

## **TYPIFICATION OF THE PUZZLING DIATOM SPECIES *NEIDIUM IRIDIS* EHRENB. INCLUDING DNA FOR THE DIATOM LIBRARY**

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Researchers have looked through the New York mica's (West Point) for *Navicula iridis* (e.g. Lange-Bertalot pers. Comm., P.B. Hamilton) but were not able to find a specimen of *N. iridis*. Katarzyna Stachura-Suchoples and Wolf-Henning Kusber were able to find two specimens from the New York (West Point) micas matching the line drawing of Ehrenberg. In addition, original material was found. The objective of this study is to circumscribe and emend the species description of *Neidium iridis* (*Navicula iridis*) using original and current samples from North America. Comparisons are also made with an unknown taxon, and two other closely related taxa *N. columnaris* (Ehrenb.) Mills and *N. maximum* (Cleve) F.Meister which have not been typified. Genetic data for *N. iridis* and other *Neidium* taxa are further used to identify a simple phylogenetic structure within the genus.