ISSN 0096-3925, Moscow University Biological Sciences Bulletin, 2014, Vol. 69, No. 3, pp. 138–140. © Allerton Press, Inc., 2014.
Original Russian Text © K.G. Mikhailov, 2014, published in Vestnik Moskovskogo Universiteta. Biologiya, 2014, No. 1, pp. 50–52.

FAUNA, FLORA

Data on the Spider Fauna (Arachnida, Aranei) at the White Sea Biological Station, Moscow State University

K. G. Mikhailov

Zoological Museum, Moscow State University, Moscow, 125009 Russia

e-mail: mikhailov2000@gmail.com

Received May 25, 2013

Abstract—As a result of preliminary study, the spider fauna at the White Sea Biological Station, Moscow State University, 36 new spider species belonging to 10 families, comprising approximately 20% of the whole species diversity of this locality, have been found.

***Keywords*:** spiders (*Arachnida*, *Aranei*), White Sea Biological Station of Moscow State University.

DOI: 10.3103/S0096392514020047

The White Sea Biological Station of Moscow State University (hereinafter referred to as WSBS of MSU) is located in the Loukhi district, Republic of Karelia, near the Polar Circle in the taiga zone (northern taiga subzone). The spider fauna at the WSBS of MSU is fragmentarily studied. Currently, it comprises only 12 species, which have been collected in the littoral [1]. Nevertheless, compared to the neighboring regions of Karelia and Murmansk oblast, the total volume of the spider fauna at the WSBS of MSU is made of approximately 180–200 species.

During the academic trip in August 2011, I managed to make a small collection of spiders. This work is based on the data obtained while processing the above-said collection and additional samples taken from the collection of the Zoological Museum, Moscow State University. All materials are kept at the Zoological Museum, Moscow State University.

A complete list of spider species inhabiting the WSBS of MSU is given below. It is compiled considering the previously published materials. The name of the person who sampled spiders is abbreviated: KM—K.G. Mikhailov.

Fam. ARANEIDAE (one species)

Araneus diadematus Clerck, 1758—one female; slope of the Nizhnii Radikulit, sparse pine forests growing on the rock, in the lichen mat; August 19, 2011; KM.

Araneus diadematus Clerck, 1758—one female; Nizhnii Radikulit; behind the botanical garden, on the birch; August 23, 2011; KM.

Fam. GNAPHOSIDAE (one species)

Micaria nivosa (L. Koch, 1866). Littoral, storm drains [1].

Fam. HAHNIIDAE (one species)

Cryphoeca silvicola (C.L. Koch, 1834)—one female; slope of the Nizhnii Radikulit, under the stones; August 17, 2011; KM.

Cryphoeca silvicola (C.L. Koch, 1834)—one male, six females; slope of the Nizhnii Radikulit; sparse pine forests growing on the rock, in the lichen mat; August 19, 2011; KM.

Fam. LINYPHIIDAE (15 species)

Agyneta beata (O. Pickard-Cambridge, 1906). Littoral, storm drains (Mikhailov, 2008).

Agyneta gulosa (L. Koch, 1869)—one male; slope of the Nizhnii Radikulit, sparse pine forests growing on the rock, in the lichen mat; August 19, 2011; KM.

Drapetisca socialis (Sundevall, 1832)—one male, one female; territory of the biostation, birch trunk; August 18, 2011; KM.

Halorates holmgreni (Thorell, 1872)—one male; slope of the Nizhnii Radikulit, sparse pine forests, in the lichen matt; August 19, 2011; KM.

Lepthyphantes alacris (Blackwall, 1853)—one female; slope of the Nizhnii Radikulit, under the stones; August 17, 2011; KM.

Macrargus carpenteri (O. Pickard-Cambridge, 1894)—three males, three females; slope of the Nizhnii Radikulit, sparse pine forests growing on the rock, in the lichen mat; August 19, 2011; KM.

Minyriolus pusillus (Wider, 1834)—three males; slope of the Nizhnii Radikulit, sparse pine forests growing on the rock, in the lichen mat; August 19, 2011; KM.

Moebelia penicillata (Westring, 1851)—one male, two females; WSBS, territory of the biostation, on the pine trunk; August 18, 2011; KM.

Neriene montana (Clerck, 1758)—one female (with a cocoon); seashore, tree; July 14, 1979; KM.

Neriene montana (Clerck, 1758)—one female; seashore, birch; July 14, 1979; KM.

Neriene montana (Clerck, 1758)—two males sbad, one female sbad; a road to Lake Vodoprovodnoe, pine–birch forest, support of the water supply system; August 17, 2011; KM.

Oedothorax retusus (Westring, 1851). Littoral, storm drains [1].

Savignya frontata Blackwall, 1833. Littoral, storm drains [1].

Silometopus elegans (O. Pickard-Cambridge, 1872). Littoral, storm drains (Mikhailov, 2008).

Tenuiphantes mengei (Kulczyński, 1887)—three females; slope of the Nizhnii Radikulit, sparse pine forests growing on the rock, in the lichen mat; August 19, 2011; KM.

