



Observations on

Raphidocystis pallida (F. E. Schulze 1874) Zlatogursky 2018

Most likely ID: n. a.

Synonyms: *Raphidiophrys pallida* Schulze 1874

EOL Phylogenetic tree: [Raphidocystis pallida](#)

Heliozoans as neuston members

Two feeding communities of *Raphidocystis pallida* could be seen with the dissecting microscope near a chitin shell of a dead mosquito on the surface membrane of the water of a Petri dish with sample water from a bog pond.



Fig. 1: Feeding community of *Raphidocystis pallida*. Scale bar indicates 100 μm .
Sample from Pond Suploch, Hiddensee (Germany) Latitude: 54.538638, Longitude: 13.097802.

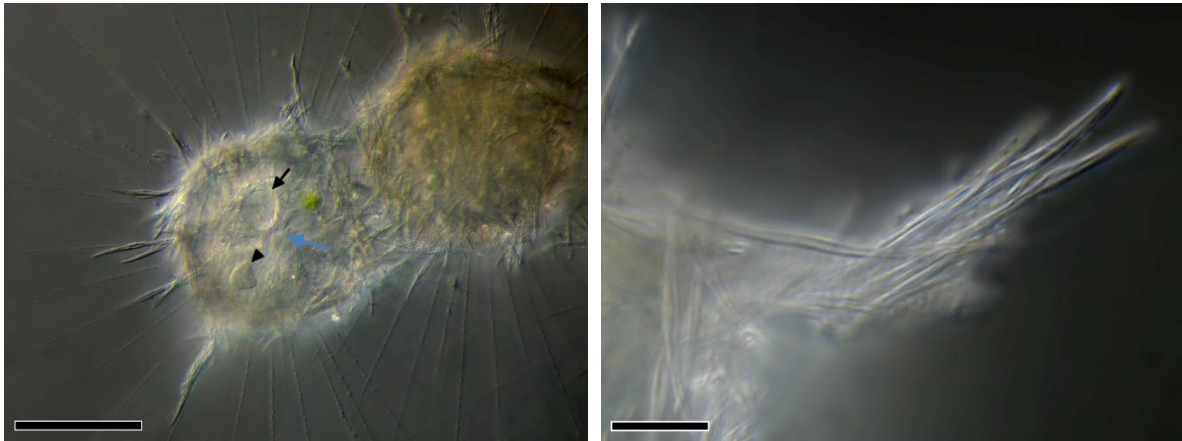


Fig. 2: Picture detail showing the nucleus (arrowhead) and the contractile vacuole (arrow). The centroplast is faintly visible (blue arrow). Scale bar indicates 50 μm .

Fig. 3: In *Raphidocystis* the spiculae also adhere a short distance along the axopodia. Scale bar indicates 10 μm .

Typical for *Raphidocystis*, many 10–30 μm long needle-like silicate scales (spiculae) stick tangentially in a mucous cell sheath. This thick cuticle scatters light a lot, so it was not easy to get a sufficiently clear view of the centroplast and nucleus. Unfortunately, the Fig. 2 don't show the centroplast clearly. The centroplast is the origin and organizing center of the microtubules, which in bundles stabilize the axopodia, the radiating pseudopods of the heliozoans. This structure is determinative for the order Centroplasthelida, to which the genus *Raphidocystis* belongs (Fig. 1–3).