INITIAL CELLS OF A FRESHWATER DIATOM FRUSTULIA CRASSINERVIA (BRÉBISSON) LANGE-BERTALOT & KRAMMER

Anna Nesterovich

Laboratory of Algology, Komarov Botanical Institute, Russian Academy of Sciences

During an ongoing biodiversity inventory in the "Vepssky forest" Natural Park a sample of foam from a water surface was collected (Lerinskoe Lake, $60^{\circ}08'03.3''N$, $035^{\circ}04'01.3''E$). The sample contained a few *Frustulia* species, one of which, *F. crassinervia* (Brebisson) Lange-Bertalot & Krammer, was caught during sexual reproduction. Newly formed initial cells, partially covered by the perizonium, were measured. They range in size from 62 to 65 μ m long and from 12 to 14 μ m wide. The initial thecae, as normal, had a modified morphology. Unlike vegetative cells, they were narrow, linear to linear-lanceolate, often with wavy and uneven margins, ends were not protracted, rostrare or subrostrate. The helictoglossae were long, narrow, and linear. The proximal raphe fissures were widely separated, ranging from 6.2 to 8 μ m. However, as well as vegetative cells, initial cells had central and terminal raphe ends with T-shaped fissures and striae around the terminal nodules. Since initial cells of pennate diatoms are not seen very often in nature, their descriptions from different localities maybe of interest. A curious fact about this finding is that *Frustulia* reproduced near the water surface, though it is a benthic and epiphytic species.