Tenuiphantes tenebricola (Wider, 1834)—one female; slope of the Nizhnii Radikulit, under the stones; August 17, 2011; KM.

Walckenaeria capito (Westring, 1861)—one female; slope of the Nizhnii Radikulit, sparse pine forests growing on the rock, in the lichen mat; August 19, 2011; KM.

Fam. LYCOSIDAE (nine species)

Acantholycosa lignaria (Clerck, 1758)—one female with a cocoon; Kislaya Guba, soil; July 2, 1979; KM, identified by A.A. Zyuzin.

Pardosa lugubris (Walckenaer, 1802). Littoral, storm drains [1].

Pardosa palustris (Linnaeus, 1758). Littoral, storm drains [1].

Pardosa plumipes (Thorell, 1875). Littoral, storm drains [1].

Pardosa riparia (C.L. Koch, 1833). Littoral, storm drains [1].

Pardosa sphagnicola (F. Dahl, 1908). Littoral, storm drains [1].

Tarentula aculeata (Clerck, 1758)—one female; slope of the Nizhnii Radikulit, sparse pine forests growing on the rock, in the lichen mat; August 19, 2011; KM.

Tarentula pinetorum Thorell, 1856—one female with a cocoon; Chernaya River; July 1, 1979; KM, identified by KM.

Tarentula pulverulenta (Clerck, 1758). Littoral, storm drains [1].

Fam. PHILODROMIDAE (one species)

Philodromus fuscomarginatus (De Geer, 1778)—one female; territory of the biostation, on the pine trunk; August 18, 2011.

Fam. SALTICIDAE (two species)

Neon reticulatus (Blackwall, 1853)—one female; slope of the Nizhnii Radikulit, under the stones; August 17, 2011; KM.

Salticus cingulatus (Panzer, 1797)—one female; slope of the Nizhnii Radikulit, sparse pine forests growing on the rock, in the lichen mat; August 19, 2011; KM.

Fam. TETRAGNATHIDAE (one species)

Pachygnatha listeri Sundevall, 1829. Littoral, storm drains [1].

Fam. THERIDIIDAE (three species)

Asagena phalerata (Panzer, 1801)—one female; slope of the Nizhnii Radikulit, sparse pine forests growing on the rock, in the lichen mat; August 19, 2011; KM.

Steatoda bipunctata (Linnaeus, 1758)—one female; slope of the Nizhnii Radikulit, sparse pine forests growing on the rock, in the lichen mat; August 19, 2011; KM.

Theridion varians (Hahn, 1833)—one female; territory of the biostation, on the pine trunk; August 18, 2011; KM.

Fam. THOMISIDAE (two species)

Coriarachne depressa (C.L. Koch, 1837)—one juv.; territory of the biostation, on the pine tunk; August 18, 2011; KM.

Xysticus audax (Schrank, 1803)—one female; slope of the Nizhnii Radikulit, sparse pine forests growing on the rock, in the lichen mat; August 19, 2011; KM.

Therefore, up to now, 36 spider species out of 10 families are known to inhabit the territory of the WSBS of MSU. It is comparable to the poorly studied fauna of the Kandalaksha Nature Reserve [2, 3] and comrises approximately 20% of the assumed species diversity and only 6.5% of the spider fauna in the taiga–tundra Fennoscandia comprising 554 species [4]. The family Linyphiidae comprises 40% of the species diversity of spiders in the fauna of the WSBS of MSU. These data correlates with those obtained in Fennoscandia (44%, [4]). New findings should take place. They would cover such families of spiders as Clubionidae, Corinnidae (genus *Phrurolithus*), Cybaeidae (genus *Argyroneta*), Dictynidae, Liocranidae, Pisauridae (genus *Dolomedes*), Sparassidae (genus *Micrommata*), Zoridae, as well as, probably, Agelenidae (genus *Tegenaria*), Anyphaenidae, and Oxyopidae. Further study will significantly increase the volume of spider fauna at the WSBS of MSU.

REFERENCES

1. Mikhailov, K.G., Order Aranei Clerck, 1757, spiders, in *Katalog bioty Belomorskoi biologicheskoi stantsii MGU* (Catalogue of the Biota of the White Sea Biological Station of Moscow State University), Chesunov, A.V., Kalyakina, N.M., and Bubnova, U.N., Eds., Moscow: KMK, 2008, p. 318.
2. *Pochvennye bespozvonochnye belomorskikh ostrovov Kandalakshskogo zapovednika* (Soil Invertebrates of the White Sea islands of the Kandalaksha Reserve), Gilyarov, M.S., Ed., Moscow: Nauka, 1986.
3. Shutova, E.V., Influence of the collection method on the study of the species composition of spiders (Aranei), in *Mater. nauch. konf. Belomorskoi Biol. Stantsii. 11–12 avgusta 1999 g.* (Proc. Sci. Conf. White Sea Biol. Stn., August 11–12, 1999), Moscow, 1999, pp. 65–69.
4. Mikhailov, K.G., Advances in the study of the spider (Aranei) fauna of Russia and adjacent regions: a 2011 update, *Arthropoda Sel.*, 2013, vol. 22, no. 1, pp. 47–53.

Translated by N. Shulaev