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Spiders (Aranei) of Wrangel Island, Russia. 1. New data on the species composition and distribution

Пауки (Aranei) о-ва Врангеля, Россия. 1. Новые данные по видовому составу и распространению

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KEY WORDS: Chukotka Autonomous Okrug, High Arctic, chorology, habitat preferences, checklist, new records.

КЛЮЧЕВЫЕ СЛОВА: Чукотский А.О., высокая Арктика, хорология, список видов, биотопическое распределение, новые находки.

ABSTRACT. There is an annotated checklist of spider species of Wrangel Is. It contains previously unpublished data of 2006 as well as the results of new studies in 2014–2021. The data on distribution, biotopic association and density in various areas of the island are given for each species. In the XXI century, all the species recorded on Wrangel Is. in the XX century were recollected (except for *Oreoneta mineevi* Saaristo et Marusik, 2004), and 14 species were also added. Six of the latter, *Dictyna major* Menge, 1869, *Monocerellus montanus* Tanasevitch, 1983, *Oreoneta alpina* (Eskov, 1987), *Semljicola beringianus* (Eskov, 1989), *Styloctetor lehtineni* Marusik et Tanasevitch, 1998 and *Uusitaloia wrangeliana* Marusik et Koponen, 2009, have been earlier recorded in the island fauna. Eight species, *Agyneta decora* (O. Pickard-Cambridge, 1871), *A. ripariensis* Tanasevitch, 1984, *Hilaira proletaria* (L. Koch, 1879), *Oreoneta beringiana* Saaristo et Marusik, 2004, *Oreonetides beringianus* Eskov, 1991, *Tubercithorax subarcticus* (Tanasevitch, 1984), *Thymoites bellissimus* (L. Koch, 1879) and *Th. oleatus* (L. Koch, 1879), are recorded in Wrangel Is. fauna for the first time. Records of *Agyneta trifurcata* Hippa et Oksala, 1985, *Alopecosa borea* (Kulczyński, 1908) and *Chalcoscirtus glacialis* Caporiacco, 1935 are erroneous and belong to *A. bulavintsevi* Tanasevitch, 2016, *A. pictilis* (Emerton, 1885) and *Ch. hyperboreus* Marusik, 1991, respectively. The finding of *Halorates thulensis* (Jackson, 1934) needs confirmation.

Accounting the new data, the spider fauna of Wrangel Is. consists of 57 species from the families Dictynidae (3 species), Gnaphosidae (1), Linyphiidae (44), Lycosidae (5), Salticidae (1), Theridiidae (2), Thomisidae (1 species). The longitudinal character of the fauna defines the dominance of species with Siberian-Nearctic (39%) and Siberian (30%) ranges, whereas the latitudinal one determines the abundance of species with mainly arctic and arcto-alpine/montane distribution type (81%). At the same time, Wrangel Is. is the only place of finding for 20 species (35%) in the High Arctic. Basically all of them are confined by the island areas with most favorable mesoclimatic conditions.

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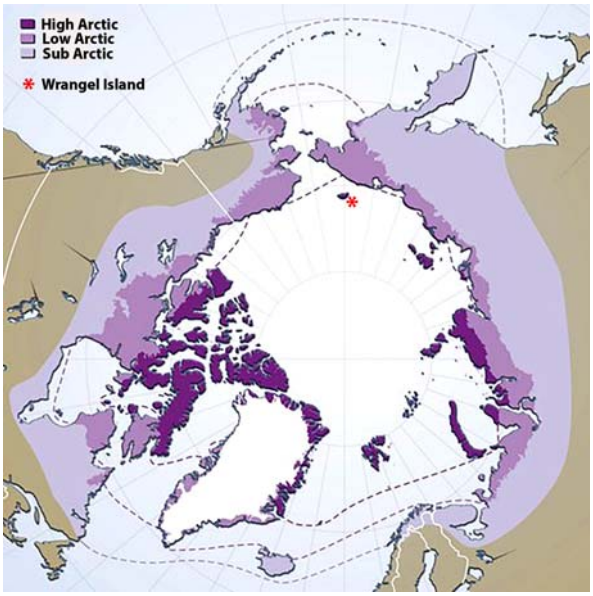
РЕЗЮМЕ. Приведён аннотированный список видов пауков о-ва Врангеля, содержащий неопубликованные ранее материалы 2006 г., а также результаты новых сборов 2014–2021 гг. Для каждого вида указаны данные по распределению, биотопической приуроченности и численности в различных районах острова. В XXI веке были собраны все виды, отмеченные на о-ве Врангеля в XX веке (за исключением *Oreoneta mineevi* Saaristo et Marusik, 2004), а также было добавлено ещё 14 видов. Шесть из них, *Dictyna major* Menge, 1869, *Monocerellus montanus* Tanasevitch, 1983, *Oreoneta alpina* (Eskov, 1987), *Semljicola beringianus* (Eskov, 1989) и *Styloctetor lehtineni* Marusik et Tanasevitch, 1998, *Uusitaloia wrangeliana* Marusik et Koponen, 2009, ранее

уже были указаны для фауны острова. Восемь видов, *Agyneta decora* (O. Pickard-Cambridge, 1871), *A. ripariensis* Tanasevitch, 1984, *Hilaira proletaria* (L. Koch, 1879), *Oreoneta beringiana* Saaristo et Marusik, 2004, *Oreonetides beringianus* Eskov, 1991, *Tubercithorax subarcticus* (Tanasevitch, 1984), *Thymoites bellissimus* (L. Koch, 1879) и *Th. oleatus* (L. Koch, 1879), приведены для фауны о-ва Врангеля впервые. Указания для о-ва *Agyneta trifurcata* Hippa et Oksala, 1985, *Alopecosa borea* (Kulczyński, 1908) и *Chalcoscirtus glacialis* Caporiacco, 1935 ошибочны, и относятся, соответственно, к *A. bulavintsevi* Tanasevitch, 2016, *A. pictilis* (Emerton, 1885) и *Ch. hyperboreus* Marusik, 1991. Находка *Halorates thulensis* (Jackson, 1934) нуждается в подтверждении.

С учётом новых данных фауна пауков о-ва Врангеля насчитывает 57 видов из семейств Dictynidae (3 вида), Gnaphosidae (1), Linyphiidae (44), Lycosidae (5), Salticidae (1), Theridiidae (2), Thomisidae (1 вид). Долготный облик фауны определяет преобладание видов с сибирско-неарктическими (39%) и сибирскими (30%) ареалами, а широтный — видов с преимущественно арктическим и аркто-альпийским/монтанным типом распространения (81%). При этом для 20 видов (35%) о-в Врангеля является единственной точкой их обнаружения в высокой Арктике. Практически все они ограничены районами острова с наиболее благоприятными мезоклиматическим условиями.



Map 1. A circumpolar map with High, Low and Sub Arctic boundaries (according to Gillespie *et al.*, [2020]), and the position of Wrangel Is.

Карта 1. Циркумполярная карта с границами высокой, низкой и Субарктики (согласно Gillespie *et al.*, [2020]) и местоположение на ней о-ва Врангеля.

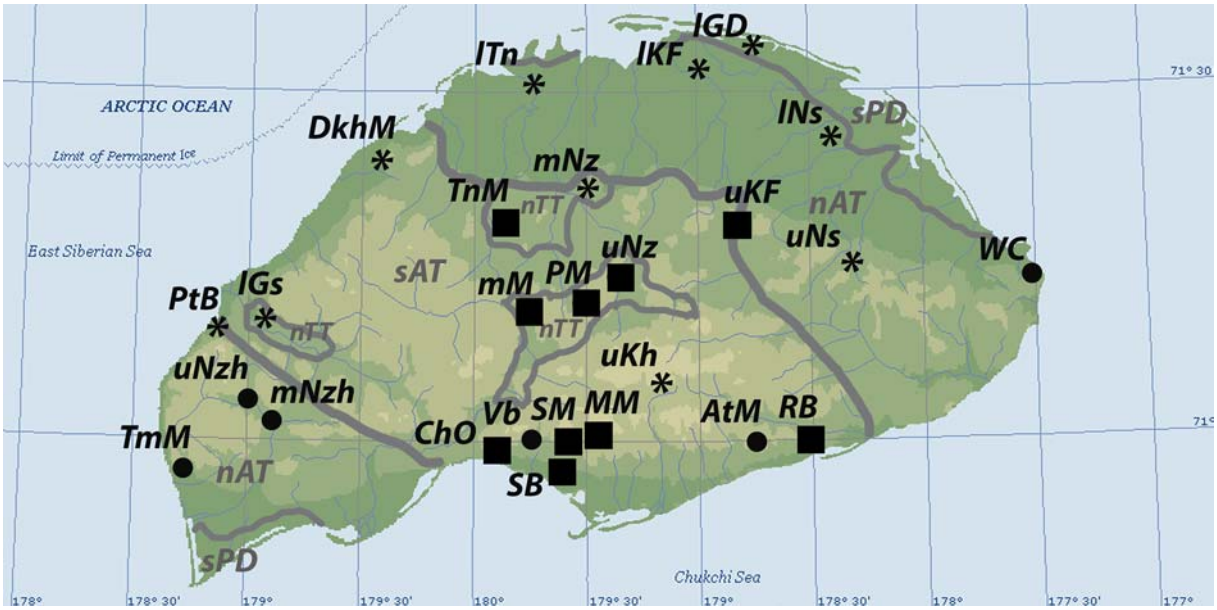
Introduction

Spiders are one of the groups of terrestrial arthropods that most successfully explore the tundra zone, including Arctic islands [Alsos *et al.*, 2009; Gillespie *et al*., 2020]. Currently, the spider fauna of many High Arctic islands (Map 1) is quite well studied. The minimum number of species (2) are noted in the most high-latitude and climatically severe island territories, such as Ellef Ringness Island, Franz Josef Land, Severnaya Zemlya [MacLean, 1965; Eskov, 1985]. On the most other islands the species richness varies from 8 to 22 species. The latter include islands so different in location and Pleistocene history as Svalbard [Coulson *et al*., 2014], Novaya Zemlya and Vaygach [Tanasevitch, 2017, 2018], Shokalsky [Nekhaeva, 2018], Sibiryakova [Tanasevitch *et al*., 2020], Banks [Loboda, Buddle, 2018], Ellesmere [Leach, 1966], Devon [Leech, Ryan, 1972]; Southampton [Pickavance, 2006]. Only the spider fauna of Wrangel Is. has a higher species richness, which until recently was estimated as 45 species [Gillespie *et al.*, 2020].

The first data on spiders of Wrangel Is. have been published in a brief review of the spiders of tundra of the USSR [Eskov, 1985]. It included 25 species collected by O.A. Khruleva in 1983. The results of our further collections of spiders on Wrangel Is. were included in a number of other publications [Khruleva, 1987, 2007, 2009; Eskov, 1989, 1990a, b; Marusik, 1988, 1989; Marusik *et al*., 1992, 2008, 2019; Efimik, Esyunin, 1996; Ovtsharenko, Marusik, 1996; Saaristo, Eskov, 1996; Eskov, Marusik, 1993; Logunov, Marusik, 2000; Saaristo, Marusik, 2004]. In total, for the period of 1983–1994, about 13500 specimens of spiders belonging to 42 species have been identified from Wrangel Is.

The collection of spiders on the island was continued in 2006, during the initial period of climate change in the Arctic, which has begun in 2000s [Alekseev *et al*., 2015]. Based on these materials, *Uusitaloia wrangeliana* was described by Marusik et Koponen, 2009 [Marusik, Koponen, 2009], and several additional species (without collection sites) were first indicated for Wrangel Is. [Marusik, Eskov, 2009]. Partially, the data of 2006 were published in some other articles [Khruleva, 2009, 2014]. The collection of material on the island was continued in 2014–2021. This made it possible to significantly increase the total list of spider species known there.

This article presents all the materials on spiders collected in the XXI century on Wrangel Is. For each of the species, data on the distribution on the island are summarized, erroneous identifications of some species are corrected, and the taxonomic, longitudinal and latitudinal composition of araneofauna is considered. This work continues a series of publications devoted to the study of terrestrial arthropods of Wrangel Is. [Khruleva, 1987, 2007, 2009, 2014; Khruleva, Zinchenko, 2017; Grichanov, Khruleva, 2018; Khruleva, Stekolshchikov, 2019; Barkalov, Khruleva, 2021; Khruleva *et al*., 2021, etc].



Map 2. Map of Wrangel Is. with localities where spiders were collected in the XX and XXI centuries. Stars — places of collections only in the XX century: squares — places of collections in both periods; circles — places of collections only in the XXI century. Subzonal differentiation of vegetation cover: *sPD*, southern variant of the polar desert zone; *nAT*, northern variant of the Arctic tundra subzone; *sAT*, southern variant of the Arctic tundra subzone; *nTT*, northern variant of the typical tundra subzone. Bold line marks the boundary between the northern and southern zonal belts. Collection sites: *sPD*: nGd — lower reaches of the Gidrografov River. *nAT*: lTn — lower reaches of the Tundrovaya River; lKF — lower reaches of the Krasnyi Flag River; lNs — lower reaches of the Naskhok River; uNs — upper reaches of the Naskhok River; WC — Cape Waring; uKF — upper reaches of the Krasnyi Flag River; TmM — environs of Thomas Mount; uNzh — upper reaches of the Neozhidannaya River; mNzh — middle flow of the Neozhidannaya River. *sAT*: PtB — Cape Ptichiy Bazar; DkhM — Drem-Khead Mt.; ChO — Chertov Ovrag; Vb — Vjuchnyi brook; SB — Somnitelnaya Bay environs; SM — Somnitelnye Mts; MM — Mineev Mts; uKh — upper reaches of the Khischnikov River; AtM — Aterton Mt.; RB — Rogers Bay environs. *nTT*: TnM — environs of Tundrovaya Mt.; mNz — middle flow of the Neizvestnaya River; mM — middle flow of the Mamontovaya River; PM — spurs of Pervaya Mt.; uNz — upper reaches of the Neizvestnaya River.

Карта 2. Карта о-ва Врангеля с местами сборов пауков в XX и XXI вв. Звездочки — точки сборов только в XX веке; квадраты — точки сборов в оба периода сборов; кружки — точки сборов только в XXI веке. Подзональная дифференциация растительного покрова о-ва Врангеля: *юПП* — южный вариант зоны полярных пустынь; *сАТ* — северный вариант подзоны арктических тундр; *юАТ* — южный вариант подзоны арктических тундр; *сТТ* — северный вариант подзоны типичных тундр. Жирная линия — граница между северной и южной зональной полосами. Места сборов: *юПП*: nGd — нижнее течение р. Гидрографов. *сАТ*: lTn — нижнее течение р. Тундровой; lKF — нижнее течение р. Красный Флаг; lNs — нижнее течение р. Насхок; uNs — верхнее течение р. Насхок; WC — мыс Уэринг; uKF — верхнее течение р. Красный Флаг; TmM — окрестности г. Томас; uNzh — верхнее течение р. Неожиданной; mNzh — среднее течение р. Неожиданной. *юАТ*: PtB — мыс Птичий Базар; DkhM — г. Дрем-Хед; ChO — Чертов овраг; Vb — руч. Вьючный; SB — окрестности бухты Сомнительной; SM — горы Сомнительные; MM — горы Минеева; uKh — верхнее течение р. Хищников; AtM — г. Атертон; RB — окрестности бухты Роджерса. *сТТ*: TnM — окрестности г. Тундровой; mNz — среднее течение р. Неизвестной; mM — среднее течение р. Мамонтовой; PM — отроги г. Первой; uNz — верхнее течение р. Неизвестной.

Material and methods

This article is based on spider materials collected in 2006 and 2014–2021, both in areas previously studied in detail, and where collections were not carried out (Map 2). In 2006, 2015 and 2019 the material was collected by O.A. Khruleva, using various methods, mainly by pitfall traps and litter sifting; in addition, yellow pan traps, entomological sweepings, as well as manual collection were used. In other seasons, spiders were collected mainly by pitfall traps by "Wrangel Is." Reserve staff and some other collectors.

The spiders collected in 2006 were identified by Yu.M. Marusik (Magadan), and materials of the following seasons were identified by A.V. Tanasevitch (Moscow). In total, about 16200 adult spider specimens were identified. The material is stored in the Zoological Museum of the Moscow State University, Moscow (ZMMU) and some, temporarily in the Zoological Museum of Turku (Finland). Gergin Blagoev (Toronto) sequenced 130 spider specimens from the Wrangel Is. (26 species), they are stored in the Biodiversity Institute of Ontario (Canada). In the annotated list of species, literature references are mainly limited to those that contain data on the location of species on Wrangel Is.

The boundaries of the Arctic, corresponding to the boundaries of the tundra zone in the understanding of Russian botanists [Yurtsev, 1994; Matveeva, 1998], are given by the CAVM Team [2003]). Currently, a map with the division of the territory into High, Low and Sub Arctic (Map 1) is widely used in the studies of the Arctic biota (see: [Christensen *et al*. [2020], Gillespie *et al*. [2020]). High Arctic includes three northern bioclimatic subzones: A–C [CAVM Team, 2003], which correspond to the high-arctic and arctic tundra subzones (according to Yurtsev [1994]) or the zone of polar desert, arctic tundra subzone and the northern part of typical tundra subzone (according to Matveyeva [1998]). The Low Arctic includes two southern bioclimatic subzones and corresponds to the hypo-arctic tundra [Yurtsev, 1994]

or the southern part of the typical tundra and the southern tundra subzones [Matveyeva, 1998].

The distribution of species is given in a generalized form. Arctic distribution implies that the species occurs entirely or predominantly north of the forest boundary, mainly within the tundra zone. The ranges of species known from several areas outside the Arctic (mainly from Sub Arctic regions) are considered as predominantly arctic. Spiders that are found in tundra zone and in adjacent and southern mountains are listed as species with arcto-alpine (collected mainly in the highlands) or arcto-montane (collected in various mountain belts) distribution. Together with the species found mainly in the tundra zone, they are included in the arctic fraction. The species distributed in the southern part of the tundra zone, forest tundra and subzone of the northern taiga (the Hypoarctic botanical-geographic belt according to Yurtsev [1966]) are assigned to the hypoarctic fraction. They are listed as species with a hypoarctic, predominantly hypoarctic or hypoarcto-montane (found outside this belt, mainly in the mountaneous regions) distribution. Some species have an unclear distribution (intermediate between arctic and hypoarctic), their belonging to a certain fraction is determined by their altitude distribution: the species found mainly in the mountain tundra are assigned to the arctic fraction. Species widely distributed in at least two natural zones are classified as polyzonal.

When determining geographical groups by longitude, the ranges of species found in Eurasia east of lower reaches of the Lena River are classified as Northeast Siberian, and the West Nearctic distribution has species found in North America west of lower reaches of the Mackenzie River.

Abbreviations

Collectors' names: AG — A.R. Gruzdev, LV — L.F. Volkova, MB — M.B. Berezin, OKh — O.A. Khruleva, PK — P.S. Kulimeev, UB — U.V. Babiy.

Collecting methods: pt — pitfall traps, ypt — yellow pan traps, sw — sweep nets, sift — sifting litter, hc — hand collecting; m — meters above sea level; j. — juvenile.

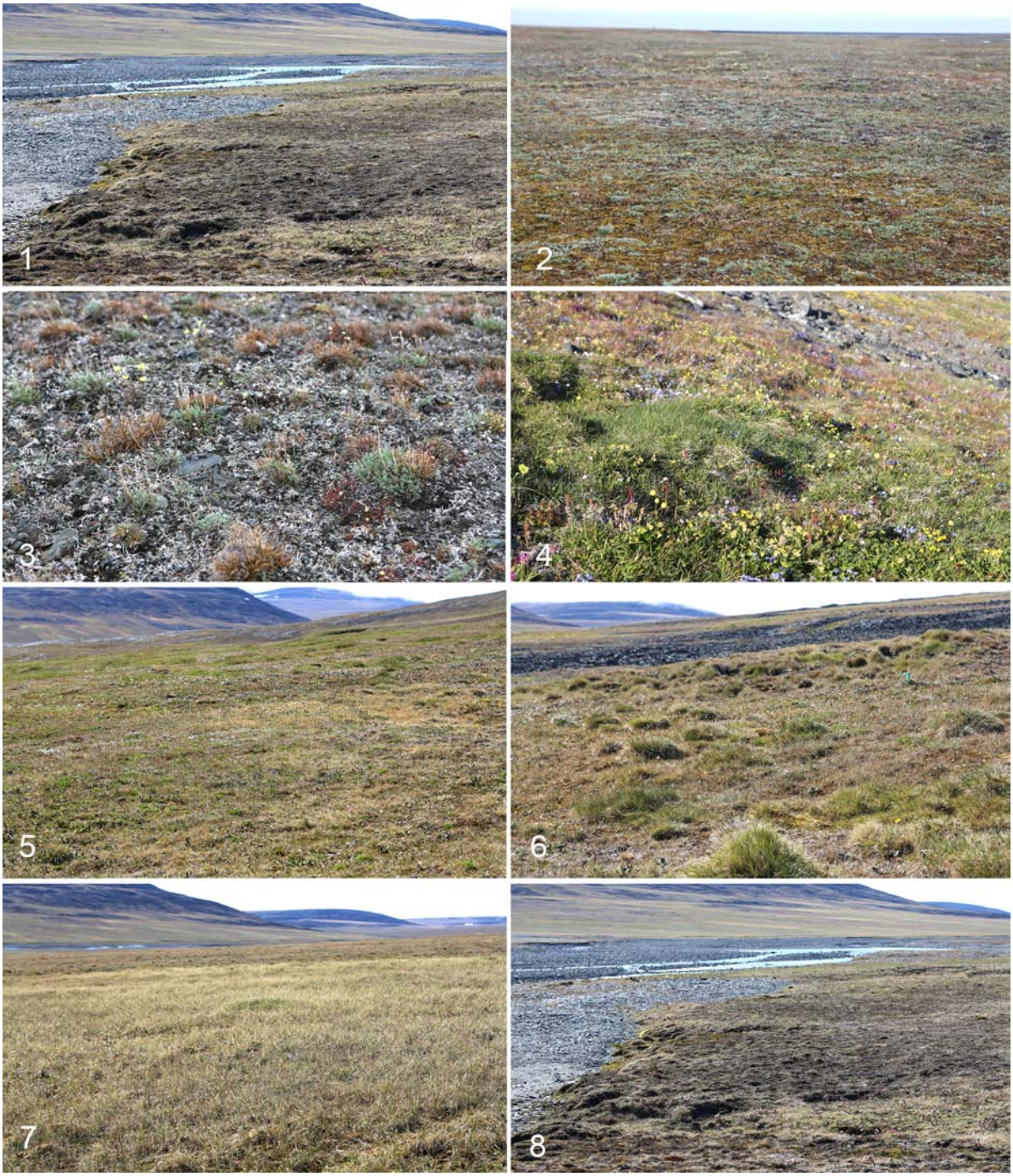
The positions of habitats on the landscape profile are given as follows: Valley. River and stream valleys: Vpf — pebble floodplains, Vhf — dry sandy-pebble high floodplains, Vm — moderately moist plots in river valleys with willow-forb cover, Vd — dry plots in river valleys with forb-dryad cover. Wetland: Wv — wet plots in river and stream valleys, Wbf — floodplain with willow bushes, Wd — wet depressions of relief, including lake depressions, Wmt — wet plots at the bases of hills, upland terraces under snowfields, in runoff strips on slopes, Wsm — areas of foothill plumes and the bases of hills with sedge-moss cover, waterlogged only in early summer. Zon: — moderately moist areas of plains, foothill plumes and gentle slopes with a zonal type of vegetation. Dry tundra: Dtd — dry gravelly tundra on foothill plumes, river terraces, areas of plains dominated by dryad (spotted forb-dryad, willow-forb-dryad cover), Dth — dry gravel-loamy plots with predominance of willows and various grasses and xerophilic sedges. Slopes: Sts — dry gravelly slopes with tundra-steppe forb-xerophilic sedges vegetation on the slopes of hills and upland terraces of the southern exposure, Sds — moderately dry gravelly slopes and upland terraces with spotted grass-moss-shrub (dryad, dwarf willow) and lichen-shrub-herbaceous cover on the slopes of the southern exposure, Sm — mesophytic forb-grass and forb-dwarf willow-grass meadows on the hill slopes of the southern exposure, Smt — gravelly slopes with lichens and sparse curtain of forbs and grasses (mountain-tundra communities), Sc — carbonate gravelly slopes with sparse forb-lichen cover; Sd — spotted moss-dryad tundra on the slopes of the hills of different exposition, Sn — slopes of the northern exposure with grass-moss and moss-shrub cover. Zoogenic: zoogenic forb-grass and grass-wormwood meadows on feed plots of owl (Zmo) and Arctic fox burrows (Zmaf). The numbers of specific habitat are given in square brackets. The variants of vegetation categories in the text are abbreviated as given in the Map 2.

