

Pseudo-nitzschia obtusa

Kingdom	Chromista
Phylum	Bacillariophyta
Class	Bacillariophyceae
Order	Bacillariales
Family	Bacillariaceae
Genus	Pseudo-nitzschia
Species	obtusa
Authority	(Hasle) Hasle & Lundholm

Description

Forms stepped chains. Two chloroplasts, one in each end, are seen in the cells. The cells are lanceolate and slightly asymmetrical, with one straight and one convex side, in valve view. In girdle view they are lanceolate with truncate ends. The valves have an eccentric raphe and lack a central nodule, and approximately an equal number of striae and fibulae. Each stria has 2 rows of poroids. Each cingulum has three bands.

Morphometrics

Apical axis (heteropolar) 39-82 µm, transapical axis 2.9-5.0 µm, 15-22 striae and fibulae in 10 µm, 6-8 poroids in 1 µm. First girdle band with 28-32 band striae in 10 µm, each being 2 poroids high and 2-3 poroids wide.

P. obtusa can be confused with *P. seriata*, but *P. seriata* has longer cells (91-160 µm), is more pronounced asymmetrical in valve view, and has a wider valve (4.6-8.0 µm) compared to *P. obtusa*. *P. seriata* has 2-4 (most often 4) rows of poroids in contrast to 2 rows in *P. obtusa*. Finally, *P. seriata* has a smaller density of girdle band striae (21-24).

Distribution

Rarely reported outside Arctic waters, only in colder waters in northern temperate areas.

References

Hasle GR & Lundholm N. 2005. *Pseudo-nitzschia seriata* f. *obtusa* (Bacillariophyceae) raised in rank based on morphological, phylogenetic and distributional data. Phycologia 44:608-619.

Throndsen J. Hasle G.R. and Tangen K. 2007. *Phytoplankton of Norwegian coastal waters*. Almatel Forlag AS. 341 pp