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Diatoms of modern bottom sediments in Siberian arctic

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Abstract

The investigation of the species composition and ecology of diatoms of modern bottom sediments in water bodies of arctic polygonal tundra in three subregions of North Yakutiya has been carried out. As a result, 161 taxons of diatoms were determined; the determinant role of the depth, conductivity, pH of the water, and geographic latitude in their distribution was confirmed, and two complexes of species with respect to the leading abiotic factors were distinguished. The diatoms of the first complex prefer shallow water bodies of high latitudes with neutral and slightly alkaline water and relatively high conductivity. The second complex is confined to the water bodies of lower latitudes with small conductivity, as well as neutral and slightly acidic water. © 2012 Pleiades Publishing, Ltd.

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Keywords

Arctic water reservoirs, bottom sediments, complexes, diatoms, ecology