

## ***Closterium kuetzingii* Brebisson, 1856**

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

**Synonym:** n. a.

**Sampling location:** [Simmelried](#)

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

### **Diagnosis:**

- cell body attenuating into long narrow ends, mid-body spindle-shaped
- length 270-550  $\mu\text{m}$ , width 18-30  $\mu\text{m}$
- distal ends curved, slightly swollen, each with an apical porus
- two chloroplasts with 5 lamellae each in both semi-cells
- at the distal ends of the chloroplasts each one vacuole filled with oval shaped crystals
- each chloroplast with 4-6 pyrenoids
- cell wall brownish, with striation of 8-11 lines/10  $\mu\text{m}$
- nucleus central between the chloroplasts

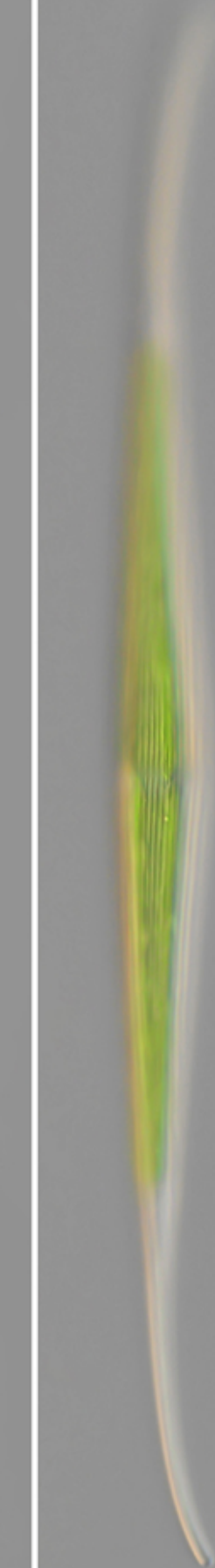


after Lenzenweger

### *Closterium kuetzingii*

I find *Closterium kuetzingii* regularly in the [Simmelried](#). The shape of the cell is somewhat reminiscent of an arch. The ends of the cells are slightly bent. *Closterium kuetzingii* can be distinguished from the similar species *Closterium rostratum* and *Closterium setaceum* by the shape and length of the semi-cells. In *Closterium setaceum*, the distal ends are much more strongly elongated and slender, while *Closterium rostratum* is more compact in appearance and has shorter and thicker distal ends.

*Closterium kuetzingii*  
Obj. 40 X



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**a**

**b**

**Fig. 1 a-b:** *Closterium kuetzingii*. L = 465  $\mu\text{m}$ . Two focal planes of a slightly squashed specimen. Obj. 40 X.

*Closterium kuetzingii*  
Obj. 60 X

PY  
Nu  
SG

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a

20 µm

b

**Fig. 2 a-b:** *Closterium kuetzingii*. L = 578  $\mu\text{m}$ . Two focal planes of the spindle-shaped mid-body. Nu = nucleus, PY = pyrenoids, SG = starch grains. Obj. 60 X.



**Fig. 3:** *Closterium kuetzingii*. At the distal end of each chloroplast a vacuole filled with oval crystals (VC) is located. Obj. 60 X.

Closterium kuetzingii  
Obj. 100 X

PO



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**Fig. 4:** *Closterium kuetzingii*. The distal end of a cell in detail. Note the slightly swollen distal end with an apical porus (PO). Obj. 100 X.