Notosolenus apocamptus

(Stokes, 1884) Stokes, 1884

Most likely ID: n.a.

Synonym: n.a.

Sampling location: Simmelried

Phylogenetic tree: Notosolenus apocamptus

Diagnosis:

- body oval with longitudinal, dorsal groove
- cross-section of body is curved
- length 7-16 μ m, width 4-8 μ m
- reservoir on right side
- nucleus on left side
- locomotion flagelling twice of body length
- trailing flagellum up to three-quarter of body length
- anterior and posterior end can be beveled



Notosolenus apocamptus

I found *Notosolenus apocamptus* in the <u>Simmelried</u> in November 2007 and in May 2024. I have not yet been able to find this species in my other sampling sites.

Notosolenus apocamptus can be confused with *Petalomonas minuta*, but the genus *Petalomonas* has only one flagellum, so the detection of the trailing flagellum (s. fig. 1 b) is important for identification. *Notosolenus apocamptus* has a dorsal groove, which is why the flagellate appears curved in cross section (s. figs. 1 c and 1 d). In addition, the anterior or posterior end is often often trancated at an angle.

Notosolenus apocamptus was found in freshwater by Stokes and Skuja. However, Larsen & Patterson (1990) also found this flagellate in saltwater. In 2012 Schroeckh et al. described a similiar species with a ventral groove as *Notosolenus rhombicus*.



Fig. 1 a-e: *Notosolenus apocamptus*. $L = 15 \mu m$. Dorsal view (a, b), apical view (c, d) and lateral view (e) of a freely swimming specimen. Note the beveled anterior end (arrow) and that the body is arcuate in cross section due to the dorsal groove (DG). CV = contractile vacuole, LF = locomotion flagellum, Nu = nucleus, TF = trailing flagellum. Obj. 100 X.



Fig. 2 a-f: Notosolenus apocamptus. $L = 10 \mu m$. Dorsal view of a second, freely gliding specimen. CV = contractile vacuole, LF = locomotion flagellum, Nu = nucleus, TF = trailing flagellum. Obj. 100 X.



Fig. 3 a-f: Notosolenus apocamptus. $L = 11 \mu m$. Dorsal view of a third, freely gliding specimen. CV = contractile vacuole, LF = locomotion flagellum, Nu = nucleus, TF = trailing flagellum. Obj. 100 X.