Notosolenus apocamptus

Stokes, 1884

Most likely ID: n.a.

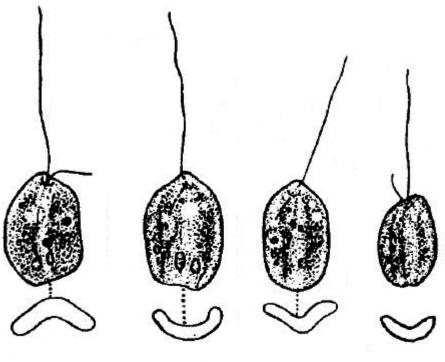
Synonym: n.a.

Sampling location: Simmelried

Phylogenetic tree: Notosolenus apocamptus

Diagnosis:

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



after Skuja

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 truncated 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*.

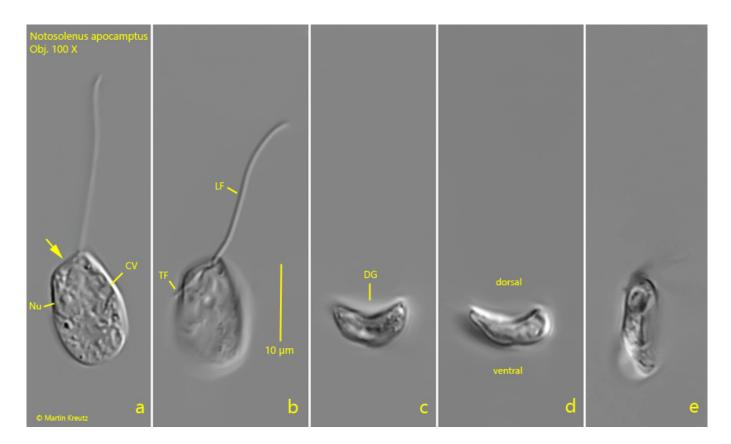


Fig. 1 a-e: Notosolenus apocamptus. $L = 15 \mu m$. Dorsal view (a, b), apical view (c, d) and lateral view (e) of a freely swimming specimen. Note the obliquely trunctaed anterior end (arrow) and that the body is arcuate in cross section due to the dorsal groove (DG). CV = contractile vacuole, LF =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

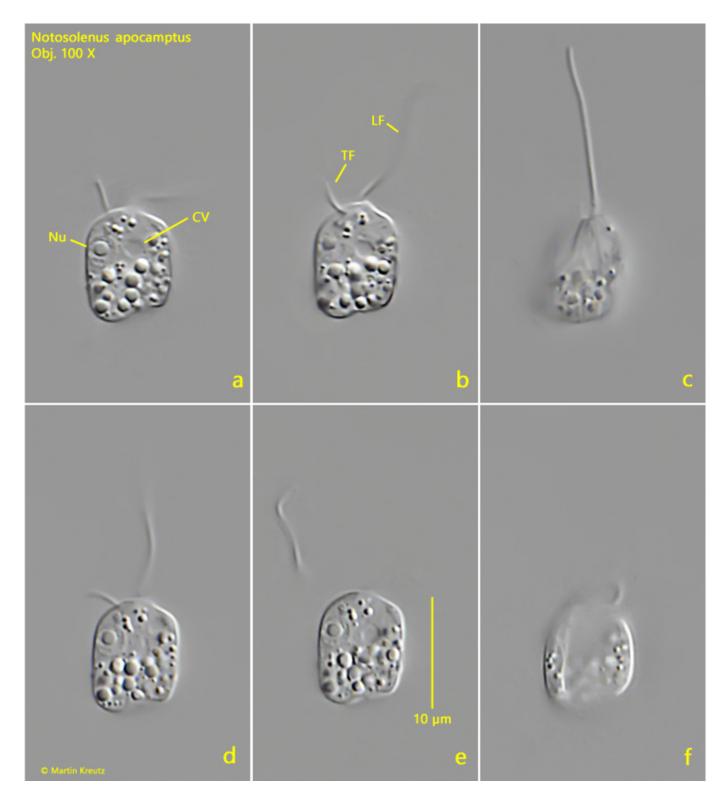


Fig. 2 a-f: *Notosolenus apocamptus.* $L=10~\mu m.$ Dorsal view of a second, freely gliding specimen. CV= contractile vacuole, LF= locomotion flagellum, Nu= nucleus, TF= trailing flagellum. Obj. 100 X.

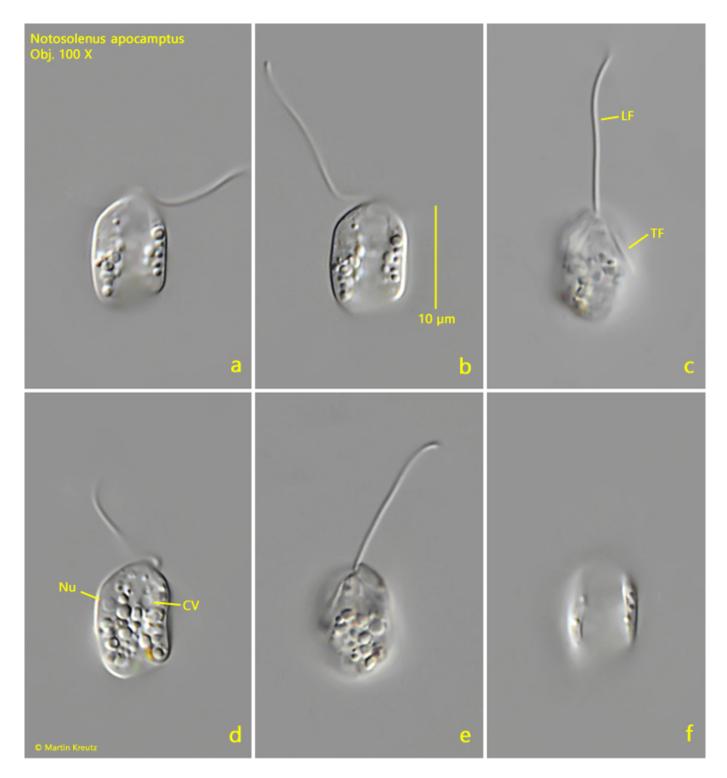


Fig. 3 a-f: Notosolenus apocamptus. $L = 11 \mu m$. Dorsal view of a third, freely gliding specimen. CV = contractile vacuole, LF = locomotion flagellum, Nu = nucleus, TF = trailing flagellum. Obj. 100 X.