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Diversity and Floristic Composition in Diatom Samples of a Glacial Lake

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Abstract: The first investigation of diversity in diatom samples of Dushku Lake was performed in order to describe their temporal and spatial dynamics and floristic composition. A number of 65 taxa were recorded in 24 samples. Considerable spatial differences in diversity were established. Generally, diversity was higher in shallow parts of the lake than in the pelagic region. Low diversities (below 1 on Shannon's diversity index) were characterized by domination of large pennate diatoms (*e.g. Fragilaria ulna, F. crotonensis, Asterionella formosa*), or centric *Cyclotella radiosa*. Higher diversities (above 2) were characterized by colonial *Fragilaria capucina* and *F. construens* fo. *construens*. According to relative abundance only 11 taxa play an important role in forming planktonic diatom communities. These are: *Asterionella formosa, Cyclotella radiosa, Fragilaria arcus, F. capucina* var. *capucina*, *F. construens* fo. *construens*, *F. crotonensis*, *F. ulna*, *Gomphonema angustatum*, *Navicula cryptotenella*, *Nitzschia linearis* var. *linearis* and *Planothidium lanceolatum*.

***Key words**: diatoms, diversity, Dushku Lake.*

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