, 1 ♀, same, flat-hill peatbog, in leaf litter & moss under shrubs, 26.VIII.1980; 3 ♂♂, 1 ♀, same, lichen-moss dwarf birch tundra, under trash on garbage piles, 14.VI.1981; 1 ♂, same, lichen-moss dwarf birch tundra, in moss, 28.VII.1982; 3 ♂♂, 2 ♀♀, same, lichen-moss dwarf birch tundra, leaf litter under *Betula nana*, 14.VI.1981; 3 ♂♂, 5 ♀♀, same, lichen-moss dwarf birch tundra, under trash, 15.VI.1981; 10 ♂♂, same, willow stands in depression, in leaf litter, 23–29.VI.1981; 1 ♂, 3 ♀♀, same, willow stands in agrocoenosis, in leaf litter, 9.VIII.1984; 1 ♂, same, willow bush on hill slopes, in leaf litter, 9.VIII.1984; 1 ♀, same, willow stands with diverse herbs on brook bank, in leaf litter, 4.VII.1982; 6 ♂♂, 1 ♀, same, willow stands in depression, in leaf litter, 21.VIII.1982; 1 ♂, same, flat-hill peatbog, willow stands in depression, in moss, 18.VII.1982; 1 ♀, same, flat-hill peatbog, in leaf litter under shrubs, 18.VII.1982; 2 ♂♂, 5 ♀♀, near Oktiabrskiy Village, willow stands on floodplains of Vorkuta River, in leaf litter, 1.IX.1982; 1 ♂, 3 ♀♀, near Tsementnozavodskiy Village, willow stands on floodplains of Vorkuta River, 28.VI.1982; 7 ♀♀, same, 23.VIII.1982; 1 ♂, near Zarechnyi Village, meadow with diverse herbs on floodplains of Vorkuta River, under stones, 19.VII.1982; 1 ♀, near Severnyi Village, willow stands on Ayach-Yaha Brook bank, in leaf litter, 17.VII.1985; 1 ♂, 2 ♀♀, near Mulda Village, lichen-moss dwarf birch tundra, in moss, 6.VII.1982; 1 ♀, same, willow stands on foot of hills, in moss, 31.VII.1982; 2 ♀♀, same, 20.VIII.1982; KHALMER-YU: 3 ♂♂, 5 ♀♀, near the village, willow stands, in leaf litter & in moss, 13–16.VIII.1984 1 ♀, same, channel of brook, under stones, 13–16.VIII.1984.

N. PESHA: 2 ♀♀, near the village, spruce-birch forest with diverse herbs on watershed, 3.VII.1983; 2 ♂♂, same, birch forest with diverse herbs, leaf litter, 2.VIII.1983; 1 ♀, same, meadow with diverse herbs in willow stands, 3.VIII.1983.

RANGE. West Siberian arcto-boreal.

#### *Oreonetides vaginatus* (Thorell, 1872)

2000 *Oreonetides vaginatus*. — Mazura, Pechora Delta: 137. (Map: 15).

2001 *Oreonetides vaginatus*. — Mazura & Eshyunin, Arthropoda Selecta, 10 (1): 76. (Map: 15).

MATERIAL. BELUSHIE: 1 ♀, near the village, floodplain of Pesha River, willow bushes with *Betula* sp. *Sorbus* sp., in leaf litter & moss, 10.VII.1983; VORKUTA: 1 ♀, near Vorgashor Village, lichen-moss dwarf birch tundra, under trash, 25.VI.1980; 1 ♂, 1 ♀, same, lichen-moss dwarf birch tundra, in pitfall traps, 22.VII.1980; 1 ♀, same, in moss, 20.VI.1981; 1 ♀, same, lichen-moss dwarf birch tundra, under trash on garbage piles, 15.VI.1981; 1 ♂, same, willow stands near agrocoenosis, in leaf litter, 9.VIII.1984; 1 ♀, same, flat-hill peatbog, willow stands in depression, in moss, 18.VII.1982; 1 ♀, near Tsementnozavodskiy Village, steep bank of Vorkuta River, rocks, among stones, 27.VI.1982; 3 ♂♂, 5 ♀♀, same, 27.VIII.1982; 1 ♂, 1 ♀, same, willow stands on floodplains of Vorkuta River, 19.VII.1982; 1 ♂, same, 18–30.VI.1981; 1 ♀, near Zarechnyi Village, meadow with diverse herbs on floodplain bank of Vorkuta River, under stones, 19.VII.1982; KHALMER-YU: 1 ♀, near the village, willow stands in depression, outcrop of rocks, in crevices, under stones, 13–16.VIII.1984; 1 ♂, 2 ♀♀, same, willow stands on bank of brook, in litter, 23.VII.1981.

SIVOMASKINSKIY: 1 ♂, 6 km NW of the village, birch-spruce forest with diverse herbs, in moss & leaf litter, 30.VII.1981; 3 ♀♀, same, 9–10.VII.1981; 1 ♂, 10 km NE of the village, right bank of Usa River, sparse moss-undershrub spruce-birch forest, in moss, 29.VII.1981; 1 ♀, same, 5.VII.1981.

RANGE. Holarctic boreal.

#### *Oryphantes angulatus* (O. Pickard-Cambridge, 1881)

2001 *Oryphantes angulatus*. — Mazura & Eshyunin, Arthropoda Selecta, 10 (1): 76. (Map: 15).

MATERIAL. BELUSHIE: 2 ♀♀, near the village, willow stands with *Betula* sp. & *Sorbus* sp. on floodplain bank of Pesh River, in leaf litter & moss, 10.VII.1983; 1 ♂, same, willow stands on diverse herb-grass meadow, leaf litter, 12.VII.1983; 3 ♀♀, same, 8.VII.1983; 1 ♀, same, peatbog on lake bank, in leaf litter & moss, 10.VII.1983; VOLONGA: 1 ♂, 5 ♀♀, near the village, watershed terrace, willow stands with diverse herbs in depression, 24.VII.1983; 1 ♀, same, moist birch forest with diverse herbs near river, leaf litter, 29.VII.1983; 1 ♀, same, floodplain willow stands on Volonga River bank, in leaf litter, 27.VII.1983; 1 ♀, 10 km from Volonga River mouth, stony slope to the river, among grass and stones, 19.VII.1983; INDIGA: 1 ♀, near the village, steep limestone slopes of B. Stchelikh River, in crevices, 19–26.VII.1984; 1 ♂, 9 ♀♀, same, willow stands on floodplains of B. Stchelikh River, in leaf litter, 19–26.VII.1984; 2 ♀♀, same, willow bush on hills slope, 19–26.VII.1984.

N. PESHA: 1 ♀, near the village, spruce-birch forest with diverse herbs on watershed, 3.VII.1983; 1 ♀, swampy willow stands with *Alnus* sp., in moss & leaf litter, 2.VIII.1983; 2 ♀♀, same, 3.VII.1983.

RANGE. European boreo-nemoral.

### *Oryphantes geminus* (Tanasevitch, 1982)

1982 *Lepthyphantes geminus*. — Tanasevitch, Zool. zhurn., 61 (10): 1504. (Map: 8).

1986 *Lepthyphantes* sp. — Eskov, Southern tundra of Taimyr: 182. (Map: 8).

2000 *Oryphantes geminus*. — Mazura, Pechora Delta: 137. (Map: 15).

MATERIAL. SHAPKINA RIVER: 5 ♀♀, willow stands with diverse herbs in depression in flat-hill peatbog, in leaf litter, 13–17.VII.1984; NARIAN-MAR: 1 ♀, near Iskatelei Village, moss-undershrub birch forest, 18.VII.1984; VORKUTA: 1 ♂, 4 ♀♀, 80 km NW of Vorkuta, bank of Diya-Ty Lake, willow stands, in leaf litter, 13.VII.1980; 1 ♂, 1 ♀, near Vorgashor Village, lichen-moss dwarf birch tundra, in pitfall traps, 22.VII.1980; 9 ♂♂, 11 ♀♀, same, willow stands in depression, in pitfall traps, 9.VII–22.VII.1980; 1 ♂, 3 ♀♀, same, under trash, 7–10.VI.1981; 3 ♂♂, 8 ♀♀, same, lichen-moss dwarf birch tundra, under trash, 14.VI.1981; 1 ♀, same, sedge fen on lake bank, 4.IX.1983; 3 ♀♀, same, lichen-moss dwarf birch tundra, under trash, 1.IX.1981; 1 ♀, same, lichen-moss dwarf birch tundra, in moss, 23–25.VIII.1983; 1 ♀, same, willow stands near agrocoenosis, in leaf litter, 9.VIII.1984; 2 ♂♂, same, willow stands on hills slope, in leaf litter, 9.VIII.1984; 2 ♂♂, 3 ♀♀, same, willow stands in depression, in leaf litter, 21.VIII.1982; 1 ♂, same, willow stands in depression in lichen-moss dwarf birch tundra, 31.VIII.1982; 1 ♂, 5 ♀♀, same, willow stands with diverse herbs on brook bank, in leaf litter, 4.VII.1982; 1 ♂, 2 ♀♀, near Oktibrskiy Village, willow stands on floodplain bank of Vorkuta River, in leaf litter, 1.IX.1982; 2 ♀♀, near Zarechniy Village, steep bank of Vorkuta River, rocky slopes, *Salix*, *Betula nana*, & *Rosa* with *Vaccinium uliginosum* & *Empetrum*, in leaf litter, 17.VIII.1984; 2 ♀♀, near Tsementnozavodskiy Village, willow stands on floodplains of Vorkuta River, 20.VIII.1984; 1 ♀, same, 28.VI.1982; 2 ♀♀, same, 5.VII.1982; 4 ♂♂, 7 ♀♀, same, 23.VIII.1982; 3 ♂♂, 5 ♀♀, same, steep bank of Iz'yurovzh Brook, rocky slopes, among stones, 27.VI.1982; 1 ♀, near Zarechniy Village, meadow with diverse herbs on floodplain bank of Vorkuta River, under stones, 19.VII.1982; near Severnyy Village, bank of Vorkuta River, *Salix* forest with diverse herbs, in litter; 5.VIII.1985; 2 ♀♀, near Mulda Village, diverse herb-grass hollow in lichen-moss dwarf birch tundra, in sod, 30.VIII.1982; KHALMER-YU: 2 ♂♂, 4 ♀♀, near the village, willow stands in depression, 13–16.VIII.1984; 1 ♀, same, sedge-moss bog in willow stands in depression, 13–16.VIII.1984; 1 ♀, same, dry channel of brook, under stones, 13–16.VIII.1984; 1 ♀, same, willow stands in depression on brook bank, 23.VII.1981; SIVAYA MASKA: 1 ♀, 8 km NW of the village, lichen-moss dwarf birch tundra (200 m N of timberline), willow tundra on watershed, in leaf litter, 20.VIII.1981.

SIVOMASKINSKIY: 4 ♀♀, near the village, birch-spruce forest with diverse herbs, in moss & leaf litter, 6.VII.1982; 1 ♀, near Sivaya Maska Village, hummocky sedge fen, 10.VIII.1982.

RANGE. West Siberian boreal.

### *Panamomops dybowski* (O. Pickard-Cambridge, 1873)

2000 *Panamomops dybowski*. — Mazura, Pechora Delta: 137. (Map: 15).

2001 *Panamomops dybowski*. — Mazura & Eshyunin, Arthropoda Selecta, 10 (1): 76. (Map: 13).

MATERIAL. VOLONGA: 1 ♂, 1 ♀, 2 km from mouth of Volonga River, fern-*Cornus suecica* birch forest on watershed, in moss, 26.VII.1983; INDIGA: 4 ♂♂, 1 ♀, near the village, lichen-moss dwarf birch tundra with *Ledum*, in moss, 19–26.VII.1984; SIVAYA MASKA: 1 ♀, 8 km NW of the village, lichen-moss dwarf birch tundra (200 m N of timberline), in moss, 3.VIII.1982.

N. PESHA: 1 ♀, near the village, spruce-birch forest with diverse herbs, in moss, 3.VII.1983; SIVOMASKINSKIY: 1 ♂, 1 ♀, 6 km NW of the village, sparse moss-undershrub-dwarf birch spruce forest, in moss, 10.VIII.1985; 8 ♂♂, 14 ♀♀, 10 km NE of the village, right bank of Usa River, moss-undershrub larch-birch forest on terrace, in moss, 3.VIII.1982.

RANGE. Siberian boreal.

COMMENTS. The species occurs only in skirts of the southern tundra, but by the Pechora River Valley it penetrates through the southern tundra up to the Barents Sea in the North.

Volonga is the westernmost locality of the species.

### *Panamomops tauricornis* (Simon, 1881)

MATERIAL. VOLONGA: 1 ♀, near the village, lichen-moss dwarf birch tundra on watershed, 27.VII.1983.

N. PESHA: 2 ♂♂, 5 ♀♀, near the village, birch forest with diverse herbs, leaf litter, 6.VII.1983; 2 ♂♂, 4 ♀♀, same, spruce-birch forest with diverse herbs on watershed, 3.VII.1983; 1 ♂, 2 ♀♀, same, birch forest with diverse herbs, leaf litter, 2.VIII.1983.

RANGE. Palaearctic boreo-nemoral.

COMMENTS. The species occurs only in skirts of the southern tundra.

### *Paraglyphesis polaris* Eskov, 1991

MATERIAL. KHALMER-YU: 1 ♀, near Khalmer-Yu, spotty tundra on top of hills (*Arctous*, *Empetrum*, *Vaccinium uliginosum*), 13–16.VIII.1984, det. K. Eskov.

RANGE. Siberian boreal.

COMMENTS. This is the westernmost locality of the species.

### *Pelecopsis mengei* (Simon, 1884)

2000 *Pelecopsis mengei*. — Mazura, Pechora Delta: 137. (Map: 15).

2001 *Pelecopsis mengei*. — Mazura & Eshyunin, Arthropoda Selecta, 10 (1): 76. (Map: 4, 13, 15).

MATERIAL. VOLONGA: 3 ♂♂, 5 ♀♀, near the village, willow stands with diverse herbs in depression on watershed dwarf birch tundra, 24.VII.1983; 2 ♂♂, 2 ♀♀, same, moist birch forest with diverse herbs on bank of the river, 29.VII.1983; 1 ♀, 5 km from mouth of Volonga River, moss-undershrub birch forest on bank slope, in moss, 20.VII.1983; INDIGA: 1 ♂, 1 ♀, near the village, willow stands on floodplains of B. Stchelikh River, in leaf litter, 19–26.VII.1984; TOBSEDA: 2 ♂♂, 4 ♀♀, lichen-moss associations of *Arctous*, *Empetrum* & *Betula nana* on sand, 2–9.VII.1984; 3 ♂♂, 6 ♀♀, grassy meadow on slope of brook, in grass, 2–9.VII.1984; 1 ♂, 2 ♀♀, flat-hill peatbog, high dwarf birch bushes, in moss, 2–9.VII.1984; 6 ♂♂, 15 ♀♀, flat-hill peatbog, thin layer of lichens, 2–9.VII.1984; 3 ♂♂, 9 ♀♀, dry lichen-moss dwarf birch associations on sand, 2–9.VII.1984; VORKUTA: 1 ♀,

near Vorgashor Village, willow stands in depression, in pitfall traps, 22.VII.1980; 1 ♀, same, willow stands in depression, in leaf litter, 22.VII.1980; 1 ♀, near Severnyi Village, bank of Vorkuta River, *Salix* forest with diverse herbs, in leaf litter, 30.VII.1985; 2 ♂♂, 1 ♀, near Zarechnyi Village, steep bank of Vorkuta River, rocky slopes, *Salix*, *Betula nana* & *Rosa* with *Vaccinium uliginosum* & *Empetrum*, in leaf litter, 17.VIII.1984; 2 ♂♂, 1 ♀, near Oktiabrskiy Village, willow stands on flood-lands of Vorkuta River, in leaf litter, 1.IX.1982; SIVAYA MASKA: 1 ♂, 1 ♀, 8 km NW of the village, lichen-moss dwarf birch tundra (200 m N of timberline), willow stands on brook bank, 20.VIII.1981.

N. PESHA: 1 ♂, near the village, spruce-birch forest with diverse herbs on watershed, 3.VII.1983; 1 ♀, same, moist willow stands with diverse herbs with *Alnus* & *Ribes*, in moss & leaf litter, 3.VIII.1983; SIVOMASKINSKIY: 1 ♀, 6 km NW of the village, hummocky sedge fen, 10.VIII.1982.

RANGE. Holarctic polyzonal.

#### *Pelecopsis paralella* (Wider, 1834)

MATERIAL. VORKUTA: 1 ♀, near Vorgashor Village, flat-hill peatbog, wet hollow, in tussocks of sedge, 2.VII.1982; 1 ♀, near Mulda Village, willow stands in deep depression among peat hills, 26.VII.1982.

RANGE. Palaearctic polyzonal.

#### *Perregrinus deformis* (Tanasevitch, 1982)

1982 *Perregrinus* (sic.) *deformis*. — Tanasevitch, Zool. zhurn., 61 (10): 1503. (Map: 8).

2000 *Perregrinus deformis*. — Mazura, Pechora Delta: 137. (Map: 15).

MATERIAL. INDIGA: 1 ♂, 1 ♀, near the village, willow stands on floodplains of B. Stchelikh River, in leaf litter, 19–26.VII.1984; 1 ♂, same, lichen-moss dwarf birch tundra with *Ledum*, in moss, 19–26.VII.1984; 2 ♂♂, same, willow tundra on watershed, in leaf litter, 19–26.VII.1984; VORKUTA: 2 ♂♂, 4 ♀♀, near Vorgashor Village, lichen-moss dwarf birch tundra, in moss, 25.VI.1980; 5 ♀♀, same, flat-hill peatbog, in *Sphagnum*, 18.VII.1982; 5 ♂♂, 6 ♀♀, same, lichen-moss dwarf birch tundra, in moss, 28.VII.1982; 4 ♂♂, 19 ♀♀, same, 23–25.VIII.1983; 1 ♀, near Zarechnyi Village, meadow with diverse herbs on floodplains bank of Vorkuta River, under stones, 19.VII.1982; 3 ♀♀, near Tsementnozavodskiy Village, steep bank of Vorkuta River, rocky slopes, among stones, 5.VII.1982; 1 ♀, near Zarechnyi Village, steep bank of Vorkuta River, rocky slopes, *Salix*, *Betula nana* & *Rosa* with *Vaccinium uliginosum* & *Empetrum*, in leaf litter, 17.VIII.1984; 2 ♀♀, near Mulda Village, lichen-moss dwarf birch tundra, in moss, 6.VII.1982; 1 ♂, same, willow stands on foot of hills, in moss, 20.VIII.1982.

N. PESHA: 1 ♂, near the village, spruce-birch forest with diverse herbs on watershed, 3.VII.1983; SIVOMASKINSKIY: 1 ♀, 10 km NE of the village, right bank of Usa River, pebble bank of the river, under stones, 3.VIII.1982.

RANGE. Siberian-Nearctic boreal.

COMMENTS. Indiga is the westernmost locality of the species.

#### *Pocadicnemis pumila* (Blackwall, 1841)

2000 *Pocadicnemis pumila*. — Mazura, Pechora Delta: 137. (Map: 15).

2001 *Pocadicnemis pumila*. — Mazura & Eyunin, Arthropoda Selecta, 10 (1): 76. (Map: 13).

MATERIAL. VOLONGA: 1 ♀, 2 km from mouth of Volonga River, fern-*Cornus suecica* birch forest on watershed, in moss, 26.VII.1983.

SIVOMASKINSKIY: 1 ♂, 10 km NE of the village, right bank of Usa River, bank slope, moss-undershrub larch-birch forest, 29.VII.1981.

RANGE. Holarctic polyzonal.

COMMENTS. The species occurs only in skirts of the southern tundra, but by the Pechora River Valley it penetrates through the southern tundra up to the Barents Sea in the North.

