Cosmarium transitorium

(Heimerl) Ducellier, 1918

Most likely ID: n.a.

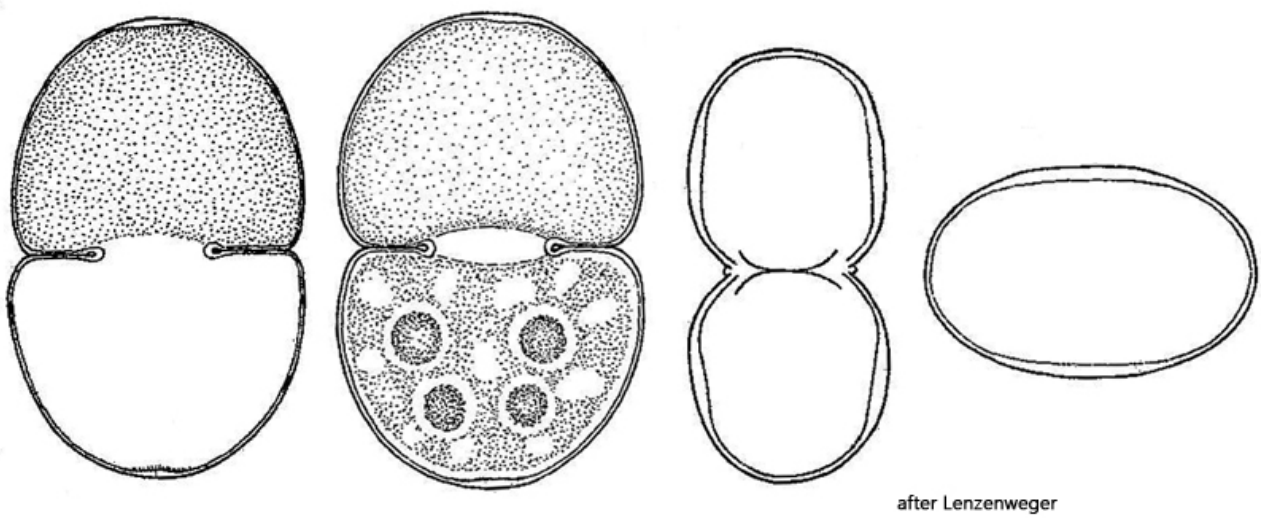
Synonym: n.a.

Sampling location: Schwemm Moor (Austria)

Phylogenetic tree: *Cosmarium transitorium*

Diagnosis:

- semi-cells almost hemi-spherical
- cells 1.5-1.6. times longer than wide
- length 60–80 µm, width 40–55 µm
- apices thickened
- cells wall punctate
- 2–4 pyrenoids per semi-cell



Cosmarium transitorium

I have so far only found *Cosmarium transitorium* in the Schwemm Moor in Austria. The specimens of my population were mostly between 60–70 µm long and had only 2 pyrenoids per semi-cell. However, sometimes there can also be 4 pyrenoids per

semi-cell. The cell wall is finely granulated and the apices are distinctly thickened.

Cosmarium transitorium can be confused with *Cosmarium pachydermum* and *Cosmarium incrassum* var. *schmidlei*. However, *Cosmarium pachydermum* does not have thickened apices and is significantly larger at 80–120 µm. *Cosmarium incrassum* var. *schmidlei* is also larger (80–100 µm) and has a central, smooth area without pores in the middle of the semi-cells.

