Closterium praelongum Brébisson, 1856

Most likely ID: n.a.

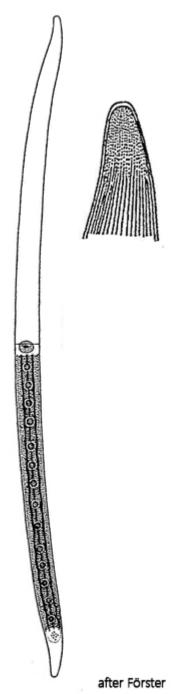
Synonym: n.a.

Sampling location: Mindelsee, Simmelried

Phylogenetic tree: <u>Closterium praelongum</u>

Diagnosis:

- cell long, slender, near apices slightly curved, middle almost straight
- apices slightly bent backwards
- length 380-950 μm, width 25-40 μm
- two chloroplasts, each with 3-5 longitudinal ridges
- 7-25 pyrenoids per cell
- girdle bands absent, sometime pseudogirdle bands
- cell wall smooth or with fine striation
- near apices striation change to punctate
- apices without porus



Closterium praelongum

So far I have only found *Closterium praelongung* in the shore area of the Mindelsee and in the Simmelried. In both locations, however, *Closterium praelongung* is not very common.

Closterium praelongum is a very large species within the genus and is usually around 500 µm long. The cells are very slender and only curved at the cell ends. The middle part is parallel-sided and straight. The apices are characteristically slightly bent backwards. I was able to recognize a delicate and narrow striation on the cell wall, which was sometimes interrupted (s. fig. 3). At the apices this delicate striation turns into a punctation, which is typical for the species (s. fig. 4). In each half cell there are very many pyrenoids, which are all arranged along the longitudinal midline (s. fig. 1 a).

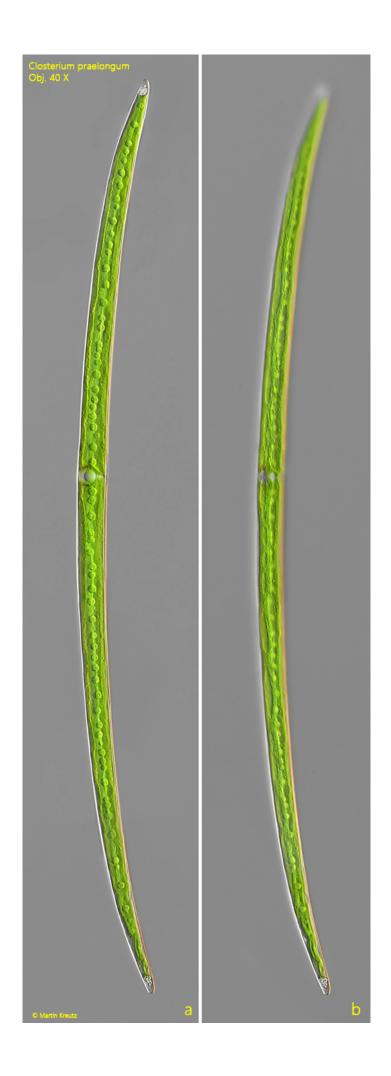


Fig. 1 a-b: Closterium praelongum. $L=570~\mu m$. Two focal planes of a specimen found in the Simmelried. Obj. 40 X.



 $\textbf{Fig. 2:} \ \textit{Closterium praelongum}. \ \textbf{The apices are slightly curved backwards}. \ \textbf{A terminal porus is absent}. \ \textbf{Obj. 100 X}.$



Fig. 3: Closterium praelongum. The delicate striation of the cell wall. Sometimes the stripes are interrupted. Obj. 100 X.

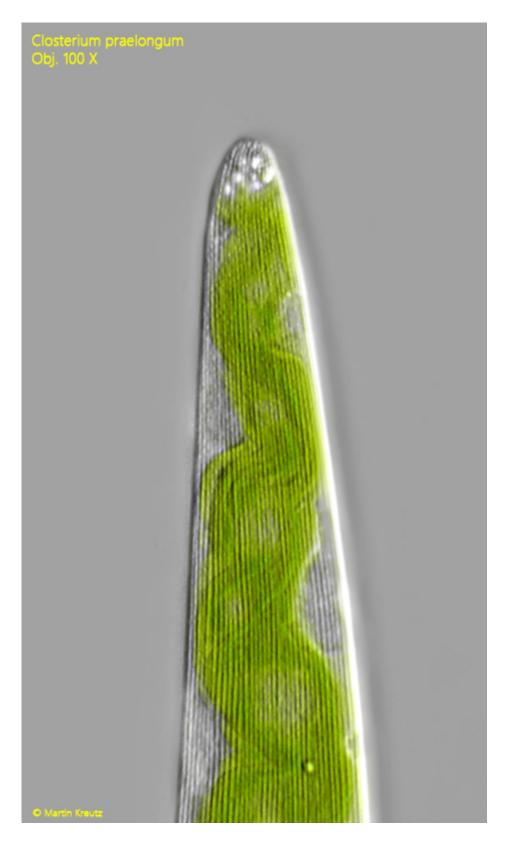


Fig. 4: Closterium praelongum. Near the apices the striation change to punctate. Obj. $100 \, \mathrm{X}$.

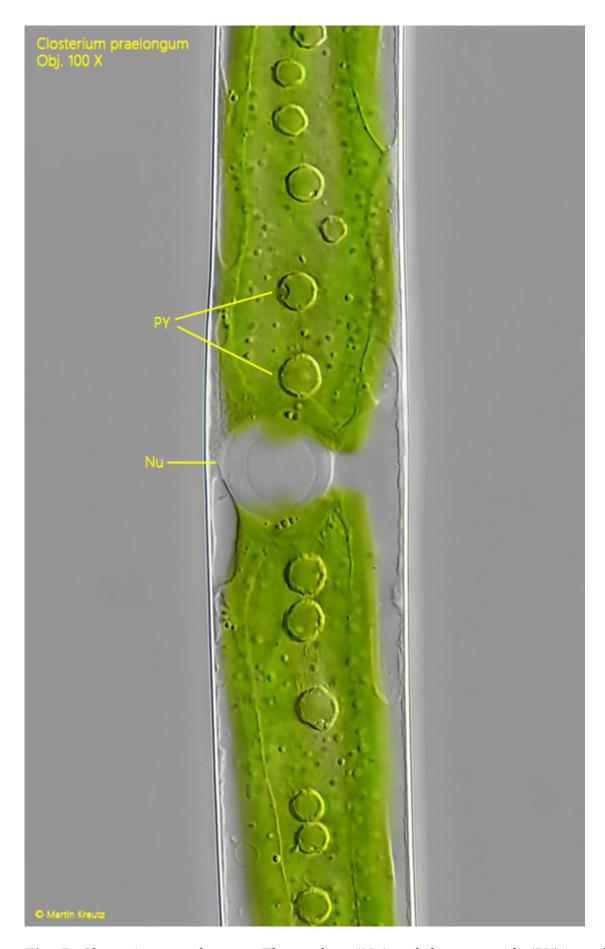


Fig. 5: Closterium praelongum. The nucleus (Nu) and the pyrenoids (PY) in a slightly squashed specimen. Obj. $100~\rm X$.