#### *Poecilometes variegata* (Blackwall, 1841)

1989 *Poecilometes variegata*. — Tanasevitch, Spixiana, 11 (2): 128. (Map: 10).

2000 *Poecilometes variegata*. — Mazura, Pechora Delta: 137. (Map: 15).

MATERIAL. VOLONGA: 1 ♀, 7 km from Volonga River mouth, rocks on steep bank slope, in crevices, among stones, 18.VII.1983; VORKUTA: 5 ♀♀, near Vorgashor Village, flat-hill peatbog, in *Sphagnum*, 18.VII.1982.

SIVOMASKINSKIY: 1 ♀, 6 km NW of the village, sparse moss-undershrub spruce forest, in moss, 6.VII.1982; 1 ♂, 1 ♀, 10 km NE of the village, right bank of Usa River, moss-undershrub larch-birch forest on terrace, leaf litter, 3.VIII.1982.

RANGE. Palaearctic-W-Nearctic polyzonal.

#### *Porrhomma boreale* (Banks, 1899)

MATERIAL. KHALMER-YU: 1 ♂, 3 ♀♀, near the village, channel of brook, under stones, 13–16.VIII.1984.

RANGE. Siberian-Alaskan boreal.

COMMENTS. This is the westernmost locality of the species.

This is a species new to the European fauna.

#### *Porrhomma convexum* (Westring, 1851)

MATERIAL. VORKUTA: 2 ♀♀, 1 ♀, near Tsementnozavodskiy Village, steep bank of Vorkuta River, rocky slopes, among stones, 24.VI.1982; 1 ♀, same, 19.VII.1982; 2 ♂♂, same, confluence of Yur-Shor Brook and Vorkuta River, rocky slopes, under stones, 12.VII.1982.

RANGE. European boreo-nemoral.

#### *Porrhomma egeria* Simon, 1884

MATERIAL. VORKUTA: 1 ♀, near Tsementnozavodskiy Village, steep bank of Vorkuta River, rocky slopes, among stones, 24.VI.1982.

RANGE. European boreo-nemoral.

#### *Porrhomma pallidum* Jackson, 1913

MATERIAL. VOLONGA: 1 ♂, 5 km from mouth of Volonga River, birch forest on the river bank, under stones, 20.VII.1983; 1 ♀, 10 km from mouth of Volonga River, stony slope to the river, birch forest, leaf litter, 19.VII.1983.

RANGE. West Palaearctic boreo-nemoral.

#### *Porrhomma pygmaeum* (Blackwall, 1834)

MATERIAL. VOLONGA: 6 ♂♂, 3 ♀♀, 7–10 km from Volonga River mouth, rocky slopes of the river bank, in crevices, among stones, 18.VII.1983; 1 ♀, same, 19.VII.1983; 1 ♀, 10 km from mouth of Volonga River, moss-undershrub birch forest on river terrace, in moss, 19.VII.1983; NARIAN-MAR: 12 ♀♀, near Iskatelei Village, willow stands on lake bank, leaf litter, 10.VI.1984; VORKUTA: 1 ♂, 2 ♀♀, near Zarechnyi Village, steep bank of Vorkuta River, rocky slopes, 17.VIII.1984; 2 ♀♀, near Tsementnozavodskiy Village, steep bank of Vorkuta River, rocky slopes among stones, 5.VII.1982.

N. PESHA: 1 ♂, 1 ♀, near the village, floodplain willow stands with *Prunus padus* trees on Pesho River bank, tussocks of sedge & *Equisetum*, in soil (leaf litter washed away), 2.VII.1983; 1 ♀, same, spruce-birch forest with diverse herbs on Pesho River terrace, in moss, 3.VII.1983.

RANGE. Palaearctic polyzonal.

*Praestigia groenlandica* Holm, 1967

MATERIAL. VORKUTA: 2 ♂♂, 2 ♀♀, near the village, moss-grassy meadow in depression in lichen-moss dwarf birch tundra, in sod, 30.VI.1981; 1 ♀, same, open lichen-moss associations in dwarf birch tundra, in moss, 20.VIII.1982.

RANGE. Siberian-Nearctic arctic.

COMMENTS. This is the westernmost locality of the species.

*Pseudocyba miracula* Tanasevitch, 1984

1984 *Pseudocyba miracula*. — Tanasevitch, Zool. zhurn., 63 (3): 385. (Map: 8).

2000 *Pseudocyba miracula*. — Mazura, Pechora Delta: 137. (Map: 15).

MATERIAL. VORKUTA: 2 ♂♂, 6 ♀♀, near Oktiabrskiy Village, floodplain willow stands on bank of Vorkuta River, in leaf litter, 1.IX.1982; 1 ♂, near Severnyi Village, dry channel of Ayach-Yaha Brook, under stones, 17.VII.1985.

RANGE. Siberian boreal.

COMMENTS. The Pechora River Delta is the westernmost locality of the species.

*Savignia frontata* Blackwall, 1833

2000 *Savignia frontata*. — Mazura, Pechora Delta: 137. (Map: 15).

2001 *Savignia frontata*. — Mazura & Eshunin, Arthropoda Selecta, 10 (1): 76. (Map: 15).

MATERIAL. BELUSHIE: 20 ♂♂ & ♀♀, near the village, willow stands on grassy seacoast marsh, in leaf litter & moss, 8–12.VII.1983; VOLONGA: 2 ♂♂, 2 ♀♀, near the village, floodplain willow stands, in leaf litter, 27.VII.1983; INDIGA: 2 ♀♀, near the village, willow stands on floodplains of B. Stchelikh River, in leaf litter, 19–26.VII.1984; NARIAN-MAR: 1 ♀, near Iskatelei Village, moss-undershrub birch forest, in moss, 18.VII.1984.

N. PESHA: 1 ♀, near the village, spruce-birch forest with diverse herbs on watershed, 3.VII.1983; 2 ♀♀, near the village, floodplain willow stands with *Prunus padus* trees on Pasha River bank, tussocks of sedge & *Equisetum*, in soil (leaf litter washed away), 2.VII.1983.

RANGE. West Palaearctic polyzonal.

COMMENTS. The species occurs only in skirts of the southern tundra, but by the Pechora River Valley it penetrates through the southern tundra up to the Barents Sea in the North.

*Savignia producta* Holm, 1977

1988a *Savignia producta*. — Eskov, Folia Ent. Hungarica, 49: 32. (Map: 8).

2000 *Savignia producta*. — Mazura, Pechora Delta: 137. (Map: 15).

MATERIAL. INDIGA: 3 ♂♂, 2 ♀♀, near the village, steep limestone slopes of B. Stchelikh River, among stones, in crevices, 19–26.VII.1984; VORKUTA: 1 ♂, 2 ♀♀, near Tsementnozavodskiy Village, steep bank of Vorkuta River, rocky slopes, among stones, 24.VI.1982; 5 ♂♂, same, 30.VII.1982; 3 ♂♂, 5 ♀♀, same, steep bank of Iz'yurvozh Brook, rocky slopes, among stones, 27.VI.1982; 12 ♂♂, 18 ♀♀, same, 22.VII.1982.

RANGE. Fennoscandian-Siberian boreal.

*Scandichrestus tenuis* (Holm, 1943)

MATERIAL. VOLONGA: 4 ♀♀, near the village, undershrub tundra (*Arctous*, *Empetrum*, *Betula nana*) on watershed not far

from seacoast, 28.VII.1983; 3 ♂♂, 7 ♀♀, same, lichen-moss willow-dwarf birch tundra on watershed, in moss, 27.VII.1983; 2 ♂♂, 3 ♀♀, same, floodplain willow stands, in leaf litter, 21.VII.1983.

RANGE. European boreo-nemoral.

COMMENTS. The species occurs only in skirts of the southern tundra.

*Scotinotylus alpigena* (L. Koch, 1869)

MATERIAL. NARIAN-MAR: 1 ♀, near the village, moss-undershrub birch forest, in moss, 10.VII.1984; VORKUTA: 1 ♀, near Vorgashor Village, lichen-moss dwarf birch tundra, under trash, 1.IX.1981; 3 ♀♀, near Tsementnozavodskiy Village, steep bank of Iz'yurvozh Brook, rocky slopes, among stones, 22.VII.1982.

N. PESHA: 1 ♀, near the village, dry lichen-moss-undershrub spruce-pine forest, in moss, 6.VII.1983; 1 ♀, birch forest with diverse herbs, leaf litter, 2.VIII.1983; 3 ♀♀, same, moss-*Vaccinium myrtillus* birch forest, in moss, leaf litter, 2.VIII.1983; 1 ♀, same, moss-*Vaccinium myrtillus*-*Empetrum* birch forest, leaf litter, 2.VIII.1983; SIVOMASKINSKIY: 4 ♀♀, 6 km NW of the village, sparse moss-dwarf birch spruce forest, in moss, 6.VII.1982; 15 ♂♂, 17 ♀♀, 10 km NE of the village, right bank of Usa River, bank slope, moss under trees, 3.VIII.1982; 18 ♂♂, 29 ♀♀, same, right bank of Usa River, moss-undershrub larch-birch forest on terrace, in moss, leaf litter, 3.VIII.1982.

RANGE. Palaearctic boreo-nemoral.

*Scotinotylus evansi* (O. Pickard-Cambridge, 1894)

MATERIAL. VOLONGA: 3 ♀♀, near the village, undershrub tundra (*Arctous*, *Empetrum*, *Betula nana*, *Ledum*) on terrace not far from seacoast, 23.VII.1983; VORKUTA: 1 ♀, near Vorgashor Village, willow stands in depression, in leaf litter, 21.VIII.1982; 1 ♀, near Mulda Village, lichen-moss associations (*Arctous*, *Empetrum*, *Vaccinium uliginosum*) on top of flat hills, 11.IX.1983.

RANGE. European boreo-nemoral.

*Scotinotylus sacer* (Crosby, 1929)

MATERIAL. SIVAYA MASKA: 1 ♀, 10 km NE of the village, right bank of Usa River, moss-undershrub larch-birch forest on terrace, leaf litter, 3.VIII.1982.

RANGE. Siberian-Nearctic boreal.

COMMENTS. This species has not been found in tundra.

*Semljicola angulatus* (Holm, 1963)

MATERIAL. VOLONGA: 2 ♀♀, 7 km from mouth of Volonga River, bank of the river, under stones, 18.VII.1983; 10 km from mouth of Volonga River, rocky slopes, among stones, 19.VII.1983; NARIAN-MAR: 1 ♂, 1 ♀, near the village, sphagnum-sedge bog on lake bank, in tussocks of sedge, 22.VII.1984.

N. PESHA: 1 ♀, near the village, spruce-birch forest with diverse herbs, in moss, 3.VII.1983.

RANGE. Fennoscandian-Siberian boreal.

*Semljicola barbiger* (L. Koch, 1879)

MATERIAL. SHAPKINA RIVER: 1 ♂, 1 ♀, sphagnum bog in flat-hill peatbog, in *Sphagnum*, 15.VII.1984; VORKUTA: 1 ♀, near Vorgashor Village, sphagnum bog in hollow in flat-hill peatbog, in *Sphagnum*, 18.VII.1982.

RANGE. Fennoscandian-Siberian arcto-boreal.

*Semljicola caliginosus* (Falconer, 1910)

MATERIAL. SHAPKINA RIVER: 3 ♀♀, sedge fen among willow stands in depression, 14.VII.1984; VORKUTA: 1 ♂, 4 ♀♀,

near Vorgashor Village, sedge fen near lake bank, 5.IX.1983; 1 ♀, same, sedge fen, 18.VII.1985.

RANGE. European boreal (?).

COMMENTS. This species has hitherto been known only as an endemic of the Great Britain. This is the first record of this species in the continental Europe, new to the Russian fauna.

*Semljicola faustus* (O. Pickard-Cambridge, 1900)

2000 *Semljicola faustus*. — Mazura, Pechora Delta: 137. (Map: 15).

2001 *Semljicola faustus*. — Mazura & Eshunin, Arthropoda Selecta, 10 (1): 76. (Map: 15).

RANGE. European boreal.

COMMENTS. The species reaches tundra zone by river valleys.

This species is not presented in our material.

*Semljicola lapponicus* (Holm, 1939)

2000 *Semljicola lapponicus*. — Mazura, Pechora Delta: 137. (Map: 15).

2001 *Semljicola lapponica*. — Mazura & Eshunin, Arthropoda Selecta, 10 (1): 76. (Map: 4).

MATERIAL. VORKUTA: 1 ♀, near Vorgashor Village, sedge fen near lake bank, 5.IX.1983.

RANGE. Fennoscandian-Siberian-W-Nearctic boreal.

*Semljicola latus* (Holm, 1939)

MATERIAL. VOLONGA: 3 ♂♂, 6 ♂♂, 10 km from mouth of Volonga River, birch forest on stony slope to the river, in moss, 19.VII.1983.

RANGE. Palaearctic boreal.

COMMENTS. The species reaches tundra zone by river valleys.

*Semljicola thaleri* (Eskov, 1981)

1981 *Latithorax thaleri*. — Eskov, Zool. zhurn., 60 (4): 499. (Map: 8).

2000 *Semljicola thaleri*. — Mazura, Pechora Delta: 137. (Map: 15).

MATERIAL. INDIGA: 1 ♀, near the village, lichen-moss dwarf birch tundra with *Ledum*, in moss, 19–26.VII.1984; 1 ♀, same, willow tundra, in leaf litter, 19–26.VII.1984; 3 ♀♀, same, lichen-moss dwarf birch tundra, in moss, 24.VII.1984; 2 ♀♀, same, meadow with diverse herbs on bank of B. Stchelikh River, 24.VII.1984; SHAPKINA RIVER: 1 ♀, willow stands in depression in flat-hill peatbog, in leaf litter & moss under shrubs, 13.VII.1984; NARIAN-MAR: 1 ♀, near Iskatelei Village, sedge fen on lake bank, in tussocks of sedge, 10.VII.1984; VORKUTA: 1 ♂, 1 ♀, near Vorgashor Village, lichen-moss dwarf birch tundra, in moss, 20–25.VI.1981; 1 ♀, same, 8.VII.1980; 2 ♀♀, same, 23–25.VIII.1983; 4 ♀♀, same, 3–9.IX.1983; 1 ♀, same, lichen-moss dwarf birch tundra, under trash, 15.VI.1981; 1 ♀, same, 25–27.VII.1981; 1 ♀, same, willow stands on slope of hill, in leaf litter, 9.VIII.1984; 1 ♀, same, willow stands in depression, in leaf litter, 21.VIII.1982; 2 ♀♀, same, willow stands in depression, in leaf litter, 23–29.VI.1981; 1 ♀, same, willow stands in depression in lichen-moss dwarf birch tundra, 31.VIII.1982; 1 ♀, same, lichen-moss willow-dwarf birch tundra, in moss, 29.VI.1982; 2 ♀♀, same, flat-hill peatbog, willow stands in depression, in moss, 18.VII.1982; 1 ♀, near Mulda Village, lichen-moss dwarf birch tundra, in moss, 6.VII.1982; 1 ♂, 1 ♀, same, willow stands on foot of hills, in moss, 31.VII.1982.

SIVOMASKINSKIY: 1 ♀, 6 km NW of the village, birch-spruce forest with diverse herbs, in moss & leaf litter, 30.VII.1981; 1 ♀, same, 10.VII.1981.

RANGE. Siberian boreal.

*Silometopus ambiguus* (O. Pickard-Cambridge, 1905)

MATERIAL. VORKUTA: 2 ♂♂, near Severnyi Village, dry channel of Ayach-Yaha Brook, under stones, 28.VI.1982; 1 ♂, near Zarechnyi Village, bank of Vorkuta River, under stones on rocky slopes, 17.VIII.1984; 1 ♀, same locality & biotope, 17.VII.1985.

RANGE. European boreo-nemoral.

COMMENTS. The species reaches tundra zone by river valleys.

This is a species new to the European fauna.

*Stemonyphantes lineatus* (Linnaeus, 1758)

MATERIAL. VOLONGA: 1 ♂, 2 km from mouth of Volonga River, fern-*Cornus suecica* birch forest on river terrace, in butt of *Betula* sp., 26.VII.1983.

SIVOMASKINSKIY: 1 ♂, 10 km NE of the village, right bank of Usa River, bank slope, moss-undershrub larch-birch forest, 29.VII.1981.

RANGE. European-Ancient Mediterranean polyzonal.

COMMENTS. The species reaches tundra zone by river valleys.

*Styloctetor stativus* (Simon, 1881)

MATERIAL. N. PESHA: 1 ♀, near the village, dry moss-*Vaccinium vitis-idaea* spruce-birch forest, in moss & leaf litter, 3.VIII.1983.

RANGE. Holarctic polyzonal.

COMMENTS. This species has not been found in tundra.

*Tarsiphantes latithorax* (Strand, 1905)

1983 *Pannicularia sinuosa*. — Tanasevitch, Zool. zhurn., 62 (2): 216. (Map: 8).

2000 *Typhochrestus latithorax*. — Mazura, Pechora Delta: 137. (Map: 15).

MATERIAL. VORKUTA: 4 ♂♂, 3 ♀♀, near Mulda Village, diverse herb-grass meadow in depression in lichen-moss dwarf birch tundra, 24.VIII.1984; 1 ♀, same, 6.VII.1982; 2 ♀♀, same, 20.VIII.1982; KHALMER-YU: 1 ♂, 1 ♀, near the village, willow stands in depression, outcrop of rocks, in crevices, under stones, 13–16.VIII.1984.

RANGE. Siberian-Nearctic arctic.

COMMENTS. The Pechora River Delta is the westernmost locality of the species.

*Tenuiphantes alacris* (Blackwall, 1853)

MATERIAL. VOLONGA: 1 ♂, 4 ♀♀, near the village, moist moss-juniper birch forest on river bank, in moss, leaf litter, 29.VII.1983; 1 ♀, 2 km from mouth of Volonga River, fern-*Cornus suecica* birch forest on watershed, in moss, 26.VII.1983; 3 ♂♂, 3 ♀♀, 5 km from mouth of Volonga River, moss-undershrub birch forest on river terrace, in moss, 20.VII.1983; 1 ♀, 7 km from mouth of Volonga River, dry channel, among stones, 18.VII.1983; 3 ♀♀, same, rocky slopes of river bank, in crevices, among stones, 18.VII.1983; 8 ♂♂, 5 ♀♀, 10 km from Volonga River mouth, rocky slopes of river bank, among grass and stones, 19.VII.1983; NARIAN-MAR: 1 ♀, near the village, sparse birch forest, VII.1984.

SIVOMASKINSKIY: 1 ♂, 1 ♀, 6 km NW of the village, birch-spruce forest with diverse herbs, in moss & leaf litter, 6.VII.1982.

RANGE. Palaearctic polyzonal.

COMMENTS. The species reaches tundra zone by river valleys.

*Tenuiphantes nigriventris* (L. Koch, 1879)

2000 *Tenuiphantes nigriventris*. — Mazura, Pechora Delta: 137. (Map: 15).

2001 *Tenuiphantes nigriventris*. — Mazura & Esyunin, Arthropoda Selecta, 10 (1): 76. (Map: 13 & 15).