Region and localities

Wrangel Is. lays in the Chukotka Autonomous Okrug (Chukotka in the text below) at the border between the East Siberian and Chukchi Seas. Together with Herald Is., located 70 km to the east, it is part of the "Wrangel Island" State Nature Reserve. In the Arctic, an extraordinary diversity of Wrangel Is. flora and fauna has been stressed out in many publications [Yurtsev, 1987; Stishov, 2004; Khruleva, 2007, etc]. It is related to landscape and climatic diversity of the island environment, as well as to the lack of covering glaciations in the Pleistocene [Vartanyan, 2007]. Due to the mountainous relief, there is a sharp gradient of mesoclimatic conditions with mean July temperatures varying from 1 ºC on the northern coast to 7–8 ºC in the center [Svatkov, 1970; Alfimov, 2007]. The climate differs greatly between various parts of the island, and that is clearly seen in plant community structure and composition. The landscape-zonal subdivision of the island is based on the geobotanical studies by Kholod [2007, 2013]. Wrangel Is. is located in the northern and southern variants of the arctic tundra subzone (Map 2). In the warmest central area, the vegetation is closer to the northern strip of typical tundra subzone; the cool and foggy northeastern and southwestern seacoasts have very harsh environmental habitats of the southern strip of the polar desert zone. According to Kholod, the most noticeable changes in the vegetation cover occur at the border of two variations of the arctic tundra subzone, so he identifies two corresponding zonal strips on the island — the northern and southern. It is appropriate to mention here that the terminology of Kholod [2013] regarding the interpretation of the island zonation has been considerably criticized (see Matveyeva [2014]). Nevertheless, we use the division proposed by S.S. Kholod, since it most fully reflected the specifics of landscape and climatic transformations of the island vegetation cover. On the small-scale Circumpolar Arctic Vegetation Map [CAVM Team, 2003], the island is completely assigned to zone "B" (corresponding to the subzone of the arctic tundra).

As in other arctic regions [Alekseev *et al.*, 2015], at the turn of the XXI century a climate warming was registered on the island, which manifests itself in increasing summer temperatures, lengthening the frost-free period and periodic autumn-winter thaws (based on data from the meteorological station at the Rogers Bay, www.thermograph.ru, www.pogodaiklimat.ru). Studies conducted in the XXI century in some previously well-studied areas of Wrangel Is. revealed a significant number of previously unknown insect species, as well as a rapid increase in the number of some of them [Khruleva, 2014; Khruleva, Zinchenko, 2017; Grichanov, Khruleva, 2018; Nartshuk, Khruleva, 2018; Khruleva, Stekolshchikov, 2019; Barkalov, Khruleva, 2021].

Below is a list of spider collection sites in the XXI century (Map 2) according to their zonal division. For each of them, a brief description of the studied habitats is given,



Photos 1–8. Habitats in the northern variant of arctic tundra subzone (*nAT*). 1–4 — environs of Thomas Mt.: 1 — swampy lowland of lagoon [**1**]; 2 — zonal tundra [**2**]; 3 — bank of the stream [**4**]; 4 — gravelly southern slope [**7**]. 5–8 — upper reaches of the Neozhidannaya River: 5 — moderately moist loamy-gravel southern slope [**4**]; 6 — tussock cover on the swampy foothill [**3**]; 7 — swampy foothill with sedge-moss cover [**2**]; 8, damp high floodplain [**1**]. Habitat numbers are given in square brackets (see the text).

Фото 1–8. Биотопы северного варианта подзоны арктических тундр (*cAT*). 1–4 — окрестности г. Томас: 1 — сырой берег лагуны [**1**]; 2 — зональная тундра [**2**]; 3 — берег ручья [**4**]; 4 — щебнистый склон южной экспозиции [**7**]. 5–8 — верхнее течение р. Неожиданной: 5 — умеренно увлажненный склон южной экспозиции [**4**]; 6 — кочкарники в сыром основании сопки [**3**]; 7 — сырое основание сопки с осоково-моховым покровом [**2**]; 8, сырая высокая пойма [**1**]. Номера биотопов даны в квадратных скобках (см. текст).

indicating the collector, the timing and the collection methods used.

1. The northern variant of the arctic tundra subzone (Photos 1–8). In this subzone spiders were collected in five localities. In the vicinity of **Thomas Mt.** (10–31.VII. 2016) seven habitats were investigated by L.F. Volkova (Pevek) using pitfall traps and hand collecting on transect from the shore of lagoon (70.927883°N, 178.729700°E, 1 m) to the southern slopes of the hill (70.951033°N, 178.715667°E, 141 m). There were: swampy lowland of lagoon with solid herb-moss cover [**1**], zonal tundra with spotted lichen-herb-dwarf willow-moss cover [**2**, **3**], dry gravelly bank of the stream with lichens and curtain grass-herb cover [**4**]**,** the base of the hill with spotted herb-sedge-moss cover [**5**], gravelly southern slope with spotted herb-dwarf willow-moss [**6**] and grassy-forb [**7**] cover.

In the **upper reaches of the Neozhidannaya River** (8.VII–1.VIII.2016) five habitats were investigated by L.F. Volkova using same methods on transect from the river bed (71.057267°N, 178.915100°E, 198 m) to the southern slopes of the hill (70.068733°N, 178.914333°E, 313 m). There were: damp high floodplain with continuous forb-herb-moss cover [**1**], swampy foothill with and continuous sedge-moss cover [**2**] and spotted willow-sedge-moss tussock cover [**3**], gently sloping, moderately moist loamy-gravel southern slope with an almost continuous willow-moss-herb-grassy [**4**] and spotted herb-dwarf willow-forb [**5**] cover.

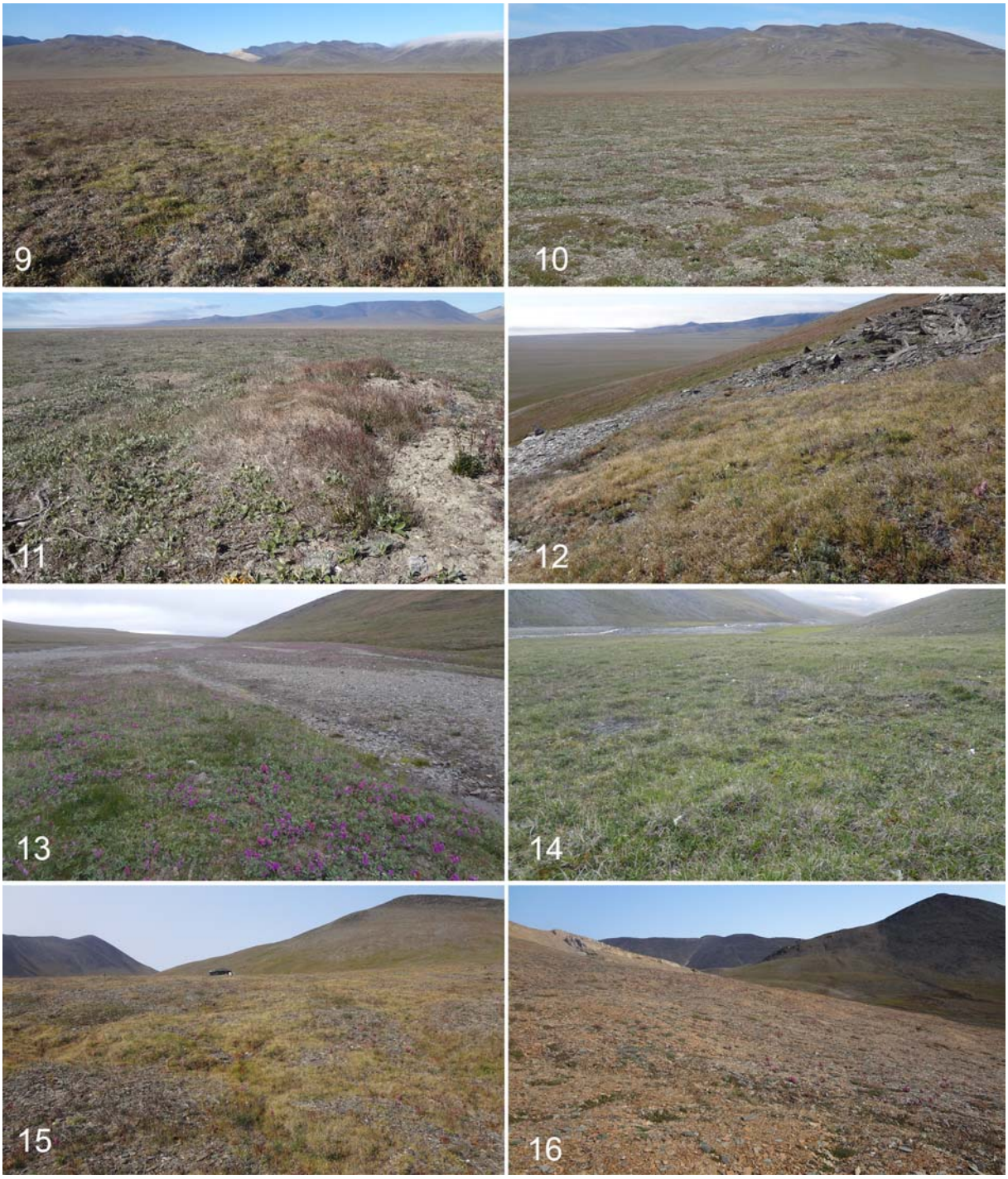
In the **middle flow of the Neozhidannaya River** (ca. 71.02°N, 179.15°E) material was collected by A.R. Gruzdev (Pevek) in pitfall traps in 10.VI–27.VII.2006 in a pebble floodplain with sparse curtains [**1**], zonal tundra with polygon mesh moss-herb cover [**2**], wet base of south-facing slope with continuous sedge-moss tussock cover [**3**], swampy south-facing slope with moss-herb cover [**4**]. In 2017 (28.VII–4.VIII, pitfall traps) a few spiders were also collected by M.V. Berezin (Moscow) in this area in a dry foothill with sparse lichen-moss-herb cover [**5**] and gravelly slope of hill with spotted lichen-shrub-(dwarf willow, dryad)-forb cover [**6**]**.**

In the eastern part of this subzonal variant, material was collected in the **upper reaches of the Krasnyi Flag River** by L.F. Volkova (pitfall traps, hand collection). Six habitats were investigated on the right bank of the river (2–17.VI.2016), from the river bed (71.275917°N, 178.834200°W, 67 m) to the mountain slope (71.273033°N, 178.852033°W, 131 m). There were: high sandy-pebble floodplain with a rare moss-herb cover [**1**], wet plot in a river valley with continuous grass-dryad-sedge-moss hummocks [**2**], damp foot of a northeastern hill with a spotted lichen-dryad-moss cover [**3**], moss-legume-dryad hummocky cover in a river valley [**4**, **5**], gently sloping dry gravel slope of the northeast exposure with a spotted sedge moss-herb-grass cover and the zoogenic owl's "stern table" [**6**]. On the left bank of the river (ca. 71.28°N, 178.82°W, 7–19.VII. 2016), material was collected in three habitats on the mountain slope of hill: in the lower part of the gravelly-loamy slope of the hill of south-western exposure (70–100 m) with a spotted lichen-grass-dryad-moss cover [**7**, **8**], and in the steep gravelly slope of a hill of southern exposure (156 m) with spotted forbs and dwarf willow cover [**9**].

In the vicinity of **Cape Waring** (ca. 71.24°N, 177.50°W), spiders were collected by P.S. Kulimeev (Pevek) in four habitats (16–24.VII.2020, pitfall traps, yellow pan traps): the pebble floodplain of a brook [**1**], a waterlogged swampy plot with a cottongrass-herb-moss hummocky cover [**2**], a damp plot with an almost continuous forb-sedge-moss cover [**3**] and a gravelly-loamy plot with a spotted lichen-willow-grass-moss cover **[4]**.

2. The southern variant of the arctic tundra subzone (Photos 9–16). In this zonal variant, the **environs of Somnitelnaya Bay** were examined in more detail by O.A. Khruleva during 25.V–14.VIII.2006 and 25.V–19.VII.2015 using different collecting techniques (i.e., sweep nets, pitfall traps, sifting of litter, hand collection). In addition, small collections were carried out in several habitats in yellow pan traps in 2019. On the right bank of the Somnitelnaya River, material was collected in 14 habitats (seven of them were interviewed in both seasons) on the transect from seashore (70.941333°N, 179.628528°W, 6 m) to the mountain slope of the Somnitelnye Mts (70.993472°N, 179.615833°W, 304 m). On the Southern plain there were: high floodplain at the mouth of the Somnitelnaya River with a willow-legume-moss cover [**1**], zoogenic cereal meadow (owl's "stern table", around — a rare willow-moss cover) on a dry edge of the terrace in the lower course of the Somnitelnaya River [**2**], zonal tundra communities on the coastal plain with a sparse lichen-dryad-willow-sedge-moss [**3**] and hummocky spotted lichen-willow-dryad-grass-moss [**4**] cover, dry gravelly-loamy river edge with a spotted moss-willow-dryad cover [**5**, only in 2015]. In the mountain part (**Somnytelnye Mts**) there were: dry hillock at the base of a foothill of southern exposure with a spotted lichen-herb cover on the convex parts and a solid willow-dryad-grassy-moss cover in depressions [**6**, only in 2015], swampy loamy-gravelly base of the hill with spotty, hummocky willow-dryad-sedge-moss cover [**7**], the lower part of the slope of the southern exposure with a hummocky lichen-grass-herb-dryad cover [**8**, only in 2015] and a spotted herb-sedge tundra-steppe assemblages [**9**, only in 2006], a steep gravelly slope of southern exposure under the monorocks (with additional moisture) with a moss-willow-mixed-grass-sedge ñover [**10**, only in 2015]**,** dry steep gravelly slope of southern exposure (~250 m) with a spotted herb-sedge tundra-steppe assemblages [**11**], dry edge of the gravelly-loamy mountain terrace (~290 m) with a sparse dwarf willow-herb-moss cover [**12**], the base of monorock with a spotted herb-moss-dryad cover on a mountain terrace (~300 m) [**13**] and a nearby wet runoff depression with almost continuous willow-sedge-moss cover [**14**] (both these habitats were studied only in 2006).

On the left bank of the Somnitelnaya River, material was collected in 15 habitats (four of them were interviewed in both seasons) on the transect from the shore of lagoon (70.937444°N, 179.513028°W, 12 m) to the mountain slopes of the Mineev Mts. (71.016611°N, 179.517417°W, 244 m). On the Southern plain there were: dry gravel-loamy hillock near the lagoon with rare herbs in convex areas and spotted moss-willow-legume-dryad cover in depressions [**15**, only in 2015], loamy-gravelly plain with a spotted willow-moss-herb-grass cover [**16**, only in 2015], dry gravelly-loamy plain with a spotted herb-sedge-dryad cover [**17**, only in 2015]. In the mountain part (**Mineev Mts**) there were: pebble floodplain with single herbs in the upper reaches of the Somnitelnaya River [**18**], high floodplain with continuous herb-willow-forb cover in the upper reaches of the Somnitelnaya River [**19**], damp loamy-gravelly foothill with spotted willow-dryad-sedge-moss cover [**20**, only in 2015], dry hillock with a spotted moss-forb-grass cover at the base of the slope of southern exposure [**21**, only in 2015], steep gravelly slope of southern exposure (~250 m) with sparse forb-herb cover [**22**, only in 2015], swampy base of hill of south-western exposure with hummocky willow-sedge-moss



Photos 9–16. Habitats in the southern variant of arctic tundra subzone (*sAT*). 9–11 — Somnitelnaya Bay environs: 9 — zonal tundra on the coastal plain [**3**]; 10 — river edge [**5**]; 11 — zoogenic cereal meadow (owl's "stern table") [**2**]; 12 — tundra-steppe cover on south facing steep slope [**11**]; 13 — high floodplain at upper reaches of the Somnitelnaya River [**19**]; 14 — swampy base of hill [**23**]; 15 — dry hillock [**25**]; 16 — extremely dry gravelly carbonate slope of hill [**29**]. Habitat numbers are given in square brackets (see in text).

Фото 9–16. Биотопы южного варианта подзоны арктических тундр (*юAT*). 9–11 — окрестности бухты Сомнительной: 9 — зональная тундра на приморской равнине [**3**]; 10 — берег реки [**5**]; 11 — зоогенный злаковый луг (присада совы) [**2**]; 12 — тундростепная группировка на крутом склоне южной экспозиции [**11**]; 13 — высокая пойма в верхнем течении р. Сомнительной [**19**]; 14 — сырое основание сопки [**23**]; 15 — сухой бугор [**25**]; 16 — сухой карбонатный склон сопки [**29**]. Номера биотопов даны в квадратных скобках (см. текст).

cover [**23**], narrow damp mountain terrace on the gravelly slope of south-western exposure with spotted herb-moss-dryad cover [**24**, only in 2015], steep gravelly slope (~280 m) of south-western exposure with sparse lichen-forb-herb cover [**25**], gentle gravelly (shale) slope with a spotted herb-dwarf shrub (dwarf willows, dryad)-grass-moss cover [**26**, only in 2006], stony-loamy plateau-like hilltop (~360 m) with a sparse lichen-forb-willow-herbaceous cover in microdepressions and a crust of lichen crust on convex plots [**27**, only in 2006], swamp base of a hill of south-western exposure with spotted dryad-sedge-moss cover [**28**, only in 2015], extremely dry gravelly carbonate slope of a hill (~245 m) of south-western exposure with sparse lichen-dryad forb cover [**29**, only in 2015].

In the environs of **Chertov Ovrag**, near 14 km W of Somnitelnaya Bay (70.976633°N, 179.859917°W, ~40 m) collection into pitfall traps was carried out by O.A. Khruleva in a dry gravel-loamy foothill with sparse willow-forb-herb cover [**1**] in 4.VI–15.VII.2006. Additional brief studies in this area were carried out in 26.VII.2019 using sweep net, sifting of litter, hand collecting in the four habitats from foothill (70.981967°N, 179.849717°W, 55 m) to slope of hill (70.988833°N, 179.842533°W, 125 m). There were: dry gravel-loamy foothill with spotted willow-forb-herb cover [**1**], swampy base of hill with spotted willow-sedge-moss cover [**2**], lower part of the slope of southern expose with spotted forb-moss-willow-dryad cover [**3**], the dry edge of mountain terrace of the southern expose with spotted moss-forb-herb cover [**4**].

Similar brief surveys were carried out in 2019 and elsewhere along the southern coast of the island. In the vicinity of **Vyuchnyi Brook** (24.VII.2019, sweep net, sifting of litter, hand collecting) material was collected at the exit of the mountains (71.037°N, 179.703667°W, ~140–160 m) in three habitats: at the base of hill of southern exposure with almost continuous dryad-willow-sedge-moss [**1**] and hummocky spotted herb-moss willow [**2**] cover, as well as lower part of the gravel-loamy slope of southern exposure with spotted lichen-moss-forb-herb cover [**3**].

In the vicinity of **Atertom Mt.** (70.980944°N, 178.698806°W, ~100–120 m, 13.VII.2019, sweep net, sifting of litter, hand collecting) material was collected on the upper part of the dry gravel-loamy foothill with spotted willow-forb-herb cover [**1**], damp depression on the foothill with continuous hummocky willow-sedge-moss cover [**2**] and steep dry gravel-loamy slope of southern exposure with spotted dryad-forb-sedge tundra-steppe plant assemblages [**3**].

In the environs of **Rogers Bay** (ca. 70.98°N, 178.49°W, ~25–100 m, 11–13.VII. 2019, pitfall traps, sweep net, yellow pan traps, sifting of litter, hand collecting), material was collected in the damp gravel-loamy lower part of foothill with spotted herb-willow-sedge-moss cover [**1**], middle part of the gravel-loamy foothill with spotted willow-herb-moss cover [**2**], dry gravel-loamy slope of southern expose with spotted forb-sedge tundra-steppe plant assemblages [**3**], as well as on the pebble floodplain of the Nasha River (ca. 71.01°N, 178.48°W) with sparse herbs [**4**].

3. The northern variant of the typical tundra subzone (Photos 17–24). This subzone is represented on the island by three isolated enclaves, in two of which spiders were collected. In the northern enclave, the environs of **Tundrovaya Mt.** were studied. Material was collected by L.F. Volkova 1–19.VII.2015 using pitfall traps in six habitats on the transect from south-facing mountain slope (71.3078°N, 179.817417°W) to nearby north-facing slope of the hill (71.283617°N, 179.81295°W). There were: the gravelly southeast-facing slope with nearly contiguous moss-herbs-legumes cover (315 m) [**1**], dry south-facing base of hill with nearly contiguous herb-dryad cover [**2**], damp north-facing brook valley (107 m) with a contiguous herb-moss cover [**3**], the damp habitats with forb-wormwood-dwarf willow-moss cover at the north-facing base [**4**] and slope of a hill [**5**], the steep gravelly north-facing slope of a hill (189 m) with a nearly contiguous forb-moss cover [**6**]. In habitats **2**, **3** and **5**, repeated collection by pitfall traps was carried out by U.V. Babiy (Pevek). In July 2019, U.V. Babiy has collected few spiders in the yellow pan traps on loamy river bank of the Tundrovaya River (71.29776°N, 179.79578°W, 134 m) with sparse grass-wormwood cover [**7**]. In 2020, spiders were collected using pitfall traps in the same habitat, as well as in two others: a wet runoff strip on a foothill plume (71.29836°N, 179.79549°W, 120 m) with a continuous grass-moss cover in the lower part [**8**] and on the loamy-gravelly slope of the hill (71.29840°N, 179.613°W, 130 m) with a spotted lichen-grass-dryad cover [**9**].

