

Diatom communities of Ardley Island, South Shetland Islands

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The Antarctic diatom flora has been in the centre of interest of many studies in past decades. The present paper brings new information on the species richness, biogeography and community composition of diatoms on Ardley Island, South Shetland Islands. One freshwater and ten soil samples had been collected in the spring of 2019. Latter analysis revealed presence of eighty-six diatom taxa in well-developed communities, dominated by *Luticola muticopsis*, *L. truncata*, *Pinnularia australoschoenfelderi*, *P. austroshetlandica* and *P. borealis*. According to the current biogeographical knowledge, the majority of species have restricted distribution among the Antarctic Realm, 46.5% of them are reported from various islands of the Maritime Antarctic Region. Species composition of the diatom communities seems to be driven by the moisture and the amount of nutrients available. The results of this study are broadening the knowledge about diatom biogeography, however, further research on the Ardley Island would be beneficial.