MATERIAL. VOLONGA: 1 ♂, 1 ♀, near the village, moist birch forest with diverse herbs on river bank, in moss, 29.VII.1983; INDIGA: 3 ♀♀, near the village, willow stands on floodplains of B. Stchelikh River, in leaf litter, 19–26.VII.1984; 6 ♂♂, 2 ♀♀, same, willow tundra on steep slope of hills, 19–26.VII.1984; 4 ♂♂, 3 ♀♀, same, willow tundra, in leaf litter, 19–26.VII.1984; NARIAN-MAR: 2 ♂♂, 2 ♀♀, near Iskatelei Village, moss-under-shrub birch forest, in moss, 10.VII.1984; SHAPKINA RIVER: 3 ♂♂, 4 ♀♀, willow stands in depression in flat-hill peatbog, 13–17.VII.1984; 3 ♀♀, sedge fen in flat-hill peatbog, 13–17.VII.1984; 1 ♀, dwarf birch tundra, in moss, 13–17.VII.1984; VORKUTA: 135 ♂♂, 63 ♀♀, near Vorgashor Village, willow stands in depression, in pitfall traps, 9.VII.–5.VIII.1980; 4 ♂♂, 2 ♀♀, same, in leaf litter, 9.VIII.1980; 1 ♂, agrocenosis, in pitfall traps, 3.VIII.1980; 1 ♂ (subad.), same, lichen-moss dwarf birch tundra, leaf litter under *Betula nana*, 14.VI.1981; 1 ♀, near Oktiabrskiy Village, willow stands on flood-lands of Vorkuta River, in leaf litter, 1.IX.1982; 1 ♀, near Tsementnozavodskiy Village, steep bank of Iz'yurvozh Brook, rocky slopes, among stones, 22.VII.1982; 1 ♀, same, willow stands on floodplains of Vorkuta River, 20.VIII.1984; 1 ♂, same, 28.VI.1982; 14 ♂♂, 18 ♀♀, same, 5–7.VII.1982; 24 ♂♂, 25 ♀♀, near Zarechniy Village, meadow with diverse herbs on floodplains bank of Vorkuta River, diverse herbs (sweeping), 19.VII.1982; 5 ♀♀, near Severnyi Village, bank of Vorkuta River, *Salix* forest with diverse herbs, in litter, 5.VIII.1985; KHALMER-YU: 4 ♂♂, 2 ♀♀, near the village, sedge-moss bog among willow stands in depression, 13–16.VIII.1984; SIVAYA MASKA: 1 ♀, 8 km NW of the village, lichen-moss dwarf birch tundra (200 m N of timberline), willow tundra on watershed, 20.VIII.1981.

N. PESHA: 1 ♂, near the village, moist willow stands with diverse herbs with *Alnus* & *Ribes*, in moss & leaf, 3.VIII.1983; 1 ♀, same, spruce-birch forest with diverse herbs, in moss, 3.VII.1983; SIVOMASKINSKIY: 1 ♂, 5 ♀♀, 6 km NW of the village, birch-spruce forest with diverse herbs, in moss & leaf litter, 30.VII.1981; 2 ♂♂, same, 10–13.VII.1981; 8 ♂♂, 11 ♀♀, same, 20.VIII.1981; 2 ♂♂, 4 ♀♀, same, 6.VII.1982; 3 ♂♂, 2 ♀♀, same, hummocky sedge fen, 10.VIII.1982; 1 ♂, 2 ♀♀, 10 km NE of the village, right bank of Usa River, sparse moss-under-shrub spruce-birch forest, in moss, 29.VII.1981; 12 ♀♀, same, 20.VIII.1981.

RANGE. Holarctic boreo-nemoral.

*Tenuiphantes tenebricola* (Wider, 1834)

2000 *Tenuiphantes tenebricola*. — Mazura, Pechora Delta: 137. (Map: 15).

2001 *Tenuiphantes tenebricola*. — Mazura & Esyunin, Arthropoda Selecta, 10 (1): 76. (Map: 13).

MATERIAL. VOLONGA: 1 ♀, near the village, moist birch forest with diverse herbs on bank of the river, in moss, 29.VII.1983; 8 ♂♂, 5 ♀♀, 2 km from mouth of Volonga River, fern-*Cornus suecica* birch forest on watershed, in moss, 26.VII.1983; 1 ♂, 2 ♀♀, 5 km from Volonga River mouth, birch forest, bank of brook, in moss 20.VII.1983; 1 ♂, 7 km from Volonga River mouth, rocky steep bank, in crevices, among stones, 18.VII.1983; 2 ♀♀, 10 km from mouth of Volonga River, moss-under-shrub birch forest on river terrace, in moss, 19.VII.1983; 2 ♀♀, same, stony slope of river, among herbs and stones, 19.VII.1983; 1 ♀, same, stony slope to the river, birch forest, leaf litter, 19.VII.1983.

N. PESHA: 1 ♀, near the village, spruce-birch forest with diverse herbs on watershed, 3.VII.1983.

RANGE. Palaearctic boreo-nemoral.

COMMENTS. The species occurs only in skirts of the southern tundra, but by the Pechora River Valley it penetrates through the southern tundra up to the Barents Sea in the North.

*Thaleria orientalis* Tanasevitch, 1984

1984 *Thaleria orientalis*. — Tanasevitch, Zool. zhurn., 63 (3): 382. (Map: 8).

2000 *Thaleria orientalis*. — Mazura, Pechora Delta: 137. (Map: 15).

MATERIAL. VORKUTA: 2 ♂♂, 4 ♀♀, near Tsementnozavodskiy Village, bank of Vorkuta River, willow stands, in leaf litter, 26.VIII.

RANGE. Siberian boreal.

COMMENTS. The Pechora River Delta is the westernmost locality of the species.

*Tibioplus diversus* (L. Koch, 1879)

MATERIAL. VOLONGA: 1 ♀, 10 km from mouth of Volonga River, stony river slope, birch forest, in moss, 19.VII.1983; NARIAN-MAR: 1 ♀, near Iskatelei Village, moss-under-shrub birch forest, in moss, 10.VII.1984; VORKUTA: 1 ♀, near Tsementnozavodskiy Village, steep bank of Iz'yurvozh Brook, rocky slopes, among stones, 27.VI.1982.

N. PESHA: 1 ♀, near the village, spruce-birch forest with diverse herbs on watershed, 3.VII.1983; SIVOMASKINSKIY: 1 ♂, 3 ♀♀, 6 km NW of the village, birch-spruce forest with diverse herbs, in moss & leaf litter, 9–10.VII.1981; 1 ♀, 10 km NE of the village, right bank of Usa River, moss-under-shrub larch-birch forest on terrace, leaf litter, 3.VIII.1982.

RANGE. Fennoscandic-Siberian-W-Nearctic boreo-nemoral.

*Tiso aestivus* (L. Koch, 1872)

MATERIAL. BELUSHIE: 2 ♂♂, near the village, lichen-moss dwarf birch tundra, in moss, 10.VII.1983; 1 ♀, lichen-*Empetrum-Arctous* tundra on steep bank of sea, 13.VII.1983.

RANGE. Holarctic polyzonal.

COMMENTS. The species occurs only in skirts of the southern tundra.

*Tmeticus affinis* (Blackwall, 1855)

2000 *Tmeticus affinis*. — Mazura, Pechora Delta: 137. (Map: 15).

2001 *Tmeticus affinis*. — Mazura & Esyunin, Arthropoda Selecta, 10 (1): 76. (Map: 15)

MATERIAL. VOLONGA: 2 ♀♀, near the village, floodplain willow stands in Volonga River bank, in leaf litter, 27.VII.1983; NARIAN-MAR: 3 ♂♂, 8 ♀♀, near the village, willow stands with sedge on lake bank, 10.VII.1984; 1 ♂, 3 ♀♀, same, sphagnum bog on lake bank, in *Sphagnum*, 27.VI.1984; SHAPKINA RIVER: 2 ♂♂, 3 ♀♀, sedge fen in flat-hill peatbog, 13–17.VII.1984; VORKUTA: 8 ♀♀, near Vorgashor Village, sedge fen on lake bank, 4.IX.1984; 1 ♀, same, 5.IX.1983; KHALMER-YU: 2 ♀♀, near the village, moss-sedge fen in depression, 13–16.VIII.1984.

N. PESHA: 1 ♀, near the village, moist willow stands with diverse herbs with *Alnus* & *Ribes*, in moss and leaf litter, 3.VIII.1983; 1 ♂, same, under trash on garbage piles in the village, 6.VII.1983.

RANGE. Palaearctic boreo-nemoral.

*Tubercithorax subarcticus* (Tanasevitch, 1984)

1984 *Rhaebothorax subarcticus*. — Tanasevitch, Zool. zhurn., 63 (3): 386. (Map: 8).

1988 *Tubercithorax subarcticus*. — Eskov, Zool. zhurn., 67 (12): 1830. (Map: 8).

2000 *Tubercithorax subarcticus*. — Mazura, Pechora Delta: 137. (Map: 15).

MATERIAL. VOLONGA: 1 ♀, near the village, undershrub tundra (*Arctous*, *Empetrum*, *Betula nana*, *Ledum*) on river terrace near seacoast, 23.VII.1983; INDIGA: 3 ♂♂, 8 ♀♀, near the village, undershrub tundra (*Arctous*, *Empetrum*, *Betula nana*) on top of flat hills, 19–26.VII.1984; TOBSEDA: 2 ♂♂, 15 ♀♀, same, dry lichen-moss dwarf birch associations on sand, thin layer of lichens, 2–9.VII.1984; 2 ♀♀, same, flat-hill peatbog, dwarf birch shrubs, in moss, 2–9.VII.1984; VORKUTA: 2 ♂♂, 10 ♀♀, near Zarechnyi Village, steep bank of Vorkuta River, rocky slopes, *Salix*, *Betula nana* & *Rosa* with *Vaccinium uliginosum* & *Empetrum*, in leaf litter, 26.VIII.1982; 8 ♂♂, 14 ♀♀, near Mulda Village, lichen-moss associations (*Arctous*, *Empetrum*, *Vaccinium uliginosum*) on top of hills, 24.VIII.1984; 4 ♂♂, 14 ♀♀, same, 11.IX.1983.

SIVOMASKINSKIY: 1 ♂, 3 ♀♀, 6 km NW of the village, sparse moss-undershrub dwarf birch spruce forest, in moss, 10.VIII.1985.

RANGE. Siberian boreal.

#### *Wabasso replicatus* (Holm, 1950)

MATERIAL. SHAPKINA RIVER: 5 ♀♀, sphagnum bog on lake bank, in *Sphagnum*, 15.VII.1984.

#### *Walckenaeria alticeps* (Denis, 1952)

MATERIAL. N. PESHA: 1 ♀, near the village, dry moss-*Vaccinium vitis-idaea* spruce-birch forest, in moss & leaf litter, 3.VIII.1983; SIVOMASKINSKIY: 1 ♂, 1 ♀, near the village, spruce-birch forest, in moss & leaf litter, 5.VIII.1982; 1 ♀, 10 km NE of the village, right bank of Usa River, moss-undershrub larch-birch forest on terrace, in moss, 3.VIII.1982.

RANGE. West Palaearctic boreo-nemoral.

COMMENTS. This species has not been found in tundra.

#### *Walckenaeria atrotibialis* (O. Pickard-Cambridge, 1878)

MATERIAL. SIVOMASKINSKIY: 1 ♀, 10 km NE of the village, right bank of Usa River, sparse spruce-birch forest, in moss, 5–13.VII.1981.

RANGE. West Palaearctic-Nearctic boreo-nemoral.

COMMENTS. This species has not been found in tundra.

#### *Walckenaeria capito* (Westring, 1861)

MATERIAL. INDIGA: 1 ♀, near the village, steep limestone slopes of B. Stchelikh River, among stones, in crevices, 19–26.VII.1984; 2 ♀♀, willow stands on floodplains of B. Stchelikh River, in leaf litter, 19–26.VII.1984; VORKUTA: 1 ♀, near Zarechnyi Village, steep bank of Vorkuta River, rocky slopes, *Salix*, *Betula nana*, & *Rosa* with *Vaccinium uliginosum* & *Empetrum*, in leaf litter, 26.VIII.1982; 1 ♀, near Tsementnozavodskiy Village, steep bank of Vorkuta River, rocky slopes, among stones, 24.VI.1982; 1 ♂, same, 30.VII.1982; 6 ♂♂, 5 ♀♀, same, 27.VIII.1982; 3 ♀♀, same, 24.VIII.1982.

RANGE. Holarctic polyzonal.

#### *Walckenaeria cuspidata* Blackwall, 1833

MATERIAL. VOLONGA: 2 ♀♀, 10 km from Volonga River mouth, steep bank of the river, rocky slopes, in crevices, among stones, 19.VII.1983; INDIGA: 1 ♀, near the village, willow stands on hill slopes, 19–26.VII.1984; 1 ♂, same, lichen-moss-undershrub dwarf birch tundra, in moss, 24.VII.1984; TOBSEDA: 1 ♀, flat-hill peatbog, *Cladonia* associations, 2–9.VII.1984; VORKUTA: 2 ♀♀, 80 km NW of Vorkuta, willow stands on bank of Diya-Ty Lake, in leaf litter, 13–15.VII.1980.

N. PESHA: 1 ♀, near the village, under trash on garbage piles, 6.VII.1983; SIVOMASKINSKIY: 2 ♀♀, near Sivaya Maska Village, hummocky sedge fen, 10.VIII.1982.

RANGE. Palaearctic polyzonal.

#### *Walckenaeria karpinskii* (O. Pickard-Cambridge, 1873)

MATERIAL. VOLONGA: 3 ♂♂, 1 ♀, near the village, moist moss-juniper birch forest on bank of Volonga River, in moss, 29.VII.1983; 2 ♀♀, same, moist birch forest with diverse herbs near the river, in moss, 29.VII.1983; 2 ♀♀, moss-undershrub birch forest on river terrace, in moss, 19.VII.1983; 5 ♂♂, 4 ♀♀, 2 km from mouth of Volonga River, fern-*Cornus suecica* birch forest on watershed, in moss, 26.VII.1983; 3 ♀♀, 5 km from Volonga River mouth, birch forest, bank of brook, in moss, 20.VII.1983; 1 ♀, 10 km from mouth of Volonga River, stony slope to the river, birch forest, in moss, 19.VII.1983; VORKUTA: 1 ♀, near Vorgashor Village, lichen-moss-dwarf birch tundra, in moss, 1.XI.1981; 2 ♀♀, same, lichen-moss dwarf birch tundra, in moss, 28.VII.1982; 2 ♀♀, same, 23–25.VIII.1983; 1 ♀, same, 3–9.IX.1983; 5 ♂♂, 5 ♀♀, same, lichen-moss dwarf birch tundra, in moss, VII.1984; 3 ♀♀, near Mulda Village, lichen-moss dwarf birch tundra, in moss, 6.VII.1982; 2 ♀♀, same, willow stands on foot of steep hills, in moss, 20.VIII.1982.

N. PESHA: 1 ♀, near the village, birch-spruce forest with pine, in moss, 6.VII.1983; SIVOMASKINSKIY: 1 ♀, 10 km NE of the village, right bank of Usa River, bank slope, in moss, 3.VIII.1982; 2 ♀♀, same, right bank of Usa River, moss-undershrub larch-birch forest on watershed terrace, in moss, 3.VIII.1982.

RANGE. Fennoscandian-Siberian-W-Nearctic boreal.

#### *Walckenaeria kochi* (O. Pickard-Cambridge, 1872)

MATERIAL. VOLONGA: 1 ♀, near Volonga, watershed terrace, diverse herb-grass willow stands in depression, 24.VII.1983; INDIGA: 1 ♀, near the village, willow stands on floodplains of B. Stchelikh River, in leaf litter, 19–26.VII.1984; NARIAN-MAR: 1 ♀, near Iskatelei village, willow stands with sedge on lake bank, 10.VII.1984; VORKUTA: 2 ♂♂, 4 ♀♀, 80 km NW of Vorkuta, Diya-Ty Lake, willow stands on lake bank, in leaf litter, 13–15.VII.1980; 1 ♀, near Tsementnozavodskiy Village, willow stands on floodplains of Vorkuta River, 18–30.VI.1981; 1 ♂, near Vorgashor Village, sedge fen on lake bank, 5.IX.1984; 1 ♀, same, dwarf birch tundra, in moss, 18.VII.1985; 1 ♂, near Mulda Village, lichen-moss associations (*Arctous*, *Empetrum*, *Vaccinium uliginosum*) on top of flat hills in lichen-moss dwarf birch tundra, 21–30.VI.1981.

N. PESHA: 1 ♀, near the village, floodplain willow stands with *Prunus padus* trees on Pasha River bank, tussocks of sedge & *Equisetum*, in soil (leaf litter washed away), 2.VII.1983.

RANGE. Palaearctic boreo-nemoral (see Tanasevitch [2007]).

#### *Walckenaeria korobeinikovi* Esyunin et Efimik, 1996

2000 *Walckenaeria korobeinikovi*. — Mazura, Pechora Delta: 137. (Map: 15).

2001 *Walckenaeria korobeinikovi*. — Mazura & Esyunin, Arthropoda Selecta, 10 (1): 76. (4).

MATERIAL. INDIGA: 1 ♀, near the village, lichen associations with *Empetrum* in dwarf birch tundra on watershed, 24.VII.1984; 1 ♀, same, lichen-moss dwarf birch tundra with *Ledum*, *Empetrum*, 21.VII.1984; TOBSEDA: 4 ♀♀, dry lichen-moss dwarf birch associations on sand, thin layer of lichens, 3–8.VII.1984; VORKUTA: 1 ♀, near Vorgashor Village, lichen-moss dwarf birch tundra, in moss, VII.1984; 4 ♂♂, 18 ♀♀, same, moss dwarf birch tundra, 1983; 1 ♂, 1 ♀, near Mulda Village, lichen-moss associations (*Arctous*, *Empetrum*, *Vaccinium uliginosum*) on top of flat hills, 11.IX.1983; 1 ♀, same, 29.VII.1986; KHALMER-YU: 1 ♂,

11 ♀♀, near the village, spotty tundra on top of hills in lichen-moss dwarf birch tundra, in moss, 13–16.VIII.1984.

SIVOMASKINSKIY: 1 ♀, 10 km NE of the village, right bank of Usa River, sparse moss-undershrub-dwarf birch larch forest on watershed, in leaf litter, 3.VIII.1982.

RANGE. Siberian boreal.

*Walckenaeria nodosa* O. Pickard-Cambridge, 1873

1986 *Wideria nodosa*. — Eskov, Southern tundra of Taimyr: 181. (Map: 8).

2000 *Walckenaeria nodosa*. — Mazura, Pechora Delta: 137. (Map: 15).

MATERIAL. SHAPKINA RIVER: 1 ♀, willow stands in depression flat-hill peatbog, in leaf litter, 13.VII.1984; VORKUTA: 3 ♀♀, near Vorgashor Village, willow stands in depression, in leaf litter, 22.VII.1980; 6 ♀♀, same, in pitfall traps, 9.VII–5.VIII.1980; 1 ♀, same, willow-dwarf birch tundra, under trash, 28.VII.1985; 1 ♂, 7 ♀♀, near Tsementnozavodskiy Village, willow stands on floodplains of Vorkuta River, in leaf litter, 19–22.VII.1982; 5 ♂♂, 4 ♀♀, same, 23.VIII.1982; 1 ♂, same, 1.IX.1982; 1 ♀, same, 7.VII.1982; 4 ♀♀, near Severnyi Village, bank of Vorkuta River, *Salix* forest with diverse herbs, in leaf litter, 05.VIII.1985.

N. PESHA: 1 ♀, near the village, spruce-birch forest with diverse herbs, in moss, 3.VII.1983; SIVOMASKINSKIY: 1 ♀, 10 km NE of the village, right bank of Usa River, sparse spruce-birch forest, 5–13.VII.1981.

RANGE. Palaearctic polyzonal.

*Walckenaeria nudipalpis* (Westring, 1851)

MATERIAL. N. PESHA: 2 ♀♀, near the village, moss-undershrub birch forest with spruce, in moss, 2.VII.1983; SIVOMASKINSKIY: 1 ♀, 10 km NE of the village, right bank of Usa River, moss-undershrub larch-birch forest on river terrace, in moss, 5–13.VII.1981.

RANGE. Palaearctic polyzonal.

COMMENTS. This species has not been found in tundra.

*Walckenaeria unicornis* O. Pickard-Cambridge, 1861

2000 *Walckenaeria unicornis*. — Mazura, Pechora Delta: 137. (Map: 15).

2001 *Walckenaeria unicornis*. — Mazura & Esyunin, Arthropoda Selecta, 10 (1): 76. (Map: 15).

RANGE. Palaearctic boreo-nemoral.

COMMENTS. The species reaches tundra zone by river valleys.

