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 µm, width 18–30 µm
- 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 µm
- 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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Fig. 1: *Closterium kuetzingii.* L = 578 µm. Total view of a slightly squashed specimen. Obj. 40 X.

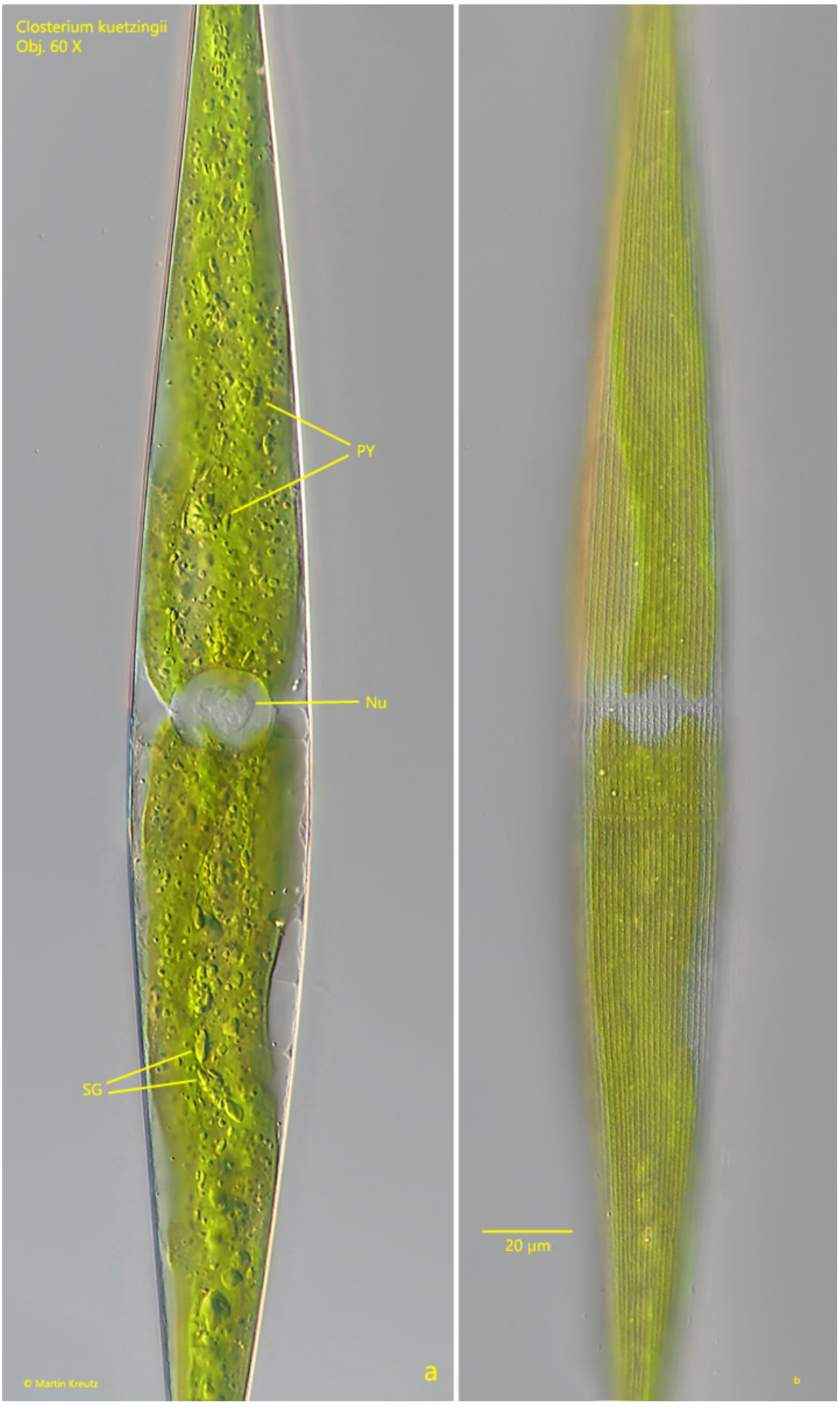
Closterium kuetzingii
Obj. 60 X
PY
Nu
SG
© Martin Kreutz
a
20 µm
b

Fig. 2 a-b: *Closterium kuetzingii.* L = 578 µm. 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.

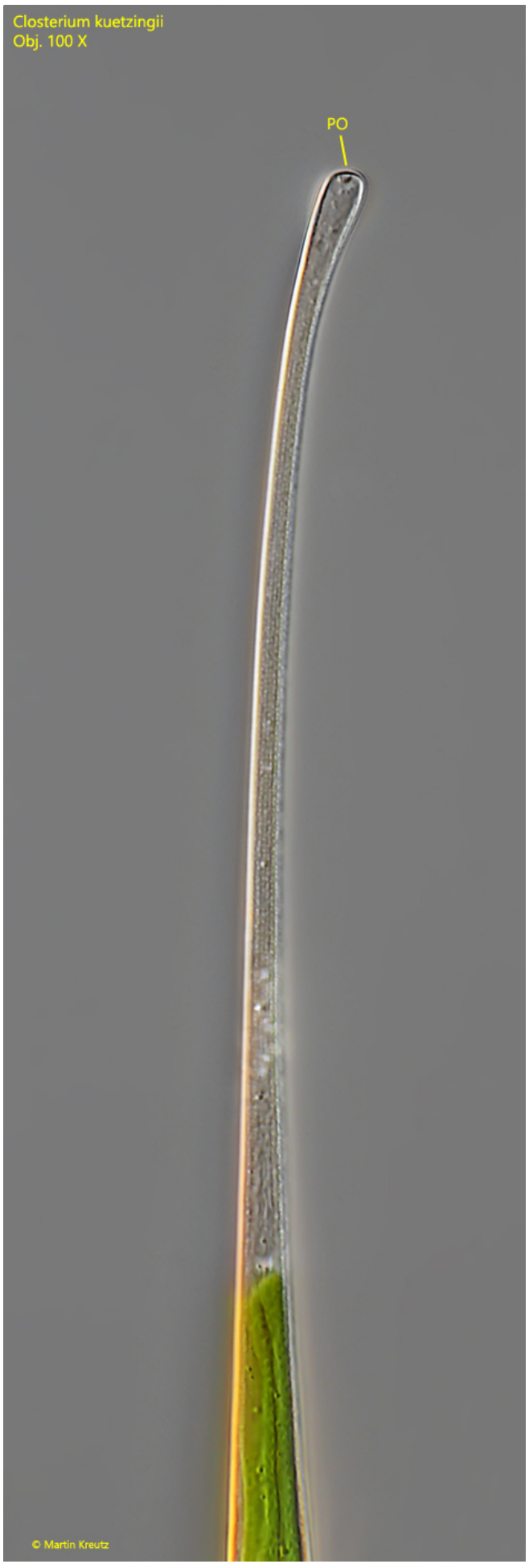
Closterium kuetzingii
Obj. 100 X
PO
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Fig. 4: *Closterium kuetzingii.* The distal end of a cell in detail. Note the slightly swollen distal end with an apical porus (PO). Obj. 100 X.