

# Diatoms in the biostratigraphy of interglacial sediments of Lithuania

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Some studies of diatom flora from different interglacial sediments were made to ascertain the possibilities to use this analysis for the biostratigraphy and correlation of sediments.

More representative complex of diatoms was found in the Middle Pleistocene (Butėnai, Holstein) interglacial sediments. This complex differs by the diversity and abundance of plancton representatives of *Cyclotella* (Kütz.) Breb. genus and includes groups of extinct species and Pliocene-Pleistocene exotic relicts. Some species with archaic features in a structure of frustule were found as well.

More difficult is identification of other Middle Pleistocene (Snaigupėlė and Turgeliai) interglacial diatom complexes. They have some differences, distinguishing them from recent diatoms, but the establishing reliable age criteria need additional studies.

The Late Pleistocene (Merkinė, Eemian) diatom complex is similar to recent one. It contains only a small amount of relict species.

Correlation of lacustrine sediments is very complicated, because during the same time and in the same physical - geographical conditions there were lakes of various size and depth and with various diatom floras. It is better to correlate diatom complexes from the same facies and from the deepest part of the paleobasin. Sometimes correlation is difficult, because the investigated section reflect only a short period (beginning or the end) of interglacial.