This species is not presented in our material.

*Wubanooides uralensis* (Pakhorukov, 1981)

1986 *Wubanooides longicornis*. — Eskov, Senckenberg. biol., 67 (1/3): 177 (Map: 2).

2000 *Wubanooides uralensis*. — Mazura, Pechora Delta: 137. (Map: 15).

MATERIAL. VOLONGA: 1 ♂, 4 ♀♀, 7–10 km from Volonga River mouth, rocks on steep bank slope, in crevices, among stones, 18–19.VII.1983; INDIGA: 7 ♂♂, 8 ♀♀, near the village, steep limestone slopes of B. Stchelikh River, among stones, in crevices, 19–26.VII.1984; VORKUTA: 4 ♂♂, 2 ♀♀, near Tsementnozavodskiy Village, steep bank of Vorkuta River, rocks, among stones, 24–27.VI.1982; 2 ♂♂, same, 27.VIII.1982; 1 ♂, 1 ♀, near Zarechnyi Village, steep bank of Vorkuta River, rocky slopes, *Salix*, *Betula nana* & *Rosa* with *Vaccinium uliginosum* & *Empetrum*, in leaf litter, 26.VIII.1982.

N. PESHA: 1 ♂, near the village, moss-undershrub birch forest with spruce, under bark of fallen *Picea*, 2.VII.1983; 1 ♀, same, birch-spruce forest with pine, in moss, 6.VII.1983.

RANGE. Siberian boreo-nemoral with an enclave in Central Europe.

*Zornella cultrigera* (L. Koch, 1879)

1986 *Zornella cultrigera*. — Eskov, Southern tundra of Taimyr: 181. (Map: 8).

2000 *Zornella cultrigera*. — Mazura, Pechora Delta: 137. (Map: 15).

MATERIAL. VOLONGA: 1 ♂, 10 km from mouth of Volonga River, stony slope to the river, birch forest, in leaf litter, 19.VII.1983; SHAPKINA RIVER: 1 ♀, willow stands in depression in flat-hill peatbog, in leaf litter & moss under shrubs, 13.VII.1984; VORKUTA: 1 ♀, near Vorgashor Village, flat-hill peatbog, in leaf litter & moss under shrubs, 24.VII.1980; 1 ♂, 6 ♀♀, same, willow stands in depression, in pitfall traps, 9.VII–22.VII.1980; 1 ♂, same, in leaf litter, 23–29.VI.1981; 1 ♂, same, lichen-moss dwarf birch tundra, in moss, 29.VI.1981; 2 ♂♂, same, 19.VII.1981; 1 ♂, same, 24.VIII.1981; SIVAYA MASKA: 1 ♀, 8 km NW of the village, lichen-moss dwarf birch tundra (200 m N of timberline), in moss, 30.VII.1981; 3 ♂♂, 12 ♀♀, same, willow tundra on watershed, 20.VIII.1981; 1 ♂, same, 30.VII.1981.

SIVOMASKINSKIY: 2 ♂♂, 6 km NW of the village, birch-spruce forest with diverse herbs, in moss & leaf litter, 30.VII.1981; 6 ♂♂, 4 ♀♀, same, 20.VIII.1981; 2 ♀♀, same, 6.VII.1982.

RANGE. Palaearctic boreal.

Fam. TETRAGNATHIDAE

*Pachygnatha clercki* Sundevall, 1823

2000 *Pachygnatha clercki*. — Mazura, Pechora Delta: 137. (Map: 15).

2001 *Pachygnatha clercki*. — Mazura & Esyunin, Arthropoda Selecta, 10 (1): 76. (Map: 4).

MATERIAL. SIVOMASKINSKIY: 12 ♀♀, 10 km NE of the village, right bank of Usa River, bank of the river, under stones, 5.VII.1981.

RANGE. Holarctic polyzonal.

*Tetragnatha extensa* (Linnaeus, 1758)

MATERIAL. INDIGA: 1 ♀, near the village, lichen-moss dwarf birch tundra, in moss, 19–26.VII.1984; SHAPKINA RIVER: 1 ♀, willow stands in depression, from dry herbs, 15.VII.1984; VORKUTA: 1 ♀, near Zarechnyi Village, meadow with diverse herbs on floodplain bank of Vorkuta River, (sweeping), 19.VII.1982.

SIVOMASKINSKIY: 1 ♀, 3–4 km NW of the village, sedge fen in spruce-birch sparse forest, 20.VIII.1981; 1 ♀, 10 km NE of the village, right bank of Usa River, meadow with diverse herbs on bank of the river, 29.VII.1981.

RANGE. Holarctic polyzonal.

*Tetragnatha pinicola* (L. Koch, 1870)

MATERIAL. BELUSHIE: 1 ♀, near the village, road on peatbog hills, in cotton grass above water, 14.VII.1983 (det. Yu. Marusik, 1989).

RANGE. Palaearctic polyzonal.

COMMENTS. The species occurs only in skirts of the southern tundra.

Fam. ARANEIDAE

*Araneus marmoreus* Clerck, 1758

MATERIAL. SIVOMASKINSKIY: 2 ♀♀, near the village, on *Betula* sp., summer, 1980.

RANGE. Holarctic polyzonal.

COMMENTS. This species has not been found in tundra.

*Araneus quadratus* Clerck, 1758

MATERIAL. SIVOMASKINSKIY: 1 ♀, near the village, sedge fen, on high dwarf birch shrubs, 5.VIII.1982.

RANGE. Palaearctic polyzonal.

COMMENTS. This species has not been found in tundra.

*Larinioides cornutus* Clerck, 1758

2000 *Larinioides cornutus*. — Mazura, Pechora Delta: 137. (Map: 15).

MATERIAL. BELUSHIE: 1 ♂, near the village, lichen-*Empetrum* undershrub tundra on terrace near riverside, 8.VII.1983; 2 ♀♀, lichen-moss dwarf birch tundra, in shrubs, 9.VII.1983; 1 ♀, in a wooden building, 11.VII.1983; 1 ♀, sedge-sphagnum bog, in shrubs, 13.VII.1983; VOLONGA: 1 ♀, near the village, flat-hill peatbog, tussocks of *Rubus chamaemorus*, 29.VII.1983; TOBSEDA: 2 ♂♂, 14 ♀♀, in willow stands, 2–9.VII.1984; NARIANMAR: 1 ♀, in *Betula* sp. in aerodrome, 27.VI.1984; 2 ♂♂, 2 ♀♀, near Iskatelei Village, birch forest, in trees and shrubs, 28.VI.1984; 1 ♀, same, dwarf birch tundra, 27.VI.1984; 1 ♀, same, in panicle of gramineous plant, 28.VI.1984; 1 ♀, same, willow stands in depression, 13.VII.1984; SHAPKINA RIVER: 1 ♀, same, in tussocks of sedge in fen, 15.VII.1984; 1 ♀, same, meadow with diverse herbs on brook bank, 14.VII.1984; VORKUTA: ♀♀, near Mulda Village, willow-dwarf birch tundra, in willow stands, 21.VI.1981.

N. PESHA: 1 ♀, near the village, moss-*Vaccinium myrtillus* birch forest with *Picea*, in undergrown of *Picea*, 2.VIII.1983; SIVOMASKINSKIY: 2 ♀♀, near the village, northern taiga forest, in shrubs, 7.VII.1980.

RANGE. Holarctic polyzonal.

*Larinioides patagiatus* (Clerck, 1758)

MATERIAL. N. PESHA: 1 ♀, near the village, Pasha River bank, floodplain willow stands with sedge & *Equisetum*, 2.VII.1983; 1 ♀, same, moss-*Vaccinium myrtillus* birch forest with spruce, in spruce, 2.VIII.1983; SIVAYA MASKA: 1 ♂, 8 km NW of the village, timberline, in a hut, 30.VII.1981.

SIVOMASKINSKIY: 1 ♀, near the village, forest tundra, in shrubs, 7.VII.1980; 1 ♂, in the village, in a hut, 8.VII.1981; 12 ♀♀, 10 km NE of the village, right bank of Usa River, in *Betula* sp., 5.VII.1981.

RANGE. Palaearctic polyzonal.

*Nuctenea silvicultrix* (C. L. Koch, 1844)

MATERIAL. SIVOMASKINSKIY: 2 ♀♀, 10 km NE of the village, right bank of Usa River, sparse moss-undershrub-dwarf birch larch-spruce forest on watershed terrace, under bark of *Betula* sp., summer, 1981.

RANGE. Palaearctic boreo-nemoral.

COMMENTS. This species has not been found in tundra.

## Fam. LYCOSIDAE

*Acantholycosa norvegica* (Thorell, 1872)

MATERIAL. SIVOMASKINSKIY: 3 ♀♀, 10 km NE of the village, right bank of Usa River, moss-undershrub larch-birch forest, 3.VII.1982.

RANGE. Palaearctic arcto-alpine.

COMMENTS. This species has not been found in tundra.

*Alopecosa aculeata* (Clerck, 1758)

2000 *Alopecosa aculeata*. — Mazura, Pechora Delta: 137. (Map: 15).

2001 *Alopecosa aculeata*. — Mazura & Esyunin, Arthropoda Selecta, 10 (1): 77. (Map: 13 & 15).

RANGE. Holarctic boreo-nemoral.

COMMENTS. The species occurs only in skirts of the southern tundra, but by the Pechora River Valley it penetrates through the southern tundra up to the Barents Sea in the North.

This species is not presented in our material.

*Alopecosa hirtipes* Kulczyński, 1907

2000 *Alopecosa hirtipes*. — Mazura, Pechora Delta: 137. (Map: 15).

2001 *Alopecosa hirtipes*. — Mazura & Esyunin, Arthropoda Selecta, 10 (1): 77. (Map: 4 & 14).

MATERIAL. TOBSEDA: 1 ♂, 16 ♀♀, flat-hill peatbog, in holes, 2–8.VII.1984; SHAPKINA RIVER: 2 ♀♀, spots of *Arctous* in lichen-dwarf birch associations in flat-hill peatbog, in holes, 15.VII.1984; VORKUTA: 4 ♂♂, near Mulda Village, lichen-moss associations with *Arctous*, *Empetrum*, *Vaccinium uliginosum*, on top of flat hills in lichen-moss dwarf birch tundra, 21–30.VI.1981; 1 ♂, same, 7–27.VIII.1981; 1 ♂, 3 ♀♀, same, 15.VII.1981; KHALMER-YU: 2 ♀♀, near the village, spots of lichen-undershrub tundra (*Arctous*, *Empetrum*) in lichen-moss dwarf-birch tundra on tops of hills, 17.VIII.1981.

RANGE. Siberian-Nearctic arctic.

COMMENTS. Tobsesta is the westernmost locality of the species.

*Alopecosa pinetorum* (Thorell, 1856)

2000 *Alopecosa pinetorum*. — Mazura, Pechora Delta: 137. (Map: 15).

2001 *Alopecosa pinetorum*. — Mazura & Esyunin, Arthropoda Selecta, 10 (1): 77. (Map: 13).

RANGE. European boreo-nemoral.

COMMENTS. The species occurs only in skirts of the southern tundra, but by the Pechora River Valley it penetrates through the southern tundra up to the Barents Sea in the North.

This species is not presented in our material.

*Alopecosa pulverulenta* (Clerck, 1758)

2000 *Alopecosa pulverulenta*. — Mazura, Pechora Delta: 137. (Map: 15).

2001 *Alopecosa pulverulenta*. — Mazura & Esyunin, Arthropoda Selecta, 10 (1): 77. (Map: 13 & 15).

MATERIAL. N. PESHA: 1 ♂, near the village, moss-undershrub spruce-birch forest, 3.VII.1983.

RANGE. Palaearctic boreo-nemoral.

COMMENTS. The species occurs only in skirts of the southern tundra, but by the Pechora River Valley it penetrates through the southern tundra up to the Barents Sea in the North.

*Alopecosa taeniata* (C. L. Koch, 1835)

MATERIAL. VORKUTA: 1 ♂, 6 ♀♀, near Vorgashor Village, flat-hill peatbog, in leaf litter & moss under shrubs, 24.VII.1980; 4 ♂♂ & 50 ♀♀, same, willow stands in depression, in pitfall traps, 9.VII–22.VII.1980; more than 100 ♂♂ & ♀♀, same, lichen-moss dwarf birch tundra, in pitfalls traps, 9.VII–22.VII.1980; 50 ♂♂ & ♀♀, near Mulda Village, lichen-moss dwarf birch tundra, 30.VI.1981; 3 ♂♂, near Tsementnozavodskiy Village, on bank of Vorkuta River, among stones, 30.VI.1981.

SIVOMASKINSKIY: 20 ♀♀, 6 km NW of the village, sparse spruce forest, in holes, 10.VII.1981; 11 ♂♂, 4 ♀♀, 10 km NE of the village, right bank of Usa River, sparse spruce-birch forest, in

moss, 20.VIII.1981; 9 ♂♂, 2 ♀♀, same, 5–13.VII.1981; 5 ♂♂ & 45 ♀♀, same, 29.VII.1981.

RANGE. European boreal.

*Arctosa alpigena* (Doleschall, 1852)

2000 *Arctosa alpigena*. — Mazura, Pechora Delta: 137. (Map: 15).

2001 *Arctosa alpigena*. — Mazura & Esyunin, Arthropoda Selecta, 10 (1): 77. (Map: 14).

MATERIAL. TOBSEDA: 1 ♀, grassy meadow in depression between peatbogs, in sod, 6.VII.1984; NARIAN-MAR: 1 ♀, near the village, willow stands on Sazonovskoye Lake bank, 10.VII.1984; VORKUTA: 1 ♀, near Vorgashor Village, flat-hill peatbog, in leaf litter & moss under shrubs, willow stands in depression, in moss, 18.VII.1982; 1 ♀, same, flat-hill peatbog, in leaf litter under shrubs, 18.VII.1982; 20 ♂♂, 13 ♀♀, same, lichen-moss dwarf birch tundra, in moss, 27.VI–2.VII.1980; 2 ♀♀, same, 24.VIII.1981; 10 ♂♂, 3 ♀♀, same, 20–25.VI.1981; 7 ♂♂, 30 ♂♂ & ♀♀, same, lichen-moss dwarf birch tundra, 28.VII.1981; 5 ♂♂, 1 ♀, same, flat-hill peatbog, in leaf litter & moss under shrubs, 24.VII.1980; 1 ♀, same, lichen-moss dwarf birch tundra, in moss, 28.VII.1982; 1 ♀, near Mulda Village, wet hollow in dwarf birch tundra, 20.VIII.1982; 1 ♀, same, moss-grass meadow in depression in willow-dwarf birch tundra, in moss, 20.VIII.1982; 1 ♂, 12 ♀♀, same, lichen-moss associations (*Arctous*, *Empetrum*, *Vaccinium uliginosum*) on top of flat hills in lichen-moss dwarf birch tundra, 21–30.VI.1981; 2 ♂♂, 3 ♀♀, same, 27.VII–7.VIII.1981; KHALMER-YU: 3 ♂♂, 4 ♀♀, near the village, lichen-moss dwarf birch tundra on steep slopes of hills, 17.VIII.1981; 3 ♂♂, 2 ♀♀, willow tundra on watershed, 17.VIII.1981; SIVAYA MASKA: 1 ♂, 8 km NW of the village, lichen-moss dwarf birch tundra (200 m N of timberline), in moss, 30.VII.1981; 5 ♀♀, same, 20.VIII.1981.

SIVOMASKINSKIY: 1 ♀, 6 km NW of the village, birch-spruce forest with diverse herbs, in moss & leaf litter, 20.VIII.1981; 1 ♂, 2 ♀♀, 10 km NE of the village, right bank of Usa River, moss-undershrub larch-birch forest on terrace, in moss, 29.VII.1981.

RANGE. Holarctic polyzonal.

*Pardosa agrestis* (Westring, 1861)

2000 *Pardosa agrestis*. — Mazura, Pechora Delta: 137. (Map: 15).

2001 *Pardosa agrestis*. — Mazura & Esyunin, Arthropoda Selecta, 10 (1): 77. (Map: 15).

RANGE. European boreo-nemoral.

COMMENTS. The species reaches tundra zone by river valleys.

This species is not presented in our material.

*Pardosa agricola* (Thorell, 1856)

MATERIAL. BELUSHIE: 2 ♂♂, 2 ♀♀, near the village, sea-coast marsh, 9.VII.1983; 2 ♀♀, same, 12.VII.1983; 1 ♀, in hut, 12.VII.1983; 1 ♀, peatbog on lake bank, in leaf litter & moss, 10.VII.1983; NARIAN-MAR: 5 ♂♂, 1 ♀, near the village, on Sazonovskoye Lake bank, 27–29.VI.1984.

N. PESHA: 2 ♀♀, in the village, 7.VII.1983; SIVOMASKINSKIY: 6 ♀♀, 10 km NE of the village, right bank of Usa River, pebble bank of the river, under stones, 29.VII.1981.

RANGE. European boreo-nemoral.

COMMENTS. The species reaches tundra zone by river valleys.

*Pardosa amentata* (Clerck, 1758)

MATERIAL. VOLONGA: 1 ♂, 3 ♀♀, 6 km from mouth of Volonga River, bank of the river, among stones, 18.VII.1983.

N. PESHA: 1 ♀, near the village, diverse herb-grass meadow on floodplains of Pasha River, 3.VIII.1983; 2 ♀♀, in the village,

7.VII.1983; SIVOMASKINSKIY: 1 ♂, near the village, sedge fen in northern taiga forest, 19.VII.1985.

RANGE. European boreo-nemoral.

COMMENTS. The species reaches tundra zone by river valleys.

*Pardosa atrata* (Thorell, 1873)

2000 *Pardosa atrata*. — Mazura, Pechora Delta: 137. (Map: 15).

2001 *Pardosa atrata*. — Mazura & Esyunin, Arthropoda Selecta, 10 (1): 77. (Map: 13 & 15).

MATERIAL. VOLONGA: 4 ♀♀, near the village, flat-hill peatbog, sphagnum bog in hollow, 24.VII.1983; TOBSEDA: 1 ♀, flat-hill peatbog, in leaf litter & moss under shrubs, 3.VII.1984; NARIAN-MAR: 1 ♀, near Iskatelei Village, sedge fen on Sazonovskoye Lake bank, 10.VII.1984; 2 ♂♂, same, 27.VI.1984.

N. PESHA: 3 ♀♀, near the village, sphagnum bog, in *Sphagnum*, 7.VII.1983; 1 ♂, spruce-birch forest, moss-sedge bog, 3.VII.1983; 1 ♂, in the village, 6.VII.1983.

RANGE. Palaearctic boreo-nemoral.

*Pardosa eiseni* (Thorell, 1875)

MATERIAL. VORKUTA: 1 ♂, near Tsementnozavodskiy Village, willow stands on floodplains of Vorkuta River, 18–30.VI.1981; 2 ♀♀, same, 31.VIII.1981.

SIVOMASKINSKIY: 1 ♀, 10 km NW of the village, sparse spruce forest, in moss, 30.VII.1981; 1 ♀, 10 km NE the village, right bank of Usa River, sparse spruce-birch forest, in moss, 5–13.VII.1981; 2 ♀♀, same, larch-birch forest, 3.VII.1982.

RANGE. Fennoscandian-Siberian boreal.

*Pardosa hyperborea* (Thorell, 1872)

2000 *Pardosa hyperborea*. — Mazura, Pechora Delta: 137. (Map: 15).

2001 *Pardosa hyperborea*. — Mazura & Esyunin, Arthropoda Selecta, 10 (1): 77. (Map: 13 & 14).

