

ON THE MEMBERS OF THE GENUS *AULACOSEIRA* (BACILLARIOPHYTA) NEW FOR THE FLORA OF RUSSIA

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This study of morphological traits of the frustules of the *Aulacosiera* taxa (*A. subarctica*, *A. subborealis*, *A. scalaris*, *A. pusilla*) has shown a higher variability in quantitative (valve diameter, height of its mantle, the ratio of the mantle height to the valve diameter, number of areolae and striae in 10 μm) and qualitative (arrangement of areolae on the valve face and mantle) characteristics. For the first time, the length and shape of spines as well as the size of ringleist have been evaluated for *A. scalaris* and *A. pusilla* – new species to the flora of Russia. The data obtained from this study have allowed to extend diagnoses of these species, refine taxonomic position of two species known before in Russia, *A. subarctica* and *A. subborealis*, specify their ecology, and reduce *A. stevensiae* to the synonymy of *A. pusilla*.

Keywords: Bacillariophyta, *Aulacoseira subarctica*, *A. subborealis*, *A. scalaris*, *A. pusilla*, *A. stevensiae*, morphology, taxonomy, distribution, ecology, electron microscopy, new records

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