



a diatom

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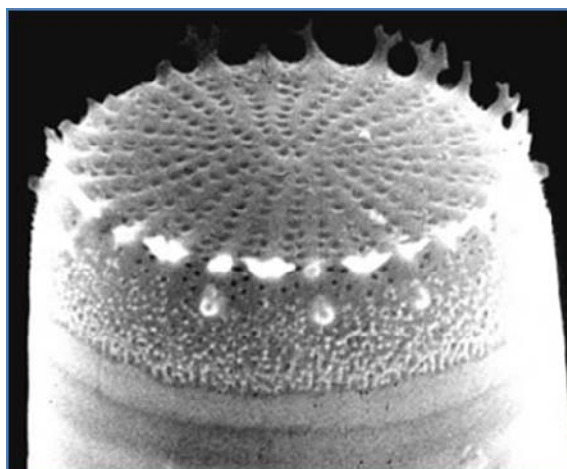
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Common Name	a diatom
Genus & Species	<i>Stephanodiscus binderanus</i>
Family	Stephanodiscaceae
Order	Thalassiosirales
Class	Coscinodiscophyceae

Diagnosis: An obligate colonial species that occurs in filaments. Valve faces typically flat but may exhibit concentric undulations that occur at right angles to valve mantles. Valve spines are forked. Some cells of this species may exhibit an occluded or slit-shaped areola. Thick pores occur in a ring on the mantle. Average volume of this species is typically 830 cubic microns.

Ecology: Blooms of this species usually occur in both spring and fall. Growth is typically triggered by changes in temperature, nutrients, and other abiotic factors.

Habitat & Distribution: This diatom prefers waters with eutrophic and/or brackish conditions. It's native to the Baltic Sea and is considered to be a Eurasian species. In the U.S., this species was first recorded from the Great Lakes basin in the mid- to late- 1930's. Introduction of the species into the U.S. has been attributed to transport in vessel ballast water.



Status: In Illinois, this species was recorded from Lake Michigan in 1938. Since its introduction it has caused water quality problems in treatment plants. This diatom is capable of clogging filters and effecting the smell and taste of drinking water. In addition, this species may also have caused the extirpation of 5 native diatoms from Lake Ontario.

USGS Fact Sheet: <http://nas.er.usgs.gov/queries/FactSheet.aspx?SpeciesID=1687>