The central enclave of a typical tundra subzone has been studied in more detail. In the **middle flow of the Mamontovaya River,** material was collected by O.A. Khruleva in the two seasons (19.VI–13.VIII.2006 and 29.VI–5.VIII.2015) using all collecting techniques in the 19 habitats (16 of them were interviewed in both seasons) located on the transect between brooks Vesely (71.174667°N, 179.759667°W, 189 m) and Khrustalny (71.137222°N, 179.711139°W, 162 m). In the river valley, collections were carried out near Research Station "Srednyaya Mamontovaya" (71.159083°N, 179.545°W, 158 m) in the following habitats: low sandy-pebble floodplain with sparse forbs [**1**], thick willow bushes (height about 1 m) in the floodplain of the river with a pillow of moss in the lower tier [**2**], swamp depression in the river valley with a contiguous herb-moss cover [**3**] and dampish (highly moisturized only in the beginning of the summer season) plot in the river terrace with contiguous herb-willow-moss cover and sparse willow bushes [**4**] and willow-dryad-sedge-moss tussocks [**5**, only in 2006], river terrace with a contiguous hummocky moss-legume-dryad cover [**6**], dry sandy plot on high floodplain with spotted forb-wormwood-grass cover [**7**]. Outside river valley, material was collected in the zonal habitat — a moderately moisturized low hill with spotted herb-willow-moss cover [**8**] and in the more dry sites with spotted lichen-willow-herb [**9**], hummocky forb-willow-moss-herb [**10**] and hummocky grass-legume-dryad cover [**11**] cover. In the mouth of the brook Vesely spiders were collected on Arctic fox burrows with wormwood-cereal zoogenic meadow [**12**], as well as in the tundra-steppe plant communities with forbs and xerophilous sedges located on the edge of terrace [**13**] and in the extremely dry gravelly south-facing slope of riverbank with sparse herbs [**14**]. In the lower flow of brook Khrustalny spotted tundra-steppe plant cover and separate creeping willows were studied in a dry rubbly loamy south-facing slope of a shallow ridge [**15**] and on the south-facing river terrace [**16**]. Only in 2006, material was collected also on the right bank of Khrustalny brook, in the northern gravelly (carbonates) slope of Perkatkun monorock (~230 m), in the dry habitat with sparse forb-dwarf willow-dryad cover [**18**] and in the wet runoff depression with almost continuous dryad-sedge-moss tussocks [**19**]. In addition, on 17.VII.2019, few spiders were collected downstream, at the wet base of Inkali Mt. (71.096778°N, 179.693°W, 227 m), with hummock dryad-sedge-moss cover [**17**].

In this area, material was also collected by O.S. Starova (Pevek) on 2.VII–11.VIII.2014 in seven habitats using pit-

Photos 17–24. Habitats in enclaves of the northern variant of the typical tundra subzone (*nTT*), upper reaches of the Neizvestnaya River: 17 — pebble floodplain [**1**]; 18 — river valley with thick willow bushes [**2**]; 19 — wet depressions near lake [**4**]; 20 — zonal tundra in moderately moisturized intermountain basin [**8**]; 21 — foothill plume with spotted dryad tundra [**11**]; 22 — gentle slope of hill [**9**]; 23 — carbonate hillock [**13**]; 24 — tundra-steppe cover on the south-facing slope of monorock [**19**]. Habitat numbers are given in square brackets (see the text).

Фото 17–24. Биотопы северного варианта подзоны типичных тундр (*cTT*), верхнее течение р. Неизвестной: 17 — галечниковая пойма [**1**]; 18 — пойменные ивняки [**2**]; 19 — сырое понижение у озера [**4**]; 20 — зональная тундра в межгорной котловине [**8**]; 21 — дриадовая тундра на предгорном шлейфе [**11**]; 22 — склон увала [**9**]; 23 — карбонатный бугор [**13**]; 24 — тундростепная группировка на склоне останца южной экспозиции [**19**]. Номера биотопов даны в квадратных скобках (см. текст).

fall traps. Three of them were located in the river valley (high floodplain [**7**] and damp plots on the river terrace [**2**] at immediate vicinity of the Research station, the rest were on a dry shallow ridge [**10**]. Since no more detailed descriptions of these habitats have been made, their numbers are not indicated in the list of materials.

In upper reaches of the Neizvestnaya River, two areas separated by a distance of nearly 8 km were investigated. The main upstream (**spurs of Pervaya Mt.**) material was collected by O.A. Khruleva 28.VI–5.VIII.2015 (pitfall traps, sifting of litter, sweep nets and hand collection) in five habitats on the transect from 71.153194°N, 179.461444°W to 71.148083°N, 179.4453528°W, ~185–240 m There were: the stream valley with herb-moss-willow cover, [**1**], the dry gravelly foothill with spotted herb-dryad cover [**2**], the dry gravelly southern slope with spotted tundra-steppe willow-forb-sedge [**3**] and spotted forb-dryad [**4**] plant communities, the wet runoff slope with dryad-sedge-moss cover [**5**]. On 21.VII.2019 in the latter habitat few specimens were also collected using sifting litter, as well as at the base of Pervaya Mt. (71.175472°N, 179.453194°W, ~180–220 m) with horsetail-herb-moss cover [**6**] and on the gravelly south-facing slope with spotted forb-dryad cover [**7**].

Downstream (**upper reaches of the Neizvestnaya River**, vicinity of the Research Station "Verkhnaya Neizvestnaya" (71.216417°N, 179.322278°W, 121 m) material was collected by O.A. Khruleva during two seasons (4.VI–3.VIII.2006 and 21.VI–10.VIII.2015, 8 habitats from 19 were interviewed in both seasons) using all collecting techniques. There were: pebble floodplain [**1**, only in 2015] and thick willow bushes with a pillow of forb-moss cover in the lower tier [**2**] of the river valley, various wet habitats in the depressions of relief with horsetail-dryad-sedge-moss and sparse willows [**3**, only in 2015], cotton grass-moss [**4**], willow-sedge-sphagnum-moss [**5**, only in 2015] cover, moderately moisturized habitats in the intermountain basin with dryad-sedge-moss [**6**, **7** (only in 2006) and **8** (only in 2015)] and spotted forb-moss-grass cover and sparse willow bushes [**9**]. In this area, moss-herb-dryad spotted tundra communities are widespread on moderately dry gentle north-facing slopes [**10**, only in 2015] and foothills [**11**, only in 2015]. On dried gravel substrates, sparse herb-dryad-willow (creeping and dwarf forms) [**12**] and forb-sedge [**13**] communities are represented. The warmest habitats on the south-facing slope of terrace are occupied by dryad-grass-forb meadow [**14**] or in the extremely dry gravelly edge of river terrace – tundra-steppe communities with forbs and xerophilous sedges [**15**, **16** (only in 2015) and **17**]. In 2015, similar tundra-steppe habitats [**18**, **19**] were also studied on southern slopes of a low separate ridge three kilometers to the south (71.184417°N, 179.312917°W, 154 m). The habitat **19** was studied on 20.VII.2019 (hand collecting and sifting litter), as well as some other [**5**, **6**, **14**] on 20–22.VII.2019 using pitfall traps, sweep net, yellow pan traps, sifting of litter, hand collecting.

Annotated check-list of spiders of the Wrangel Is.

Fam. DICTYNIDAE (3 species)

Dictyna major Menge, 1869

2009 *Dictyna major*. — Marusik, Eskov: 105 (without precise locality).

MATERIAL. **Somnytelnye Mts**. Slopes (Sts): 3 ♂♂, 1 ♀ [**11**, pt], 25.V–3.VI.2015 (OKh). **Middle flow of Mamontovaya River**. Zoogenic (Zma): 1 ♀ [**18**, sw], 6.VIII.2006 (OKh).

REMARKS. This very rare species was collected on an extremely dry steep gravelly south-facing slope, with a spotted herb-sedge tundra-steppe assemblages (70.985833°N, 179.588417°W, 249 m, *sAT*, Photo 12), and on zoogenic glade with contiguous cover of herbs, wormwoods and grasses above an uninhabited polar fox den (*nAT*, 71.17425°N, 179.75425°W, 165 m).

RANGE. Holarctic, polyzonal.

Dictyna tyshchenkoi wrangeliana Marusik, 1988

1988 *Dictyna tyshchenkoi wrangeliana*. — Marusik: 1474.
1992 *D. t. wrangeliana*. — Marusik *et al*.: 137.
2009 *D. t. wrangeliana*. — Khruleva: 130.

MATERIAL. **Thomas Mt.** Slopes (Sm): 1 ♂ [**7**, hc], 10–31.VII.2016 (LV). **Upper reaches of Neozhidannaya River.** Slopes (Sm): 2 ♂♂, 1 ♀, 1 j. [**4**, **5** pt & hc], 8.VII–1.VIII.2016 (LV). **Upper reaches of Krasnyi Flag River.** Slopes (Sds): 2 ♀♀ [**8**, hc], 12–19.VI.2016 (LV). **Chertov Ovrag.** Dry tundra: 1 ♂ [**1**, pt], 4–25.VI.2006, (OKh). **Mineev Mts.** Slopes (Smt): 1 ♀ [**27**, pt], 8–14.VI.2006 (OKh). **Middle flow of Mamontovaya River.** Valley (Vhf): 2 ♂♂ [**7**, pt], 3–23.VII.2015 (OKh). Slopes (Sts, Smt): 5 ♂♂, 4 ♀♀, 3 j. [**14**, **16**, pt & sw], 24.VI–29.VII.2006 (OKh); 33 ♂♂, 2 ♀♀ [**13**, **14**, **16**, pt & sift], 29.VI–5.VIII.2015 (OKh).

REMARKS. The species is widespread in the mountainous part of the island, where it occurs exclusively on the gravelly south-exposed slopes. The maximum abundance was observed in 2015 in one of the areas of the central part of the island (*nTT*). In addition to Wrangel Is., this subspecies has been recorded in central Chukotka, the basin of the Amguema River [Marusik, 1993].

RANGE. Northeast Siberian, arctic.

Emblyna borealis (O. Pickard-Cambridge, 1877)

1987 *Dictyna* sp. — Khruleva: 11.
1989 *Emblyna borealis*. — Marusik: 49.
1992 *E. borealis*. — Marusik *et al*.: 137.
2009 *E. borealis*. — Khruleva: 130.

MATERIAL. **Chertov Ovrag.** Slopes (Sts): 1 j. [**4**, sift], 26.VII.2019 (OKh). **Atertom Mt.** Slopes (Sts): 4 j. [**3**, sw], 13.VII.2019 (OKh). **Somnitelnye Mts.** Slopes (Sds): 1 ♂ [**12**, pt], 28.V–9.VI.2006 (OKh). **Mineev Mts.** Dry tundra (Dth): 1 ♀ [**19**, pt], 27.V–5.VI.2015 (OKh). Slopes (Sts): 1 j. [**16**, sift], 30.VI.2015 (OKh). **Upper Reaches of Neizvestnaya River.** Slopes (Sts): 2 ♀♀ [**19**, hc & sift], 20.VII.2019 (OKh).

REMARKS. It is a rather rare species on Wrangel Is. It was recorded in mountains of *sAT* and in the enclaves of *nTT*, where it is confined to the gravelly plots of foothill plumes, hill slopes and river terraces of southern exposure.

RANGE. East Siberian-Nearctic, arcto-montane.

Fam. GNAPHOSIDAE (1)

Gnaphosa orites Chamberlin, 1922

1996 *Gnaphosa orites*. — Ovtsharenko, Marusik: 117.
1992 *G. orites*. — Marusik *et al*.: 138.
2009 *G. orites*. — Khruleva: 130.

MATERIAL. **Somnitelnye Mts.** Slopes (Sts, Sm): 48 ♂♂ & ♀♀ & j. [**11**, pt & hc], 25.V–14.VIII.2006 (OKh); 15 ♂♂ & 14 ♀♀ & 32 j. [**10**, **11**, pt & sift], 25.V–17.VII.2015 (OKh).

REMARKS. It is a very rare species on Wrangel Is. Its clearly relict micropopulation is known only from one habitat: an extreme dry steep gravelly south-facing slope with a

spotted herb-sedge tundra-steppe assemblages, (70. 985833°N, 179.588417°W, ~230–250 m, *sAT*, Photo 12). In the same locality the species was stably observed during all collection periods (1986, 1989, 2006, 2015), and in the last season (2015) it was collected in a more lower plot under the monorocks with additional moisture, with a moss-willow-mixed-grass-sedge cover.

RANGE. Holarctic, arcto-alpine (with wide distribution only in Low Arctic).

Fam. LINYPHIIDAE (43)

Agyneta birulai (Kulczyński, 1908)

1992 *Agyneta birulai*. — Marusik *et al*.: 139.
2009 *A. birulai*. — Khruleva: 130.

MATERIAL. **Chertov Ovrag.** Slopes (Sts): 1 ♀ [**4**, hc], 26.VII.2019 (OKh). **Somnitelnye Mts.** Slopes (Sts): 1 ♀ [**9**, hc], 9.VI.2006 (OKh); 1 ♂ [**11**, pt], 25.V.–3.VI.2015 (OKh).

REMARKS. A rare species, a few specimens were collected in the mountains of *sAT* and in the enclaves of *nTT*, on the gravelly slopes of southern exposure, with tundra-steppe plant communities.

RANGE. Siberian-West Nearctic, arcto-boreo-montane.

Agyneta brusnewi (Kulczyński, 1908)

1985 *Meioneta brusnewi*. — Eskov: 124.
1987 *M. brusnewi*. — Khruleva: 10.
1992 *Agyneta brusnewi*. — Marusik *et al*.: 139.
2009 *A. brusnewi*. — Khruleva: 130.

MATERIAL. **Somnitelnye Mts**. Slopes (Sds): 1 ♂ [**12**, pt], 13.VI–14.VII.2006 (OKh). **Mineev Mts**. Valley (Vpf): 1 ♂ [**18**, pt], 14.VI–14. VII.2006 (OKh). **Upper reaches of Neizvestnaya River**. Slopes (Sts): 2 ♂♂ [**17**, pt], 4.VI–3.VII.2006 (OKh).

REMARKS. It is a rather rare species on the island, some specimens were collected in dry habitats (most from slopes of southern exposure) in the mountains of *sAT* and in the enclaves of *nTT*.

RANGE. Siberian, arctic.

Agyneta bulavintsevi Tanasevitch, 2016

1987 *Agyneta trifurcata*. — Khruleva: 8, misidentification.
1992 *A.* cf. *trifurcata*. — Marusik *et al*.: 139.
2009 *A.* cf. *trifurcata*. — Khruleva: 130.

MATERIAL. **Upper reaches of Krasnyi Flag River.** Slopes (Sd): 2 ♂♂, 1 ♀ [**6**, pt], 2–17.VI.2016 (LV).

REMARKS. This rather rare species on the island has been mistakenly recorded as *A. trifurcata*. It was found in dry habitats on the gravelly slopes and hilltops.

RANGE. Siberian, arctic.

Agyneta decora (O. Pickard-Cambridge, 1871)

MATERIAL. **Mineev Mts.** Slopes (Sc): 1 ♂ [**29**, pt], 1–14.VI.2015 (OKh).

REMARKS. A very rare species. A single specimen was collected on the extremely dry gravelly carbonate slope of a hill of south-western exposure, with sparse lichen-dryad forb cover (71.016611°N, 179.517417°W, 244 m, *sAT*, Photo 16). This species is new to the fauna of the Wrangel Is.

RANGE. Palearctic-West Nearctic, polyzonal.

Agyneta maritima (Emerton, 1919)

1985 *Meioneta nigripes*. — Eskov: 125, misidentification.
1987 *M. nigripes*. — Khruleva: 10.
1992 *Agyneta alaskensis*. — Marusik *et al*.: 139.
2009 *A. alaskensis*. — Khruleva: 130.

MATERIAL. **Thomas Mts.** Slopes (Sm): 1 ♂, 2 j. [**7**, hc], 10–31.VII.2016 (LV). **Upper reaches of Krasnyi Flag River.** Slopes (Sd, Zmo): 1 ♀ [**6**, pt], 2–17.VI.2016 (LV). **Chertov Ovrag.** Slopes (Sts): 1 ♂, 2 ♀♀ [**4**, pt & sift], 26.VII.2019 (OKh). **Vyuchnyi Brook.** Slopes (Sds): 1 ♂ [**3**, sift], 24.VII.2019 (OKh). **Env. of Somnitelnaya Bay.** Zon: 9 ♂♂, 4 ♀♀ [**3**, **4**, **16**, pt & hc], 27.V–17.VI.2015 (OKh). Dry tundra (Dtd): 2 ♂♂, 2 ♀♀ [**5**, **15**, **17**, pt], 25.V–5.VI.2015 (OKh). Zoogenic (Zmo): 2 ♂♂ [**2**, pt], 5–11.VI.2006 (OKh); 14 ♂♂, 3 ♀♀ [**2**, pt & sift], 30.V–17.VI.2015 (OKh). **Somnitelnye Mts.** Slopes (Sts, Sds): 2 exs. [**12**, pt, hc], 28.V–9.VI.2006, 14. VIII.2006 (OKh); 2 ♂♂[**11**, **12**, pt], 25.V–12.VI.2015 (OKh). **Mineev Mts**. Valley (Vpf): 1 ♂ [**18**, pt], 8–16.VI.2006 (OKh). Dry tundra (Dth): 1 ♂, 2 ♀♀ [**21**, pt], 27.V–16.VI.2015 (OKh). **Env. of Tundrovaya Mt.** Valley (Vm): 1 ♂, 2 ♀♀ [7, pt], 4–14.VII.2020 (UB). **Middle flow of Mamontovaya River.** Wetland (Wsm): 1 ♀ [**4**, litter], 1.VII.2006 (OKh); 1 ♂ [**3**, pt], 12–27.VII.2014 (OS). Dry tundra (Dth): 1 ♂ [**10**, sw], 26.VI.2006 (OKh); 1 ♂, 1 ♀ [**10**, pt], 12–27.VII.2014 (OS); 1 ♂ [**9**, sift], 22.VII.2015 (OKh). **Spurs of Pervaya Mt**. Valley (Vm): 1 ♂ [**1**, sift], 13.VII.2015 (OKh). **Upper reaches of Neizvestnaya River**. Wetland (Wd): 1 ♂, 1 ♀ [**5**, pt], 6–28.VII.2015 (OKh). Zon: 1 ♂ [**9**, pt], 25.VI–10.VII.2015 (OKh). Slopes (Sts, Sm): 3 ♂♂ [**14**, **17** pt], 23.VI–3.VIII.2015 (OKh).

REMARKS. This species is widely distributed throughout the island, with exception of the extreme north-east (*sPD*). In the XX century, it was observed in habitats with different heat supply and humidity, but mostly in small quantities. In the XXI century, quite large series were collected in dry and moderately moist habitats on the coastal Southern Plain (*sAT*). In the mountainous areas of the island (*nAT*, *sAT*), individual specimens were collected mainly on south-facing foothill plumes and hillsides, and in the center of the island (*nTT*) — in wide range of habitats, including wet ones.

RANGE. Siberian-Nearctic, arcto-alpine.

Agyneta nigripes (Simon, 1884)

1985 *Meioneta nigripes*. — Eskov: 125.
1987 *M. nigripes*. — Khruleva: 10.
1993 *M. nigripes*. — Eskov, Marusik: 68.

MATERIAL. **Chertov Ovrag.** Slopes (Sts): 1 ♀, 1j. [**4**, sift], 26.VII.2019 (OKh).

REMARKS. A very rare species. It was collected on the dry edge of mountain terrace of the southern exposure, with spotted moss-herb cover (70.988833°N, 179.842528°W, 125 m). Previously, several males of *A. nigripes* were recorded at lower reaches of the Gusinaya River, western enclave of *nTT* [Eskov, Marusik, 1993].

RANGE. Holarctic, arcto-alpine.

Agyneta ripariensis Tanasevitch, 1984

MATERIAL. **Upper reaches of Neizvestnaya River.** Zon: 1 ♂ [**8**, sift], 10.VIII.2015 (OKh).

REMARKS. A very rare species. It was collected in the warmest central part of island (*nTT*), in the dryad-moss-sedge tundra (71.2045°N, 179.327639°W, 131 m, Photo 20). This species is new to the fauna of the Wrangel Is.

RANGE. Siberian, arcto-boreo-montane.

Arcterigone pilifrons (L. Koch, 1879)

1985 *Acartauchenius pilifrons*. — Eskov: 123.
1987 *A. pilifrons*. — Khruleva: 138.
1992 *A. pilifrons*. — Marusik *et al*.: 139.

1993 *Arcterigone pilifrons*. — Eskov, Marusik: 42.
2009 *A. pilifrons*. — Khruleva: 130.

MATERIAL. **Thomas Mt.** Slopes (Sm): 2 ♀♀ [**6**, **7**, pt], 10–31.VII.2016 (LV). **Upper reaches of Neozhidannaya River.** Slopes (Sm): 1 ♂, 2 ♀♀ [**4**, pt & hc], 8.VII–1.VIII.2016 (LV). **Upper reaches of Krasnyi Flag River.** Wetland (Wv): 6 ♂♂, 1 ♀ [**2**, pt], 4–17.VI.2016 (LV). **Chertov Ovrag.** Slopes (Sds): 1 ♂, 2 ♀♀ [**3**, sift & hc], 26.VII.2019 (OKh). **Vyuchnyi Brook.** Wetland (Wsm): 1 ♂, 4 ♀♀ [**1**, sift], 24.VII.2019 (OKh). **Env. of Somnitelnaya Bay.** Zon: 1 ♂ [**16**, pt], 27.V–6.VI.2015 (OKh). Dry tundra (Dtd): 1 ♀ [**17**, sift], 6.VI.2015 (OKh). Zoogenic (Zmo): 1 ♀ [**2**, pt], 17.VI–17.VII.2015 (OKh). **Somnitelnye Mts.** Wetland (Wsm): 1 ♂ [**7**, pt], 16.VII–13.VIII.2006 (OKh); 17 ♂♂, 17 ♀♀ [**7**, pt & sift], 25.V–17.VII.2015 (OKh). Slopes (Sds): 3 ♂♂, 1 ♀ [**12**, pt], 25.V–3.VI.2015 (OKh). **Mineev Mts.** Valley (Vhf): 1 ♀ [**19**, pt], 8–14.VI.2006 (OKh); 1 ♂, 1 ♀ [**19**, pt & sift], 8–14.VI.2015, (OKh). Wetland (Wsm, Wmt): 14 ♂♂, 3 ♀♀, [**20**, **23**, **24**, **28**, pt & sift], 1.VI–18.VII.2015 (OKh). **Env. of Tundrovaya Mt.** Wetland (Wv, Wmt): 1 ♂ [**6**, pt], 1–19.VII.2015 (LV); 1 ♀ [**3**, pt], 8–17.VII.2021 (UB). **Middle flow of Mamontovaya River.** Valley (Vm): 1 ♂ [**6**, pt], 9–19.VII.2006 (OKh); 2 ♀♀ [**6**, sift], 30.VI.2015 (OKh). Wetland (Wbf, Wv): 2 ♂♂, 2 ♀♀ [**2**, **4**, pt & litter], 28.VI–31.VII.2006, (OKh); 2 ♂♂, 3 ♀♀ [**3**, pt], 2–20.VII.2014 (OS); 4 ♂♂, 5 ♀♀ [**2**, **4**, sift], 30.VI–23.VII.2015 (OKh). Dry tundra (Dth): 1 ♀ [**10**, litter], 1.VII.2006 (OKh); 1 ♀ [**10**, pt], 27.VII–11.VIII.2014 (OS); 6 ♀♀ [**9**, **10**, pt & sift], 30.VI–23.VII.2015 (OKh); Zon: 1 ♂, 1 ♀ [**8**, sift], 1.VII.2015 (OKh). Slopes (Sts, Smt): 6 ♂♂, 1 ♀, [**14**, **15**, pt], 24.VI–8.VII.2006 (OKh). **Spurs of Pervaya Mt**. Valley (Vm): 1 ♂, 1 ♀ [**1**, pt & sift], 13.VII–5.VIII 2015 (OKh). **Upper reaches of Neizvestnaya River.** Wetland (Wbf, Wd): 6 ♀♀ [**2**, **4**, pt & littet], 4.VII–3.VIII.2006 (OKh); 12 ♂♂, 8 ♀♀ [**2**, **3**, **5**, pt, sift, ypt], 25.VI–10.VIII.2015 (OKh). Zon: 1 ♂ [**8**, sift], 10.VIII.2015 (OKh). Dry tundra (Dth): 1 ♂, 2 ♀♀ [**9**, pt & sift], 25.VI–31.VII.2015 (OKh).

REMARKS. In the XX century individual specimens were collected mainly in wet habitats of the mountainous part of *sAT*. In the XXI century, the number of species has increased significantly. Spiders were collected both in wet and moderately moist habitats in various localities of *sAT* and *nTT*, including watersheds. In *nAT*, this species was recorded for the first time, it was also found both in humid habitats and on southern slopes with mesophytic vegetation.