MATERIAL. BELUSHIE: 1 juv., near the village, sedge-sphagnum bog, 13.VII.1983; 1 ♀, spots of moss-lichen-undershrub (*Empetrum*, *Arctous* etc.) tundra on watershed terrace, 10.VII.1983; VOLONGA: 1 ♀, near the village, flat-hill peatbog, sphagnum bog in hollow, in *Sphagnum*, 24.VII.1983; 3 ♀♀, same, 24.VII.1983; INDIGA: 6 ♀♀, near the village, lichen-moss dwarf birch tundra with *Ledum*, in moss, 19–26.VII.1984; 1 ♀, same, lichen-moss dwarf birch tundra, in moss, 19–26.VII.1984; NARIAN-MAR: 2 ♀♀, near Iskatelei Village, sphagnum bog on lake bank, in *Sphagnum*, 18.VII.1984; 1 ♀, same, sedge fen on Sazonovskoye Lake bank, 27.VI.1984; SHAPKINA RIVER: 1 ♂, dwarf birch shrubs in flat-hill peatbog, in moss, 13–17.VII.1984; VORKUTA: 1 ♀, near Vorgashor Village, flat-hill peatbog, in leaf litter & moss under shrubs, 26.VIII.1980; 45 ♂♂, 38 ♀♀, lichen-moss dwarf birch tundra, in moss, 27.VI–2.VII.1980; 1 ♂, same, 20–25.VI.1981; 5 ♂♂, 3 ♀♀, willow stands in depression, in leaf litter, 23–29.VI.1981; 1 ♂, same, 9.VIII.1981; 2 ♂♂, 2 ♀♀, near Tsementnozavodskiy Village, willow stands on floodplains of Vorkuta River, 18–30.VI.1981; 1 ♀, near Mulda Village, moss-grass meadow in depression in willow-dwarf birch, in moss, 20.VIII.1982; 1 ♀, same, lichen-moss associations (*Arctous*, *Empetrum*, *Vaccinium uliginosum*) on top of flat hills in lichen-moss dwarf birch tundra, 27.VII–7.VIII.1981; SIVAYA MASKA: 25 ♂♂, 10 ♀♀, 8 km NW of the village, lichen-moss dwarf birch tundra (200 m N of timberline), in moss, 8–13.VII.1981; 35 ♂♂, 48 ♀♀, same, 30.VII.1981; 10 ♀♀, same, 9.VII.1981; 28 ♀♀, 5 ♂♂ (subad.), same, 20.VIII.1981; 2 ♀♀, same, willow tundra on watershed, 20.VIII.1981.

N. PESHA: 1 ♀, near the village, moss-sedge bog, 7.VII.1983; SIVOMASKINSKIY: 4 ♂♂, 9 ♀♀, 6 km NW of the village, sparse moss-undershrub-dwarf birch spruce forest, in moss, 30.VII.1981; 2 ♀♀, same, 12.VII.1983; 2 ♂♂, 1 ♀, 10 km NE the village, right

bank of Usa River, sparse spruce-birch forest on watershed, in moss, 5–13.VII.1981.

RANGE. Holarctic boreo-nemoral.

*Pardosa indecora* L. Koch, 1879

2000 *Pardosa indecora*. — Mazura, Pechora Delta: 137. (Map: 15).

2001 *Pardosa indecora*. — Mazura & Esyunin, Arthropoda Selecta, 10 (1): 77. (Map: 15).

MATERIAL. VOLONGA: 3 ♀♀, 6 km from mouth of Volonga River, bank of the river, among stones, 18.VII.1983; SHAPKINA RIVER: 2 ♀♀, sedge-sphagnum bog, 16.VII.1984; VORKUTA: near Vorgashor Village, 21 ♂, 8 ♀♀, flat-hill peatbog, in leaf litter & moss under shrubs, 24.VII.1980; 27 ♂♂, 32 ♀♀, same, lichen-moss dwarf birch tundra, in moss, 27.VI–2.VII.1980; 2 ♂♂, same, 20.VI.1981; 5 ♂♂, 3 ♀♀, same, 25.VI.1981; 4 ♀♀, same, 24.VIII.1981; 9 ♂♂, 7 ♀♀, same, 20–25.VI.1981; 1 ♂, same, 24.VIII.1981; 3 ♂♂ subad., 2 ♀♀, 1 ♀ subad., same, lichen-moss dwarf birch tundra, under trash, 1.IX.1981; 50 ♂♂, 15 ♀♀, same, willow stands in depression, in leaf litter, 23–29.VI.1981; 1 ♂, 10 ♀♀, same, 9.VIII.1981; 1 ♀, near Tsementnozavodskiy Village, steep bank of Iz'yurovzh Brook, rocky slopes, among stones, 22.VII.1982; 1 ♂, same, 18.VI.1981; 18 ♂♂, 26 ♀♀, near Tsementnozavodskiy Village, willow stands on floodplains of Vorkuta River, 18–30.VI.1981; 1 ♀, near Zarechniy, meadow with diverse herbs on floodplains bank of Vorkuta River, under stones, 19.VII.1982; 4 ♀♀, near Severnyi Village, bank of Vorkuta River, *Salix* forest with diverse herbs, in litter, 30.VII.1985; 3 ♀♀, near Mulda Village, wet grassy hollow in dwarf birch tundra, in sod, 20.VIII.1982; 3 ♀♀, same, moss-grass meadow in depression in willow-dwarf birch, in moss, 20.VIII.1982; KHALMER-YU: 8 ♀♀, near the village, dry channel of brook, under stones, 13–16.VIII.1984; 1 ♀, same, willow stands in depression on brook bank, 23.VII.1981; SIVAYA MASKA: 20 ♀♀, 8 km NW of the village, lichen-moss dwarf birch tundra, summer 1980.

SIVOMASKINSKIY: 18 ♀♀, 10 km NE of the village, right bank of Usa River, sparse moss-undershrub spruce-birch forest, in moss, 5–13.VII.1981.

RANGE. Siberian boreal.

COMMENTS. The Pechora River Delta is the westernmost locality of the species.

*Pardosa lapponica* (Thorell, 1872)

2000 *Pardosa lapponica*. — Mazura, Pechora Delta: 137. (Map: 15).

2001 *Pardosa lapponica*. — Mazura & Esyunin, Arthropoda Selecta, 10 (1): 77. (Map: 4 & 13).

MATERIAL. VOLONGA: 2 ♀♀, near the village, flat-hill peatbog, wet hollow with *Sphagnum*, 24.VII.1983; 8 ♀♀, same, 24.VII.1983; SIVAYA MASKA: 26 ♀♀, 8 km NW of the village, lichen-moss dwarf birch tundra (200 m N of timberline), in moss, 20.VIII.1981.

SIVOMASKINSKIY: 16 ♂♂, 4 ♀♀, 6 km NW of the village, sparse moss-undershrub dwarf birch spruce forest, in moss, 10.VIII.1985.

RANGE. Fennoscandian-Siberian-Nearctic boreal.

*Pardosa lasciva* L. Koch, 1879

MATERIAL. SIVOMASKINSKIY: 1 ♂, 5 ♀♀, 10 km NE of the village, right bank of Usa River, sparse moss-undershrub spruce-birch forest, in moss, 29.VII.1981; 3 ♀♀, same, 5–13.VII.1981.

RANGE. Fennoscandian-Siberian-Nearctic boreal.

COMMENTS. This species has not been found in tundra.

*Pardosa lugubris* (Walckenaer, 1802)

MATERIAL. BELUSHIE: 1 ♀, near the village, peatbog, *Rubus chamaemorus* associations, in moss & leaf litter, 15.VII.1984.

RANGE. European boreo-nemoral.

COMMENTS. The species occurs only in skirts of the southern tundra.

*Pardosa palustris* (Linnaeus, 1758)

MATERIAL. BELUSHIE: 10 ♀♀, near the village, moss-lichen-undershrub tundra with *Empetrum*, *Arctous*, etc. on terrace, 8–10.VII.1983; 1 ♀, peatbog, *Rubus chamaemorus* associations, in moss & leaf litter, 15.VII.1983.

N. PESHA: 1 ♂, near the village, spruce-birch forest, moss-sedge bog, 3.VII.1983.

RANGE. Palaearctic-W-Nearctic polyzonal.

COMMENTS. The species occurs only in skirts of the southern tundra.

*Pardosa plumipes* (Thorell, 1875)

2000 *Pardosa plumipes*. — Mazura, Pechora Delta: 137. (Map: 15).

RANGE. Palaearctic boreo-montane.

COMMENTS. The species reaches tundra zone by river valleys.

This species is not presented in our material.

*Pardosa prativaga* (L. Koch, 1870)

2000 *Pardosa prativaga*. — Mazura, Pechora Delta: 137. (Map: 15).

2001 *Pardosa prativaga*. — Mazura & Esyunin, Arthropoda Selecta, 10 (1): 77. (Map: 13).

RANGE. European boreo-nemoral.

COMMENTS. The species occurs only in skirts of the southern tundra, but by the Pechora River Valley it penetrates through the southern tundra up to the Barents Sea in the North.

This species is not presented in our material.

*Pardosa riparia* (C. L. Koch, 1847)

2000 *Pardosa riparia*. — Mazura, Pechora Delta: 137. (Map: 15).

2001 *Pardosa riparia*. — Mazura & Esyunin, Arthropoda Selecta, 10 (1): 77. (Map: 13).

RANGE. European boreo-nemoral.

COMMENTS. The species occurs only in skirts of the southern tundra, but by the Pechora River Valley it penetrates through the southern tundra up to the Barents Sea in the North.

This species is not presented in our material.

*Pardosa septentrionalis* (Westring, 1861)

2000 *Pardosa septentrionalis*. — Mazura, Pechora Delta: 137. (Map: 15).

2001 *Pardosa septentrionalis*. — Mazura & Esyunin, Arthropoda Selecta, 10 (1): 77. (Map: 4 & 14).

MATERIAL. TOBSEDA: 1 ♂, 8 ♀♀, flat-hill peatbog, thin layer of lichens, 3.VII.1984; SHAPKINA RIVER: 2 ♀♀, flat-hill peatbog, in leaf litter & moss under shrubs, 13.VII.1984; 2 ♀♀, sedge-sphagnum bog, in *Sphagnum*, 16.VII.1984; VORKUTA: 18 ♂♂ & ♀♀, near Vorgashor Village, lichen-moss dwarf birch tundra, 28.VII.1981; 2 ♀♀, same, 24.VIII.1981; 4 ♂♂, 2 ♀♀, near Mulda Village, lichen-moss associations (*Arctous*, *Empetrum*, *Vaccinium uliginosum*) on top of flat hills in lichen-moss dwarf birch tundra, 21–30.VI.1981; 2 ♀♀, same, 27.VII–7.VIII.1981; KHALMER-YU: 1 ♂, 15 ♀♀, near the village, lichen-moss dwarf birch tundra on steep slopes of hills, 17.VIII.1981; 5 ♂♂ (subad.), 8 ♀♀,

same, spots of lichen-undershrub tundra (with *Arctous*, *Empetrum*) in lichen-moss dwarf-birch tundra on tops of hills, 17.VIII.1981.

RANGE. Fennoscandian-Siberian boreal.

*Pardosa sphagnicola* (F. Dahl, 1908)

2000 *Pardosa sphagnicola*. — Mazura, Pechora Delta: 137. (Map: 15).

2001 *Pardosa sphagnicola*. — Mazura & Esyunin, Arthropoda Selecta, 10 (1): 77. (Map: 13 & 15).

MATERIAL. N. PESHA: 1 ♂, 2 ♀♀, near the village, spruce-birch forest, moss-sedge bog, 3.VII.1983; 1 ♂, 4 ♀♀, same, Pesha River bank, under stones, 2.VII.1983; 1 ♀, sedge fen, 1.VIII.1983; SIVOMASKINSKIY: 1 ♂, in village, 6.VII.1981; 2 ♀♀, 3–4 km NW of the village, sedge fen among spruce-birch sparse forest, 20.VIII.1981; 1 ♂, 4 ♀♀, 10 km NE of the village, right bank of Usa River, moss-undershrubs spruce-birch sparse forest, in moss, 29.VII.1981; 3 ♂♂, 3 ♀♀, same, 5–13.VII.1981.

RANGE. European boreo-nemoral.

COMMENTS. The species occurs only in skirts of the southern tundra, but by the Pechora River Valley it penetrates through the southern tundra up to the Barents Sea in the North.

*Pardosa tesquorum* (Odenvall, 1901)

MATERIAL. VORKUTA: 1 ♀, near Zarechnyi Village, meadow with diverse herbs on riverside of Vorkuta River, under stones, 19.VII.1982; 1 ♀, near Tsementnozavodskiy Village, Vorkuta River bank under stones, 8.VII.1980; 2 ♀♀, same, 31.VIII.1981.

RANGE. Siberian-W-Nearctic boreal.

*Pirata piraticus* (Clerck, 1758)

MATERIAL. N. PESHA: 3 ♀♀, near the village, moss-sedge bog, 6&7.VII.1983.

RANGE. Holarctic boreo-nemoral.

COMMENTS. This species has not been found in tundra.

Fam. PISAURIDAE

*Dolomedes fimbriatus* (Clerck, 1758)

MATERIAL. SIVOMASKINSKIY 1 ♀, near the village, dwarf birch shrubs on fen, 5.VIII.1982; 1 ♀, 10 km NE of the village, right bank of Usa River, sphagnum bog in sparse spruce-birch forest, in moss, 3.VIII.1981.

RANGE. Palaearctic polyzonal.

COMMENTS. This species has not been found in tundra.

Fam. ZORIDAE

*Zora nemoralis* (Blackwall, 1861)

MATERIAL. SIVOMASKINSKIY: 1 ♂, 10 km NE of the village, right bank of Usa River, sparse moss-undershrub spruce-birch forest, in moss, 5–13.VII.1981.

RANGE. European polyzonal.

COMMENTS. This species has not been found in tundra.

Fam. CYBAEIDAE

*Argyroneta aquatica* (Clerck, 1757)

MATERIAL. VOLONGA: 1 ♀, near the village, swampy bank of Volonga River, 29.VII.1983.

RANGE. Palaearctic polyzonal.

COMMENTS. The species reaches tundra zone by river valleys.

Fam. HAHNIIDAE

*Cryphoea silvicola* (C. L. Koch, 1834)

MATERIAL. N. PESHA: 1 ♀, dry lichen-moss-undershrub spruce-pine forest, in moss, 6.VII.1983; 1 ♂, 1 ♀, same, birch forest with diverse herbs, in leaf litter, 2.VIII.1983; SIVOMASKINSKIY: 1 ♀, 6 km to NW of the village, birch-spruce forest with diverse herbs, in moss & leaf litter, 6.VII.1982; 3 ♀♀, same, 10.VIII.1985; 1 ♀, near the village, dwarf birch shrubs on fen, 5.VIII.1982; 1 ♂, 1 ♀, 10 km NE of the village, right bank of Usa River, sparse moss-undershrub-dwarf larch-birch forest on watershed terrace, leaf litter, 3.VIII.1982.

RANGE. Palaearctic boreo-nemoral.

COMMENTS. This species has not been found in tundra.

*Hahnia ononidum* Simon, 1875

2000 *Hahnia ononidum*. — Mazura, Pechora Delta: 137. (Map: 15).

2001 *Hahnia ononidum*. — Mazura & Esyunin, Arthropoda Selecta, 10 (1): 77. (Map: 13).

MATERIAL. SIVAYA MASKA: 2 ♀♀, 8 km to NW of the village, lichen-moss dwarf birch tundra (200 m N of timberline), in moss, 9.VII.1981; 22 ♂♂, 1 ♀, same, sparse lichen-moss-dwarf birch spruce forest, in moss, 20.VIII.1981; 5 ♂♂, 4 ♀♀, same, in moss, 30.VII.1981; 1 ♂, 2 ♀♀, same, 6.VIII.1982.

RANGE. Palaearctic-W-Nearctic boreo-nemoral.

COMMENTS. The species occurs only in skirts of the southern tundra, but by the Pechora River Valley it penetrates through the southern tundra up to the Barents Sea in the North.

Fam. DICTYNIDAE

*Archaeodictyna consecuta* (O. Pickard-Cambridge, 1872)

MATERIAL. VOLONGA: 1 ♀, 5 km from mouth of Volonga River, birch forest on stony slope, under stones, 20.VII.1983.

RANGE. Palaearctic polyzonal.

COMMENTS. The species reaches tundra zone by river valleys.

*Arctella lapponica* (Holm, 1945)

MATERIAL. VOLONGA: 1 ♂, near the village, undershrub tundra (*Arctous*, *Empetrum*, *Betula nana*, *Ledum*) on terrace not far from seacoast, 28.VII.1983; INDIGA: 1 ♂, 1 ♀, near the village, lichen-moss dwarf birch tundra with *Ledum*, in moss, 21.VII.1984; VORKUTA: 1 ♂, 1 ♀, near Mulda Village, lichen-moss dwarf birch tundra, in moss, 6.VII.1982; 1 ♂, 1 ♀, same, 26.VII.1982; 1 ♀, same, 20.VIII.1982.

RANGE. Holarctic boreal.

*Dictyna alaskae* Chamberlin et Ivie, 1947

MATERIAL. TOBSEDA: 1 ♀, lichen spots with *Arctous*, *Empetrum* & *Betula nana* on sandy hills, 5.VII.1984; VORKUTA: 1 ♂, 80 km NW of Vorkuta, bank of Diya-Ty Lake, willow stands, in leaf litter, 18–20.VII.1980.

SIVOMASKINSKIY: 1 ♂, 1 ♀, near the village, forest tundra, summer, 1980.

RANGE. Holarctic boreal.

*Dictyna arundinacea* (Linnaeus, 1758)

2000 *Dictyna arundinacea*. — Mazura, Pechora Delta: 137. (Map: 15).

2001 *Dictyna arundinacea*. — Mazura & Esysunin, Arthropoda Selecta, 10 (1): 77. (Map: 15).

RANGE. Holarctic polyzonal.

COMMENTS. The species reaches tundra zone by river valleys.

This species is not presented in our material.

*Dictyna major* Menge, 1869

MATERIAL. TOBSEDA: 1 ♀, dry lichen-moss dwarf birch associations on sand, 7.VII.1984; 4 ♀♀, undershrub tundra (*Betula nana*, *Empetrum*, *Arctous*) on sandy hills, 5.VII.1984; 1 ♂, same, thin layer of lichens, 4.VII.1984; 5 ♀♀, same, undershrub tundra (*Empetrum*, *Arctous*), 5.VI.1984; 1 ♂, same, flat-hill peatbog, in wet hollow, 3.VII.1984; 1 ♀, same, undershrub tundra, thin layer of lichens, 8.VII.1984; VORKUTA: 1 ♀, 80 km NW of Vorkuta, Diya-Ty Lake bank, grassy meadow in dwarf birch tundra, 18.VII.1980; 1 ♂, 10 km to W of Vorgashor Village, near Yaneit-Ty Lake, lichen-moss tundra, in moss, 6.VII.1980; 1 ♂, 1 ♀, near Tsementnozavodskiy Village, steep bank of Vorkuta River, rocky slopes, among stones, 28.VI.1982; 1 ♀, same, 27.VIII.1982; 1 ♂, 1 ♀, same, 8.VII.1980; 1 ♂, same, willow stands on floodplains of Vorkuta River, leaf litter, 8.VIII.1981; 1 ♀, same, 5.VII.1982; 3 ♀♀, near Zarechniy Village, steep bank of Vorkuta River, rocky slopes, *Salix*, *Betula nana* & *Rosa* with *Vaccinium uliginosum* & *Empetrum*, in leaf litter, 17.VIII.1982.

RANGE. Holarctic polyzonal.

*Dictyna pusilla* Thorell, 1856

MATERIAL. NARIAN-MAR: 1 ♀, dry moss-undershrub (*Vaccinium uliginosum*, *Empetrum*) birch forest on river terrace, in moss, 10.VII.1984.

RANGE. Palaearctic polyzonal.

COMMENTS. The species reaches tundra zone by river valleys.

## Fam. CLUBIONIDAE

*Clubiona kulczynskii* Lessert, 1905

2000 *Clubiona kulczynskii*. — Mazura, Pechora Delta: 137. (Map: 15).

2001 *Clubiona kulczynskii*. — Mazura & Esysunin, Arthropoda Selecta, 10 (1): 77. (Map: 15).

