

ORAL PRESENTATION

A POTENTIALLY NEW SPECIES OF *RHOICOSIGMA* FROM THE BAHAMAS.

Michael K. Hein

Water & Air Research, Inc., Gainesville, Florida 32608, U.S.A. (mhein@waterandair.com)

A potentially new species of *Rhoicosigma* is described from benthic marine macro-algae and seagrasses northwest of Andros Island, Bahamas. Specimens observed ranged in length from 30 - 70 microns and a width of 6 - 9 microns, with 30 - 32 striae in 10 microns. Specimens are similar to *R. compactum* (Greville 1857) Grunow 1867 but are smaller and have finer striae. The frustule is slightly sigmoid in valve view and arched in girdle view. The epivalve is concave with the raphe straight or gently flexed. The hypovalve is convex with the raphe strongly sigmoid.

SEM reveals that the valves have loculate areolae with the areolae opening to the valve exterior as apically elongated slits. Externally, the proximal raphe endings are deflected in the same direction and terminate in pore-like expansions. The distal raphe endings are strongly bent in opposite directions and in the same direction as the curvature of the valve end. In contrast, the areolae openings on the interior of the valves are rectangular, being elongated apically. The proximal raphe endings are simple and straight whereas the distal raphe endings terminate in a conspicuous helictoglossa. Internally there is a V-shaped siliceous thickening on both sides of the central area.