RANGE. Siberian-Nearctic, arctic.

Dactylopisthoides hyperboreus Eskov, 1990

1990b *Dactylopisthoides hyperboreus*. — Eskov: 4.
1992 *D. hyperboreus*. — Marusik *et al*.: 141.
2009 *D. hyperboreus*. — Khruleva: 130.

MATERIAL. **Somnitelnye Mts.** Slopes (Sts): 2 ♀♀ [**9**, pt], 28.V–9.VI.2006 (OKh).

REMARKS. A very rare species. Previously, it was recorded from the gravel hilltop at lower reaches of the Gusinaya River (western enclave of *nTT*) and on the south-facing slope with tundra-steppe vegetation on the Somnitelnye Mts (*sAT*). In XXI century it was also collected in the latter habitat.

RANGE. Northeast Siberian, arcto-alpine (mostly in the mountain tundras).

Diplocephalus barbiger (Roewer, 1955)

1985 *Diplocephalus barbatus*. — Eskov: 123.
1987 *D. barbatus*. — Khruleva: 8.
1992 *D. barbatus*. — Marusik *et al*.: 141.
2009 *D. barbatus*. — Khruleva: 130.

MATERIAL. **Upper reaches of Krasnyi Flag River.** Wetland (Wrv): 2 ♂♂ [**2**, pt], 4–17.VI.2016 (LV). **Cape Waring.** Wetland (Wd, Wsm): 1 ♂, 2 ♀♀ [**2**, **3**, pt], 16–24.VII.2020 (PK). **Env. of Somnitelnaya Bay.** Zon: 5 ♂♂, 9 ♀♀ [**3**, **4**, **16**, pt & sift], 27.V–19.VII.2015 (OKh). **Mineev Mts.** Valley (Vhf): 1 ♂ [**19**, pt], 14.VI–18.VII.2015 (OKh). Wetland (Wmt): 3 ♂♂, 2 ♀♀ [**23**, **28**, pt & sift], 1.VI–18.VII.2015 (OKh). **Env. of Tundrovaya Mt.** Wetland (Wmt): 1 ♀ [**8**, pt], 4–14.VII.2020 (UB); 1 ♀ [**3**, pt], 8–17.VII.2021 (UB). **Middle flow of Mamontovaya River.** Valley (Vm): 1 ♂ [**6**, pt], 1–23.VII.2015 (OKh). Wetland (Wbf, Wv, Wsm): 2 ♂♂, 2 ♀♀ [**2**, **3**, **4**, pt, sift & sw], 29.VI–5.VII.2015 (OKh). **Spurs of Pervaya Mt.** Valley (Vm): 1 ♂ [**1**, pt], 13.VII–5.VIII 2015 (OKh). **Upper reaches of Neizvestnaya River.** Valley (Vpf): 1 ♂, 2 ♀♀, [**1**, pt], 26.VI–13.VII.2015 (OKh). Wetland (Wd): 1 ♂, 1 ♀ [**2**, **4**, pt & sift], 26.VI–3.VIII.2006 (OKh); 5 ♂♂, 9 ♀♀ [**4**, **5**, pt & sift], 26.VI–3.VIII.2015 (OKh).

REMARKS. This species occurs everywhere on the island. In the XX century, it was collected in a fairly wide range of habitats, most often in river valleys (floodplains, dry edges of terraces). In the XXI century, the species was collected mainly in wet and (or) near-water habitats in river valleys; the exception was the coastal Southern Plain (nearby Somnitelnaya Bay, *sAT*), where it was quite common in the lichen-grass-moss tundra on watersheds.

RANGE. Siberian-Nearctic, arctic.

Erigone arctica sibirica Kulczyński, 1908

1985 *Erigone arctica sibirica*. — Eskov: 126.
1987 *E. a. sibirica*. — Khruleva: 9.
1992 *E. a. sibirica*. — Marusik *et al*.: 141.
2009 *E. a. sibirica*. — Khruleva: 130.
2014 *E. a. sibirica*. — Khruleva: 318.

MATERIAL. **Middle flow of Neozhidannaya River.** Valley (Vpf): 90 ♂♂ & 30 ♀♀ [**1**, pt & hc], 2–17.VI.2016 (LV). Wetland (Wv): 42 ♂♂, 12 ♀♀ [**2**, pt], 4–17.VI.2016 (LV). Slopes (Sds): 1 ♂, 1 ♀ [**7**, pt], 12–19.VI.2016 (LV). **Upper reaches of Krasnyi Flag River.** Valley (Vpf): 29 ♂♂, 30 ♀♀ [**1**, pt & hc], 2–17.VI.2016 (LV). Wetland (Wv): 42 ♂♂, 12♀♀ [**2**, pt], 2–17.VI.2016 (LV). Slopes (Sds): 11 ♂♂, 12 ♀♀ [**7**, pt], 7–19.VI.2016 (LV). **Env. of Somnitelnaya Bay.** Valley (Vhf): 1 ♂, 1 ♀ [**1**, hc], 19.VIII.2006 (OKh); 47 ♂♂, 50 ♀♀ [**1**, pt & hc], 28.V–17.VII.2015 (OKh). Zon: 4 ♂♂, 1 ♀ [**16**, pt], 27.V–6.VI.2015 (OKh). Zoogenic (Zmo): 2 ♂♂, 2 ♀♀ [**2**, pt], 25.V–15.VI.2006 (OKh). **Mineev Mts.** Valley (Vpf, Vhf): 6 ♂♂, 1 ♀ [**18**, pt], 8.VI–14.VII.2006 (OKh); 46 ♂♂, 22 ♀♀ [**18**, pt], 1.VI–18.VII.2015 (OKh); 2 ♂♂, 6 ♀♀, 2 j. [**19**, pt], 8.VI–14.VII.2006 (OKh); 108 ♂♂, 48 ♀♀ [**19**, pt], 1.VI–18.VII.2015 (OKh). Wetland (Wmt): 8 ♂, 1 ♀ [**28**, pt], 14.VI–18.VII.2015 (OKh); Slopes (Sds): 1 ♂ [**26**, pt], 14.VI–14.VII.2006 (OKh). **Env of Rogers Bay.** Valley (Vpf): 2 ♂♂, 1 ♀, 1j. [**4**, hc], 12.VII.2019 (OKh). **Env. of Tundrovaya Mt.** Wetland (Wv, Wmt): 72 ♂♂, 12 ♀♀ [**3**, pt], 1–19.VII.2015 (LV); 12 ♂, 14 ♀, same habitat [**3**, pt], 8–17.VII.2021 (UB); 22 ♂♂, 11 ♀♀ [**4**, **5**, **6**, pt], 1–19.VII.2015 (LV); 134 ♂♂, 1 ♀j. [**8**, pt], 4–14.VII.2020 (UB). Dry tundra (Dtd): 1 ♂ [**9**, pt], 4–14.VII.2020 (UB). **Middle flow of Mamontovaya River.** Valley (Vpf, Vhf, Vm): 1 ♂, 3 ♀♀ [**1**, pt], 20.VI–9.VII.2006 (OKh); 2 ♀ [**1**, pt], 4–23.VII.2015 (OKh); 2 ♂♂, 1 ♀ [**7**, pt], 2–12.VII.2014 (OS); 2 ♂♂, 1 ♀ [**7**, pt], 3.VII–5.VIII.2015 (OKh); 4 ♂♂, 4 ♀♀ [**6, 7**, pt], 20.VI–9.VII.2006 (OKh). Wetland (Wbf, Wv): 42 ♂♂, 1 ♀ [**2**, **3**, **4**, pt & litter], 23.VI–8.VIII.2006 (OKh); 44 ♂,13 ♀ [**3**, pt], 2–27.VII.2014 (OS); 5 ♂♂, 3 ♀♀ [**3**, **4**, pt & sift], 1–22.VII.2015 (OKh). Dry tundra (Dth, Dtd): 3 ♂♂, 1 ♀ [**9**, **10**, **18**, pt & litter], 19.VI–20.VII.2006 (OKh); 4 ♂♂ [**9**, pt], 22.VII–5.VIII.2015 (OKh). Zoogenic (Zma): 2 ♂♂ [**12**, pt], 24.VI–21.VII.2006 (OKh); 2 ♂♂, 1 ♀ [**12**, pt], 29.VI–5.VIII.2015 (OKh). **Upper reaches of Neizvestnaya River.** Valley (Vpf, Wbf): 2 ♂♂, 2 ♀♀ [**1**, pt & hc], 4.VII–3.VIII.2006 (OKh); 21 ♂♂, 16 ♀♀ [**1**, pt], 26.VI–3.VIII.2015 (OKh). Wetland (Wd, Wbf): 1 ♂, 5 ♀♀ [**4**, litter], 22.VI–10.VIII.2015 (OKh); 25 ♂♂, 11 ♀♀ [**3**, **4**, **5**, pt, sift & ypt], 24.VI–3.VIII.2015 (OKh). Dry tundra (Dth): 8 ♂♂, 1 ♀ [**9**, pt], 25.VI–31.VII.2015 (OKh). Slopes (Sm): 1 ♀ [**14**, pt], 6.VII–3.VIII.2006 (OKh); 1 ♀ [**14**, pt], 12–29.VII.2015 (OKh).

REMARKS. This species is widely distributed throughout the island, with the exception of the extreme northeast

part (*sPD*). In the XX century, it was found mainly in the river floodplains. In the XXI century, in all previously studied areas, the number of the species has increased significantly. In addition to floodplains, the species was found in wet habitats, less often in zonal tundra communities on watersheds.

RANGE. Siberian, arcto-boreal (mostly in the tundra zone).

Erigone arcticola Chamberlin et Ivie, 1947

1985 *Erigone arcticola*. — Eskov: 123.
1987 *E. arcticola*. — Khruleva: 9.
1992 *E. arcticola*. — Marusik *et al*.: 141.
2019 *E. arcticola*. — Marusik *et al*.: 136.

MATERIAL. **Middle flow of Neozhidannaya River.** Valley (Vpf): 2 ♀♀ [**1**, pt], 10.VI–27.VII.2006 (AG). **Env. of Somnitelnaya Bay.** Valley (Vhf): 2 ♀♀ [**1**, pt], 30.V–8.VI.2015 (OKh). **Mineev Mts.** Valley (Vpf): 30 ♂♂, 1 ♀ [**18**, pt], 8.VI–14.VII.2006 (OKh); 2 ♂♂, 3 ♀♀ [**18**, pt & hc], 1–8.VI.2015 (OKh); 2 ♀♀ [**18**, hc], 14.VII.2019 (OKh). **Middle flow of Mamontovaya River.** Valley (Vpf): 3 ♂♂, 8 ♀♀ [**1**, pt & hc], 20.VI–19.VII.2006 (OKh); 1 ♀ [**7**, pt] 2–12.VII.2014 (OS). **Upper reaches of Neizvestnaya River.** Valley (Vpf): 2 ♂♂, 1 ♀ [**1**, pt & hc], 4.VII–3.VIII.2006 (OKh); 11 ♂♂, 5 ♀♀ [**1**, pt & hc], 26.VI–13.VII.2015 (OKh).

REMARKS. It is a rather rare species on the island, restricted to pebble floodplains.

RANGE. Siberian-Nearctic, arcto-alpine.

Erigone psychrophila Thorell, 1872

1985 *Erigone psychrophila*. — Eskov: 124.
1987 *E. psychrophila*. — Khruleva: 9.
1992 *E. psychrophila*. — Marusik *et al*.: 142.
2009 *E. psychrophila*. — Khruleva: 130.
2014 *E. psychrophila*. — Khruleva: 318.

MATERIAL. **Thomas Mt.** Wetland (Wd): 90 ♂♂ & ♀♀ [**1**, pt], 11–31.VII.2016 (LV). Zon: 1 ♂ [**2**, pt], 11–31.VII.2016 (LV). **Upper reaches of Neozhidannaya River.** Different habitats: 9 ♂♂, 11 ♀♀ [**1**, **2**, **3**, **4**, pt & hc], 8.VII–1.VIII.2016 (LV). **Middle flow of Neozhidannaya River.** Valley (Vpf): 30 ♂♂, 14 ♀♀ [**1**, pt], 10.VI–27.VII.2006 (AG). Wetland (Wsm): 16 ♀♀ [**4**, pt], 10.VI–27.VII.2006 (AG). Zon: 1 ♂ [**2**, pt], 10.VI–27.VII.2006 (AG). **Upper reaches of Krasnyi Flag River.** Different habitats: 41 ♂♂, 33 ♀♀ [**1**, **2**, **3**, **4**, **5**, **6**, **7**, **8**, pt & hc], 2–19.VI.2016 (LV). **Cape Waring.** Valley (Vpf): 1 ♀ [**1**, pt], 16–24.VII.2020 (PK). Wetland (Wd, Wsm): 7 ♂♂, 17 ♀♀, 4 j. [**2**, **3**, pt & ypt], 16–24.VII.2020 (PK). Dry tundra (Dth): 2 ♂♂ [**4**, pt], 16–24.VII.2020 (PK). **Vyuchnyi Brook.** Wetland (Wsm): 1 ♂ [**1**, sift], 24.VII.2019 (OKh). **Env. of Somnitelnaya Bay.** Zon: 31 ♂♂ & ♀♀ [**3**, **4**, pt & hc], 9.VI–16.VII, 19.VIII.2006 (OKh); 66 ♂♂, 9 ♀♀ [**3**, **4**, **16**, pt], 27.V–19.VII.2015 (OKh). Zoogenic (Zmo): 3 ♂♂ [**2**, pt], 9.VI–15.VII.2006 (OKh). Dry tundra (Dtd): 6 ♂♂ [**15**, **17**, pt], 27.V–16.VI.2015 (OKh). **Somnitelnye Mts.** Wetland (Wsm, Wmt): 3 ♂♂ [**7**, pt], 9.VI–13.VII.2006 (OKh); 5 ♂♂, 1 ♀ [**7**, pt & sift], 25.V–17.VII.2015 (OKh); 1 ♀ [**14**, pt], 13.VI–14.VIII.2006 (OKh). **Mineev Mts.** Valley (Vpf, Vhf): 1 ♀ [**18**, pt], 14.VI–18.VII.2015 (OKh); 1 ♂ [**19**, pt], 14.VI–14.VII.2006 (OKh). Wetland (Wmt): 5 ♂♂, 1 ♀ [**23**, pt], 8.VI–14.VII.2006 (OKh); 28 ♂♂, 8 ♀♀ [**23**, **28**, pt & sift], 1.VI–18.VII.2015 (OKh). **Atertom Mt**: Wetland (Wsm): 1 ♂, 2 ♀ [**2**, sift], 13.VII.2019 (OKh). **Env of Rogers Bay.** Wetland (Wsm): 3 ♀♀ [**1**, pt], 11–13.VII.2019 (OKh). Zon: 3 ♂♂, 4 ♀♀ [**2**, pt], 11–13.VII.2019 (OKh). **Env. of Tundrovaya Mt.** Wetland (Wv, Wmt): 3 ♂♂, 1 ♀ [**3**, pt], 1–19.VII.2015 (LV); 6 ♂♂ [**4**, **5**, pt], 1–19.VII.2015 (LV); 1 ♀ [**5**, pt], 8–17.VII.2021 (UB). **Middle flow of Mamontovaya River.** Valley (Vhf): 1 ♀ [**7**, pt], 23.VII–5.VIII.2015 (OKh). Wetland (Wv, Wmt): 38 ♂♂ & ♀♀ [**3**, pt], 9.VII–8.VIII.2006 (OKh); 1 ♀ [**19**, pt], 26.VI–20.VII.2006 (OKh); 9 ♂♂, 5 ♀♀ [**3**, pt], 1.VII–5.VIII.2015 (OKh). Dry tundra (Dtd): 2 ♀♀ [**18**, pt], 26.VI–20.VII.2006 (OKh); 1 ♂ [**10**, pt], 2–12.VII.2014 (OS). **Spurs of Pervaya Mt.**: Wetland (Wmt): 3 ♂♂, 5 ♀♀ [**5**, pt & sift], 28.VI–5.VIII 2015 (OKh); 1 ♂ [**5**, sift], 21.VII.2019 (OKh); **Upper reaches of Neizvestnaya River.** Valley (Vpf): 2 ♂♂ [**1**, pt], 26.VI–6.VII.2015 (OKh). Wetland (Wd): 1 ♀ [**4**, litter], 3.VIII.2006 (OKh); 4 ♂♂, 3 ♀♀ [**4**, pt & ypt], 24.VI–3.VIII.2015 (OKh).

REMARKS. The species occurs everywhere on the island, the greatest activity is observed in *sPD* and *nAT*, where it lives in a wide range of habitats (avoiding only the most dry). On the coastal plain of *sAT*, this species has similar habitat preferences, but in the mountainous part it is found mainly in moist habitats. In the central part of the island (*nTT*), it is recorded sporadically and almost exclusively in moist habitats.

RANGE. Holarctic, predominantly arctic.

Gibothorax tchernovi Eskov, 1989

1987 "*Rhaebothorax*" sp. — Khruleva: 9.
1989 *Gibothorax tchernovi*. — Eskov: 73.
1992 *G. tchernovi*. — Marusik *et al*.: 142.

MATERIAL. **Thomas Mt.**: Wetland (Wd): 2 ♂♂, 1 ♀ [**1**, pt], 11–31.VII.2016 (LV). **Upper reaches of Neozhidannaya River.** Wetland (Wrv, Wd): 9 ♂♂ [**1**, **2**, pt], 8.VII–1.VIII.2016 (LV). **Env. of Somnitelnaya Bay.** Valley (Vhf): 1 ♀ [**1**, pt], 8–17.VI.2015 (OKh). **Mineev Mts.** Wetland (Wmt): 1 ♂ [**23**, sift], 18.VII.2015 (OKh). **Middle flow of Mamontovaya River.** Wetland (Wv): 2 ♂♂ [**3**, pt], 19–31.VII.2006 (OKh); 1 ♂ [**3**, pt], 22.VII–5.VIII.2015 (OKh). **Spurs of Pervaya Mt.** Valley (Vm): 1 ♀ [**1**, sift], 13.VII.2015 (OKh). **Upper reaches of Neizvestnaya River.** Wetland (Wd): 2 ♂♂, 2 ♀♀ [**4**, pt], 24.VI–28.VII.2015 (OKh).

REMARKS. In the XX century, the species was only collected in a single wet habitat at lower reaches of the Gusinaya River (western enclave of *nTT*). In the XXI century, the species was recorded in floodplains and wet habitats in the areas with various climate conditions (*nAT*, *sAT*, *nTT*).

RANGE. Siberian-Nearctic, arctic.

Halorates holmgreni (Thorell, 1871)

1985 *Collinsia holmgreni*. — Eskov: 123.
1987 *C. holmgreni*. — Khruleva: 8.
1992 *C. holmgreni*. — Marusik *et al*.: 140.

MATERIAL. **Thomas Mt.** Wetland (Wd): 1 ♂ [**1**, pt & hc], 11–31.VII.2016 (LV). Zon: 10 ♀♀ [**2**, pt], 11–31.VII.2016 (LV). Slopes (Sm): 5 ♂♂, 18 ♀♀ [**6**, pt & hc], 10–31.VII.2016 (LV). **Upper reaches of Neozhidannaya River.** Wetland (Wv): 46 ♂♂ & ♀♀ [**1**, pt & hc], 8.VII–1.VIII.2016 (LV). Slopes (Sm): 5 ♀♀ [**4**, **5**, pt & hc], 8.VII–1.VIII.2016 (LV). **Middle flow of Neozhidannaya River.** Wetland (Wv): 1 ♂, 1 ♀ [**1**, pt], 10.VI–27.VII.2006 (AG). **Upper reaches of Krasnyi Flag River.** Wetland (Wsm): 46 ♂♂ & ♀♀ [**3**, pt & hc], 4–17.VI.2016 (LV). **Cape Waring.** Wetland (Wd, Wsm): 4 ♂♂, 2 ♀♀ [**2**, **3**, pt], 16–24.VII.2020 (PK). **Env. of Somnitelnaya Bay.** Valley (Vm): 1 ♂ [**1**, ypt], 7–10.VII.2019 (PK). **Mineev Mts.** Valley (Vpf, Vhf): 8 ♂♂, 2 ♀♀ [**18**, **19**, pt], 8.VI–14.VIII.2006 (OKh); 7 ♂♂, 13 ♀♀ [**18**, **19**, pt & sift], 1.VI–18.VII.2015 (OKh). Wetland (Wmt): 2 ♂, 2 ♀ [**23**, **24**, pt & sift], 1–14.VI.2015 (OKh). **Env. of Tundrovaya Mt.** Wetland (Wv, Wmt): 20 ♂♂, 6 ♀♀ [**3**, **5**, **6**, pt], 1–19.VII.2015 (LV); 3 ♂♂, 2 ♀♀ [**8**, pt], 4–14.VII.2020 (UB); 3 ♂♂, 6 ♀♀ [**3**, pt], 8–17.VII.2021 (UB); 1 ♂ [**5**, pt], 8–17.VII.2021 (UB). **Middle flow of Mamontovaya River.** Valley (Vpf, Vhf): 1 ♂ [**7**, pt], 23.VII–5.VIII.2015 (OKh). Wetland (Vv, Wbf, Vmt): 1 ♂, 7 ♀♀ [**2**, **4**, **5** pt & litter], 28.VI–19.VII.2006 (OKh); 12 ♂♂, 8 ♀♀ [**2**, pt & sift], 22.VII–5.VIII.2015 (OKh); 3 ♂♂, 5 ♀♀, 3 j. [**17**, sift], 17.VII.2019 (OKh). Dry tundra (Dtd): 1 ♀ [**11**, sift], 30.VI.2015 (OKh). **Spurs of Pervaya Mt.** Valley (Vm): 1 ♀ [**1**, sift], 13.VII.2015 (OKh). **Upper reaches of Neizvestnaya River.** Valley (Vpf): 2 ♂♂, 4 ♀♀ [**1**, pt & hc], 26.VI–3.VIII.2015 (OKh). Wetland (Wbf): 4 ♀♀ [**2**, litter], 5.VII, 4.VIII.2006 (OKh); 107 ♂♂ & ♀♀ [**2**, pt & sift], 22.VI–10.VIII.2015 (OKh). Slopes (Sts): 1 ♀ [**17**, pt], 23.VI–5.VII.2015 (OKh).

REMARKS. This species is widespread on the island (with the exception of *sPD*). In the XX century, the species was mainly collected on floodplains of rivers and dry edges of river terraces. In the XXI century; the maximum number was observed in wet habitats in river valleys. In *nAT*, the species was collected both in swampy sedge-moss communities and in mesophytic meadows on the slopes of southern exposure.

RANGE. Holarctic, arcto-montane.

Halorates spetsbergensis (Thorell, 1872)

1987 *Collinsia spetsbergensis*. — Khruleva: 8.
1992 *C. spetsbergensis*. — Marusik *et al*.: 141.
2009 *C. spetsbergensis*. — Khruleva: 130.