MATERIAL. VOLONGA: 1 ♂, near the village, moist birch forest with diverse herbs on river bank, in moss, 29.VII.1983; INDIGA: 1 ♂, lichen-moss dwarf birch tundra, in moss, 21.VII.1984; VORKUTA: 1 ♂, near Zarechniy Village, steep bank of Vorkuta River, *Salix*, *Betula nana* & *Rosa* shrubs with *Vaccinium uliginosum* & *Empetrum*, in leaf litter, 3.IX.1982; 1 ♂, 1 ♀, same, VIII.1984; 1 ♀, near Mulda Village, willow stands on foot of hill, in moss, 31.VII.1982.

SIVOMASKINSKIY: 1 ♀, 6 km NW of the village, timberline, sparse spruce forest, meadow with diverse herbs, sweeping, 9.VII.1981.

RANGE. Holarctic boreo-nemoral.

*Clubiona reclusa* O. Pickard-Cambridge, 1863

2001 *Clubiona reclusa*. — Mazura & Esysunin, Arthropoda Selecta, 10 (1): 77. (Map: 15).

RANGE. European boreo-nemoral.

COMMENTS. The species reaches tundra zone by river valleys.

This species is not presented in our material.

*Clubiona stagnatilis* Kulczyński, 1897

MATERIAL. BELUSHIE: 1 ♂, near the village, willow stands in diverse herb-grass seashore marsh, leaf litter, 12.VII.1983; VOLONGA: near the village, 1 ♀, floodplain sedge meadow, 29.VII.1983; INDIGA: 1 ♂, near the village, lichen-moss dwarf birch tundra with *Ledum*, in moss, 21.VII.1984; NARIAN-MAR: 2 ♀♀, near Iskatelei Village, in *Salix* sp., VII.1984; VORKUTA: 5 ♂♂, near Tsementnozavodskiy Village, willow stands on floodplains of Vorkuta River, in *Salix* sp., 18.VI.1981; 1 ♂, near Zarechniy Village, steep bank of Vorkuta River, *Salix*, *Betula nana* & *Rosa* shrubs with *Vaccinium uliginosum* & *Empetrum*, in leaf litter, 3.IX.1982.

RANGE. European-Ancient Mediterranean boreo-nemoral.

*Clubiona trivialis* C. L. Koch, 1843

2000 *Clubiona trivialis*. — Mazura, Pechora Delta: 137. (Map: 15).

MATERIAL. BELUSHIE: 1 ♂, near the village, flat-hill peatbog, in lichen associations, 15.VII.1983; 2 ♂♂, same, lichen-moss dwarf birch tundra, in moss, 13.VII.1983; 1 ♂, same, peatbog on lake bank, leaf litter & moss, 10.VII.1983; 3 ♂♂, same, seacoast marsh, in sod, 12.VII.1983; VOLONGA: 1 ♂, 3 ♀♀, near the village, undershrub tundra (*Arctous*, *Empetrum*, *Betula nana*, *Ledum*) on terrace not far from seacoast, 23.VII.1983; INDIGA: 1 ♂, 1 ♀, same, lichen-moss dwarf birch tundra with *Ledum*, in moss, 24.VII.1984; TOBSEDA: 1 ♂, lichen-moss associations on sand (*Arctous*, *Empetrum*, *Betula nana*), 3.VII.1984; VORKUTA: 1 ♀, near Vorgashor Village, lichen-moss dwarf birch tundra, in moss, 25.VI.1981; 1 ♀, Vorgashor Village, in flat, 11.IX.1983; SIVAYA MASKA: 1 ♀, 8 km NW of the village, lichen-moss willow-dwarf birch tundra (300 m N of timberline), in moss, 9.VII.1981.

RANGE. Holarctic polyzonal.

## Fam. GNAPHOSIDAE

*Drassodes pubescens* (Thorell, 1856)

2000 *Drassodes pubescens*. — Mazura, Pechora Delta: 137. (Map: 15).

RANGE. European boreo-nemoral.

COMMENTS. The species reaches tundra zone by river valleys.

This species is not presented in our material.

*Gnaphosa lapponum* (L. Koch, 1866)

2000 *Gnaphosa lapponum*. — Mazura, Pechora Delta: 137. (Map: 15).

2001 *Gnaphosa lapponum*. — Mazura & Esysunin, Arthropoda Selecta, 10 (1): 77. (Map: 13).

MATERIAL. SIVAYA MASKA: 1 ♀, 8 km NW of Sivaya Maska Village, lichen-moss dwarf birch tundra (300 m N of timberline), in moss, 10.VII.1981; 9 ♂♂, same, 20.VIII.1981.

SIVOMASKINSKIY: 1 ♀, 10 km NE of the village, right bank of Usa River, sparse moss-undershrub spruce-birch forest, in lichens, 6.VII.1981.

RANGE. European boreal.

COMMENTS. The species occurs only in skirts of the southern tundra, but by the Pechora River Valley it penetrates through the southern tundra up to the Barents Sea in the North.

*Gnaphosa leporina* (L. Koch, 1866)

MATERIAL. BELUSHIE: 1 ♀, near the village, lichen-moss willow-dwarf birch tundra, in moss, 16.VII.1983.

RANGE. European-Ancient Mediterranean boreo-montane.

COMMENTS. The species occurs only in skirts of the southern tundra.

*Gnaphosa microps* Holm, 1939

2000 *Gnaphosa microps*. — Mazura, Pechora Delta: 137. (Map: 15).

MATERIAL. VORKUTA: 1 ♀, 80 km NW of Vorkuta, floodplain willow stands on Diya-Ty Lake bank, 14.VII.1980; 30 ♀♀, near Vorgashor Village, lichen-moss willow-dwarf birch tundra, in moss, in pitfall traps, 1.IX.1981.

RANGE. Holarctic boreal.

*Gnaphosa muscorum* (L. Koch, 1866)

MATERIAL. SIVOMASKINSKIY: 1 ♀, 10 km NE of the village, right bank of Usa River, sparse moss-undershrub spruce-birch forest, in moss, 13.VIII.1980; 4 ♂♂, 1 ♀, same, 29.VII.1981.

RANGE. Holarctic boreo-nemoral.

COMMENTS. This species has not been found in tundra.

*Gnaphosa orites* Chamberlin, 1922

MATERIAL. BELUSHIE: 1 ♀, near the village, lichen-moss dwarf birch tundra, in moss, 16.VII.1983; VORKUTA: 1 ♀, 80 km NW of Vorkuta, bank of Diya-Ty Lake, willow stands, in leaf litter, 14.VII.1980; 2 ♂♂, near Vorgashor Village, lichen-moss dwarf birch tundra, in moss, 5.VIII–19.VIII.1980; 14 ♂♂, same, 28.VII.1981; 1 ♂, same, lichen-moss dwarf birch tundra, in moss, 5–19.VIII.1980; 4 ♂♂, near Mulda Village, lichen-moss associations (*Arctous*, *Empetrum*, *Vaccinium uliginosum*) on top of flat hills in lichen-moss dwarf birch tundra, 15.VII.1981; 2 ♂♂, same, 1 ♀, 27.VII.1983; 1 ♀, same, lichen-moss dwarf birch tundra, 11.IX.1983; 1 ♀, near Tsementnozavodskiy Village, steep bank of Vorkuta River, among stones & in moss, 27.VII.1981; KHALMER-YU: 5 ♂♂, near the village, moss-lichen dwarf birch tundra, in moss, 20–23.VII.1981; 7 ♂♂, same, 17.VIII.1981.

RANGE. Holarctic arcto-boreal.

*Gnaphosa sticta* Kulczyński, 1908

MATERIAL. VORKUTA: 1 ♂, near Tsementnozavodskiy Village, willow stands on floodplains of Vorkuta River, 30.VI.1981; 1 ♂, near Mulda Village, lichen-moss associations (*Arctous*, *Empetrum*, *Vaccinium uliginosum*) on top of flat hills in lichen-moss dwarf birch tundra, 21.VI.1981.

RANGE. Palaearctic boreal.

*Haplodrassus hiemalis* (Emerton, 1909)

2000 *Haplodrassus hiemalis*. — Mazura, Pechora Delta: 137. (Map: 15).

2001 *Haplodrassus hiemalis*. — Mazura & Esyunin, Arthropoda Selecta, 10 (1): 77. (Map: 13).

RANGE. Siberian-Nearctic boreo-nemoral.

COMMENTS. The species occurs only in skirts of the southern tundra, but by the Pechora River Valley it penetrates through the southern tundra up to the Barents Sea in the North.

This species is not presented in our material.

*Haplodrassus soerenseni* (Strand, 1900)

MATERIAL. SIVAYA MASKA: 2 ♂♂, 1 ♀, 8 km NW of the village, lichen-moss dwarf birch tundra (300 m N of timberline), in moss, 9–30.VII.1981.

SIVOMASKINSKIY: 1 ♂, 10 km NE of the village, right bank of Usa River, sparse moss-undershrub spruce-birch forest, in moss, 5–13.VII.1981.

RANGE. Palaearctic boreo-nemoral.

COMMENTS. The species occurs only in skirts of the southern tundra.

*Micaria alpina* L. Koch, 1872

1987 *Micaria alpina*. — Mikhailov, Spixiana, 10 (3): 324. (Map: 8).

2000 *Micaria alpina*. — Mazura, Pechora Delta: 137. (Map: 15).

MATERIAL. VORKUTA: 2 ♂♂, 5 ♀♀, near Vorgashor Village, 1981; 1 ♂, near Mulda Village, lichen-moss associations (*Arctous*, *Empetrum*, *Vaccinium uliginosum*) on top of hills, 7.VIII.1981; 2 ♂♂, same, 31.VII.1982.

RANGE. Holarctic polyzonal.

*Micaria pulicaria* (Sundevall, 1831)

2000 *Micaria pulicaria*. — Mazura, Pechora Delta: 137. (Map: 15).

2001 *Micaria pulicaria*. — Mazura & Esyunin, Arthropoda Selecta, 10 (1): 77. (Map: 13).

RANGE. Holarctic polyzonal.

COMMENTS. The species occurs only in skirts of the southern tundra, but by the Pechora River Valley it penetrates through the southern tundra up to the Barents Sea in the North.

This species is not presented in our material.

*Zelotes subterraneus* (C. L. Koch, 1833)

MATERIAL. SIVOMASKINSKIY: 12 ♀♀, 10 km NE of the village, right bank of Usa River, bank slope, in litter, 29.VII.1981.

RANGE. European polyzonal.

COMMENTS. This species has not been found in tundra.

Fam. PHILODROMIDAE

*Thanatus arcticus* Thorell, 1872

MATERIAL. VORKUTA: 1 ♂, near Vorgashor Village, side of a road in dwarf birch tundra, 23.VII.1985; 1 ♂, near Mulda Village, lichen-undershrub tundra on top of hills, 21.VI.1981; 1 ♂, same, 30.VI.1981 (det. Logunov, 1997).

SIVOMASKINSKIY: 4 ♂♂, 10 km NE of the village, right bank of Usa River, sparse spruce-birch forest, in moss, 20.VIII.1981 (det. Logunov, 1997).

RANGE. Fennoscandian-Siberian-Nearctic arctic.

*Tibellus maritimus* (Menge, 1875)

2000 *Tibellus maritimus*. — Mazura, Pechora Delta: 137. (Map: 15).

2001 *Tibellus maritimus*. — Mazura & Esyunin, Arthropoda Selecta, 10 (1): 77. (Map: 15).

MATERIAL. SIVOMASKINSKIY: 1 ♀, 10 km NE of the village, right bank of Usa River, meadow with diverse herbs on river bank, 14.VIII.1980.

RANGE. Holarctic polyzonal.

Fam. THOMISIDAE

*Ozyptila arctica* Kulczyński, 1908

1998 *Ozyptila arctica*. — Koponen et al., Arthropoda Selecta, 6 (3/4): 118. (Map: 8).

1992 *Oxyptila arctica*. — Esyunin, Zool. zhurn., 71 (11): 38. (Map: 8).

2000 *Ozyptila arctica*. — Mazura, Pechora Delta: 137. (Map: 15).

MATERIAL. BELUSHIE: 1 ♂, near the village, flat-hill peat-bog, in lichen association, 15.VII.1983; 1 ♂, 1 ♀, same, lichen-moss dwarf birch tundra, in moss, 13.VII.1983; INDIGA: 1 ♀, near the village, lichen-moss dwarf birch tundra with *Ledum*, in moss, 19–26.VII.1984; 1 ♂, 2 ♀♀, same, steep limestone slopes of B. Stchelikh River, among stones, in crevices, 19–26.VII.1984; 1 ♂, same, meadow with diverse herbs on M. Stchelikh River bank, 24.VII.1984; TOBSEDA: 1 ♂, 4 ♀♀, dry lichen-moss dwarf birch associations on sand, in thin layer of lichen, 3.VII.1984; 7 ♀♀, same, flat-hill peat-bog, in thin layer of lichens, 2–9.VII.1984; NARIAN-MAR: 1 ♀, near Iskatelei Village, dry birch forest, in moss, 28.VI.1984; SHAPKINA RIVER: 4 ♀♀, dwarf birch shrubs in flat-hill peatbog, in moss, 13–17.VII.1984; VORKUTA: 1 ♀, near Vorgashor Village, flat-hill peatbog, 26.VIII.1980; 1 ♂, same, flat-hill peatbog, in leaf litter & moss under shrubs, 24.VII.1980; 1 ♂, same, lichen-moss dwarf birch tundra, in moss, 27.VI–2.VII.1980; 1 ♂, 2 ♀♀, same, 25–27.VII.1981; 1 ♂, 2 ♀♀, same, 24.VIII.1981; 13 ♂♂, 4 ♀♀, same, 20–25.VI.1981; 4 ♀♀, same, 23–25.VIII.1983; 1 ♀, same, lichen-moss dwarf birch tundra, under trash, 15.VI.1981; 1 ♀, same, flat-hill peatbog, willow stands in depression, in moss, 18.VII.1982; 1 ♀, near Zarechnyi Village, steep bank of Vorkuta River, *Salix*, *Betula nana* & *Rosa* shrubs with *Vaccinium uliginosum* & *Empetrum*, in leaf litter, 26.VIII.1982; 3 ♂♂, 1 ♀, near Tsementnozavodskiy Village, steep bank of Vorkuta River, *Empetrum* & *Arctous* associations, 27.VIII.1982; 1 ♂, same, willow stands on floodplains of Vorkuta River, 18–30.VI.1981; 2 ♀♀, near Mulda Village, lichen-moss dwarf birch tundra, in moss, 6.VII.1982; 1 ♀, same, willow stands on foot of hills, in moss, 31.VII.1982; 2 ♀♀, same, moss-grass meadow in depression in lichen-moss willow-dwarf birch tundra, in moss, 20.VIII.1982; 3 ♂♂, same, lichen-moss associations with *Arctous*, *Empetrum*, *Vaccinium uliginosum* on top of flat hills in lichen-moss dwarf birch tundra, 21–30.VI.1981; 1 ♂, same, 27.VII–7.VIII.1981; KHALMER-YU: 2 ♀♀, near the village, lichen-moss dwarf birch tundra on steep slopes, 17.VIII.1981; SIVAYA MASKA: 1 ♂, 3 ♀♀, 8 km NW of the village, lichen-moss dwarf birch tundra (200 m N of timberline), in moss, 8–13.VII.1981; 7 ♂♂, 5 ♀♀, same, 20.VIII.1981.

N. PESHA: 1 ♀, near the village, birch-spruce forest with pine, in moss, 6.VII.1983.

RANGE. Fennoscandian-Siberian-Nearctic arcto-boreal [Hippa et al., 1986].

#### *Ozyptila trux* (Blackwall, 1846)

2000 *Ozyptila trux*. — Mazura, Pechora Delta: 137. (Map: 15).

2001 *Ozyptila trux*. — Mazura & Esyunin, Arthropoda Selecta, 10 (1): 77. (Map: 13 & 15).

MATERIAL. VOLONGA: 1 ♀, near the village, moist birch forest with diverse herbs on river bank, in moss, 29.VII.1983.

SIVOMASKINSKIY: 4 ♂♂, 2 ♀♀, 6 km NW of the village, sparse moss-undershrub-dwarf spruce forest, in moss, 20.VIII.1981; 2 ♂♂, same, 30.VII.1981; 3 ♂♂, 2 ♀♀, same, birch-spruce forest with diverse herbs, in moss & leaf litter, 30.VII.1981; 1 ♀, same, 20.VIII.1981; 1 ♂, 1 ♀, 10 km NE of the village, right bank of Usa River, sparse moss-undershrub spruce-birch forest on terrace, in moss, 29.VII.1981.

RANGE. Palaearctic polyzonal.

COMMENTS. The species occurs only in skirts of the southern tundra, but by the Pechora River Valley it penetrates through the southern tundra up to the Barents Sea in the North.

#### *Xysticus albidus* Grese, 1909

2000 *Xysticus albidus*. — Mazura, Pechora Delta: 137. (Map: 15).

2001 *Xysticus albidus*. — Mazura & Esyunin, Arthropoda Selecta, 10 (1): 77. (Map: 14).

MATERIAL. TOBSEDA: 1 ♀, lichen-moss associations on sand with *Arctous*, *Empetrum*, *Betula nana*, 2–9.VII.1984; VORKUTA: 1 ♀, near Mulda Village, lichen-moss associations with *Arctous*, *Empetrum*, *Vaccinium uliginosum* on top of flat hills, 11.IX.1983; 1 ♀, same, 21–30.VI.1981; 1 ♀, same, 15–27.VII.1981; 2 ♂♂, 2 ♀♀, same, 7–27.VIII.1981; KHALMER-YU: 1 ♂, 1 ♀, near the village, spots of lichen-undershrubs tundra (*Arctous*, *Empetrum*) in lichen-moss dwarf birch tundra on tops of hills, 17.VIII.1981.

RANGE. Fennoscandian-Siberian arctic.

#### *Xysticus audax* (Schrank, 1803)

MATERIAL. SIVAYA MASKA: 1 ♀, in the village, on *Ranunculus* sp., 6.VII.1981.

RANGE. Palaearctic boreo-nemoral.

COMMENTS. This species has not been found in tundra.

#### *Xysticus britcheri* Gertsch, 1934

2000 *Xysticus britcheri*. — Mazura, Pechora Delta: 137. (Map: 15).

2001 *Xysticus britcheri*. — Mazura & Esyunin, Arthropoda Selecta, 10 (1): 77. (Map: 13 & 15).

MATERIAL. INDIGA: 3 ♀♀, near the village, lichen-moss dwarf birch tundra with *Ledum*, in moss, 21.VII.1984; VORKUTA: 1 ♀, near Zarechnyi Village, meadow with diverse herbs on floodplain bank of Vorkuta River, under stones, 19.VII.1982; 1 ♀, near Tsementnozavodskiy Village, bank of Vorkuta River, 8.VII.1980; 2 ♀♀, same, 31.VIII.1981; 3 ♂♂, near Vorgashor Village, lichen-moss dwarf birch tundra, 24.VIII.1981; 1 ♂, same, 24.VIII.1981; 2 ♂♂, same, lichen-moss dwarf birch tundra, in pitfall traps, VII.1980; KHALMER-YU: 1 ♂, near the village, lichen-moss dwarf birch tundra on steep slopes, 17.VIII.1981; 2 ♀♀, same, 15–27.VII.1981; 2 ♂♂, same, near the village, willow tundra on watershed, 17.VIII.1981; SIVAYA MASKA: 10 ♂♂, 3 ♀♀, 8 km NW of the village, lichen-moss dwarf birch tundra (200 m N of timberline), in moss, 30.VII.1981; 4 ♂♂, 5 ♀♀, same, 20.VIII.1981; 6 ♂♂, same, 9–13.VII.1981.

