

*Closterium acerosum*

Ehrenberg ex Ralfs, 1848

**Most likely ID:** n.a.

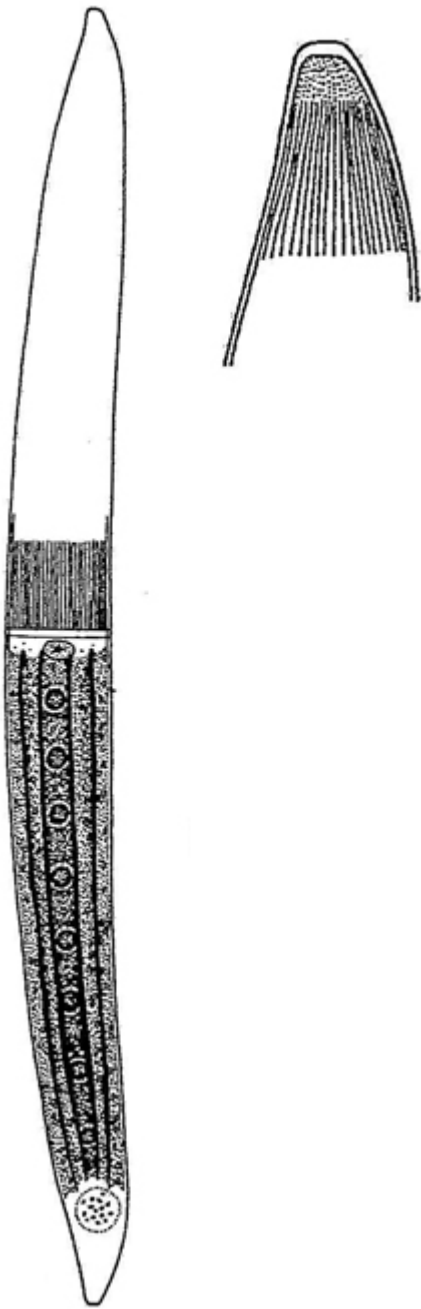
**Synonym:** n.a.

**Sampling location:** [Ulmisried](#), Pillersee Moor (Austria)

**Phylogenetic tree:** [Closterium acerosum](#)

**Diagnosis:**

- cells long, slender, slightly curved, inner margin almost straight or concave
- length 250-800 µm, width 30-60 µm
- cells taper shortly before apices
- cell wall colorless, yellowish or brownish
- chloroplast with 3-4 longitudinal ridges
- up to 18 pyrenoids per semi-cell, slightly irregularly arranged
- cell wall with fine striation, rarely punctate
- cell wall of apices punctate
- terminal vacuoles with large number crystals



after Skuja

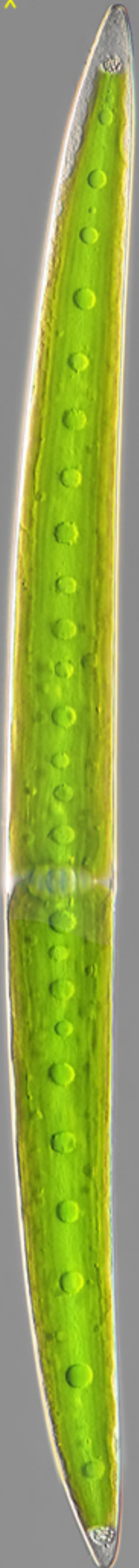
### Closterium acerosum

So far I have only found *Closterium acerosum* in [Ulmisried](#) and in the Pillersee Moor. This species grows very large and is easy to recognize in the samples. However, *Closterium acerosum* can be confused with the similar *Closterium pritchardianum*, which has a very similar shape. However, the cell wall of *Closterium pritchardianum* shows clear rows of dots and interrupted lines, while the cell wall of *Closterium acerosum* shows a fine line pattern (s. fig. 2), which only rarely appears slightly dotted. According to my measurements, there are 12-14 lines/10  $\mu\text{m}$  (s fig. 2).