MATERIAL. **Upper reaches of Neozhidannaya River.** Wetland (Wv): 3 ♂♂, 6 ♀♀ [**1**, pt & hc], 8.VII–1.VIII.2016 (LV). **Middle flow of Neozhidannaya River.** Wetland (Wv): 1 ♂, 31 ♀♀ [**1**, pt], 10.VI–27.VII.2006 (AG). **Env. of Somnitelnaya Bay.** Valley (Vhf): 12 ♂♂ & ♀♀ [**1**, hc], 19.VIII.2006 (OKh); 10 ♂♂, 151 ♀♀ [**1**, pt & hc], 30.V–17.VII.2015 (OKh). Zon: 12 ♂♂, 24 ♀♀, 2 j. [**16**, pt & sift], 27.V–16.VI.2015 (OKh). Zoogenic (Zmo): 2 ♂♂, 10 ♀♀ [**2**, pt], 25–28.V.2006; (OKh). **Mineev Mts.** Valley (Vpf, Vhf): 1 ♀ [**19**, pt], 14.VII–15.VIII.2006 (OKh); 3 ♂♂, 4 ♀♀ [**18**, pt], 1.VI–18.VII.2015 (OKh). **Env. of Tundrovaya Mt.** Wetland (Wv, Wmt): 54 ♂♂ & ♀♀ [**3**, **4**, **5**, **6**, pt], 1–19.VII.2015 (LV). **Middle flow of Mamontovaya River.** Valley (Vhf): 1 ♂ [**7**, pt], 25–30.VI.2006 (OKh); **Upper reaches of Neizvestnaya River.** Valley (Vpf): 3 ♂♂, 1 ♀ [**1**, pt], 6–13.VIII.2015 (OKh).

REMARKS. In the XX century, this species was found in various areas of the island, with the exception of the warmest central part. In the north-east of the island (*sPD*), it was found almost everywhere, including zonal habitats. In other areas it was mainly limited to floodplain habitats in the river valleys, although it was sometimes observed in various dry habitats. In the XXI century, this species was very numerous at the mouth of the Somnitelnaya River. In the northern enclave of *nTT*, in addition to floodplain habitats, it was locally numerous on the wet slopes of northern exposure.

RANGE. Holarctic, arctic.

Hilaira gertschi Holm, 1960

1985 *Hilaira gertschi*. — Eskov: 123.
1987 *H. gertschi*. — Khruleva: 9.
1992 *H. gertschi*. — Marusik *et al*.: 142.
2009 *H. gertschi*. — Khruleva: 130.

MATERIAL. **Thomas Mt.**: Wetland (Wd): 1 ♀, 1 j. [**1**, hc], 11–31.VII.2016 (LV); Zon: 1 ♂, 1 ♀ [**2**, pt & hc], 11–31.VII.2016 (LV). Slopes (Sm): 4 ♂♂, 6 ♀♀ [**6**, **7**, pt & hc], 11–31.VII.2016 (LV). **Upper reaches of Krasnyi Flag River.** Slopes (Sds, Sd): 11 ♂♂, 12 ♀♀ [**6**, **7**, **8**, **9**, pt & hc], 2–19.VI.2016 (LV). **Env. of Somnitelnaya Bay.** Zoogenic (Zmo): 7 ♂♂ & ♀♀ [**2**, pt], 28.V–15.VI.2006 (OKh); 8 ♂♂, 20 ♀♀ [**2**, pt & sift], 30.V–8.VI.2015, 17.VII.2015 (OKh). Dry tundra (Dtd): 22 ♂♂, 29 ♀♀ [**5**, **15**, **17**, pt & sift], 25.V–16.VI.2015, 19.VII.2015 (OKh). **Somnitelnye Mts.** Slopes (Sds, Sm): 10 ♂♂, 5 ♀♀ [**10**, **12**, pt & sift], 25.V–17.VII.2015 (OKh). **Mineev Mts.** Valley (Vhf): 13 ♂♂, 3 ♀♀ [**19**, pt], 8.VI–14.VII.2006 (OKh); 35 ♂♂, 2 ♀♀ [**19**, pt], 1–14.VI.2015 (OKh). Wetland (Wmt): 1 ♀ [**23**, pt], 1–8.VI.2015 (OKh). **Env. of Tundrovaya Mt.** Valley (Vm): 1 ♀ [**7**, pt], 4–14.VII.2020 (UB). Wetland (Wmt): 1 ♀ [**6**, pt], 1–19.VII.2015 (LV); 2 ♀♀ [**5**, pt], 8–17.VII.2021 (UB). Dry tundra (Dtd): 1 ♂, 1 ♀ [**2**, pt], 1–19.VII.2015 (LV). Slopes (Sm): 5 ♂♂, 1 ♀ [**1**, pt], 1–19.VII.2015 (LV). **Middle flow of Mamontovaya River.** Wetland (Wv, Wbf): 2 ♀♀ [**3**, pt], 2–12.VII.2014 (OS); 4 ♂♂, 2 ♀♀ [**2**, **4**, **5**, pt], 28.VI–31.VII.2006 (OKh); 1 ♂, 2 ♀♀ [**3**, **4**, pt & sift], 1.VII.2015, 22.VII–5.VIII.2015 (OKh). Zon: 1 ♂ [**8**, pt], 21.VII–2.VIII.2006 (OKh); 2 ♀♀ [**8**, pt & sift], 1–22.VII.2015 (OKh). Dry tundra (Vm, Dth): 12 ♂♂ & ♀♀ [**6**, **9**, **10**, pt & litter], 19.VI–31.VII.2006 (OKh); 7 ♂♂, 5 ♀♀ [**10**, pt], 2.VII–11.VIII.2014 (OS); 4 ♂♂, 6 ♀♀ [**6**, **9**, **10**, pt & sift], 30.VI–5.VIII.2015 (OKh). Zoogenic (Zma): 9 ♂♂ & ♀♀ [**12**, pt & litter], 24.VI–6.VIII.2006 (OKh); 1 ♂, 1 j. [**12**, sift], 1.VII.2015 (OKh). Slopes (Sts): 1 ♂ [**16**, pt], 8–20.VII.2006 (OKh); 3 ♀♀ [**13**, pt], 22.VII–5.VIII.2015 (OKh).

REMARKS. This species is widely distributed throughout the island. In the XX century, it was found in a wide range of habitats, clearly avoiding only the wettest, as well as the driest habitats on the southern slopes in the mountainous part. In the XXI century, in vicinity of Somnitelnaya Bay (*sAT*), these spiders were absent in some habitats, where they were previously numerous, but retained a fairly high abundance in the rest. In the center of the island (*nTT*), the species was found locally: it is numerous at the middle flow of the Mamontovaya River, but absent in the upper reaches of Neizvestnaya River.

RANGE. Siberian-West-Nearctic, arctic.

Hilaira glacialis (Thorell, 1871)

1985 *Hilaira glacialis*. — Eskov: 124.
1987 *H. glacialis*. — Khruleva: 9.
1992 *H. glacialis*. — Marusik *et al*.: 142.
2009 *H. glacialis*. — Khruleva: 130.

MATERIAL. **Upper reaches of Neozhidannaya River.** Different habitats: 17 ♂♂, 13 ♀♀ [**1**, **2**, **3**, **4**, **5**, pt & hc], 8.VII–1.VIII.2016 (LV). **Middle flow of Neozhidannaya River.** Wetland (Sms): 1 ♂ [**4**, pt], 10.VI–27.VII.2006 (AG). Zon: 1 ♂, 1 ♀ [**5**, pt], 28.VII–2.VIII.2017 (MB). **Upper reaches of Krasnyi Flag River.** Wetland (Wv): 1 ♂, 1 ♀ [**2**, pt & hc], 2–17.VI.2016 (LV). **Cape Waring.** Wetland (Wd, Wsm): 6 ♂♂, 3 ♀♀ [**2**, **3**, pt], 16–24.VII.2020 (PK). **Chertov Ovrag.** Slopes (Sds, Sts): 1 ♂, 10 ♀♀ [**3**, **4**, sift & hc], 26.VII.2019 (OKh). **Vyuchnyi Brook.** Wetland (Wsm): 2 ♀♀ [**1**, hc], 24.VII.2019 (OKh); Slopes (Sds): 2 ♀♀, 2 j. [**3**, sift], 24.VII.2019 (OKh). **Env. of Somnitelnaya Bay.** Zon: 79 ♂♂ & S♀ [**3**, **4**, pt & hc], 5.VI–14.VIII.2006 (OKh); 43 ♂♂, 67 ♀♀ [**3**, **4**, **16**, pt, sift & hc], 30.V–17.VI.2015 (OKh). Dry tundra (Dtd): 1 ♂, 5 ♀♀ [**17**, pt & hc], 27.V–6.VI.2015 (OKh). **Somnitelnye Mts.** Wetland (Wsm): 16 ♂♂ & ♀♀ [**7**, **14**, pt], 13.VI–14.VIII.2006 (OKh); 13 ♂♂, 17 ♀♀ [**7**, pt & sift], 25.V–17.VII.2015 (OKh). Slopes (Sds): 1 ♂, 5 ♀♀ [**8**, **12**, pt & hc], 25.V–12.VI.2015 (OKh). **Mineev Mts.** Valley (Vhf): 1 ♀ [**19**, hc], 14.VII.2019 (OKh). Wetland (Wmt): 5 ♂♂, 5 ♀♀ [**23**, pt], 14.VI–14.VIII.2006 (OKh); 6 ♂♂, 7 ♀♀ [**20**, **24**, **28**, pt & sift], 25.V–18.VII.2015 (OKh). Slopes (Sc): 1 ♀ [**29**, pt], 1–14.VI.2015 (OKh). **Atertom Mt**: Wetlans (Wsm): 4 ♀♀ [**2**, sift], 13.VII.2019 (OKh). Dry tundra (Dth): 2 ♂♂, 2 ♀♀ [**1**, sift], 13.VII.2019 (OKh). **Env of Rogers Bay.** Zon: 3 ♀♀ [**2**, pt], 11–13.VII.2019 (OKh). **Env. of Tundrovaya Mt.** Slopes (Sm): 1 ♀ [**1**, pt], 1–19.VII.2015 (LV). **Middle flow of Mamontovaya River.** Wetland (Wv): 5 ♂♂, 2 ♀♀ [**4**, pt], 23.VI–19.VII.2006 (OKh). **Pervaya Mt.** Wetland (Wv): 3 ♀♀ [**6**, sift], 21.VII.2019 (OKh). Dry tundra (Dtd): 4 ♂♂ [**2**, pt], 28.VI–5.VIII.2015 (OKh). **Upper reaches of Neizvestnaya River.** Zon: 3 ♂♂, 1 ♀ [**7**, pt], 4.VII–3.VIII.2006 (OKh). Dry tundra (Dtd): 1 ♀ [**12**, pt], 5.VII–3.VIII.2006 (OKh); Different habitats: 40 ♂♂ & ♀♀ [**2**, **3**, **4**, **7**, **8**, **9**, **10**, pt, sift & ypt], 25.VI–3.VIII.2015 (OKh).

REMARKS. In the XX century, this species was recorded extremely sporadically. Quite large series was collected in 1983 at the middle flow of the Neizvestnaya River (60 specimens, a small abundance in a wide range of habitats) and in 1988 in the vicinity of Rogers Bay (34 specimens, slopes and foothill plumes of southern exposure, previously unpublished data). In the XXI century, the species was collected in all the surveyed areas, including *nAT*. The number of the species has increased significantly in vicinity of Somnitelnaya Bay, *sAT* (coastal plain and mountain part), where it has not been recorded before. In the center of the island (*nTT*), the activity of the species varies greatly in different localities.

RANGE. Siberian-Nearctic, arcto-alpine.

Hilaira proletaria (L. Koch, 1879)

MATERIAL. **Upper reaches of Neozhidannaya River.** Wetland (Wv): 1 ♂ [**1**, pt] 8.VII–1.VIII.2016 (LV).

REMARKS. A single male was collected in *nAT* (swampy high floodplain, with continuous forb-herb-moss cover, 71.057267 N, 178.915100 W, 198 m, Photo 8). This species is new to the fauna of the Wrangel Is.

RANGE. Siberian-Nearctic, arctic.

Hilaira vexatrix (O. Pickard-Cambridge, 1877)

1985 *Hilaira vexatrix*. — Eskov: 123.
1987 *H. vexatrix*. — Khruleva: 9.
1992 *H. vexatrix*. — Marusik *et al*.: 143.
2009 *H. vexatrix*. — Khruleva: 130.

MATERIAL. **Thomas Mt.** Slopes (Sm): 1 ♂, 6 ♀♀ [**6**, pt], 10–31.VII.2016 (LV). **Upper reaches of Neozhidannaya River.** Wetland (Wsm): 3 ♂♂ [**3**, pt & hc], 8.VII–1.VIII.2016 (LV). Slopes (Sm): 6 ♂♂, 11 ♀♀ [**4**, **5**, pt & hc], 8.VII–1.VIII.2016 (LV). **Middle flow of Neozhidannaya River.** Wetland (Wmt): 7 ♂♂, 1 ♀ [**3**, pt], 10.VI–27.VII.2006 (AG). **Chertov Ovrag.** Dry tundra (Dth): 1 ♂ [**1**, pt], 4–25.VI.2006 (OKh). **Env. of Somnitelnaya Bay.** Zon: 19 ♂♂ & ♀♀ [**3**, **4**, pt & hc], 25.V–15.VI, 13.VII, 19.VIII.2006 (OKh). Zoogenic (Zmo): 6 ♂♂, 1 ♀ [**2**, pt], 25.V–9.VI. 2006 (OKh). Dry tundra (Dtd): 15 ♀♀ [**15**, sift], 6.VI, 19.VII.2015 (OKh). **Somnitelnye Mts.** Wetland (Wmt): 1 ♀ [**7**, pt], 3–12.VI.2015 (OKh). **Mineev Mts.**: Valley (Vpf, Vhf): 3 ♂♂ [**19**, pt], 8.VI–14.VIII.2006 (OKh); 2 ♀ [**18**, **19**, pt], 1–8.VII.2015 (OKh); Wetland (Wmt): 9 ♂♂, 3 ♀♀ [**23**, pt], 8–14.VI.2006 (OKh); 16 ♂♂, 12 ♀♀ [**23**, pt & sift], 1.VI–18.VII.2015 (OKh). **Env. of Tundrovaya Mt.** Wetland (Wmt): 2 ♂♂, 2 ♀♀ [**5**, pt], 8–17.VII.2021 (UB). **Middle flow of Mamontovaya River.** Wetland (Wv, Wmt, Wbf): 3 ♂♂, 2 ♀♀ [**3**, **5**, pt], 19–31.VII.2006 (OKh); 1 ♂, 4 ♀♀ [**19**, pt], 20–29.VII.2006 (OKh); 3 ♂♂ [**3**, pt], 27.VII–11.VIII.2014 (OS); 33 ♂♂, 31 ♀♀ [**2**, **3**, **4**, pt & sift], 29.VI–5.VIII.2015 (OKh). **Pervaya Mt.** Valley (Vm): 2 ♀♀ [**1**, sift], 13.VII.2015 (OKh). Wetland (Wmt, Wv): 2 ♂♂, 5 ♀♀ [**5**, pt & sift], 28.VI–5.VIII.2015 (OKh); 2 ♂♂, 2 ♀♀, 1 j. [**6**, sift], 21.VII.2019 (OKh). **Upper reaches of Neizvestnaya River.** Valley (Vpf): 1 ♀ [**1**, hc], 5.VIII.2006 (OKh). Wetland (Wbf, Wd): 10 ♂♂ & ♀♀ [**2**, **4**, litter], 3.VIII, 4.VIII.2006 (OKh); 27 ♂♂, 36 ♀♀ [**2**, **4**, **5**, pt, sift & ypt], 22.VI–10.VIII.2015 (OKh); 4 ♀♀, 1 j. [**5**, sift & ypt], 20–22.VII.2019 (OKh). Zon: 5 ♀♀, 3 j. [**6**, **7**, litter], 4.VII, 4.VIII.2006 (OKh); 2 ♀♀ [**8**, sift], 10.VIII.2015 (OKh). Dry tundra (Dtd, Dth): 2 ♂♂, 2 ♀♀ [**12**, litter], 3.VIII.2006; 1 ♀ [**9**, sift], 22.VI.2015 (OKh).

REMARKS. In the XX century, this species was found in various areas (*nAT*, *sAT*, *nTT*), but it had a fairly high abundance only in wet habitats in *nTT* enclaves. In the XXI century, the activity of the species on the island has increased significantly everywhere. In colder areas, it has been found in a fairly wide range of habitats, while in the warmest areas (the mountain part of *sAT* and *nTT* enclaves), the species is limited to moist habitats.

RANGE. East Siberian-Nearctic, arctic.

Hybauchenidium aquilonare (L. Koch, 1879)

1985 *Hybauchenidium aquilonare*. — Eskov: 126.
1987 *H. aquilonare*. — Khruleva: 9.
1992 *H. aquilonare*. — Marusik *et al*.: 143.
2009 *H. aquilonare*. — Khruleva: 130.

MATERIAL. **Thomas Mt.** Wetland (Wd): 3 ♂♂, 6 ♀♀ [**1**, pt], 11–31.VII.2016 (LV). Zon: 1 ♀ [**2**, pt], 11–31.VII.2016 (LV). Slopes (Sm): 3 ♀♀ [**7**, pt], 10–31.VII.2016 (LV). **Upper reaches of Neozhidannaya River.** Wetland (Wsm): 1 ♂, 3 ♀♀ [**3**, pt], 8.VII–1.VIII.2016 (LV). Slopes (Sm): 10 ♂♂, 7 ♀♀ [**4**, **5**, pt & hc], 8.VII–1.VIII.2016 (LV). **Middle flow of Neozhidannaya River.** Valley (Vpf): 7 ♂♂, 7 ♀♀ [**1**, pt], 10.VI–27.VII.2006 (AG). Wetland (Wmt): 3 ♀♀ [**3**, pt], 10.VI–27.VII.2006 (AG). Zon: 1 ♀ [**2**, pt], 10.VI–27.VII.2006 (AG); 2 ♂♂ [**5**, pt], 28.VII–2.VIII.2017 (MB). **Upper reaches of Krasnyi Flag River.** Different habitats: 125 ♂♂ & ♀♀ [**1**, **2**, **3**, **4**, **5**, **6**, **7**, **8**, **9**, pt & hc], 2–19.VI.2016 (LV). **Chertov Ovrag.** Different habitats: 11 ♀♀ [**1**, pt & hc], 4.VI–15.VII.2006 (OKh); 4 ♂♂, 4 ♀♀ [**2**, **3**, **4**, hc & sift], 26.VII.2019 (OKh). **Env. of Somnitelnaya Bay.** Valley (Vhf): 10 ♀♀ [**1**, pt], 30.V–17.VI.2015 (OKh). Zon: 44 ♂♂ & ♀♀ [**3**, **4**, pt & hc], 5.VI–19.VIII.2006 (OKh); 5 ♂♂, 35 ♀♀ [**3**, **4**, **16**, pt & sift], 27.V–19.VII.2015 (OKh). Zoogenic (Zmo): 1 ♂, 1 ♀ [**2**, pt], 16.VII–14.VIII.2006 (OKh). Dry tundra (Dtd): 4 ♀♀ [**15**, pt & sift], 6–16.VI.2015 (OKh). **Somnitelnye Mts.** Wetland (Wsm, Wmt): 4 ♂♂, 4 ♀♀ [**14**, pt & hc], 13.VI–14.VIII.2006 (OKh); 11 ♂♂ & ♀♀ [**7**, pt], 9.VI–13.VIII.2006 (OKh); 8 ♂♂, 25 ♀♀ [**7**, pt & sift], 25.V–17.VII.2015 (OKh). Dry tundra (Dth): 1 ♂ [**6**, pt], 25.V–3.VI.2015 (OKh). Slopes (Sds, Sd): 4 ♂♂, 4 ♀♀ [**13**, pt], 13.VI–14.VIII.2006 (OKh); 10 ♂♂ & ♀♀ [**12**, pt], 28.V–13.VI.2006 (OKh); 3 ♂♂, 6 ♀♀ [**12**, pt], 25.V–17.VII.2015 (OKh). **Mineev Mts.** Valley (Vpf, Vhf): 2 ♀♀ [**18**, pt], 1.VI–18.VII.2015 (OKh); 26 ♂♂ & ♀♀ [**19**, pt], 8.VI–15.VIII.2006 (OKh); 108 ♂♂, 48 ♀♀ [**19**, pt], 1–8.VI.2015 (OKh). Wetland (Wmt): 2 ♂♂ [**23**, pt], 14.VII–14.VIII.2006 (OKh); 5 ♂♂, 37 ♀♀ [**20**, **23**, **24**, pt & sift], 27.V–18.VII.2015 (OKh). Dry tundra (Dth): 2 ♀♀ [**21**, pt], 27.V–18.VII.2015 (OKh). Slopes (Sds): 1 ♀ [**26**, pt], 8–14.VI.2006 (OKh). **Atertom Mt.** Slopes (Sts): 1 ♀ [**3**, sift], 13.VII.2019 (OKh). **Env. of Tundrovaya Mt.** Wetland (Wv, Wmt): 37 ♂♂, 26 ♀♀ [**3**, **4**, **5**, pt], 1–19.VII.2015 (LV); 4 ♂♂, 2 ♀♀ [**3**, **5**, pt], 8–17.VII.2021 (UB). **Middle flow of Mamontovaya River.** Valley (Vpf, Vhf): 5 ♀♀ [**7**, litter], 12.VII.2006 (OKh); 1 ♂ [**1**, pt], 4–23.VII.2015 (OKh); 6 ♂ [**2**, pt], 3–23.VII.2015 (OKh). Wetland (Wv): 2 ♂♂, 2 ♀♀ [**3**, **4**, pt], 9.VII–8.VIII.2006 (OKh); 5 ♂♂, 3 ♀♀ [**3**, **4**, pt], 1.VII–5.VIII.2015 (OKh). Zon: 2 ♂♂, 3 ♀♀ [**8**, pt, sift & sw], 1–22.VII.2015. Dry tundra (Dth): 2 ♂♂ [**9**, pt], 22.VII–5.VIII.2015 (OKh). Zoogenic (Zma): 9 ♂♂ & ♀♀ [**12**, pt, lit & sw], 24.VI–6.VIII.2006 (OKh); 18 ♂♂, 12 ♀♀ [**12**, pt & sift], 29.VI–5.VIII.2015 (OKh). **Spurs of Pervaya Mt.** Valley (Vm): 1 ♀ [**1**, sift], 13.VII.2015 (OKh). Wetland (Wmt): 3 ♀♀ [**5**, pt & sift], 13.VII–5.VIII 2015 (OKh); 1 ♀ [**5**, sift], 21.VII.2019 (OKh). **Upper reaches of Neizvestnaya River.** Valley (Wbf): 1 ♂, 2 ♀♀ [**2**, sift], 26.VI,10.VIII. 2015 (OKh). Wetland (Wd): 1 ♀ [**4**, litter], 3.VIII.2006 (OKh); 64 ♂♂, 34 ♀♀ [**3**, **4**, **5**, pt, sift & ypt], 24.VI–3.VIII.2015 (OKh); 1 ♀ [**5**, sift], 20.VII.2019 (OKh). Zon: 2 ♂♂, 1 ♀ [**8**, pt], 22.VI–31.VII.2015 (OKh). Slopes (Sm): 1 ♀ [**14**, litter], 3.VII.2006 (OKh).

REMARKS. In the XX century, the species was recorded in most of the surveyed areas of the island (with the exception of *sPD*), it was found mainly in wet, less often moderately moist habitats. The greatest abundance was observed in *nTT* enclaves. In the XXI century, the activity of the species increased everywhere, but especially noticeably in *nAT*.

RANGE. Siberian-Nearctic, predominantly arctic.

Hypselistes jacksoni (O. Pickard-Cambridge, 1902)

1992 *Hypselistes jacksoni*. — Marusik *et al*.: 143.
1993 *H. jacksoni*. — Marusik, Leech: 1118.
2009 *H. jacksoni*. — Khruleva: 130.

MATERIAL. **Somnitelnye Mts.** Wetland (Wsm): 1 ♂, 5 ♀♀ [**7**, pt], 25.V–3.VI.2015 (OKh). Dry tundra (Dth): 2 ♂♂, 8 ♀♀ [**6**, pt & sift], 25.V–17.VI.2015 (OKh). Slopes (Sts, Sd): 1 ♀ [**9**, pt], 9–13.VI.2006 (OKh); 27 ♂♂ & ♀♀ [**13**, pt], 13.VI–14.VIII.2006 (OKh). **Mineev Mts.** Wetland (Wmt, Wsm): 2 ♂♂, 1 ♀ [**23**, pt], 14.VI–14.VIII.2006 (OKh); 1 ♀ [**20**, pt], 5–16.VI.2015 (OKh). **Spurs of Pervaya Mt.** Valley (Vm): 2 ♀♀ [**1**, sift], 26.VI–5.VIII.2015 (OKh).