SIVOMASKINSKIY: 7 ♂♂, 6 km NW of the village, sparse moss-dwarf birch spruce forest, in moss, 30.VII.1981; 2 ♂♂, same, 12.VII.1983; 2 ♂♂, same, 20.VIII.1981; 2 ♂♂, 10 km NE of the village, right bank of Usa River, sparse moss-undershrub spruce-birch forest on terrace, in moss, 5–13.VII.1981; 3 ♂♂, same, 29.VII.1981.

RANGE. Siberian-Nearctic arcto-boreal.

COMMENTS. Indiga is the westernmost locality of the species.

#### *Xysticus obscurus* Collett, 1877

MATERIAL. NARIAN-MAR: 1 ♀, near the village, sphagnum bog on lake bank, in *Sphagnum*, 27.VI.1984; VORKUTA: 1 ♂, near Tsementnozavodskiy Village, willow stands on floodplains of Vorkuta River, 18–30.VI.1981; 1 ♀, same, in shrubs, 8.VII.1980.

RANGE. Holarctic polyzonal.

#### *Xysticus sabulosus* (Hahn, 1832)

MATERIAL. N. PESHA: 1 ♂, near the village, dump of beams, 3.VIII.1983.

RANGE. European polyzonal.

COMMENTS. This species has not been found in tundra.

#### *Xysticus sincera* Kulczyński, 1926

MATERIAL. TOBSEDA: 1 ♀, dry lichen-moss dwarf birch associations on sand, thin layer of lichens, 3.VII.1984; SHAPKINA

RIVER: 1 ♂, 1 ♀, lichen-moss dwarf birch tundra, in moss, 16.VII.1984.

RANGE. Holarctic arcto-boreal.

*Xysticus viduus* Kulczyński, 1898

2000 *Xysticus viduus*. — Mazura, Pechora Delta: 137. (Map: 15).

2001 *Xysticus viduus*. — Mazura & Esyunin, Arthropoda Selecta, 10 (1): 77. (Map: 13).

MATERIAL. SIVOMASKINSKIY: 2 ♂♂, 2 ♀♀, 10 km NW of the village, right bank of Usa River, under stones on river bank, 5.VII.1981; 1 ♀, same, diverse herbs on river bank, 14.VIII.1980.

RANGE. European boreo-alpine.

COMMENTS. The species occurs only in skirts of the southern tundra, but by the Pechora River Valley it penetrates through the southern tundra up to the Barents Sea in the North.

Fam. SALTICIDAE

*Chalcoscirtus alpicola* (L. Koch, 1876)

1991 *Chalcoscirtus alpicola*. — Marusik, Zool. zhurn., 70 (1): 21. (Map: 8).

2000 *Chalcoscirtus alpicola*. — Mazura, Pechora Delta: 137. (Map: 15).

MATERIAL. VOLONGA: 1 ♂, 4 ♀♀, near the village, under-shrub tundra (*Arctous*, *Empetrum*, *Betula nana*), not far from sea-coast, 23.VII.1983; NARIAN-MAR: 1 ♀, near the village, dry birch forest, in moss, 28.VI.1984; VORKUTA: 1 ♀, near Tsementnozavodskiy Village, bank of Vorkuta River, among stones, 18.VI.1981; 1 ♀, near Vorgashor Village, lichen-moss dwarf birch tundra, 18.VII.1985 (all det. D. Logunov, 1982).

RANGE. Holarctic arcto-alpine.

*Chalcoscirtus hyperboreus* Marusik, 1991

1991 *Chalcoscirtus hyperboreus*. — Marusik, Zool. zhurn., 70 (1): 25. (Map: 8).

2000 *Chalcoscirtus hyperboreus*. — Mazura, Pechora Delta: 137. (Map: 15).

MATERIAL. VORKUTA: 1 ♀, near Tsementnozavodskiy Village, steep bank of Iz'yurvozh Brook, rocky slopes, among stones, 27.VI.1982; 1 ♀, same, bank of Vorkuta River, among stones, 26.VIII.1982.

RANGE. Siberian boreo-nemoral.

*Dendryphantes rudis* (Sundevall, 1832)

MATERIAL. VORKUTA: 1 ♀, near Tsementnozavodskiy Village, steep bank of Iz'yurvozh Brook, rocky slopes, among stones, 27.VI.1982; 1 ♀, same, 22.VII.1982.

RANGE. Palaearctic boreo-nemoral.

*Evarcha falcata* (Clerck, 1758)

MATERIAL. N. PESHA, 2 ♀♀, near the village, birch forest with diverse herbs, in moss, 2.VIII.1983; SIVOMASKINSKIY: 1 ♂, 1 ♀, 6 km NW of the village, sparse moss-under-shrub-dwarf birch spruce forest, in moss, 30.VII.1981; 1 ♀, 10 km N of Sivomaskinskiy Village, right bank of Usa River, sparse moss-under-shrub-dwarf birch spruce-birch forest on the river terrace, under bark of *Betula* sp., 13.VIII.1980; 1 ♂, same, in *Vaccinium myrtillus* under-shrub, 13.VIII.1980.

RANGE. Palaearctic polyzonal.

COMMENTS. This species has not been found in tundra.

*Heliophanus camtschadalicus* Kulczyński, 1885

MATERIAL. BELUSHIE: 1 ♀, near the village, lichen-moss dwarf birch tundra, in moss, 13.VII.1983.

RANGE. Palaearctic boreo-nemoral.

COMMENTS. The species occurs only in skirts of the southern tundra.

*Neon reticulatus* (Blackwall, 1853)

MATERIAL. N. PESHA: near the village, 2 ♀♀, birch-spruce forest with pine on terrace, in moss, 6.VI.1983; 2 ♀♀, same, birch forest with diverse herbs, in moss, 2.VIII.1983.

RANGE. Palaearctic-W-Nearctic boreo-nemoral.

COMMENTS. This species has not been found in tundra.

*Sitticus ranieri* (Peckham et Peckham, 1909)

1985 *Sitticus lineolatus*. — Nenilin, Fauna and ecology of spiders of the USSR: 132. (Map: 8).

MATERIAL. VORKUTA: 1 ♀, near Vorgashor Village, meadow with diverse herbs in depression in lichen-moss dwarf birch tundra, VII.1981.

RANGE. Fennoscandian-Siberian-Nearctic boreal.

Discussion

Altogether 216 species of spiders belonging to 13 families are registered in the southern tundra of the Russian Plain. Certainly, these numbers do not reflect the tundra fauna in full, because studies over several years were carried out only in Vorkuta Region (Map: 7–9), and in other points spiders were collected during several days or weeks. In the two investigated localities in forest tundra we registered 127 species from 14 families, and this information considerably helps us for the analysis of the zonal-landscape distribution.

Table 1 shows general data of spider distribution in tundra.

Predictably, as seen well in Table 1, the leading part in formation of the spider fauna of southern tundra belongs exclusively to Linyphiidae, in all landscapes. The second family in importance is Lycosidae and the third Gnaphosidae; however, in zonal communities Thomisidae are more species-rich than Gnaphosidae. Other families are represented by 1–3 species and do not play practically any role in formation of fauna of tundra. Many families do not come into tundra (see below) even on channels of the rivers, although found in forest tundra, i.e., Pisauridae and Zoridae.

Regional features of the southern tundra fauna

Among interesting records of spiders in the European tundra, we will mention here the following:

*Agyreta tibialis* has been recently described from Altai Mts. (South Siberia) [Tanasevitch, 2005] and found outside of Altai only in Bolshezemelskaya tundra. The distribution type of this species can be characterized as arcto-alpine and assume its presence in other

Table 1. Number of species in families found in tundra.  
Таблица 1. Число видов в семействах, найденных в тундре.

Families	Tundra (as belt)	Number of species in main tundra landscapes		
		River valleys only**	Tundra watersheds	
			All communities	Zonal communities
Linyphiidae	152	36	116	22
Lycosidae	22	5	17	4
Gnaphosidae	10	1	9	1
Thomisidae	7	1	6	4
Salticidae	5	1	4	0
Dictynidae	6	3	3	1
Araneidae	1	0	1	0
Clubionidae	4	1	3	0
Tetragnathidae	3	0	3	0
Theridiidae	2	0	2	0
Pisauridae	0	0	0	0
Hahniidae	1	0	1	0
Philodromidae	2	1	1	1
Cybaeidae	1	1	0	0
Zoridae	0	0	0	0
TOTAL species	216	50	166	33

\*All families found in tundra and forest tundra.

\*\*Species reaches tundra zone by river valleys only.

regions of Arctic and in mountains of the Southern Siberia.

*Dactylopiastes mirificus* is documented in several localities of nemoral zone in Europe, found in high latitude, but the penetration into the tundra zone is restricted to river valleys.

*Erigone arctica* has hitherto been registered in East Siberia and Alaska.

*Erigone whymperi* has been known from the Northern Nearctic and is registered in Palaearctic for the first time. *E. whymperi* is a common species for intrazonal habitats in Bolshezemelskaya tundra and it is very strange that it has not been earlier found in well-studied Urals and Southern Yamal, as well as in other Northern Asian territories.

*Semljicola caliginosus* has been earlier considered as an endemic of the Great Britain fauna. It was found in two localities of the Bolshezemelskaya tundra by both sexes, so there is no any doubt to its true determination.

*Silometopus ambiguus* has been earlier known from the Western Europe.

In the zoogeographical structure of the tundra spider fauna (216 species) we can see the abundance of common boreo-nemoral species with wide range (H + P + S-N + F-S-N + F-S-WN + P-WN + P-A, see Table 2). Such species form the majority — 62% of the fauna. The European (E) and Siberian elements (S + F-S + S-A+WS) have almost similar proportions, i.e., 17.3% and 15.4%, respectively. If we deduct from the total tundra-list the species, which penetrate into tundra only on river valleys (“v” - in the Table 2), i.e. we are dealing only with the watershed fauna (166 species), the proportion of the European species will de-

crease until 11.5%, and the proportion of Siberian species will increase up to 16.9%. Obviously, the Siberian elements participate in formation of watershed fauna in greater degree than European ones.

The Siberian elements penetrate into the European tundra through the Urals, and a few of them occupy only its eastern regions, e.g., *Erigone arctica*, *Hypselistes semiflavus*, *Maro sibiricus*, *Paraglyphesis polaris*, *Porrhomma boreale*, *Praestigia groenlandica*. The majority is distributed in the whole southern part of Bolshezemelskaya tundra, and the western border of their distribution is Pechora River: *Agyneta tibialis*, *Incestophantes laricetorum*, *Pseudocyba miracula*, *Thaleria orientalis*, and *Pardosa indecora*. It is quite probable, that these species penetrate through the Polar Ural using tundra communities although it is difficult to be sure, as the spider material from the European northern taiga is virtually absent.

Pechora River is also as the western border of distribution of many Siberian-Nearctic and Holarctic species, e.g. *Thymoites oleatus*, *Dactylopiastes video*, *Hilaira incondita*, *Mecynargus tungusicus*, *Perregrinus deformis*, *Tarsiphantes latithorax*. The border of some Siberian and Siberian-Nearctic species crosses the western border of the European tundra (up to bottom of Kanin Peninsula): *Agyneta ripariensis*, *Araeoncus vorkutensis*, *Erigone hypoarctica*, *Panamomops dybowskii*, *Semljicola thaleri*, *Tubercithorax subarcticus*, *Alopecosa hirtipes*, *Xysticus britcheri*, *X. sincera*. Of species with Pechora River as their eastern border in the European tundra it is possible to note only *Oryphantes angulatus*; eastward from Pechora in tundra occurs its vicariant *O. geminus*, occupying there intrazonal biotopes.

In his time K. Eskov compared the well-known Yenisei River zoogeographically to semi-permeable membrane which is permeable to the eastern fauna westwards, but is closed for the numerous European elements eastwards [Eskov, 1988]. Precisely similar barrier is the Urals which prevents dispersal of many representatives of the Siberian or the Siberian-Nearctic fauna to Europe: *Agyneta birulai* (Kulcz., 1908), *A. levii* Tan., 1984, *Anguliphantes dybowski* (O.P.-Cambr., 1873), *A. sibiricus* (Tan., 1986), *Arcterigone pili-frons* (L.Koch, 1879), *Bathylinyphia major* (Kulcz., 1885), *Ceraticelus bulbosus* (Em., 1882), *Concavocephalus rubens* Eskov, 1989, *Dicymbium facetum* (L.Koch, 1879), *Erigone arctica sibirica* Kulcz., 1908, *Gnathonarium taczanowskii* (O.P.-Cambr., 1873), *H. proletaria* (L.Koch, 1879), *H. syrojeczkovskii* Eskov, 1981, *Holminaria sibirica* Eskov, 1991, *Improphantes flexilis* (Tan., 1986), *Incestophantes incestus* (L.Koch, 1879), *Islandiana cristata* Eskov, 1987, *Maro pansibiricus* Tan., 2006, *M. saaristoi* Eskov, 1980, *Monoclerellus montanus* Tan., 1983, *Mughiphantes taczanowskii* (O.P.-Cambr., 1873), *Paraeboria jeniseica* (Eskov, 1981), *Paraglyphesis lasiargoides* Eskov, 1991, *Poeciloneura theridiiformis* (Em., 1911), *Proislandiana pallida* (Kulcz., 1908), *Scotinotylus protervus* (L.Koch, 1879), *Sibirocyba incerta* (Kulcz., 1916) most representatives of *Silometopoides*, *Silometopus uralensis* Tan., 1986, *Styloctetor lehtineni* Mar. et Tan., 1998, *Tanasevitchia uralensis* (Tan., 1983), *Tmeticus nigriceps* (Kulcz., 1916), *Viktorium putoranicum* Eskov, 1988, *Wabasso hilairoides* Eskov, 1988, *W. millidgei* Eskov, 1988, *Alopecosa mutabilis* (Kulcz., 1908), etc. On the other hand, the Urals is not an essential obstacle for penetration of the European species into West Siberia, fauna of that is European [Tanasevitch, 2005].

#### Zonal peculiarities of the spider tundra population in Russian Plain

##### *The species restricted to river valleys*

It is well-known from literature, and conformed in this research, that the rivers flown in a meridional direction are suppliers of southern elements in the tundra zone. Such most powerful "pipeline" in the European part of the Russian tundra is the Pechora River. Numerous species are moving to the North on its wide valleys, and some of them live only in intrazonal communities of valleys, others live on watershed and participate in formation of tundra fauna. The first group, which is not leaving valleys, totals up to 50 species (23% of the total tundra belt fauna). They are almost without exception species with wide areas, e.g. Holarctic and Palaearctic (45%) or European ones (37%). In this category, the Siberian species have a minor percent (12%).

In the Vorkuta region (Map: 7–9) such supplier of southern material is the Vorkuta River, the right tributary of the Usa River. Valleys of the Vorkuta River and its large inflows — brooks are characterized by pres-

ence not only floodland willow stands (bush), but also a plenty of rocky exposures and stony banks. To these two biotopes is associated (confined) the specific river valley fauna, rising up to the middle of the zone of southern tundra.

Many species occur exclusively on stony banks: *Diplocephalus subrostratus*, *Halorates distinctus*, all *Oedothorax* (three species), many of *Erigone* species, *Silometopus ambiguus*. It is interesting that an arctic species *E. arctica palaeartica* and a Siberian boreal *E. hypoartica* are associated here in tundra only in this kind of biotope. The fauna of rocky slopes (with undershrubs) is also specific: only here occurs Siberian boreal *Abiskoa abiskoensis*, *Flagelliphantes bergstroemi*, *Savignia producta*, *Wubanoidea uralensis*; as well as all species of *Porrhomma*, *Erigone dentipalpis*, *Walckenaeria capito*. These do not live on watersheds and do not participate in formation of the tundra fauna.

The fauna of floodland willow stands and coastal meadows is not so specific, but these communities accumulate the great bulk of valley fauna, including untypical species for tundra, such as representatives of Araneidae, Clubionidae and Salticidae. In addition, such typical Siberian boreals as *Pseudocyba miracula* and *Thaleria orientalis* are found only in this type of localities.

Among species, which do not penetrate into the tundra even on river valleys but are found in the forest tundra, are not only boreo-nemoral, i.e., *Bolyphantes alticeps*, *Macrargus rufus*, *Walckenaeria alticeps*, *W. atrotibialis*, *W. nudipalpis*, but also even typical boreal: *Incestophantes kochiellus*, *Cryphoea silvicola*, *Gnaphosa muscorum*, etc. There are the whole genera belonging to the same category, i.e., *Pirata* spp., and *Zelotes* spp., as well as the family Araneidae (except one species).

Some species penetrate only into the skirts of southern tundra (in zonal communities) at the border with forest tundra, but do not come into depth of tundra watershed: *Centromerus sylvaticus*, *Hypselistes semiflavus*, *Maro minutus*, *Panamomops tauricornis*, *Scandichrestus tenuis*, *Tiso aestivus*, *Pardosa palustris*, *Hahnia ononidum*, *Haplodrassus soerenseni*, *Gnaphosa lapponum*, *G. leporina*, etc. Surprisingly, such typical taiga moss inhabitants as *Robertus lividus* and *Cryphoea silvicola* which do not occur in zonal tundra communities do not come in intrazonal communities located on watersheds and are found in zonal tundra only at the narrow edge of the southern tundra.

##### *Peculiarities of the watershed tundra fauna*

Considering the watershed tundra fauna, we should remind, that watersheds are not entirely covered with zonal communities (lichen-moss-undershrub dwarf birch or willow-dwarf birch), but also with intrazonal communities (willow stands in depressions, bushes and bogs on coast of lakes, meadow-like communities on brook slopes, flat-hill peatbogs). Thus, the watershed area is a diverse mosaic of the vegetation cover. The

following is based on the long-term researches in the Vorkuta Region where zonal communities are dominating in the area.

It is difficult to divide precisely the watershed fauna (166 species) to clearly intrazonal or zonal groups of distribution type, so we propose the third type (mixed), i.e. spiders which occur in zonal and in intrazonal communities, but prefer the last one.

**INTRAZONAL species.** There are 74 species with pure intrazonal type of distribution in southern tundras ("i" and "i-v" in Table 2, 45%). Mainly these species are found in willow stands in depressions. The litter is here rather well developed and conditions are characterized by the higher humidity. The fauna of this biotope is rich and frequently population density here is higher than in zonal communities. The most abundant species strictly restricted to this biotope are: *Araeoncus vorkutensis*, *Oryphantes geminus*, *Leptorhoptrum robustum*, *Walckenaeria nodosa*. Many species lives also in other biotopes, for example, meadow-like communities: *Agyneta allosubtilis*, *Allomengea scopigera*, *Bathypantes reprobis*, *Erigone longipalpis*, *Pelecopsis mengei*. Many species prefer overwetting willow stands on coast of lakes: *Erigone svenssoni*, *Bathypantes eumenis*, *B. setiger*, *B. gracilis*, *Tmeticus affinis*, etc.

The flat-hill peatbogs are one of the least occupied intrazonal biotopes, owing to presence of some specific conditions. Peats are xerotic, the vegetation is basically concentrated on their slopes, and the main surface is covered mainly with *Rubus chamaemorus*, *Polytrichum* mosses, spots of lichens, and creeping *B. nana* and *Salix* spp. Besides low population density, the fauna of flat-hill peatbogs is characterized also by low species diversity. As species specific for this plant community we can mention *Drepanotylus borealis* and *Lophomma punctatum*, the last species has been found only in this biotope.

Boggy sites between peat hills are occupied usually by ponds, or sedge-*Eriophorum* fens, or small-sized sphagnum bogs. The fauna of them is poor, but specific. Only here occur *Carorita limnaea*, *Hilaira nubigena*, *Semljicola barbiger*, *S. caliginosus* and *Wabasso replicatus*.

Small number of intrazonal habitants prefers coast of the small rivers and brooks (i-v in Table 2): *Pardosa eiseni*, *Clubiona kulczynskii*, *C. stagnatilis*, and *Dendryphantes rudis*.

