



cryptic algae

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Common Name	cryptic algae
Genus & Species	<i>Cyclotella cryptica</i>
Family	Stephanodiscaceae
Order	Thalassiosirales
Class	Coccinodiscophyceae

Diagnosis: A circular unicellular algae ranging from 8-16 microns in diameter. This species is characterized by its very stiff, thin, crystalline, and chitinous fibril appendages that attach to the pores of the valves composing its cell wall. Valves are almost flat to slightly concentrically undulate. Around the valve's edge, there are wide striae with chambers. In between there are costae arranged radially and terminating with a small spine near the edge of the valve. Different morphologies are often exhibited depending on water salinity.

Ecology: This species is typically characterized as photoautotrophic, meaning it uses inorganic carbon sources and light in photosynthesis. However, this species is also capable of heterotrophic growth in benthic environments by utilizing glucose. It poses a risk to native algae by producing exudates that suppresses their growth responses.

Habitat & Distribution: This diatom is able to tolerate a wide range of salinities. Its native range is unknown; however, its current distribution is widespread. In the U.S., this species occurs within the Great Lakes basin and has dispersed throughout all of the Great Lakes except Lake Superior. In Lake Ontario, *Cyclotella cryptica* has been documented as accounting for 18.5% of overall diatom abundance.

Status: This species was recorded from Lake Michigan for the first time in 1964. Introduction outside of the species native range is attributed to transport in vessel ballast water.

USGS Fact Sheet: <http://nas.er.usgs.gov/queries/factsheet.aspx?SpeciesID=1671>

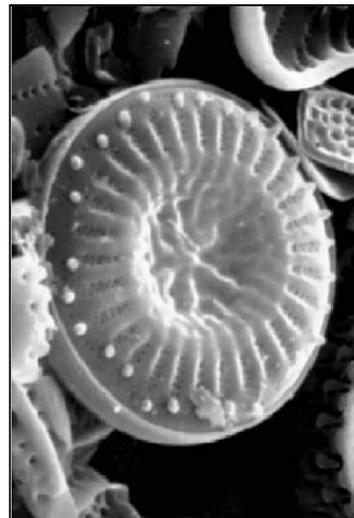


Photo source: NOAA