REMARKS. This species occurs very sporadically on the island. Previously, it was known only from one locality (dry foothill plumes of the Somnitelnye Mts, *sAT*). In the XXI century, the species was collected in this part of the

island in a fairly wide range of habitats (including wet ones), and was also first recorded in the central part (*nTT*).

RANGE. Holarctic, polyzonal.

Islandiana falsifica (Keyserling, 1886)

1992 *Islandiana alata*. — Marusik *et al*.: 143.
2009 *I. falsifica*. — Marusik, Eskov: 108.
2009 *I. falsifica*. — Khruleva: 130.

MATERIAL. **Mineev Mts.** Valley (Vpf, Vhf): 5 ♂♂ [**18**, pt], 8.VI–14.VII.2006 (OKh); 19 ♂♂, 7 ♀♀ [**18**, pt], 1.VI–18.VII.2015, pt (OKh); 2 ♂♂ [**19**, pt], 1–14.VI.2015 (OKh). **Middle flow of Mamontovaya River.** Valley (Vhf): 1 ♂, 1 ♀ [**7**, pt], 30.VI–19.VII.2006 (OKh). Wetland (Wbf, Wv): 1 ♀ [**3**, pt], 2–12.VII.2014 (OS); 1 ♂ [**2**, sw], 2.VII.2015 (OKh). **Upper reaches of Neizvestnaya River.** Slopes (Sts): 1 ♂ [**15**, pt], 4.VI–3.VII.2006 (OKh).

REMARKS. It is a rare species found in river valleys located in the warmest areas of the island (mountains of *sAT*, enclaves of *nTT*). The only large series was collected on a low pebble floodplain at upper reaches of the Somnitelnaya River (Mineev Mts, *sAT*) in 2015 (previously, the species was collected here in smaller numbers).

RANGE. Holarctic, arcto-boreo-montane.

Masikia indistincta (Kulczyński, 1908)

1985 "*Macrargus" indistinctus*. — Eskov: 123.
1987 "*M." indistinctus*. — Khruleva: 10.
1992 *Masikia indistincta*. — Marusik *et al*.: 145.
1993 *M. indistincta*. — Eskov, Marusik: 47.
2019 *M. indistincta*. — Nekhaeva *et al*.: 158.

MATERIAL. **Upper reaches of Neozhidannaya River.** Wetland (Wv): 2 ♀♀ [**2**, pt], 8.VII–1.VIII.2016 (LV). **Upper reaches of Krasnyi Flag River.** Valley (Vpf): 2 ♂♂, 6 ♀♀ [**1**, pt], 2–17.VI.2016 (LV). **Mineev Mts.** Wetland (Wmt): 1 ♂♂, 10 ♀♀ [**23**, pt & sift], 1.VI–18.VII.2015 (OKh).

REMARKS. A rather rare species, previously known from two localities of *nTT*; the largest series (21 specimens) was collected at lower reaches of the Gusinaya River [Eskov, Marusik, 1993]. In the XXI century, it was first collected in mountain part of *nAT* and *sAT*.

RANGE. Siberian-Nearctic, arctic.

Monocerellus montanus Tanasevitch, 1983

2009 *Monocerellus montanus*. — Marusik, Eskov: 100 (without precise locality).
2009 *M. montanus*. — Khruleva: 130.

MATERIAL. **Somnitelnye Mts.** Slopes (Sts): 1 ♀ [**11**, pt], 25.V–9.VI.2006 (OKh).

REMARKS. Single specimen was collected on the extreme dry steep gravelly south-facing slope with a spotted herb-sedge tundra-steppe assemblages, 70.985833°N, 179.588417°W, 249 m, mountainous part of *sAT*.

RANGE. Siberian, arcto-alpine (mostly in the mountain tundras).

Mughiphantes sobrius (Thorell, 1872)

1987 *Leptyphantes* (sic.) *sobrius*. — Khruleva: 10.
1992 *Lepthyphantes sobrius*. — Marusik *et al*.: 145.

MATERIAL. **Somnitelnye Mts.** Slopes (Sts): 1 j. [**11**, pt], 3–12.VI.VII.2015 (OKh). **Mineev Mts.** Wetland (Wsm): 1 ♀, 1 j. [**24**, hc & sift], 1.VI & 18.VII.2015.

REMARKS. A rare species, in XX century one specimen was collected on the steep rocky coastal slope (western part of *sAT*, Cape Ptichy Bazar). In XXI century it was collected on gravel steep slopes in two localities in the southern part of *sAT*.

RANGE. Palearctic, arctic.

Oreoneta alpina (Eskov, 1987)

2009 *Oreoneta alpina*. — Marusik, Eskov: 100 (without precise locality).
2009 *O. alpina*. — Khruleva: 130.

MATERIAL. **Mineev Mts.** Slopes (Smt): 2 ♀♀ [**25**, hc], 30.V, 14.VII.2006 (OKh).

REMARKS. The species was collected on the extremely dry stone-gravel-loamy south-facing steep slope with sparse forb-herb cover, 71.010667°N, 179.519°W, 254 m, *sAT*.

RANGE. East Siberian, arcto-alpine.

Oreoneta arctica (Holm, 1960)

2004 *Oreoneta arctica*. — Saaristo, Marusik: 211.
2009 *O. arctica*. — Khruleva: 130.

MATERIAL. **Upper reaches of Neozhidannaya River.** Slopes (Sm): 1 ♂, 1 ♀ [**5**, pt & hc], 8.VII–1.VIII.2016 (LV). **Somnitelnye Mts.** Dry tundra (Dth): 1 ♂, 2 ♀♀ [**6**, pt, sift & hc], 25.V–17.VII.2015 (OKh). Slopes (Sds): 1 ♂, 8 ♀♀ [**12**, pt & sift], 12.VI–17.VII.2015 (OKh). **Mineev Mts.** Valley (Vpf, Vhf): 6 ♂♂ [**18**, pt], 8.VI–14.VII.2006 (OKh); 1 ♂, 2 ♀♀ [**18**, pt], 1–8.VI.2015 (OKh); 4 ♂♂ [**19**, pt], 1–8.VI.2015 (OKh). Wetland (Wsm): 5 ♂♂ [**20**, **24**, pt], 27.V–14.VI.2015 (OKh). Dry tundra (Dth): 1 ♂ [**21**, pt], 5–16.VI.2015 (OKh). Slopes (Sds, Smt, Sc): 1 ♂, 1 ♀ [**26**, pt], 8–14.VI.2006 (OKh); 1 ♂, 5 ♀♀ [**22**, **25**, **29**, pt, sift & hc], 27.V–18.VII.2015 (OKh). **Env. of Rogers Bay.** Slopes (Sts): 1 ♀ [**3**, ypt], 11–12.VII.2019 (OKh). **Middle flow of Mamontovaya River.** Slopes (Smt): 1 ♂, 1 ♀ [**14**, pt], 22.VII–5.VIII.2015 (OKh). **Pervaya Mts.** Slopes (Sds): 1 ♀ [**7**, hc], 21.VII.2019 (OKh).

REMARKS. In the XX century, the largest series (19 specimens, previously unpublished data) was collected in 1988 in the vicinity of Rogers Bay (*sAT*) on the southern slope of a hill with tundra vegetation cover. In the XXI century, it was collected in several areas of the mountainous part belonging to various subzonal variants (*nAT*, *sAT*, *nTT*), it was recorded in different habitats, except for the wettest ones.

RANGE. Northeast Siberian-West Nearctic, predominantly arctic.

Oreoneta beringiana Saaristo et Marusik, 2004

MATERIAL. **Middle flow of Mamontovaya River.** Dry tundra: 1 ♀ [**10**, pt], 27.VII–11.VIII.2014 (OS).

REMARKS. A single specimen was collected in the central part of the island (*nTT*), on a moderately moisturized low hill with spotted lichen-willow-herb cover (ca. 71.15 N, 179.75 W). This species is new to the fauna of the Wrangel Is.

RANGE. Siberian-Nearctic, predominantly hypoarctic.

Oreoneta leviceps (L. Koch, 1879)

1985 *Hilaira leviceps*. — Eskov: 124.
1987 *H. leviceps*. — Khruleva: 9.
1992 *H. leviceps*. — Marusik *et al*.: 143.

MATERIAL. **Chertov Ovrag.** Slopes (Sds, Sts): 2 ♂♂, 5 ♀♀ [**3**, **4**, hc & sift], 26.VII.2019 (OKh). **Somnitelnye Mts.** Wetland (Wsm): 1 ♀ [**7**, pt], 3–12.VI.2015 (OKh). Slopes (Sds, Sd): 2 ♂♂ [**13**, pt], 13.VI–14.VIII.2006 (OKh); 1 ♂, 5 ♀♀ [**12**, pt], 25.V–3.VI.2015 (OKh). **Middle flow of Mamontovaya River.** Valley (Vpf): 1 ♀ [**1**, ypt], 2–4.VII.2015 (OKh). Zon: 1 ♀ [**8**, pt], 1–22.VII.2015 (OKh). **Upper reaches of Neizvestnaya River**. Slopes (Sts): 1 ♀ [**19**, sift], 20.VII.2019 (OKh).

REMARKS. Quite rare species on the island. In the XX century, it was found mainly in moderately humid habitats,

most often on mesophytic forb-grass meadows in the enclaves of *nTT*. In the XXI century, the species was also collected in the mountainous part of *sAT* (mainly on the slopes of southern exposure).

RANGE. Siberian-Nearctic, predominantly arctic.

Oreoneta mineevi Saaristo et Marusik, 2004

2004 *Oreoneta mineevi*. — Saaristo, Marusik: 237.

REMARKS. The species was described based on two females collected in the south-eastern part of the island by Mineev, 20.VI.1930 [Saaristo, Marusik, 2004]. This is the only finding of the species on the island. In our materials, it was absent both in the XX and XXI centuries.

RANGE. Northeast Siberian, arctic, presumed endemic to the island.

Oreonetides beringianus Eskov, 1991

MATERIAL. **Mineev Mts.** Wetland (Wmt): 1 ♂ [**24**, pt], 1–14.VI.2015 (OKh).

REMARKS. A single male was collected on a narrow damp mountain terrace of south-western exposure, with spotted herb-moss-dryad cover (71.007417°N, 179.523111°W, 231 m). *Oreonetides beringianus* has been described based on females alone, from both the Magadan Area and the Chukotka by Eskov [1991]. A male of this species of unknown origin has just been described from Yamal Peninsula by Tanasevitch [2022]. This species is new to the fauna of the Wrangel Is.

RANGE. Siberian, predominantly arctic.

Pelecopsis parallela (Wider, 1834)

1985 *Pelecopsis parallela*. — Eskov: 126.
1987 *P. parallela*. — Khruleva: 10.
1992 *P. parallela*. — Marusik *et al*.: 146.
2009 *P. parallela*. — Khruleva: 130.

MATERIAL. **Thomas Mt.** Wetland (Wd): 2 ♀♀ [**1**, pt], 11–31.VII.2016 (LV). Slopes (Sm): 1 ♂ [**6**, pt], 10–31.VII.2016 (LV). **Upper reaches of Neozhidannaya River.** Wetland (Wd, Wsm): 4 ♀♀ [**2**, **3**, pt], 8.VII–1.VIII.2016 (LV). **Middle flow of Neozhidannaya River**. Valley (Vpf): 4 ♂♂, 7 ♀♀ [**1**, pt], 10.VI–27.VII.2006 (AG). **Upper reaches of Krasnyi Flag River.** Slopes (Sd, Sds): 2 ♂♂, 2 ♀♀ [**6**, **7**, **8**, pt], 2–19.VI.2016 (LV). **Env. of Somnitelnaya Bay.** Zon: 2 ♀♀ [**4**, pt], 9.VI–16.VII.2006 (OKh); 7 ♂♂, 5 ♀♀ [**3**, **4**, **16**, pt & sift], 27.V–19.VII.2015 (OKh). Dry tundra (Dtd): 1 ♀ [**15**, sift], 16.VI.2015 (OKh). **Somnitelnye Mts.** Wetland (Wsm): 1 ♂ [**7**, pt], 9.VII–13.VIII.2006 (OKh); 1 ♂, 5 ♀♀ [**7**, pt & sift], 25.V–17.VII.2015 (OKh). Slopes (Sd, Sds, Sts): 2 ♀♀ [**13**, pt], 13.VI–14.VIII.2006 (OKh); 2 ♂♂, 1 ♀♀ [**12**, pt], 25.V–12.VI.2015 (OKh); 1 ♀, 1 j. [**11**, sift], 17.VII.2015 (OKh). **Mineev Mts.** Valley (Vpf, Vhf): 2 ♀♀ [**18**, **19**, pt], 8.VI–14.VII.2006 (OKh); 1 ♂, 1 ♀ [**18**, **19**, pt & sift], 1–8.VI.2015 (OKh). Wetland (Wmt, Wsm): 1 ♀ [**23**, pt], 14.VI–14.VII.2006 (OKh); 1 ♂ [**24**, sift], 18.VII.2015 (OKh). **Env. of Tundrovaya Mt.** Wetland (Wmt): 1 ♀ [**4**, pt], 1–19.VII.2015 (LV); 1 ♂ [**8**, pt], 4–14.VII.2020 (UB). Dry tundra (Dtd): 1 ♂, 1 ♀ [**2**, pt], 8–17.VII.2021 (UB). **Middle flow of Mamontovaya River.** Wetland (Wmt): 1 ♂ [**19**, pt], 8–20.VII.2006 (OKh). Slopes (Sts): 2 ♂♂, 2 ♀♀ [**13**, pt], 28.VI–6.VIII.2006 (OKh). **Spurs of Pervaya Mt.** Wetland (Wmt): 2 ♂♂ [**5**, pt], 26.VI–13.VII 2015 (OKh). **Upper reaches of Neizvestnaya River.** Zon: 1 ♂ [**8**, pt], 23.VII–3.VIII.2015 (OKh). Dry tundra (Dth): 1 ♀ [**13**, pt], 10–31.VII.2015 (OKh). Slopes (Sn, Sts):1 ♂, 1 ♀ [**10**, **17**, pt], 23.VI–23.VII.2015 (OKh).

REMARKS. In the XX century, the species was found in small numbers in some moist and moderately moist habitats in various areas, most often in *nTT* enclaves. In the XXI century, it was collected in almost all localities studied, and in a fairly wide range of habitats (including zonal tundra communities).

RANGE. Palearctic, polyzonal.

Poeciloneta pallida Kulczyński, 1908

1992 *Poeciloneta pallida*. — Marusik *et al*.: 146.
2009 *P. pallida*. — Khruleva: 130.

MATERIAL. **Mineev Mts.** Slopes (Smt): 2 ♀♀ [**22**, sift], 5.VI.2015 (OKh).

REMARKS. Species is known only from the mountain part of *sAT*, where it was collected on a steep gravelly south-facing slopes of the Somnitelnye Mts (70.985833°N, 179.588417°W, 249 m, in 1986) and the Mineev Mts, 70.988444 N, 179.513333 W, ~250 m.

RANGE. Siberian, arcto-alpine.

Praestigia groenlandica Holm, 1967

1985 *Praestigia groenlandica*. — Eskov: 124.
1987 *P. groenlandica*. — Khruleva: 10.
1992 *P. groenlandica*. — Marusik *et al*.: 146.
2008 *P. sibirica*. — Marusik *et al*.: 220.

MATERIAL. **Somnitelnye Mts.** Wetland (Wsm): 1 ♂, 1 j. [**7**, pt & sift], 12.VI–17.VII.2015 (OKh). **Middle flow of Mamontovaya River.** Wetland (Wv): 2 ♂♂ [**3**, pt], 1–22.VII.2015 (OKh). **Spurs of Pervaya Mt.** Valley (Vm): 1 ♀ [**1**, pt], 13.VII–5.VIII.2015 (OKh). Wetland (Wv): 1 ♂ [**6**, sift], 21.VII.2019 (OKh). **Upper reaches of Neizvestnaya River.** Wetland (Wd, Wbf): 1 ♀ [**4**, pt], 4.VII–3.VIII.2006 (OKh); 2 ♂♂, 5 ♀♀ [**3**, **4**, **5**, pt], 22.VI–28.VII.2015 (OKh). Zon: 3 ♀♀ [**6**, **7**, pt & sw], 4.VII–3.VIII.2006 (OKh); 10 ♂♂, 12 ♀♀, 1 j. [**8**, pt & sift], 22.VI–10.VIII.2015 (OKh). Dry tundra (Dth): 1 ♀ [**9**, pt], 25.VI–10.VII.2015 (OKh).

REMARKS. In the XX century, one specimen was collected at the middle flow of the Neizvestnaya River (*nTT*), and in the XXI century, this species was recorded in all well-studied areas of the central part (*nTT*), where it was found in both wet and moderately moist habitats. Only one specimen was collected in the *sAT*.

RANGE. Siberian-Nearctic, arctic.

COMMENTS. Taxonomic status of *P. sibirica* Marusik, Gnelitsa et Koponen, 2008 found is unclear. The current second author (A.T.) is treating *P. groenlandica* as a sub-Holarctic circumpolar species, unlike Marusik *et al*. [2008], who splitted it into several species associated with different sectors of the Arctic, based on characters, which A.T. considers as reflecting infraspecific variations, either individual or populational. The results of further studies on *P. groenlandica* will be presented and discussed elsewhere (Tanasevitch, in preparation).

Semljicola arcticus (Eskov, 1989)

1985 *Latithorax* sp. — Eskov: 124.
1989 *L. arcticus*. — Eskov: 102.
1992 *L. arcticus*. — Marusik *et al*.: 144.
1996 *Semljicola arcticus*. — Saaristo, Eskov: 52.
2009 *S. arctica* (sic!). — Khruleva: 130.

MATERIAL. **Thomas Mt.** Zon: 2 ♀♀ [**2**, hc], 11–31.VII.2016 (LV). **Upper reaches of Krasnyi Flag River.** Dry tundra (Dtd): 2 ♂♂, 9 ♀♀ [**4**, **5**, pt], 2–17.VI.2016 (LV). Slopes (Sd): 5 ♀♀ [**6**, pt & hc], 2–17.VI.2016 (LV). **Chertov Ovrag.** Slopes (Sds): 1 ♀ [**3**, hc], 26.VII.2019 (OKh). **Env. of Somnitelnaya Bay.** Zon: 12 ♂♂ & ♀♀ [**3**, **4**, pt & hc], 5.VI–19.VIII.2006 (OKh); 6 ♂♂, 7 ♀♀ [**3**, **4**, pt, sift & hc], 30.V–8.VI.2015 (OKh). Dryad tundra (Dtd): 2 ♂♂, 4 ♀♀ [**15**, **17**, pt & sift], 27.V–16.VI.2015 (OKh). **Somnitelnye Mts.** Wetland (Wsm): 1 ♀ [**7**, pt], 9–13.VII.2006 (OKh); 2 ♂♂ [**7**, pt],

25.V–3.VI.2015 (OKh). Slopes (Sds): 2 ♀♀ [**12**, pt & sift], 25.V–12.VI.2015 (OKh). **Mineev Mts.** Wetland (Wsm, Wmt): 1 ♂ [**23**, pt], 8–14.VI.2006 (OKh); 1 ♂ [**20**, pt], 27.V–6.VI.2015 (OKh). **Env. of Tundrovaya Mt.** Dry tundra (Dtd): 1 ♀ [**9**, pt], 4–14.VII.2020 (UB). **Middle flow of Mamontovaya River.** Dry tundra (Dth): 1 ♂ [**10**, sift], 30.VI.2015 (OKh). **Spurs of Pervaya Mt.** Wetland (Wsm, Wmt): 1 ♀ [**5**, sift], 13.VII.2015 (OKh). Dry tundra (Dtd): 1 ♂ [**2**, pt], 13.VII–5.VIII 2015 (OKh). **Upper reaches of Neizvestnaya River.** Zon: 2 ♀♀ [**8**, sift], 10.VIII.2015 (OKh).

REMARKS. The species was found everywhere on the island, mainly in moderately moist and dry habitats, less often on dry slopes of southern exposure and in wet habitats. In the warmest central part (*nTT*) the species is rarer than in other areas of island (*nAT*, *sAT*).

RANGE. Siberian-West Nearctic, arctic.

Semljicola beringianus (Eskov, 1989)

2009 *Semljicola beringianus*. — Marusik, Eskov: 113 (without precise locality).

MATERIAL. **Env. of Somnitelnaya Bay.** Zon: 1 ♀ [**16**, sift], 19.VII.2015 (OKh). **Mineev Mts.** Valley (Vpf): 2 ♂♂ [**18**, pt], 1–8.VI.2015 (OKh). Wetland (Wmt): 1 ♂ [**23**, pt], 1–8.VI.2015 (OKh). **Env. of Tundrovaya Mt.** Wetland (Wv): 1 ♂ [**3**, pt], 1–19.VII.2015 (LV); 1 ♀ [**3**, pt], 8–17.VII.2021 (UB). **Middle flow of Mamontovaya River.** Wetland (Wv, Wbf): 1 ♂ [**2**, litter], 2.VIII.2006 (OKh); 1 ♂, 1 ♀ [**2**, sift], 29.VI, 22.VII.2015 (OKh); 1 ♀ [**3**, pt], 2–12.VII.2014 (OS); 1 ♀ [**3**, pt], 1–22.VII.2015 (OKh). **Spurs of Pervaya Mt.** Wetland (Wmt): 1 ♂ [**5**, pt], 26.VI–13.VII.2015 (OKh). **Upper reaches of Neizvestnaya River.** Wetland (Wd, Wbf): 4 ♂♂, 6 ♀♀ [**2**, **3**, pt & sift], 25.VI–10.VIII.2015 (OKh); 1 ♂ [**5**, sift], 20.VII.2019 (OKh). Zon: 1 ♀ [**8**, pt], 22.VI.–5.VII.2015 (OKh).

REMARKS. The single specimen of this species was first recorded in 2006 from the center of the island (*nTT*). In 2015, it was collected in all well-studied areas of *sAT* and *nTT*, where it occurs mainly in wet habitats.

RANGE. East Siberian-Nearctic, predominantly arctic.

Sibirocyba incerta (Kulczyński, 1916)

1992 *Tapinocyba incerta*. — Marusik *et al*.: 147.

MATERIAL. **Mineev Mts.** Valley (Vpf): 1 ♀ [**18**, pt], 8–14.VI.2006 (OKh); 1 ♀ [**18**, pt], 1–8.VI.2015 (OKh). **Upper reaches of Neizvestnaya River.** Valley (Vpf): 1 ♀ [**1**, pt], 4.VII–3.VIII.2006 (OKh).

REMARKS. A rare species, which was collected on the pebble floodplains in a few localities in the mountain part of *sAT* and *nTT*. The largest series (10 specimens) was collected in 1988 in the vicinity of Rogers Bay (earlier unpublished data).

RANGE. Siberian, predominantly hypoarctic (mostly in the mountain regions).

Silometopoides pampia (Chamberlin, 1948)

1985 *Minyriolus pampia*. — Eskov: 125.
1987 *M. pampia*. — Khruleva: 10.
1990a *Silometopoides pampia.* — Eskov: 52.
1992 *S. pampia.* — Marusik *et al*.: 147.