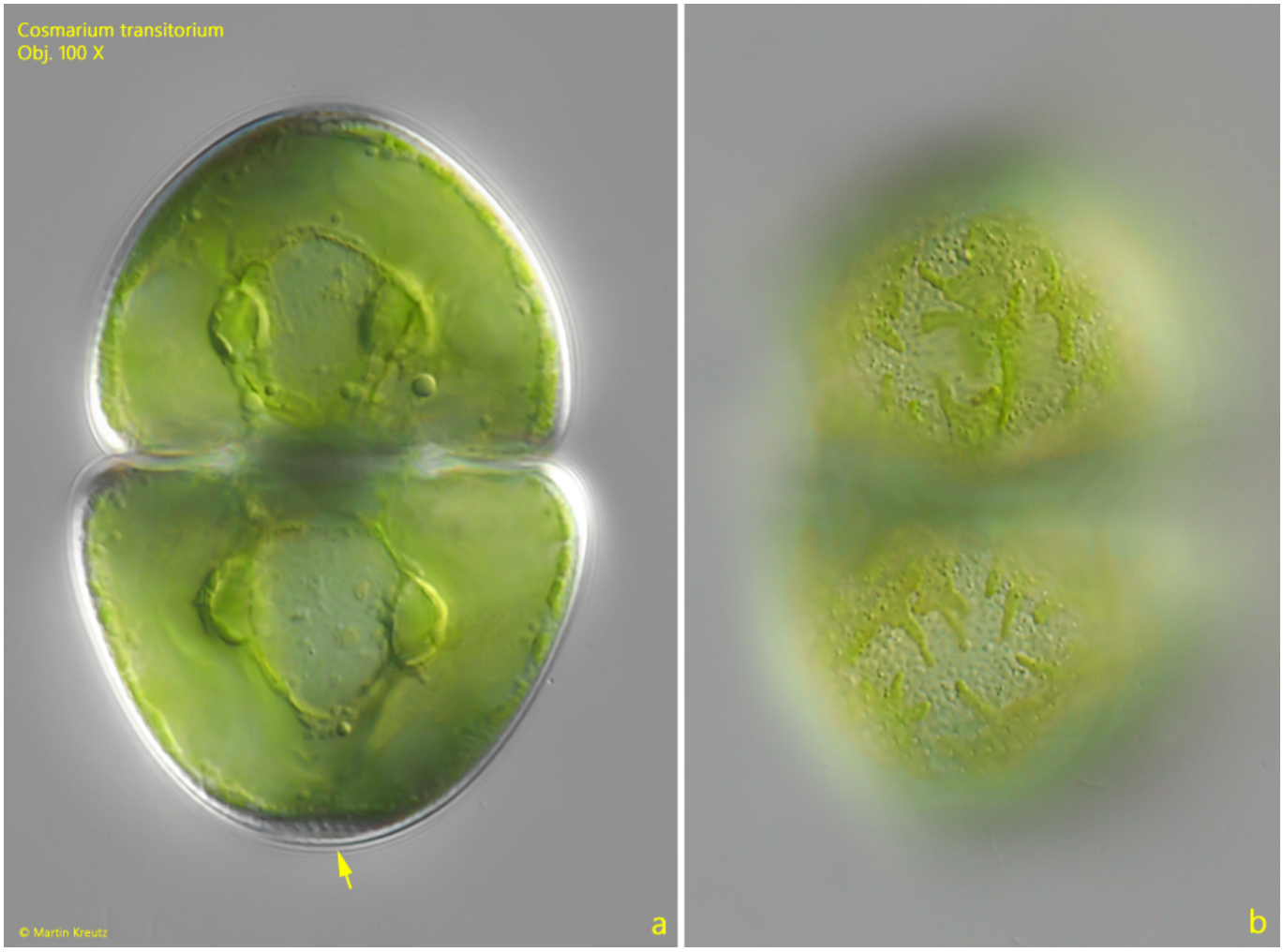


Fig. 1 a-b: *Cosmarium transitorium*. L = 62 µm. Two focal planes of a specimen found in the Schwemm Moor. Note the thickened apices (arrow). Obj. 100 X.