Special place among intrazonal communities represent agrocoenoses (polycereals). Fauna of them, as one would expect, is the poorest, but from the zonal point of view the most unexpected. During all time of research in the tundra, arcto-alpine *Erigone psychrophila* and arctic *Halorates spetsbergensis* were found only here. *E. psychrophila* together with *Allomengea scopigera* and *Erigone longipalpis* makes the basis of the population of spiders in agrocoenoses: pitfall traps have been at times simply overfill by these three species. Also ubiquitous *E. atra* and arctic *Erigone whymperi* have been found in high numbers in agrocoenoses.

It is important to note, that the majority of arctic and arcto-alpine species are associated only with intra-

zonal communities: *Thymoites oleatus*, *Hybauchenidium aquilonare*, *H. ferrumequinum*, *Erigone psychrophila*, *E. remota*, *E. tirolensis*, *Erigone whymperi*, *Halorates spetsbergensis*, *Praestigia groenlandica*, *Tar-siphantes latithorax*, *Wabasso replicatus*, etc. Some of arctic elements occur only in river valleys and on river coasts: *Erigone arctica palaeartica*, *E. arctica*, *Chalcoscirtus alpicola*. Only a small portion of this type of species living in zonal communities, but is not avoiding intrazonal biotopes in watersheds: *Agyneta tibialis*, *Alopecosa hirtipes*, *Ozyptila arctica*, *Thanatus arcticus*, *Xysticus albidus*, and *X. sincera*.

**ZONAL species.** The pure zonal elements in watersheds fauna includes 33 species (less than 20% of the watershed fauna). These species seldom leave zonal communities (where the basic feature is presence of mosses and lichens), and make the core of zonal fauna of southern tundras. The majority of these are boreal, boreo-nemoral and polyzonal species with wide range of distribution; of which the most abundant are (in alphabetic order within families): *Agyneta gulosa*, *Diplocentria bidentata*, *Gonatium rubens*, *Hilaira gibbosa*, *H. herniosa*, *Horcotes strandi*, the majority of *Mecynargus* spp., *Walckenaeria karpinskii*, *Zornella cultrigera*, *Arctosa alpigena*, *Pardosa hyperborea*, *Arctella lapponica*, the others are Siberian boreals: *Semljicola thaleri*, *Walckenaeria korobeinikovi*, *W. korobeinikovi*, etc.; or European boreals: *Mecynargus morulus*, *Alopecosa taeniata*.

The distinctive feature of zonal southern tundra communities is the small portion (less than 30%) of arctic and arcto-boreal elements: *Oreoneta leviceps*, *O. uralensis*, *Alopecosa hirtipes*, *Ozyptila arctica*, all species of *Xysticus*: *X. albidus*, *X. britcheri*, *X. sincera*, and rather rare tundra species: *Hilaira glacialis*, and *Thanatus arcticus*. It is important to note, that among the listed species above, linyphiids are in minority, although in all communities they are exclusive dominants. Probably, the small and poorly chitinized arctic Linyphiidae are more sensitive to humidity than bigger and well-sclerotized non-linyphiid spiders, therefore in southern tundras they choose intrazonal communities.

A special biotope among zonal elements of landscape in the southern tundra represent sites at tops of high hills, which correspond to typical tundra, and can be considered as extrazonal communities. These biotopes are perhaps the most extreme on watersheds: the range of temperatures here is much wider than on flat sites (in the winter the snow is blown off by wind, in the summer there is a strong drainage and warming up by the sun). The fauna of these biotopes is poor, and is compound mainly of boreal elements, and the populations have very low density (due to a dry and very thin inhabited layer). Nevertheless these communities are a preferable place of dwelling for some arcto-boreal or arcto-alpine species, i.e., *Agyneta maritima*, *A. ripariensis*, *A. similis*, *A. tibialis*, *Horcotes strandi*, *Mecynargus borealis*, and *Oreoneta leviceps*.

**INTRAZONAL-ZONAL species.** For this type of distribution we refer 30 species ("iz" in Table 2, 18%

of watershed fauna), most of them are Linyphiidae (70%), from that 48% are boreal, 29% — boreo-nemoral. The Arctic elements in this category is minor — 23%.

In the analysis proposed above we have not mentioned species which occur only in skirts of the southern tundra (“s” in Table 2), or/and found only in Pechora Delta (“s-d” in Table 2). These 29 species form 17% of watershed spider fauna, and should be considered as tundra inhabitants formally.

#### *Typical tundra of the Russian Plain*

Only 35 species of spiders were found in the typical tundra subbelt (Map: 4). This is caused by short duration of stay in that locality (our material contains all species reported by Mazura & Esyunin [2001]). Only one species found here by us is not present in southern tundra, i.e., arcto-boreal *Agyneta nigripes*.

Some data of the continental tundra spider fauna exists for the northernmost point of Russian Plain tundra [Eskov, 1985] — Yurshar Polar Station (Yugorskiy Peninsula). This locality does not belong to Bolshezemelskaya tundra, this region is considered belonging to the Urals, but just in case we mention these seven species here: *Erigone arctica palaeartica*, *E. psychrophila*, *Halorates holmgreni*, *Hilaira incondita*, *Masikia indistincta* (Kulczyński, 1908), *Larinioides cornutus* and *Alopecosa solivaga* (Kulczyński, 1901). Only two species are missing in our list of southern tundra spiders: Siberian-Nearctic arcto-boreal *M. indistincta* and Siberian arcto-boreal *A. solivaga*.

#### Conclusion

Based on chorological analysis from above, the southern tundra spider fauna (216 species) of the European Plain is compound of three basic components. The first is fauna of river valleys (50 species, 23% of the total tundra fauna) which is not penetrating to watersheds and does not participate in formation of the watershed fauna, although formally is found in tundra zonal belt. This element is formed of species with widespread range of distribution and of European species; the Siberian element is a minor here. The second component are intrazonal species and species with intermediate (intrazonal) type of distribution, making the basic part of watershed tundra fauna (104 species, 48%); and, the third are zonal species (33 species, 15%), the core of the fauna of zonal communities. 29 species registered in tundra (14%) have an unclear chorological pattern, they are only occurring in skirts of the southern tundra or/and found only in Pechora Delta.

No specific southern tundra fauna exists at all. The zonal and intrazonal groups of the watershed fauna are basically boreal or boreo-nemoral species. The Arctic element (arctic, arcto-alpine, arcto-boreal) is insignificant and associated almost exclusively with intrazonal moist biotopes, but the zonal communities are occupied by boreal species and ubiquitous, e.g., *Gonatium*

*rubens*, *Agyneta gulosa*, *Walckenaeria kochi*, *Clubiona trivialis*, etc. It is important to note, that the arctic elements in zonal communities are represented mainly of not-linyphiid spiders, basically Thomisidae. It is quite probably, that the well-sclerotized Thomisidae are not so depending of humidity of biotope and can live in xeric zonal communities.

The occupation of ubiquitous and boreals in the zonal formations in southern tundras probably is considered to show that the conditions of dwelling here are not so pessimal, that they demand special adaptations of species. The arctic component will penetrate into the southern areas of tundra using well humidified biotopes, avoiding zonal, which are more xerotic.

Entering of boreal and ubiquitous species to zonal areas and penetration of the Arctic fauna into the southern tundra using intrazonal communities, mentioned by K. Eskov [1986] for Siberian araneofauna, is here confirmed in the European tundra. It means that processes of zonal-landscape distribution of spiders in Hypoarctic are the same and do not depend on the regional component.

**ACKNOWLEDGEMENTS.** The authors are very grateful to Drs Kirill Eskov, Kirill Mikhailov (Moscow, Russia), Vladimir Ovtsharenko (New York, USA), Alexey Zyuzin (Alma-Aty, Kazakhstan), for help in determination of some species. Also we deeply indebted to Drs Rodney Crawford (Seattle, Canada), Donald Buckle (Saskatchewan, Canada), Dmitry Logunov (Manchester, UK), Sergey Esyunin (Perm, Russia) and Yuri Marusik (Magadan, Russia) for the comparative material. This work was supported in part by the Academy of Finland (Project # 114501).

#### 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 // *Faberies. Suppl.* 10. P.89–191.
- Chernov Yu. I. 1978. The structure of the animal population of the Subarctic // *Moscow, Nauka*. 165 pp.
- Eskov K.Yu. 1981a. [Spiders of the genera *Eboria*, *Latithorax*, *Rhaebothorax* and *Typhochrestus* (Aranei, Linyphiidae) in the fauna of Siberia] // *Zool. zhurn.* Vol.60. No.4. P. 496–505 [in Russian, English summary].
- Eskov K.Yu. 1981b. [Zoogeography of spiders of the genus *Hilaira* (Aranei, Linyphiidae)] // *Ibid.* Vol.60. No.11. P.1629–1639 [in Russian, English summary].
- Eskov K.Yu. 1985. [Spiders of the tundra zone of the USSR] // The fauna and ecology of spiders of the USSR. *Trudy Zool. Inst. Akad. nauk SSSR, Leningrad.* Vol.139. P.121–128 [in Russian].
- Eskov K.Yu. 1986a. On *Veles* Pakhorukov 1981 and *Wubanooides* n.gen., two Siberian linyphiid genera (Arachnida: Araneae: Linyphiidae) // *Senckenberg. biol.* Vol. 67. No.1/3. P. 173–182.
- Eskov K.Yu. 1986b. [The spider fauna of the hypoarctic belt of Siberia] // Chernov Yu.I. (ed.). *Southern tundras of the Taimyr.* Nauka. Leningrad. P.174–191 [in Russian].
- Eskov K.Yu. 1988a. The spider genera *Savignya* Blackwall, *Diplocephalus* Bertkau and *Archaraeoncus* Tanasevitch (Aranei, Linyphiidae) in the fauna of Siberia and the Soviet Far East // *Folia ent. Hung.* Bd.49. P. 13–39.
- Eskov K.Yu. 1988b. [Spiders of the genera *Mecynargus*, *Mecynargoides* gen.n. and *Tubercithorax* gen.n. (Aranei, Linyphiidae)

Table 2. The chorology of the European tundra spiders\*.  
Таблица 2. Хорология пауков европейских тундр\*.

Taxa	Type of zonal-landscape distribution	Localities 1–15 (see above)															Range
		Malozemelskaya tundra					Bolshezemelskaya tundra					Forest tundra					
		Belushie	Volonga	Indiga	Tobscda	U.R.Indiga	Henets Hill	Delta Pechora	Narian-Mar	U.R.Shapkina	Dya-Ty	Vorkuta	Khalmer-Yu	S.Maska	N.Pesha	Sivomask.	
<b>Theridiidae</b>																	
<i>Robertus lividus</i> (Bl.)	s		+			+		+						+	+		P-A
<i>Thymoites oleatus</i> (L.K.)	i												+				S-N
<b>Linyphiidae</b>																	
<i>Abiskoa abiskoensis</i> (Holm)	v										+						F-S
<i>Agnyphantes expunctus</i> (O.P.-C.)	v								+		+	+		+	+		P
<i>Agyneta allosubtilis</i> Loksa	i	+	+	+							+	+		+	+		S-N
<i>A. conigera</i> (O.P.-C.)	v	+	+											+			P
<i>A. gulosa</i> (L.K.)	z	+	+								+	+		+			P
<i>A. maritima</i> (Em.)	iz										+						S-N
<i>A. mollis</i> (O.P.-C.)	i		+				+										P-A
<i>A. mossica</i> (Schikora)	iz	+		+							+	+					WP
<i>A. nigripes</i> (Sim.)	z				+												H
<i>A. olivacea</i> (Em.)	i							+			+					+	H
<i>A. ripariensis</i> Tan.	iz		+		+			+			+	+					S
<i>A. similis</i> (Kulez.)	iz				+			+		+	+						P
<i>A. tibialis</i> Tan.	iz							+	+								S
<i>Allomengea scopigera</i> (Grube)	i	+	+	+			+	+	+		+	+		+	+		P-WN
<i>Araeoncus vorkutensis</i> Tan.	i	+	+	+				+			+	+		+	+		S
<i>Bathyphantes approximatus</i> (O.P.-C.)	v	+						+	+		+	+		+	+		E
<i>B. eumenis</i> (L.K.)	i							+	+		+	+		+	+		H
<i>B. gracilis</i> (Bl.)	i	+		+	+			+	+		+	+		+	+		H
<i>B. humilis</i> (L.K.)	i	+															S
<i>B. nigrinus</i> (Westr.)	v							+						+			E
<i>B. reprobus</i> (Kulez.)	i		+								+					+	H
<i>B. setiger</i> F.O.P.-C.	i							+	+		+	+		+	+		P







Table 2 (continuing).  
Таблица 2 (продолжение).

Taxa	Type of zonal-landscape distribution	Localities 1–15 (see above)															Range
		Malozemelskaya tundra					Bolshezemelskaya tundra					Forest tundra					
		Belshie	Volonga	Indiga	Tobседа	U.R.Indiga	Henets Hill	Delta Pechora	Narian-Mar	U.R.Shapkina	Diya-Ty	Vorkuta	Khalmer-Yu	S.Maska	N.Pesha	Sivomask.	
		1	2	3	4	13	14	15	5	6	7	8	9	10	11	12	
<i>Pocadicnemis pumila</i> (Bl.)	i		+			+		+								+	H
<i>Poeciloneeta variegata</i> (Bl.)	i		+					+				+		+		+	P-WN
<i>Porrhomma boreale</i> (Banks)	v												+				S-A
<i>P. convexum</i> (Westr.)	v											+					E
<i>P. egeria</i> Sim.	v											+					E
<i>P. pallidum</i> Jacks.	v		+														WP
<i>P. pygmaeum</i> (Bl.)	v		+						+			+			+		P
<i>Praestigia groenlandica</i> Holm	i											+					S-N
<i>Pseudocyba miracula</i> Tan.	i							+				+					S
<i>Savignia frontata</i> Bl.	s-d	+	+	+				+	+						+		WP
<i>S. producta</i> Holm	v			+				+				+					F-S
<i>Scandichrestus tenuis</i> (Holm)	s		+														E
<i>Scotinofylus alpigena</i> (L.K.)	iz								+			+			+		P
<i>S. evansi</i> (O.P.-C.)	iz		+									+					E
<i>S. sacer</i> (Crosby)*																+	S-N
<i>Semijicola angulatus</i> (Holm)	i		+						+						+		F-S
<i>S. barbiger</i> (L.K.)	i									+		+					F-S
<i>S. caliginosus</i> Falc.	i									+		+					E
<i>S. faustus</i> (O.P.-C.)	v							+									E
<i>S. lapponicus</i> (Holm)	iz				+			+				+					F-S-WN
<i>S. latus</i> (Holm)	v		+														P
<i>S. thaleri</i> (Esk.)	z			+				+	+			+				+	S
<i>Silometopus ambiguus</i> (O.P.-C.)	v											+					E
<i>Stemonyphantes lineatus</i> (L.)	v		+													+	EAM
<i>Styloctetor stativus</i> (Simon)*															+		H
<i>Tarsiphantes latithorax</i> Strand	i							+				+	+				S-N









- in the fauna of the USSR // Zool. zhurn. Vol.67. No.12. P.1822–1832 [in Russian, English summary].
- Eskov K.Yu. 1988c. [Spiders (Aranei) of Middle Siberia] // Materials on the fauna of Central Siberia and adjacent regions of Mongolia. Inst. Evol. Morphol. Ecol. Anim., Moscow. P.101–155 [in Russian].
- Eskov K.Yu. 1994. Catalogue of the linyphiid spiders of northern Asia (Arachnida, Araneae, Linyphiidae). Sofia. Pensoft Publishers. 144 pp.
- Esyunin S.L. 1992. [Remarks on the Ural spider (Arachnida, Aranei) fauna. 1. New records of crab spiders (Philodromidae, Thomisidae), with remarks on taxonomy] // Zool. zhurn., Vol.71. No.11. P.33–42 [in Russian, with English summary].
- Hippa H., Koponen S., Oksala I. 1986. Revision and classification of the Holarctic species of the *Ozyptila rauda* group (Araneae, Thomisidae) // Ann. Zool. Fennici. Vol.23. P.321–328.
- Koponen S., Marusik Yu.M., Tanasevitch A.V. 1998. New data on the spider fauna of the Polar Urals (Aranei) // Arthropoda Selecta. Vol.6. No.3–4. P.109–119.
- Locket G. H. 1964. Type material of British spiders in the O. Pickard-Cambridge collection at Oxford // Ann. Mag. nat. Hist. Vol.13. No.7. P.257–278.
- Marusik Yu.M. 1991. [The spider genus *Chalcoscirtus* (Aranei, Salticidae) in the USSR fauna. Communication 2] // Zool. zhurn. Vol.70. No.1. P.19–31 [in Russian, with English summary].
- Marusik Yu.M., Koponen S., Bocher J. 2006. The collection of Greenland spiders (Aranei) kept in the Zoological Museum, University of Copenhagen // Arthropoda Selecta. Vol.15. No.1. P.59–80.
- Mazura N.S. 2000. Pechora Delta: Structure and dynamics of the Pechora Delta Ecosystems (1995–1999). Spiders // Syktyvkar. P.133–137.
- Mazura N.S., Esyunin S.L. 2001. Fauna and biotopic distribution of the spiders (Arachnida: Aranei) in the tundra zone of the North-East of Russian Plain // Arthropoda Selecta. Vol.10. No.1. P.75–81.
- Mikhailov K.G. 1987. Contribution to the spider fauna of the genus *Micaria* Westring, 1851 of the USSR. I (Aranei, Gnaphosidae) // Spixiana. Bd.10. H.3. P.219–234.
- Mikhailov K.G. 1992. [Spiders of the genus *Clubiona* Latreille (Aranei, Clubionidae) of the Soviet Union (a faunistical review)] // Fauna i ekologiya paukov, skorpionov i lozhnoskorpionov SSSR. Trudy Zool. Inst. Akad. nauk SSSR. 1990. Vol.226. P.60–69 [in Russian, English summary].
- Ogureeva G.N., Danilenko A.K., Leonova N.B., Rumyantsev N.B. 2004. [Biome diversity and ecoregions of Russia] // Geografiya, obshchestvo, okruzhayushchaya sreda. Moscow: Gorodets. P.392–398.
- Tanasevitch A.V. 1982. [A new genus and species of spiders of the family Linyphiidae (Aranei) from the Bolshezemelskaya tundra] // Zool. zhurn. Vol.61. No.10. P.1501–1508 [in Russian, English summary].
- Tanasevitch A.V. 1983. [New genera and species of spiders of the family Linyphiidae from the Polar Urals] // Ibid. Vol.62. No.2. P.215–221 [in Russian, English summary].
- Tanasevitch A.V. 1984a. [New and little-known spiders of the family Linyphiidae (Aranei) from the Bolshezemelskaya tundra] // Ibid. Vol.63. No.3. P.382–391 [in Russian, English summary].
- Tanasevitch A.V. 1984b. [New species of spiders of the genus *Agynera* Hull, 1911 (Aranei, Linyphiidae) from Siberia and Middle Asia] // Nauchn. dokl. vyssh. shk. Biol. nauki. No.5. P.47–53 [in Russian, English summary].
- Tanasevitch A.V. 1989. A review of the Palaearctic *Poecilonea* Kulczyński (Aranei, Linyphiidae) // Spixiana. Bd.11. H.2. P.127–131.
- Tanasevitch A.V. 2000. On some Palaearctic species of the spider genus *Agynera* Hull, 1911, with description of four new species (Aranei, Linyphiidae) // Arthropoda Selecta. Vol.8. No.3. P.201–213.
- Tanasevitch A.V. 2007. On a small linyphiid spider collection from Simushir Island, Kurile Islands, Russia, with notes on *Stemonyphantes sibiricus* Grube (Araneae: Linyphiidae) // Arthropoda Selecta. Vol.15 (for 2006). No.3. P.255–258.
- Tanasevitch A.V., Eskov K.Yu. 1987. Spiders of the genus *Lepthyphantes* (Aranei, Linyphiidae) in the Siberian and Far Eastern fauna // Zool. zhurn. Vol.66. No.2. P.185–197 [in Russian, English summary].