Closterium abruptum West, 1892

Most likely ID: n.a.

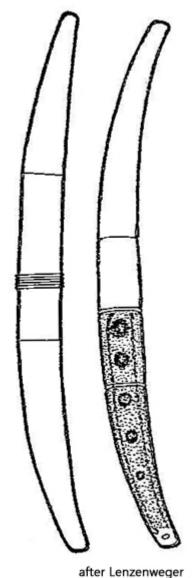
Synonym: n.a.

Sampling location: Schwemm Moor (Austria)

Phylogenetic tree: Closterium abruptum

Diagnosis:

- cell slightly curved, mid-region sometimes straight
- apices broad, obliquely truncated
- terminal pore absent
- length 120-260 μm, width 10-17 μm
- cell wall colorless or brownish
- chloroplasts with 2-3 longitudinal ridges
- up to 7 pyrenoids per chloroplast in a row
- girdle bands present
- cell wall with faint striation or puncturing
- terminal vacuoles with 1-3 rhomboidal crystal aggregates



Closterium abruptum

So far, I have only found *Closterium abruptum* in the <u>Schwemm Moor</u> (Austria). I have not been able to find this species at other locations.

Closterium abruptum is a medium-sized species. An important distinguishing feature is the mostly straight middle section of the cell and the obliquely truncated apices. Only under high magnification can one see that the cell wall is not smooth, but has very faint striations or punctures. The terminal vacuoles contain only a few individual crystals or crystal aggregates. In my population, there was often only one solitary crystal (s. fig. 4).

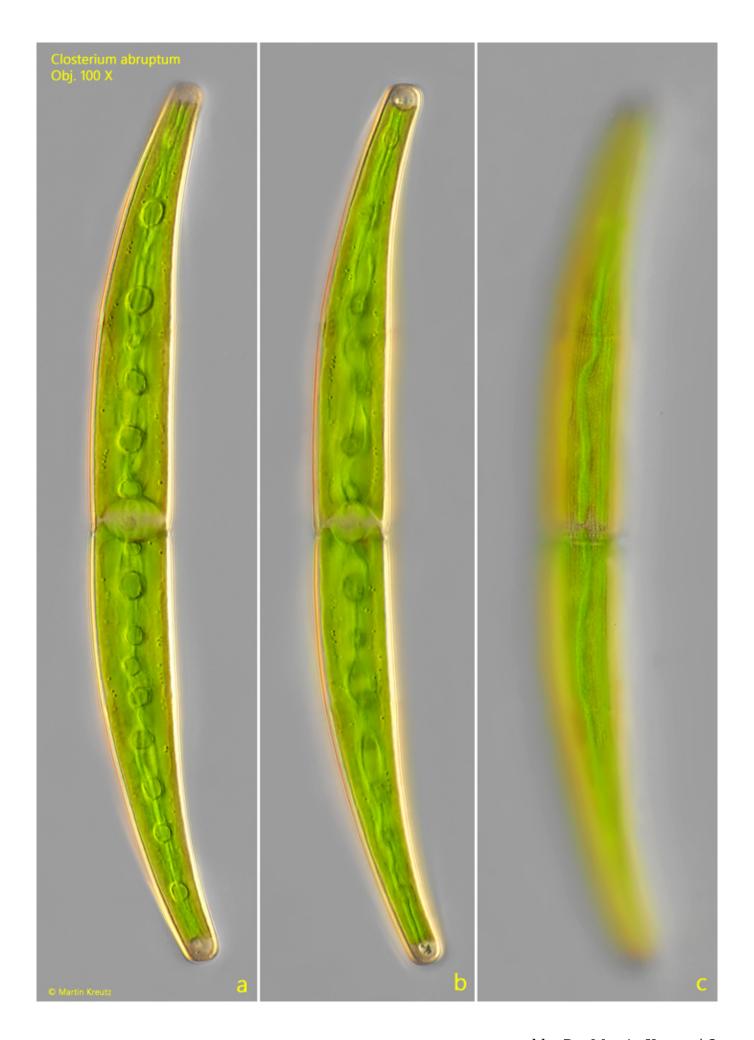


Fig. 1 a-c: Closterium abruptum. L = 185 μm . Three focal planes of a specimen in DIC. Obj. 100 X.

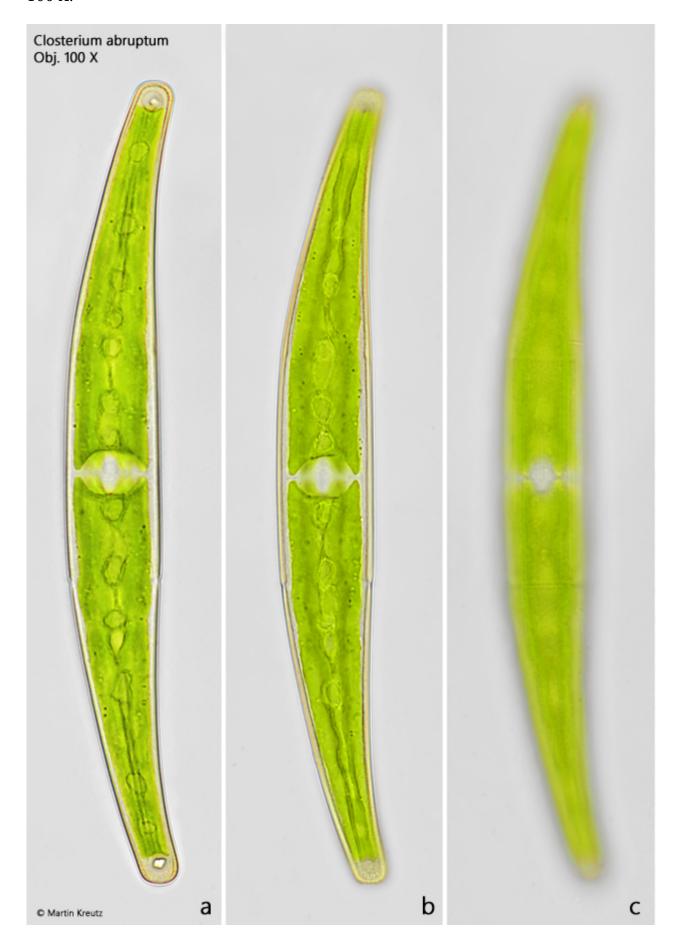


Fig. 2 a-c: Closterium abruptum. $L = 158 \mu m$. A second spcimen in brightfield illumination. Obj. 100 X.



Fig. 3: Closterium abruptum. Focal plane on the delicate puncturing of the cell wall. Obj. 100 X.



 $\textbf{Fig. 4:} \ \textit{Closterium abruptum}. \ \textbf{The apex with a single crystal in the terminal vacuole (TV)}.$ Obj. 100 X.