

LICHENS IN THE POLAR DESERTS OF THE NORTHERN TIP OF THE NOVAYA ZEMLYA ARCHIPELAGO

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For the polar deserts of the Novaya Zemlya archipelago, the analysis of the dependence of the distribution of lichens on altitude above sea level, exposure by countries of the world, the granulometric composition of soils, morphometric parameters of structural soils, the coverage of bryophytes and the total coverage of cushion plants and lichens was carried out. Based on 157 geobotanical relevés, 9 lichenocentotypes (aggregates of lichens formed in a certain type of habitat) were identified. It is shown that the cover and the number of lichen species decrease with increasing altitude (during the transition from zonal to orozonal positions). The coverage values also decrease with an increasing coverage of bryophytes. With an increasing content of the fraction coarser than 0.125 mm in soils, the species diversity and the coverage of lichens increase. A total of 84 lichen species were identified, only one of them is classified as especially active, 9 are highly active, 11 are medium-active, the rest are little active and inactive. The current pattern of lichen distribution in the landscape of the far north of Novaya Zemlya is largely due to historical reasons – the youth of the landscape recently freed from the ice cover, an exceptionally high degree of mobility of the cover of loose Quaternary deposits.

Keywords: lichens, lichenocentotype, habitat, species activity, altitude gradient, soil moisture, nivality, granulometric composition, polar deserts, Novaya Zemlya

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