Cosmarium pyramidatum

Brébisson ex Ralfs, 1848

Most likely ID: n.a.

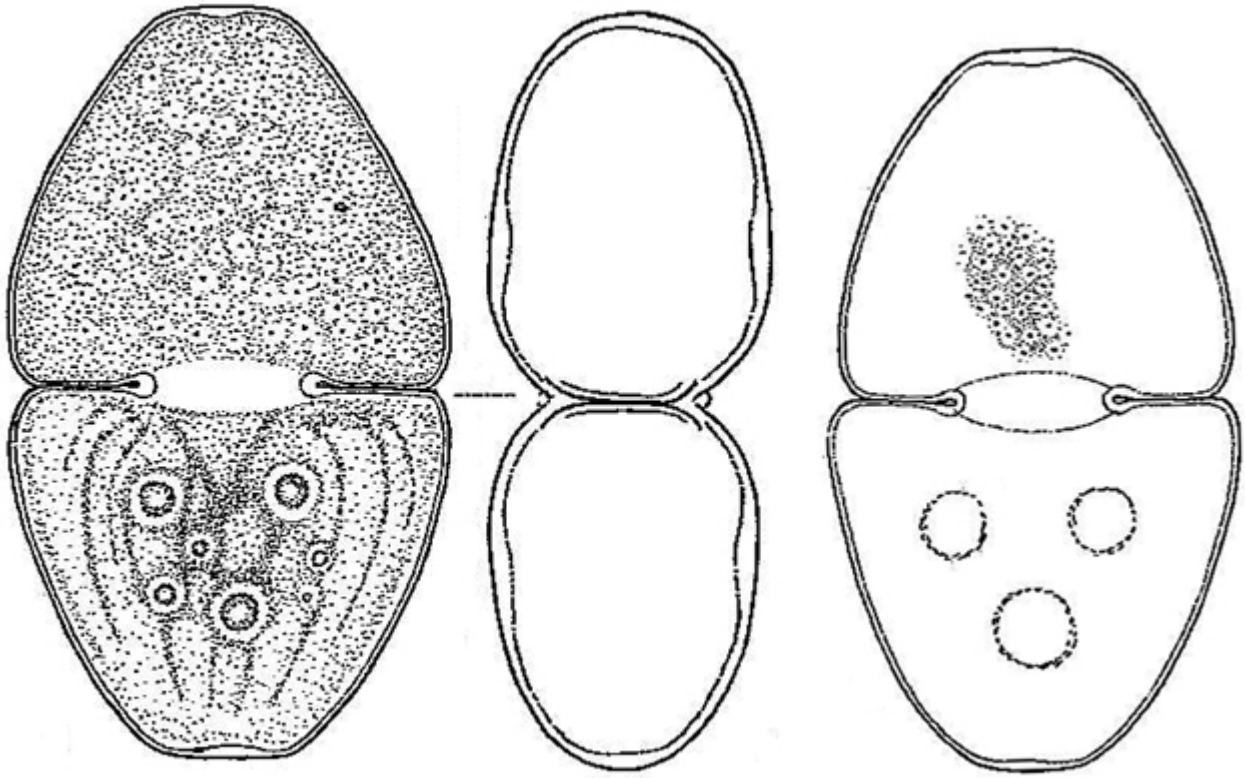
Synonym: n.a.

Sampling location: Lauchsee Moor (Austria), Sima Moor (Austria), Determoor (Austria)

Phylogenetic tree: *Cosmarium pyramidatum*

Diagnosis:

- cells elongate elliptical
- length 51–115 µm, width 39–70 µm
- semi-cell trapezoidal with flat convex apex
- lateral margin convex
- 1–6 pyrenoids per semi-cell, commonly 2–3 pyrenoids
- sinus deep, straight, internally dilated
- cell wall with punctate with distinct pores



Cosmarium pyramidatum

So far I have only found *Cosmarium pyramidatum* in Austrian bogs, where the species is very common. The cells have a quite characteristic shape, as the semi-cells are pyramidal with a flat apex. The number of pyrenoids per semi-cell is very variable (1-6). In the populations I observed there were always 3 pyrenoids per semi-cell. The cell wall has no ornamentation and only shows pore openings.