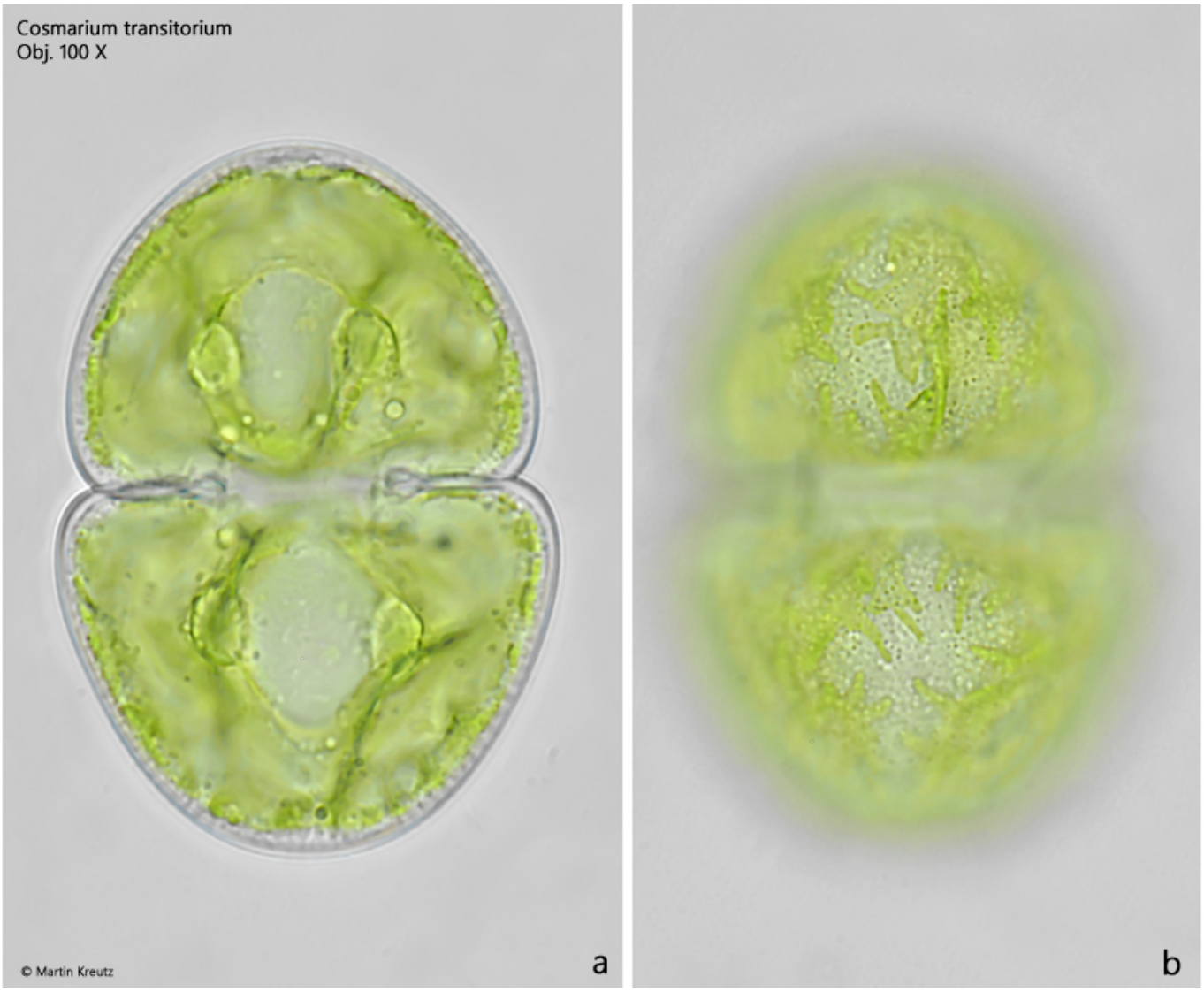


Fig. 2 a-b: *Cosmarium transitorium*. L = 62 µm. The same specimen as shown in fig. 1 a-b in brightfield illumination. Obj. 100 X.