

MOSSES OF AVAM TUNDRA (SOUTH TAIMYR)

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This paper presents the results of identification of the mosses collected in the south of the North Siberian Lowland in the southern part of the Taimyr Peninsula, in the Dudypta River midstream (70.5–71.5° N, 90.5–95.0° E). The study area, known as the Avam tundra belongs to the northern larch sparse woodland and southern tundra subzones.

The mosses were collected at three key sites: I – Nerpalakh, II – Bataika, III – Kystyktakh from July 23 to August 9, 2021. About 5000 moss samples were identified in total. The checklist comprises 179 species and provides data on preferred types of habitats in descending order of occurrence. For rare species, herbarium labels are quoted. The numbers of the species records within each site are presented in Appendix.

The greatest diversity of species was observed at the Bataika site (see Appendix), where 140 species of mosses were recorded. 125 species were revealed at the Kystyktakh, at the Nerpalakh – 111. The similarity coefficient of the three local bryophyte floras varies within 0.68–0.74.

The bryophyte flora of the Avam tundra is typical of the plains of Taimyr within the tundra zone. The local flora of each site is comparable by the number of species to the previously well-studied flora of the vicinity of Kresty settlement (Kannukene, Matveyeva, 1986) at the mouth of the Dudypta River (southern tundra).

The greatest contribution to the diversity of mosses is made by the habitats of zonal frost boil communities and meadow communities on steep riverbank slopes of southern exposition with gaps, where many rare moss species can be found.

Four species are recorded in the Taimyr Peninsula for the first time: *Meesia hexasticha*, *Niphotrichum elongatum*, *Oncophorus integerrimus*, *Sphagnum inexpectatum*. Rarely found *Aloina brevirostris*, *Amblystegium serpens*, *Aplodon wormskioldii*, *Arctoa fulvella*, *Distichium inclinatum*, *Encalypta longicolla*, *Meesia minor*, *Schistidium sordidum*, *Stegonia pilifera*, *Stereodon subimponens*, and *Tomentypnum vittii*.

Many common boreal forest and mire species – *Brachythecium salebrosum*, *Dicranum fuscescens*, *Helodium blandowii*, *Ptilium crista-castrensis*, *Sciuro-hypnum reflexum*, *Sphagnum angustifolium*, *S. girgensohnii*, *S. majus*, *S. russowii* – are quite rare in the Avam tundra.

A characteristic feature of the studied bryophyte flora is a wide species diversity of the genus *Sphagnum* (22), several of them are rare species – *Sphagnum alaskense*, *S. arcticum*, *S. inexpectatum*, *S. mirum*. *Sphagnum orientale* occurs everywhere in the southern tundra subzone, and is often accompanied by *S. beringiense*. *Sphagnum perfoliatum* and *S. steerei* are found on several peatland areas.

Keywords: bryoflora, species diversity, distribution, ecology, phytocenology, Taimyr, Russia

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