More information and images on *Closterium acerosum*: [Alfred van Geest-Digital](#)

[image collection of Desmids-\*Closterium acerosum\*](#)

Closterium acerosum  
Obj. 40 X



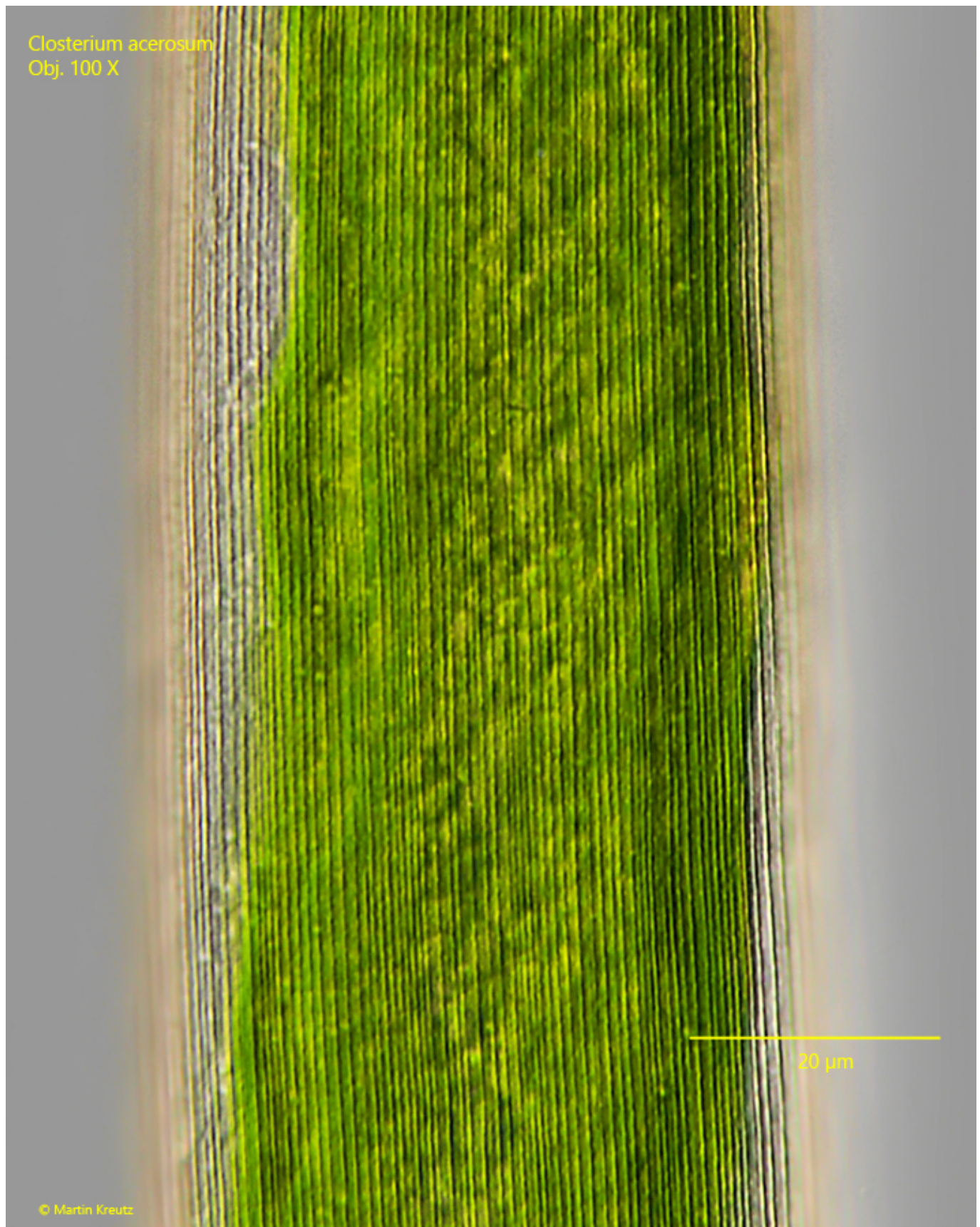
a



b

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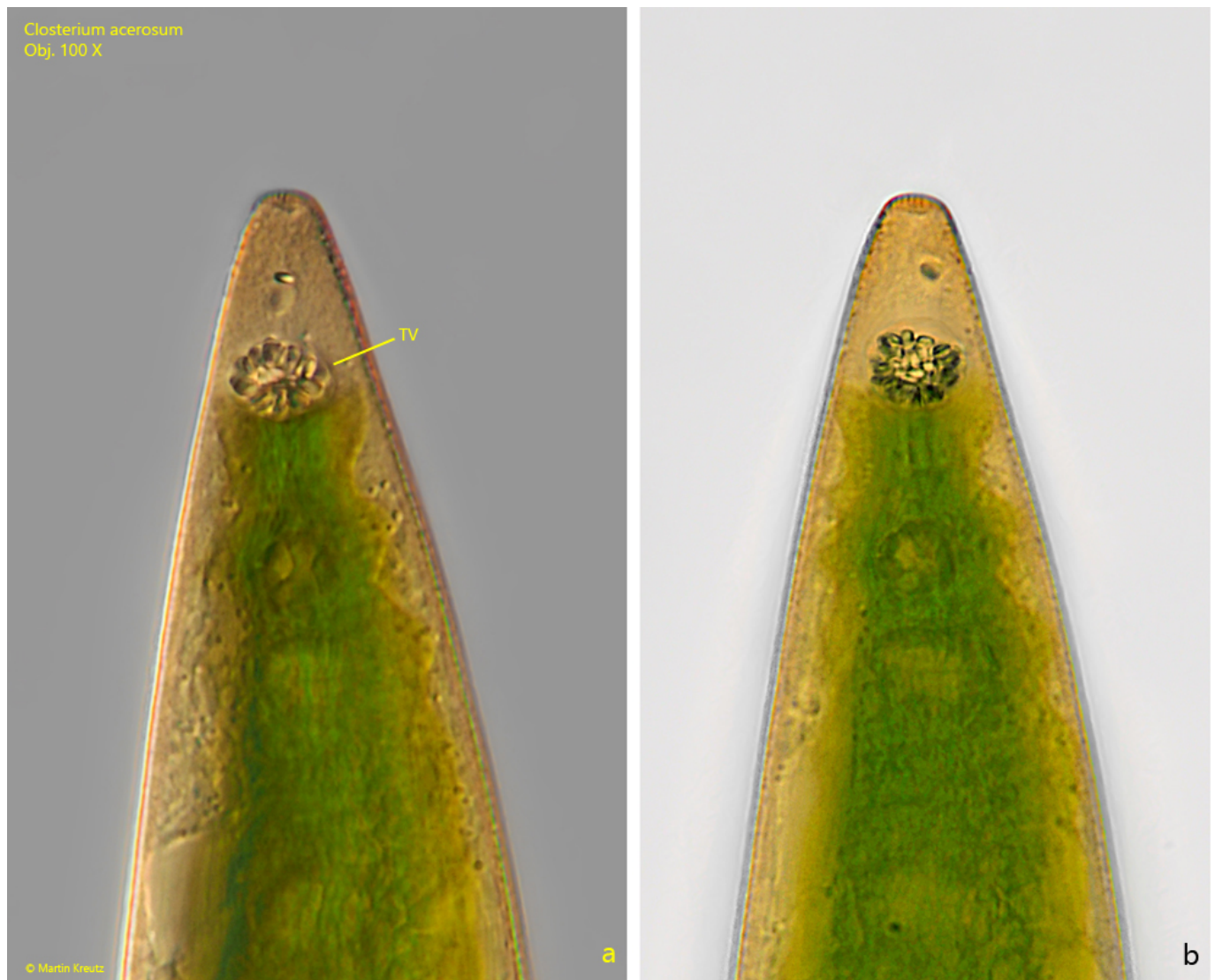
**Fig. 1 a-b:** *Closterium acerosum*. L = 652  $\mu\text{m}$ . Two focal planes of a specimen in DIC. Obj. 40 X.



**Fig. 2:** *Closterium acerosum*. The surface of the cell wall with a fine striation of



about 12 lines/10  $\mu\text{m}$ . Obj. 100 X.



**Fig. 3 a-b:** *Closterium acerosum*. The apex in DIC (a) and brightfield illumination (b). The terminal vacuole (TV) is filled with a large number of moving crystals. Obj. 100 X.



**Fig. 4:** *Closterium acerosum*. The cell wall of the apices are punctate (arrow). Obj. 100 X.