MATERIAL. **Somnitelnye Mts.** Slopes (Sd): 4 ♀♀ [**13**, pt], 13.VI–14.VIII.2006 (OKh). **Env. of Tundrovaya Mt.** Wetland (Wv): 1 ♀ [**3**, pt], 8–17.VII.2021 (UB). **Middle flow of Mamontovaya River.** Valley (Vd): 1 ♂, 1 ♀ [**6**, pt], 25.VI.–19.VII.2006 (OKh); 4 ♂♂, 2 ♀♀ [**6**, pt & sift], 30.VI.–5.VIII.2015 (OKh). Wetland (Wv, Wbf): 3 ♂♂, 16 ♀♀ [**2**, **4**, **5**, pt & litter], 23.VI–31.VII.2006 (OKh); 2 ♂♂, 12 ♀♀ [**3**, pt], 2–12.VII.2014 (OS); 20 ♂♂, 11 ♀♀, 7 j. [**2**, **4**, pt & sift], 1.VII–5.VIII.2015 (OKh). Zon: 10 ♂♂, 6 ♀♀ [**8**, pt & sift], 1–22.VII.2015 (OKh). Dry tundra (Dth): 1 ♀ [**10**, pt], 20–27.VII.2014 (OS); 1 ♀ [**9**, sift], 3.VII.2015 (OKh). **Spurs of Pervaya Mt.** Valley (Vm): 5 ♂♂, 16 ♀♀ [**1**, pt & sift], 26.VI–5.VIII.2015 (OKh). Wetland (Wv, Wmt): 2 ♂♂ [**5**, **6**, sift], 21.VII 2019 (OKh). Dry tundra (Dtd): 1 ♂, 1 ♀ [**2**, pt], 13.VII–5.VIII.2015 (OKh). **Upper reaches of Neizvestnaya River.** Wetland (Wd, Wbf): 3 ♂♂, 4 ♀♀ [**2**, pt & litter], 5.VII–4.VII.2006 (OKh); 6 ♂♂, 12 ♀♀ [**2**, **3**, pt & sift], 22.VI–31.VII.2015 (OKh). Dry tundra (Dth): 2 ♂♂, 2 ♀♀ [**12**, pt], 25.VI–10.VII.2015 (OKh).

REMARKS. In the XX century, this species was quite rare, mainly collected in wet habitats in the center of the island (*nTT*). Outside of *nTT*, it was collected only in 1988 on a pebble floodplain in the vicinity of Rogers Bay (previously unpublished data). In the XXI century, the species was also recorded mainly in the center of the island (*nTT*), where it was regularly found not only in wet habitats, but in some others.

RANGE. Siberian-Nearctic, arctic.

Styloctetor lehtineni Marusik et Tanasevitch, 1998

2009 *Styloctetor lehtineni*. — Marusik, Eskov: 114 (without precise locality).

MATERIAL. **Middle flow of Mamontovaya River.** Valley (Vpf, Vhp): 2 ♂♂, 1 ♀ [**1**, **7**, pt], 25.VI–31.VII.2006 (OKh); 2 ♂♂, 6 ♀♀ [**7**, pt], 2–12.VII.2014 (OS).

REMARKS. Very rare species, which was collected during two seasons in a sandy-pebble floodplain in one locality of the central part of island (*nTT*), ca. 71.166°N, 179.861°W, 158 m.

RANGE. Siberian, predominantly hypoarctic.

Tarsiphantes latithorax Strand, 1905

1987 *Typhochraestus* (sic.) *latithorax*. — Khruleva: 10.
1992 *T. latithorax*. — Marusik *et al*.: 148.

MATERIAL. **Mineev Mts.** Slopes (Smt): 1 ♀ [**27**, pt], 14.VI–14.VII.2006 (OKh); 1 ♀ [**25**, sift], 14.VI.2015 (OKh). **Middle flow of Mamontovaya River.** Wetland (Wv): 1 ♀ [**3**, pt], 2–12.VII.2014 (OS). **Upper reaches of Neizvestnaya River.** Slopes (Sts): 1 ♀ [**17**, litter], 3.VIII.2006 (OKh); 1 ♀ [**15**, sift], 20.VII.2019 (OKh).

REMARKS. It is a rather rare species, a large series of which (23 specimens) was collected only in 1984 on the slopes of southern exposure at lower reaches of the Gusinaya River (western enclave of *nTT*). In other seasons of the XX century, only single specimens were found in some areas of the island (mountains of *sAT*, *nTT*). In the XXI century, all specimens were also collected in the same zonal variants, mainly on the dry slopes of southern exposure.

RANGE. Siberian-Nearctic, arcto-alpine.

Tubercithorax subarcticus (Tanasevitch, 1984)

MATERIAL. **Vyuchnyi Brook.** Slopes (Sds): 2 ♂♂, 6 ♀♀ [**3**, sift], 24.VII.2019 (OKh). **Env. of Somnitelnaya Bay.** Valley (Vhf): 1 ♀ [**1**, pt], 6.VI–17.VII.2015 (OKh). **Somnitelnye Mts.** Slopes (Sm, Sds, Sts): 5 ♀♀ [**8**, **10**, **11**, pt & sift], 25.V–12.VI, 17.VII.2015 (OKh).

REMARKS. The species was collected only in the southern part of island, vicinity of Somnitelnaya Bay. This species is new to the fauna of the Wrangel Is.

RANGE. Siberian, arctic.

Uusitaloia wrangeliana Marusik et Koponen, 2009

2009 *Uusitaloia wrangeliana*. — Marusik, Koponen: 18.

MATERIAL. **Middle flow of Mamontovaya River.** Slopes (Smt): 1 ♂, 1 ♀ [**14**, pt], 22.VII–5.VIII.2015 (OKh). **Upper reaches of Neizvestnaya River.** Slopes (Sts): 2 ♂♂ [**15**, **16**, pt], 3.VII–3.VIII.2006 (OKh).

REMARKS. The species was described by two males from the upper reaches of the Neizvestnaya River (71. 216167°N, 179.323111°W, 121 m), and then it was discovered in one more locality of *nTT* enclave (71.174417°N, 179.758111°W, 188 m). It was found in the warmest habitats on the gravel of southern exposed slopes.

RANGE. Northeast Siberian, arctic, presumed endemic to the island.

Walckenaeria clavicornis (Emerton, 1882)

1985 *Cornicularia clavicornis*.— Eskov: 125.
1985 *C. clavicornis*.— Khruleva, 1987: 10.
1992 *C. clavicornis*.— Marusik *et al*.: 148.
1996 *Walckenaeria clavicornis*.— Efimik, Esynin: 69.
2009 *W. clavicornis*.— Khruleva: 130.

MATERIAL. **Thomas Mt.** Valley (Vm): 1 ♀ [**4**, hc], 11–31.VII.2016 (LV). Slopes (Sm): 1 ♀ [**7**, hc], 10–31.VII.2016 (LV). **Upper reaches of Neozhidannaya River.** Slopes (Sm): 1 ♀ [**5**, pt], 8.VII–1.VIII.2016 (LV). **Upper reaches of Krasnyi Flag River.** Slopes (Sd, Sds): 3 ♂♂, 2 ♀♀ [**6**, **8**, **9**, pt & hc], 2–19.VI.2016 (LV). **Vyuchnyi Brook.** Slopes (Sds): 1 ♂, 5 ♀♀ [**3**, sift], 24.VII.2019 (OKh). **Env. of Somnitelnaya Bay.** Dry tundra (Dtd): 1 ♂ [**5**, pt], 12.VI–17.VII.2015 (OKh). Zoogenic (Zmo): 5 ♂♂, 4 ♀♀ [**2**, pt], 28.V–14.VII.2006 (OKh); 3 ♂♂, 4 ♀♀ [**2**, pt], 30.V–8.VI.2015 (OKh). **Somnitelnye Mts.** Wetland (Wmt, Wsm): 1 ♀ [**7**, pt], 9–13.VI.2006 (OKh); 14 ♂♂ & ♀♀ [**14**, pt], 13.VI–14.VIII.2006 (OKh). Dry tundra (Dth): 3 ♂♂ [**6**, pt & sift], 25.V–17.VI.2015, 17.VII.2015 (OKh). Slopes (Sds, Sts): 2 ♀ [**9**, hc], 18.VI.2006 (OKh); 5 ♂♂, 1 ♀ [**8**, **11**, pt], 25.V–12.VI.2015 (OKh); **Mineev Mts** Valley (Vpf, Vhf): 3 ♂♂ [**18**, **19**, pt & hc], 8.VI–14.VII.2006 (OKh); 2 ♂♂, 1 ♀ [**19**, pt], 1–14.VI.2015 (OKh). Wetland (Wsm): 5 ♂♂, 2 ♀♀ [**20**, **24**, pt], 27.V–14.VI.2015 (OKh). Dry tundra (Dth): 2 ♂♂, 2 ♀♀ [**21**, pt], 27.V–16.VI.2015 (OKh). Slopes (Smt, Sc): 1 ♀ [**25**, pt], 14.VII–14.VIII.2006 (OKh); 1 ♂, 1 ♀ [**25**, **29**, pt], 1–14.VI.2015 (OKh). **Middle flow of Mamontovaya River**. Zon: 1 ♀ [**8**, pt], 19–24.VI.2006 (OKh). Dry tundra (Dth): 1 ♀ [**10**, pt], 2–12.VII.2014 (OS). **Upper reaches of Neizvestnaya River.** Wetland (Wbf): 2 ♀♀ [**2**, pt], 5.VII–3.VIII.2006 (OKh). Zon: 1 ♂ [**8**, pt], 8–23.VII.2015 (OKh).

REMARKS. A fairly common species. In the XX century, it was mainly collected in small numbers in *sAT* and *nTT*, in various moderately moist and dry habitats. In the XXI century, its numbers increased significantly in *sAT*, especially in the mountainous part, where the species was collected in a wider range of habitats than before. In the center of the island (*nTT*), it was also recorded in various habitats, but in *nAT*, the species was mainly found on the southern slopes of the hills.

RANGE. Holarctic, arcto-montane.

Fam. LYCOSIDAE (5)

Alopecosa hirtipes (Kulczyński, 1907)

1985 *Alopecosa hirta*. — Eskov: 127.
1987 *A. hirtipes*. — Khruleva: 10.
1992 *A. hirtipes*. — Marusik *et al*.: 149.
2009 *A. hirtipes*. — Khruleva: 130.

MATERIAL. **Thomas Mt.** Slopes (Sm): 1 j. [**7**, hc], 10–31.VII.2016 (LV). **Upper reaches of Neozhidannaya River.** Slopes (Sm): 7 j. [**5**, pt & hc], 8.VII–1.VIII.2016 (LV). **Middle flow of Neozhidannaya River.** Slopes (Sd): 1 j. [**6**, pt], 31.VII–4.VIII.2017 (MB). **Chertov Ovrag.** Slopes (Sts): 1 j. [**4**, hc], 26.VII.2015 (OKh). **Env. of Somnitelnaya Bay.** Zon: 6 ♂♂ & ♀♀ [**16**, pt], 28.V–17.VII.2015 (OKh). **Somnitelnye Mts.** Dry tundra (Dth): 9 ♂♂ & ♀♀ [**6**, pt & hc], 28.V–17.VII.2015 (OKh). Slopes (Sts, Sm, Sds): 24 ♂♂ & ♀♀ [**9**, **11**, pt], 28.V–14.VIII.2006 (OKh); 34 ♂♂ & ♀♀ [**8**, **10**, **11**, **12**, pt & hc], 28.V–17.VII.2015 (OKh). **Mineev Mts.** Wetland (Wsm): 10 exs. [**20**, pt], 1.VI–18.VIII.2015 (OKh). Slopes (Smt): 49 ♂♂ & ♀♀ [**25**, **26**, **27**, pt & hc], 30.V–14.VIII.2006 (OKh); 71 ♂♂ & ♀♀ [**21**, **22**, **25**, pt & hc], 25.V–18.VIII.2015 (OKh). **Atertom Mt.** Slopes (Sts): 3 j. [**3**, sift**]**, 13.VII.2015 (OKh). **Env. of Tundrovaya Mt.** Wetland (Wmt): 1 ♀ [**5**, pt], 8–17.VII.2021 (UB). Dry tundra (Dtd): 1 ♂, 1 ♀ [**9**, pt], 4–14.VII.2020 (UB). **Middle flow of Mamontovaya River.** Wetland (Wv): 2j. [**3**, pt], 27.VII–11.VIII.2014 (OS). Dry tundra (Dth, Dtd): 111 ♂♂ & ♀♀ [**9**, **10**, **18**, pt], 19.VI–8.VIII.2006 (OKh); 6 ♂♂, 2 j. [**10**, pt], 2.VII–11.VIII.2014 (OS); 56 ♂♂ & ♀♀ [**10**, **11**, pt], 29 VI–5.VIII.2015 (OKh); Slopes (Sts, Smt): 194 ♂♂ & ♀♀ [**13**, **14**, **15**, **16**, pt], 19.VI–8.VIII.2006 (OKh); 29 ♂♂ & ♀♀ [**15**, **16**, pt], 29.VI–5.VIII.2015 (OKh). **Spurs of Pervaya Mt.** Valley (Vm): 2 ♀♀, 1 j. [**1**, pt], 28.VI–5.VIII.2015 (OKh). Slopes (Sts, Smt): 36 ♂♂ & ♀♀ [**3**, **4**, pt], 28.VI–5.VIII.2015 (OKh). **Upper reaches of Neizvestnaya River.** Wetland (Wd): 25 ♂♂ & ♀♀ [**3**, **4**, **5**, pt], 26.VI–31.VII.2015 (OKh). Zon: 2 j. [**7**, pt & hc], 4–6.VII.2006 (OKh); 36 ♂♂ & ♀♀ [**7**, **8**, pt], 22.VI–3.VIII.2015 (OKh). Dry tundra (Dtd, Dth): 39 ♂♂ & ♀♀ [**9**, **11**, **12**, **13**, pt], 25.VI–31.VII.2015 (OKh). Slopes (Sn, Sm, Sts): 97 ♂♂ & ♀♀ [**14**–**17**, pt, hc & litter], 4.VI–3.VIII.2006 (OKh); 41 ♂♂ & ♀♀ [**10**, pt], 23.VI–10.VIII.2015 (OKh); ~20 ♂♂ & ♀♀ [**14**, **16**, **18**, **19**, pt], 5.VII–3.VIII.2015 (OKh).

REMARKS. This species is widespread in the mountains of the island, especially numerous in its warmest central part (*nTT*). In the mountains of *sAT*, the highest abundance was observed on southern slopes of the Somnitelnye and Mineev Mts, whereas in the *nAT* in such habitats the species occurs locally and in small numbers.

RANGE. Siberian-Nearctic, predominantly arctic.

Alopecosa mutabilis (Kulczyński, 1908)

1985 *Alopecosa mutabilis*. — Eskov, 1985: 124.
1987 *A. mutabilis*. — Khruleva: 11
1992 *A. mutabilis*. — Marusik *et al*.: 149
2009 *A. mutabilis*. — Khruleva: 130.

MATERIAL. **Thomas Mt.** Different habitats: 2 ♂♂, 1 ♀, 34 j. [**1**–**6**, pt & hc], 11–31.VII.2016 (LV). **Upper reaches of Neozhidannaya River.** Different habitats: 1 ♀, 15 j. [**1**–**5**, pt & hc], 8.VII–1.VIII.2016 (LV). **Middle flow of Neozhidannaya River.** Different habitats: 175 ♂♂ & ♀♀ & j. [**1**–**4**, pt], 10.VI–27.VII.2006 (AG). **Upper reaches of Krasnyi Flag River.** Different habitats: 23 ♂♂, 3 ♀♀, 5 j. [**2**, **3**, **4**, **6**, **8**, pt], 2–19.VI.2016 (LV). **Chertov Ovrag.** Different habitats: 1 ♀, 4 j. [**1**, **2**, sift], 26.VII.2015 (OKh). **Env. of Somnitelnaya Bay.** Different habitats: 133 ♂♂ & ♀♀ & j. [**2**, **3, 4**, pt & hc], 25.V–13.VIII.2006 (OKh); 540 ♂♂ & ♀♀ & j. [**2**–**5**, **15**–**17**, pt & hc], 25.V–19.VII.2015 (OKh). **Somnitelnye Mts.** Wetland (Wsm): 1 ♂, [**7**, pt], 13.VI–16.VIII.2006 (OKh). Dry tundra (Dth): 7 ♂♂ & ♀♀ [**6**, pt & sift], 25.V–17.VII.2015 (OKh). Slopes (Sds): 16 ♂♂ & ♀♀ [**7**, pt & hc], 25.V–3.VI.2015 (OKh). **Mineev Mts.** Valley (Vpf, Vhf): 3 ♂♂, [**18**, **19**, pt & hc], 8.VI–14.VIII.2006 (OKh); 3 ♂♂ [**19**, pt], 1.VI–18.VIII.2015 (OKh). Wetland (Wmt): 5 ♂♂, 2 ♀♀ [**28**, pt], 14.VI–18.VII.2015 (OKh). Dry tundra (Dth): 1 j. [21, sift], 18.VIII.2015 (OKh). Slopes (Smt, Sc): 25 ♂♂ & ♀♀ [**22**, **29**, pt & hc], 5.VI–18.VII.2015 (OKh). **Atertom Mt**: Dry tundra (Dth): 1 j. [**1**, sift], 13.VII.2015 (OKh). **Env. of Tundrovaya Mt.** Wetland (Wmt): 1 ♂ [**5**, pt], 1–19.VII.2015 (LV). Dry tundra (Dtd): 22 ♀♀ [**2**, pt], 1–19.VII.2015 (LV). **Middle flow of Mamontovaya River.** Different habitats excluse wetland: 660 ♂♂ & ♀♀ [**1**–**19**, pt], 19.VI–8.VIII.2006 (OKh); 66 ♂♂ & ♀♀ [**3**, **10**, pt], 2.VII–11.VIII.2014 (OS); 143 ♂♂ & ♀♀ [**4**–**11**, **13**–**16**, pt, sift & hc], 29.VI–5.VIII.2015 (OKh). **Spurs of Pervaya Mt.** Different habitats: 31 ♂♂ & ♀♀ [**1**–**4**, pt & hc], 28.VI–5.VIII.2015 (OKh). **Upper reaches of Neizvestnaya River.** Wetland (Wd): 2 j. [**4**, pt], 4.VII–3.VIII.2006 (OKh); 1 j. [**3**, pt], 10–31.VII.2015 (OKh). Zon: 1 j. [**6**, hc], 4.VII.2006 (OKh). Dry tundra (Dtd, Dth): 1 ♂, 5 j. [**12**, hc], 3–6.VII.2006 (OKh); 66 ♂♂ & ♀♀ [**9**, **11**, **12**, **13**, pt & sift], 25.VI–31.VII.2015 (OKh). Slopes (Sn, Sts, Sm): 2 j. [**17**, hc], 3.VII, 3.VIII.2006 (OKh); 28 ♂♂ & ♀♀ [**10**, pt & sift], 22.VI–23.VII.2015 (OKh). 1 ♀ [**15**, pt], 29.VII–3.VIII.2015 (OKh).

REMARKS. The species is widespread on the island (not found only in *sPP*). Its abundance is highest in *nAT* and on the plains of *sAT*, where the species inhabits almost the entire range of habitats. In the warmest areas (mountains of *sAT*, *nTT*), the species occurs more locally.

RANGE. Siberian-Nearctic, arctic.

Alopecosa pictilis (Emerton, 1885)

1992 *Alopecosa borea*. — Marusik *et al*.: 149, misidentification.

2009 *A.* aff. *borea*. — Marusik, Eskov: 95.

2009 *A.* aff. *borea*. — Khruleva: 130.

MATERIAL. **Chertov Ovrag.** Dry tundra (Dth): 48 ♂♂ & ♀♀ [**1**, pt & hc], 4.VI–15.VII.2006 (OKh). Slopes (Sts): 3 j. [**4**, sift & hc], 26.VII.2015 (OKh). **Somnitelnye Mts.** Slopes (Sts, Sds, Sm): 182 ♂♂ & ♀♀ [**9**, **11**, **12**, pt & hc], 28.V–14.VIII.2006 (OKh); 212 ♂♂ & ♀♀ [**8**, **10**, **11**, pt], 25.V–17.VII.2015, pt & sift (OKh); **Mineev Mts.** Slopes (Smt): 1 ♀ [**25**, pt], 14.VII–14.VIII.2006 (OKh); 1 j. [22, pt] 16.VI–19.VII.2015 (OKh). Dry tundra (Dth): 72 ♂♂ & ♀♀ [**21**, pt & sift], 27.V–19.VII.2015 (OKh); **Spurs of Pervaya Mt.** Valley (Vm): 2 ♀♀ [**1**, pt & hc], 13.VII–5.VIII.2015 (OKh). **Upper reaches of Neizvestnaya River.** Slopes (Sm, Sts): 280 ♂♂ & ♀♀ [**14**–**17**, pt, hc & litter], 4.VI–3.VIII.2006 (OKh); ~250 ♂♂ & ♀♀ [**14**, **15**, **17**, **19**, pt & sift], 23.VI–3.VIII.2015 (OKh).

REMARKS. The species is locally distributed in the mountains of *sAT* and *nTT*, where it is confined mainly to south-exposed slopes. The maximum abundance was observed on the slopes of the Somnitelnye Mts.

RANGE. Siberian-Nearctic, predominantly arctic.

COMMENTS. Previously, this species was considered as possibly new and endemic to the island [Marusik, Eskov, 2009]. However, sequencing of 12 specimens from Wrangel Is., conducted by G. Blagoev, revealed that they belong to *Alopecosa pictilis*.

Pardosa algens (Kulczyński, 1908)

1985 *Pardosa algens*. — Eskov: 125.

1987 *P. algens*. — Khruleva: 11.

1992 *P. algens*. — Marusik *et al*.: 149.

2009 *P. algens*. — Khruleva: 130.

