Penium cylindrus

Brébisson ex Ralfs, 1848

Most likely ID: n.a.

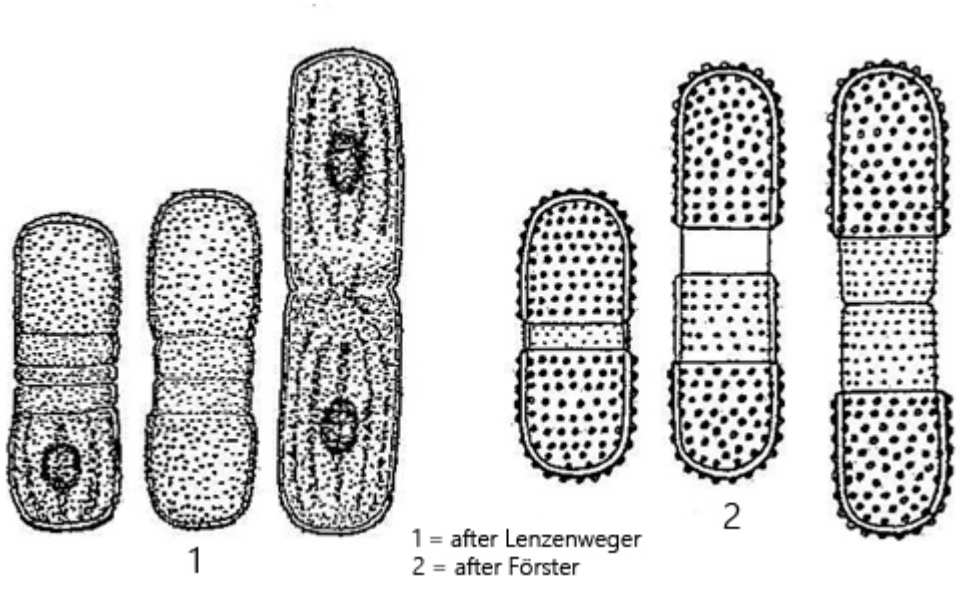
Synonym: *Closterium cylindrus*, *Dysphinctium cylindrus*, *Calocylindrus cylindrus*

Sampling location: Schwemm Moor (Austria)

Phylogenetic tree: *Penium cylindrus*

Diagnosis:

- cells cylindrical, apices flattened or broadly rounded
- cells slightly constricted in the middle
- older cells sometimes brown or yellowish
- length 25–50 µm, width 10–16 µm
- cell wall granulated
- chloroplasts with 3–4 ridges
- 1–2 (rarely 3) pyrenoids per chloroplast
- pyrenoids globular or elongated
- girdle bands present



Penium cylindrus

I found a few specimens of *Penium cylindrus* in old samples from Schwemm Moor in July 2025. The cells are easy to recognize by their cylindrical shape. However, the cell wall's granulation is only clearly visible at medium magnification or higher. In older specimens, the cell wall turns yellowish or brown. If girdle bands are present, they can be recognized in areas where the cell wall is smooth and lacks granules. The pyrenoids are often elongated or oval. Although the species is described as widespread, documented records are rather rare.

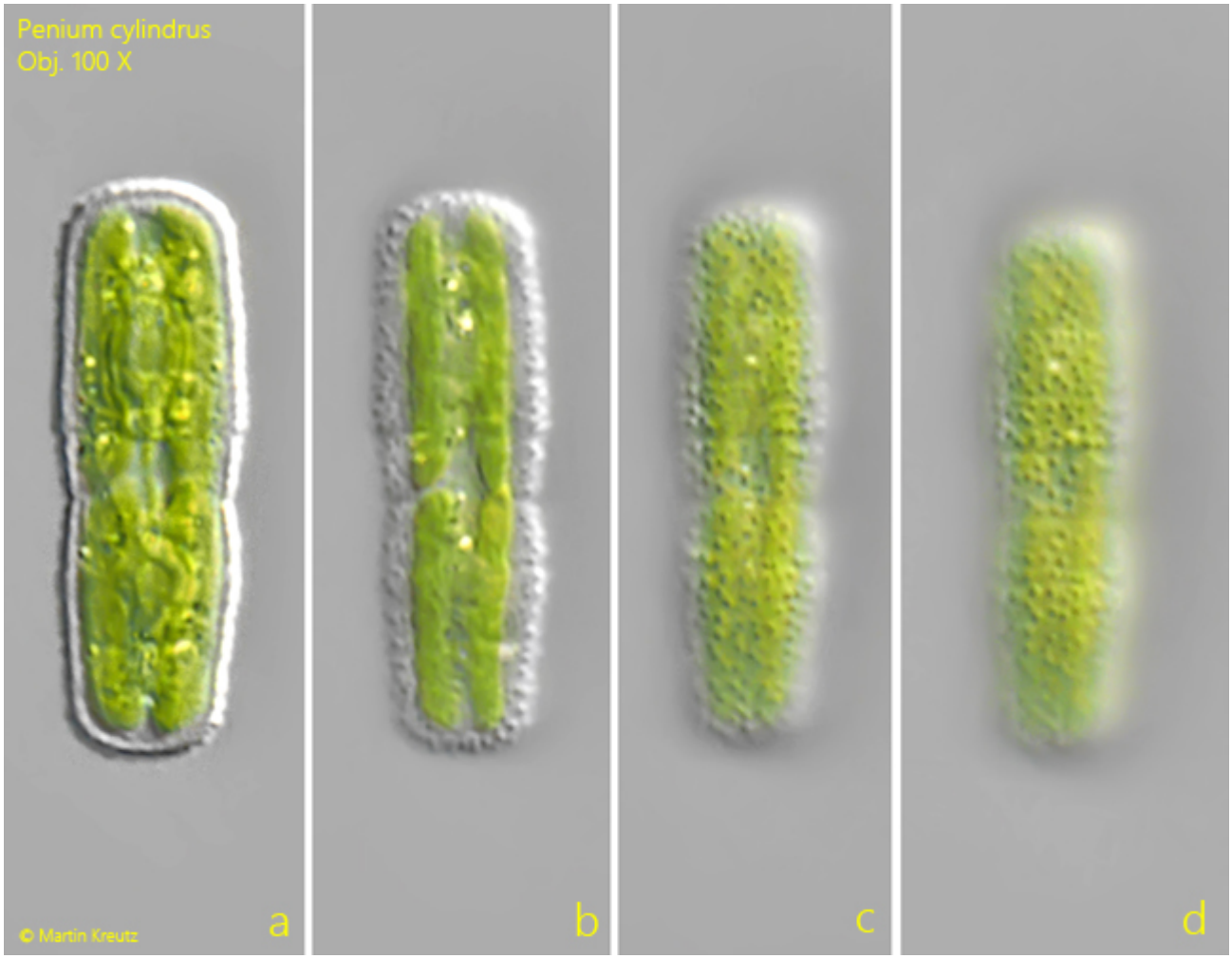


Fig. 1 a-d: *Penium cylindrus*. L = 30 µm. Several focal planes of a young specimen with colorless cell wall. Obj. 100 X.