MATERIAL. **Thomas Mt.** Wetland (Wsm): 1 ♀, 3 j. [**5**, pt], 11–31.VII.2016 (LV). Slopes (Sm): 1 ♀ [**7**, pt], 10–31.VII.2016 (LV). **Middle flow of Neozhidannaya River.** Wetland (Wmt, Wsm): 1 ♂ [**3**, pt], 10.VI–27.VII.2006 (AG); 90 ♀ [**4**, pt], 10.VI–27.VII.2006 (AG). **Chertov Ovrag.** Different habitats: 15 ♂♂ & ♀♀ [**1**, pt], 4.VI–15.VII.2006 (OKh); 3 ♀♀, 4 j. [**2**, **3**, sift & hc], 26.VII.2015 (OKh). **Vyuchnyi Brook.** Different habitats: 1 ♀, 6 j. [**1**, **2**, **3**, sift & hc], 24.VII.2015 (OKh). **Env. of Somnitelnaya Bay.** Zon: 33 ♂♂ & ♀♀ [**3**, **4**, pt], 5.VI–13.VIII.2006 (OKh); 34 ♂♂ & ♀♀ [**4**, pt], 8.VI–17.VII.2015 (OKh). Zoogenic (Zmo): 5 ♂♂ & ♀♀ [**2**, pt & hc], 5.VI–13.VIII.2006 (OKh); 12 ♂♂ & ♀♀ [**2**, pt], 8.VI–17.VII.2015 (OKh). Dry tundra (Dtd): 2 ♂♂ [**15**, pt], 27.V–6.VI.2015 (OKh). **Somnitelnye Mts.** Wetland (Wmt, Wsm): 109 ♂♂ & ♀♀ [**7**, pt], 9.VI–16.VII.2006 (OKh); 11 ♂♂ & ♀♀ [**14**, pt], 13.VI–16.VIII.2006 (OKh); 748 ♂♂ & ♀♀ [**7**, pt], 25.V–17.VII.2015 (OKh). Dry tundra (Dth): 134 ♂♂ & ♀♀ [**6**, pt], 25.V–17.VII.2015 (OKh). Slopes (Sm, Sds, Sts): 11 exs. [**9**, **11**, **14**, pt & hc], 5.VI–16.VII.2006 (OKh); 225 exs. [**8**, **10**, **11**, **12**, pt & sift], 25.V–17.VII.2015 (OKh). **Mineev Mts.** Valley (Vpf): 1 ♀ [**18**, pt & hc], 14.VI–14.VII.2006 (OKh); 1 ♀ [**18**, pt], 14.VI–19.VII.2015 (OKh). Wetland (Wsm, Wmt): 98 ♂♂ & ♀♀ [**20**, **23**, **28**, pt], 27.V–19.VII.2015 (OKh). Dry tundra (Dth): 9 ♂♂, 5 j. [**21**, pt], 27.V–19.VII.2015 (OKh). Slopes (Smt): 4 ♂♂ & ♀♀ [**22**, pt], 16.VI–19.VII.2015 (OKh). **Env of Rogers Bay.** Zon: 17 j. [**2**, pt & ypt], 11–13.VII.2019 (OKh). Slopes (Sts): 1 j. [**3**, ypt], 11–12.VII.2019 (OKh). **Env. of Tundrovaya Mt.** Dry tundra (Dtd): 1 ♀, [**2**, pt], 1–19.VII.2015 (LV). Wetland (Wv, Wmt): 1♂, 3 ♀, 1j. [**3**, **4**, **5**, pt], 1–19.VII.2015 (LV); 2 ♀♀ [**5**, pt], 8–17.VII.2021 (UB). **Middle flow of Mamontovaya River.** Different habitats excluse the most dry: 1619 ♂♂ & ♀♀ [**2**–**10**, **12**, **18**, **19**, pt], 19.VI–8.VIII.2006 (OKh); 51 ♂♂ & ♀♀ [**3**, **7**, **10**, pt], 2.VII–11.VIII.2014 (OS); ~600 ♂♂ & ♀♀ [**2**–**10**, **12**, pt, sift & hc], 29.VI–5.VIII.2015 (OKh). **Spurs of Pervaya Mt.** Valley (Vm): 117 ♂♂ & ♀♀ [**1**, pt], 28.VI–5.VIII.2015 (OKh). Wetland (Wmt): 2 ♀♀ [**5**, pt], 28.VI–5.VIII.2015 (OKh). **Upper reaches of Neizvestnaya River.** Wetland (Wdm Wbf): 168 ♂♂ & ♀♀ [**2**, **4**, **5**, pt], 4.VII–3.VIII.2006 (OKh); ~740 ♂♂ & ♀♀ [**3**, **4**, **5**, pt & ypt], 26.VI–3.VIII.2015 (OKh). Zon: 95 ♂♂ & ♀♀ [**6**, pt], 4.VII–3.VIII.2006 (OKh); ~300 ♂♂ & ♀♀ [**6**, **8**, pt & hc], 22.VI–3.VIII.2015 (OKh). Dry tundra (Dth): ~120 ♂♂ & ♀♀ [**9**, pt], 25.VI–31.VII.2015 (OKh). Slopes (Sm, Sts): 39 ♂♂ & ♀♀ [**14**–**17**, pt], 4.VI–3.VIII.2006 (OKh); ~15 ♂♂ & ♀♀ [**14**, **15**, pt], 5–29.VII.2015 (OKh).

REMARKS. In *sAT* and *nTT* the species is widespred and dwells in a wide range of habitats. In the mountains of *nAT* it was found on south-exposed slopes, mainly in small numbers.

RANGE. Siberian-Nearctic, arcto-montane (mostly in the tundra zone).

Sibirocosa subsolana (Kulczyński, 1907)

1985 *Acantholycosa subsolana*. — Eskov: 124.

1987 *A. subsolana*. — Khruleva: 10.

1992 *A. subsolana*. — Marusik *et al*.: 149.

2009 *Sibirocosa subsolana*. — Khruleva: 130.

MATERIAL. **Mineev Mts.** Slopes (Smt, Sc): 36 ♂♂ & ♀♀ [**25**, **26**, **27**, pt & hc], 8.VI–14.VIII.2006 (OKh); 3 ♂♂, 5 ♀♀ [**25**, **29**, pt], 1–14.VI.2015 (OKh). **Env. of Tundrovaya Mt.** Valley (Vm): 3 j. [**7**, ypt], 6–9.VII.2019 (UB).

REMARKS. It is a rare species with a local distribution, predominantly restricted to rocky-gravelly slopes with sparse vegetation in the mountains of *sAT* and *nTT*.

RANGE. Northeast Siberian, arctic (mostly in the mountain tundra).

Fam. SALTICIDAE (1)

Chalcoscirtus hyperboreus Marusik, 1991

2000 *Chalcoscirtus hyperboreus*. — Logunov, Marusik: 58.

2000 *Chalcoscirtus glacialis*. — Logunov, Marusik: 56, misidentification.

2009 *Ch. glacialis*. — Khruleva: 130, misidentification.

MATERIAL. **Upper reaches of Neizvestnaya River.** Slopes (Sts): 1 ♂ [**19**, pt], 8–23.VII.2015 (OKh).

REMARKS. The species was collected on the island in a single habitat in the center of the island (*nTT*) — on dry south-facing slope of monadnock with spotted forb-sedge tundra-steppe cover. It was collected in the same habitat also in 1991.

RANGE. Siberian, arcto-alpine.

Fam. THERIDIIDAE (2)

Thymoites bellissimus (L. Koch, 1879)

MATERIAL. **Mineev Mts.** Wetland (Wmt): 2 ♀♀ [**24**, pt], 1–14.VI.2015 (OKh).

REMARKS. The species was collected in a single habitat — on the narrow damp mountain terrace on the gravelly slope of south-western exposition with spotted herb-moss-dryad cover, 71.007417 N, 179.523111 W, 231 m (*sAT*). This species is new to the fauna of the Wrangel Is.

RANGE. Palearctic, predominantly boreal.

Thymoites oleatus (L. Koch, 1879)

MATERIAL. **Mineev Mts.** Wetland (Wsm) and Slopes (Smt): 1 ♂, 4 ♀♀, 42 j. [**24**, **25**, under stones], 1.VI.2015 (OKh).

REMARKS. An extremely rare species collected on a gravelly-stony slope with mountain-tundra curtain vegetation and an adjacent mountain terrace of southwestern exposure with a grass-moss cover (*Th. belissimus* was also found here). All specimens were found at the beginning of the vegetation season, when it was wet under stones. There were a lot of spiders on the day of the collection, but in subsequent collections in this habitats (June 14, July 18) they were no longer found. This species is new to the fauna of the Wrangel Is. It was earlier found on Gerald Is. [Marusik *et al*., 1992].

RANGE. Siberian-Nearctic, predominantly arcto-montane.

Fam. THOMISIDAE (1)

Psammitis albidus (Grese, 1909)

1985 *Xysticus albidus*. — Eskov: 126.
1987 *X. albidus*. — Khruleva: 11.
1992 *X. albidus*. — Marusik *et al*.: 153
2009 *X. albidus*. — Khruleva: 130
2014 *X. albidus*. — Khruleva: 318.

MATERIAL. **Thomas Mt.** Wetland (Wsm): 1 ♂ [**5**, pt], 11–31.VII.2016 (LV). Slopes (Sm): 6 ♂♂, 4 ♀♀, 2 j. [**7**, pt], 10–31.VII.2016 (LV). **Chertov Ovrag.** Different habitats: 38 ♂♂ & ♀♀ [**1**, pt & hc], 4.VI–15.VII.2006 (OKh); 3 ♂♂, 4 ♀♀, 22 j. [**2**, **3**, **4**, sift & hc], 26.VII.2015 (OKh). **Vyuchnyi Brook.** Slopes (Sds): 2 ♂♂, 3 ♀♀, 5 j. [**3**, sift], 24.VII.2019 (OKh). **Somnitelnye Mts.** Different habitats: 186 ♂♂ & ♀♀ [**7**, **9**, **11**, **12**, **13**, **14**, pt & hc], 28.V–14.VIII.2006 (OKh); 409 ♂♂ & ♀♀ [**6**, **7**, **8**, **10**, **11**, **12**, pt & sift], 25.V–17.VII.2015 (OKh). **Mineev Mts.** Different habitats excluse most wet: 165 ♂♂ & ♀♀ [**18**, **19**, **25**, **26**, **27**, pt], 8.VI–14.VIII.2006 (OKh); 206 ♂♂ & ♀♀ [**20**, **21**, **24**, **25**, **29**, pt & sift], 1.VI–18.VII.2015 (OKh); 1 ♂ [**29**, pt], 1–14.VI.2015 (OKh). **Atertom Mt.** Slopes (Sts): 1 ♂, 1 ♀ [**3**, sift], 13.VII.2019 (OKh). **Env of Rogers Bay.** Slopes (Sts): 1 ♂, 1 ♀, 1 j. [**3**, ypt], 11–12.VII.2019 (OKh). **Env. of Tundrovaya Mt.** Valley (Vm): 3 ♂♂ [**7**, pt], 4–14.VII.2020 (UB). Dry tundra (Dtd): 2 ♂♂ [**9**, pt], 4–14.VII.2020 (UB). Slopes (Sm): 1 ♂ [**1**, pt], 1–19.VII.2015 (LV). **Middle flow of Mamontovaya River.** Dry tundra (Dth): 1 ♂, 1 j. [**10**, pt], 2–20.VII.2014 (OS); 2 ♂♂ [**9**, pt], 22.VII–5.VIII.2015 (OKh). Slopes (Smt): 21 ♂♂, 1 ♀ [**14**, pt], 19.VI–9.VII.2006 (OKh); 1 ♂, 1 ♀ [**14**, pt], 22.VII–5.VIII.2015 (OKh). **Spurs of Pervaya Mt.** Valley (Vm): 1 ♂ [**1**, sw], 13.VII.2015 (OKh). Slopes (Sts): 3j. [**3**, pt], 13.VII–5.VIII.2015 (OKh). **Upper reaches of Neizvestnaya River.** Different habitats excluse slopes: 24 ♂♂ & ♀♀ [**2**, **4**, **6**, **12**, pt, hc & sw], 4.VII–3.VIII.2006 (OKh); 127 ♂♂ & ♀♀ [**2**–**13**, pt, ypt, sift & hc], 22.VI–10.VIII.2015 (OKh). Slopes (Sm, Sts): 94 ♂♂ & ♀♀ [**14**–**17**, pt & hc], 4.VI–3.VIII.2006 (OKh); 99 ♂♂ & ♀♀ [**14**–**19**, pt, ypt, sw & hc], 23.VI–3.VIII.2015 (OKh).

REMARKS. The species is strictly confined to mountainous part of the island, it reaches the highest abundance on south-exposed slopes and foothill plumes of the Somnitelnye and Mineev Mts. In the center of the island (*nTT*), it is numerous only at upper reaches of the Neizvestnaya River, where it also lives in a wide range of habitats; in other localities of this area it is a rare species.

RANGE. Fennoscandian-Siberian, arcto-montane.

Spiders collected on Gerald Island

Together with Wrangel Is., the State Nature Reserve "Wrangel Island" includes Gerald Is., located 70 km eastward. It is a small rocky island (11.3 km^2) composed of granites and gneiss; the maximum height above the sea level is 364 m. Small collections of spiders obtained by M.S. Stishov in 1988 on Herald Is. contained 13 species [Marusik *et al*., 1992], one of which, *Agyneta* sp., has not been identified. It was found that most of the collected species (11) are common to Wrangel Is. Most of them, *Arcterigone pilifrons*, *Erigone psychrophila*, *Halorates holmgreni*, *H. spetsbergensis*, *Hilaira gertschi*, *Hybauchenidium aquilonare*, *Semljicola arcticus*, *Walckenaeria clavicornis* are numerous on Wrangel Is., and *Oreoneta leviceps*, *Mughiphantes sobrius*, *Thymoites oleatus* are quite rare. In addition, *Perro tshuktshorum* (Eskov et Marusik, 1991), not yet known from Wrangel Is., was collected on Herald Is.

Misidentifications

Three species of spiders from Wrangel Is. were identified incorrectly: *Agyneta trifurcata* Hippa et Oksala 1985 (*A.* cf. *trifurcata*) [Khruleva, 1987; Marusik *et al*., 1992; Khruleva, 2009] actually belongs to *A. bulavintsevi*, *Alopecosa borea* (Kulczyński, 1908) (*A.* aff. *borea*) [Marusik *et al*., 1992; Marusik, Eskov, 2009; Khruleva, 2009] — to *A. pictilis*, and *Chalcoscirtus glacialis* Caporiacco, 1935 [Logunov, Marusik, 2000; Khruleva, 2009] — to *Ch. hyperboreus*.

Halorates thulensis (Jackson, 1934) was recorded from Wrangel Is. [Marusik, Eskov, 2009] on the basis of a single female (label data: middle flow of the Mamontovaya River, dry tundra, 13–20.VI.1992, OKh). This species has been recorded on the island only once. Its definition of a female cannot be considered satisfactory and needs to be confirmed. *H. thulensis* is removed from the list of spiders of Wrangel Is.

Results and Discussion

Changes in the composition of the fauna

The table summarizes data on the distribution of spider species on Wrangel Is. Apart from introduced *Parasteatoda tepidariorum* (C.L. Koch, 1841) (Theridiidae) [Khruleva, 1987], which we did not include in the list, 42 spider species were collected during the first stage of our research on Wrangel Is. (1983–1994). During the second stage (2006, 2014–2021), not only all previously known species were found, but also 14 species new to the fauna of the island were discovered. These are *Dictyna major*, *Agyneta decora*, *A. ripariensis*, *Hilaira proletaria*, *Monocerellus montanus*, *Oreoneta alpina*, *O. beringiana*, *Oreonetides beringianus*, *Semljicola beringianus*, *Styloctetor lehtineni*, *Tubercithorax subarcticus*, *Uusitaloia wrangeliana*, *Thymoites bellissimus*, and *Th. oleatus*. At the same time, *Oreoneta mineevi* collected in 1930 was not found again.

Taking into account the new data and re-identifications, 57 species belonging to seven families do occur

on Wrangel Is.: Dictynidae (3 species), Gnaphosidae (1), Linyphiidae (44), Lycosidae (5), Salticidae (1), Theridiidae (2), Thomisidae (1 species). As in other studied regions of tundra zone, Linyphiidae are the most speciose (44 species from 24 genera, 77.2% of the fauna). The genera *Agyneta* Hull, 1911 (7 species), *Oreoneta* Kulczyński, 1894 (5), *Hilaira* Simon, 1884 (4) and *Erigone* Audouin, 1826 (3 species) are most variously represented; two genera are represented by two species (*Halorates* Hull, 1911 and *Semljicola* Strand, 1906), and the remaining 18 — by one species. Among other families, Lycosidae (5 species, of which 3 belong to the genus *Alopecosa* Simon, 1885) and Dictynidae (3 species, 2 from the genus *Dictyna* Sundevall, 1833) are the leaders.

Longitudinal composition of spider fauna

Species distributed in Eurasia and North America comprise almost two thirds of the fauna (36 species, 63.2%). Most of them (28) are widespread on these continents. At the same time, species with a Siberian-Nearctic range prevail over species with circumpolar or subcircumpolar ranges — 19 (33%) and 9 (16%) species, respectively. Two species, *Emblyna borealis* and *Hilaira vexatrix*, have a predominantly Nearctic distribution, while *Oreoneta arctica* (Northeast Siberian-Alaskan range) has a close to Beringian distribution. The remaining four species are more widely distributed in Eurasia: three of them, *Agyneta birulai*, *Hilaira gertschi*, and *Semljicola arcticus*, have Siberian-West Nearctic ranges.

Among spiders collected only in Eurasia (21 species, 37% of fauna), species restricted to Siberia (17; 30% of fauna) prevail. Four of them, *Dictyna tyshchenkoi wrangeliana*, *Dactylopisthoides hyperboreus*, *Oreoneta alpina*, *Sibirocosa subsolana*, are known only from its northeast part, and two species, *Oreoneta mineevi* and *Uusitaloia wrangeliana*, are currently classified as presumed endemics of the island. *Uusitaloia wrangeliana* is close to the one described from Buryatia as U. *transbaicalica* Marusik, Koponen et Danilov, 2001 [Marusik, Koponen, 2009], which indicates its East Siberian relations.

Thus, the spider fauna of Wrangel Is., despite its proximity to both continents, Eurasia and North America, is characterized by a noticeable prevalence of species with Siberian and predominantly Siberian (Siberian-West Nearctic) distribution over species with predominantly Nearctic one (35 and 3.5%, respectively).

Latitudinal composition of spider fauna

The fauna of the island has a pronounced Arctic appearance — 46 species (81% of the fauna) are attributed to the arctic fraction (Suppl. Table). The main part of these species (30) are widely distributed in the tundra zone of Siberia and (or) the Nearctic, and the remaining species occur quite locally. As a rule, their findings are confined to areas with mountainous terrain, that is, the Polar Urals, the spurs of the Pai-Hoi ridge, the mountains of northern Yakutia and (most often) Chukotka. There are *Dictyna t. wrangeliana*, *Agyneta brusnewi*, *A. bulavintsevi*, *Dactylopisthoides hyperboreus*, *Erigone arcticola*, *Monocerellus montanus*, *Oreoneta arctica*, *O. alpina*, *Oreonetides beringianus*, *Poeciloneta pallida*, *Sibirocosa subsolana*, *Chalcoscirtus hyperboreus*, *Thymoites oleatus* [Eskov, 1990b; Marusik *et al*., 1992, 2019; Logunov, Marusik, 2000; Eskov, Marusik, 1994; Saaristo, Marusik, 2004; Marusik, Eskov, 2009; Tanasevitch, 2016, 2017; Tanasevitch, Nekhaeva, 2016; Tanasevitch, Khruleva, 2017].

Currently, about 345 species are known from the tundra zone of Russia [Marusik, Eskov, 2009, with additions], of which only about 80 have a predominantly arctic and arcto-alpine/montane distribution. It is very significant that more than half of them were collected on Wrangel Is., given its relatively small size and harsh climatic conditions. It is also important to note that for 20 species (35% of fauna) Wrangel Is. is the only area of their finding in the High Arctic (Suppl. Table). From the arctic fraction, they include most of the arcto-alpine species listed above, two presumed endemics, *Oreoneta mineevi* and *Uusitaloia wrangeliana*, and *Gnaphosa orites* found only in various areas of the Low Arctic. All the others are southern elements: all species from the hypoarctic fraction (*Agyneta birulai*, *A. ripariensis*, *Islandiana falsifica*, *Oreoneta beringiana*, *Sibirocyba incerta*, *Styloctetor lehtineni*), polyzonal *Dictyna major* and *Hypselistes jacksoni*, as well as *Thymoites bellissimus* with predominantly boreal distribution. Only two polyzonal species, *Agyneta decora* and *Pelecopsis parallela*, are known from other areas of the High Arctic, but only the latter is widespread there. Almost half of the southern elements (5 out of 11 species) were collected on the island in the XXI century, which in total increased their share in the fauna from 14% (in the XX century) to 19%.

It is worth to note that a significant part of the species unknown from other areas of the High Arctic is limited in its distribution to Siberia or only its northeastern part. These are some southern species (*Agyneta ripariensis*, *Sibirocyba incerta*, *Styloctetor lehtineni*), but most of them are arcto-alpine species (*Dictyna t. wrangeliana*, *Dactylopisthoides hyperboreus*, *Monocerellus montanus*, *Oreoneta alpina*, *Oreonetides beringianus*, *Poeciloneta pallida*, *Sibirocosa subsolana*). Undoubtedly, their presence on the island largely determines the high proportion of Siberian species in the fauna, since 12 of the 17 species belong to them.

Spatial distribution of spiders within the island

In the XXI century, spider collections were carried out in three of the four zonal variants. Only the climatically harshest areas of the island (*sPD*), from where only five species of spiders were previously known (Suppl. Table), were not studied again. The species composition of the faunas of the remaining subzonal variants in the XXI century was significantly supple-

mented. In *nAT*, some localities were surveyed for the first time, which increased the number of new detection points for many species, and their total number increased from 15 to 24. At the same time, all the most widespread species in the XXI century (*Erigone arctica sibirica*, *E. psychrophila*, *Halorates holmgreni*, *H. spetsbergensis*, *Hilaira gertschi*, *H. glacialis*, *H. vexatrix*, *Hybauchenidium aquilonare*, *Pelecopsis parallela*, *Alopecosa mutabilis*) were noted there earlier. Among the spiders first noted in *nAT*, species widespread in *sAT* and *nTT* prevailed. Of the species new to the fauna of Wrangel Is. in the XXI century, only *Hilaira proletaria* was collected there.

Unlike *nAT*, in *sAT* and *nTT*, a number of localities were surveyed repeatedly (Suppl. Table). Most of the species new to the fauna (13 out of 14) were found in these areas. They were especially diverse in the mountains of *sAT* (9 species). A number of rare species, *Agyneta birulai*, *A. nigripes*, *Gibothorax tchernovi*, *Masikia indistincta*, *Praestigia groenlandica*, previously known only from some areas of *nTT*, were also collected in *sAT* for the first time. In general, the number of species in *sAT* has increased from 34 to 49 in the XXI century. In *nTT*, the number of species increased from 36 to 45. It also occurred due to the findings of both new to the fauna (6 species) and rare species (*Emblyna borealis*, *Hypselistes jacksoni*, *Islandiana falsifica*, *Sibirocyba incerta*), previously locally recorded only in the mountains of *sAT*.

The fact that most of the species new to the fauna are confined either to the warmest areas of the island or to mountainous areas with the greatest diversity of habitats indicates the non-random nature of their distribution on the island. We assume that all these species are not recent invasions of the island ecosystems. Given the rarity of most species, it is obvious that they are located there beyond their climatic optimum and were able to survive exclusively locally and only in particularly favorable conditions for them. It is also worth noting that most insect species new to the fauna have a similar distribution [Khruleva, Zinchenko, 2017; Grichanov, Khruleva, 2018; Khruleva, Stekolshchikov, 2019; Barkalov, Khruleva, 2021; Khruleva *et al*., 2021; Vinokurov, Khruleva, 2021].

It is important to note that the fauna of more climatically harsh subzonal variants (*sPD*, *nAT*) consists almost exclusively of species from arctic fraction. Also in this part there are no species for which Wrangel Is. is the only place of detection in the High Arctic (with the exception of *Dictyna t. wrangeliana*). The latter were found exclusively in the warmer areas (mountains of *sAT*, *nTT*). This suggests that the mesoclimate is one of the important factors limiting their distribution on Wrangel Is.

Conclusion

Although the fauna of Wrangel Is. spiders was previously well studied, the continuation of research in the XXI century, during the climate warming in the Arctic, significantly, almost at one third, increased its species richness. The fact that most of the species new to the fauna are confined either to the warmest areas of the island or to mountainous areas with the greatest diversity of habitats indicates the non-random nature of their distribution on the island. Although the number of southern elements (hypoarctic, boreal and polyzonal species) has increased during research in the XXI century, the araneofauna of the island has retained its pronounced arctic appearance. However, for a significant number of species, Wrangel Is. is the only point of their detection in the High Arctic. The fact that these species are confined to areas with most favorable mesoclimatic conditions suggests the role of warmth in their distribution on the island. This group includes not only the majority of southern elements, but also species with arcto-alpine distribution, locally occurring in the tundra zone. The latter comprise about a third of all species of the arctic fraction; most of them are limited in their distribution to Siberia (some — its northeastern part). Their presence on the island significantly increases the number of species with Siberian distribution in the fauna. The predominance of spiders with a Siberian-Nearctic and Siberian ranges with insignificant participation of species from other longitude groups is another distinctive feature of the araneofauna of Wrangel Is.

Supplementary data. The following Table is available online at http://kmkjournals.com/journals/AS.

Supplementary Table 1. Latitudinal composition and distribution of spiders in various subzonal variants of vegetative cover of Wrangel Is.

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