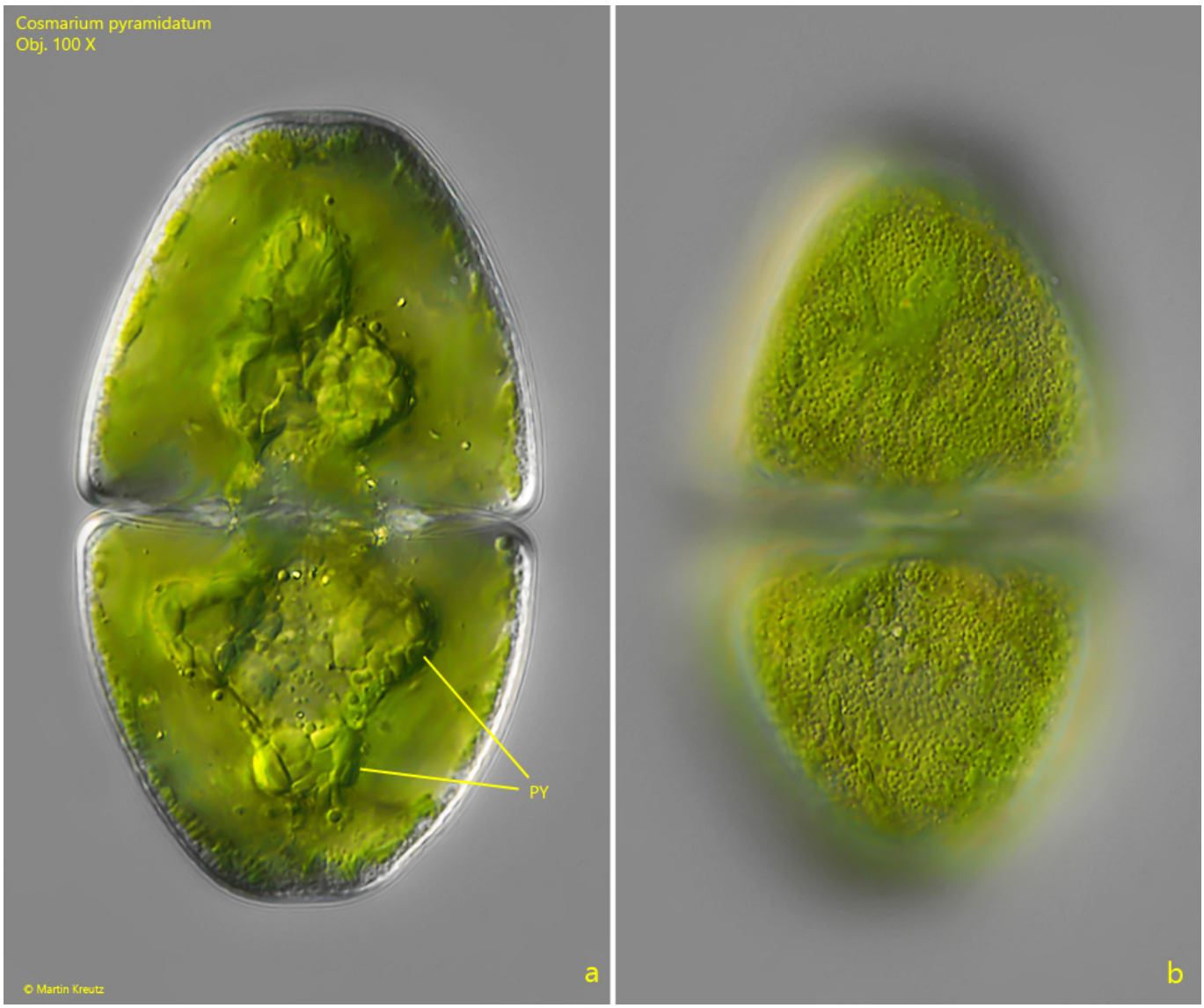


Fig. 1 a-b: *Cosmarium pyramidatum*. L = 88 µm. Two focal planes on the pyrenoids (PY) and the granulated cell wall. Obj. 100 X.

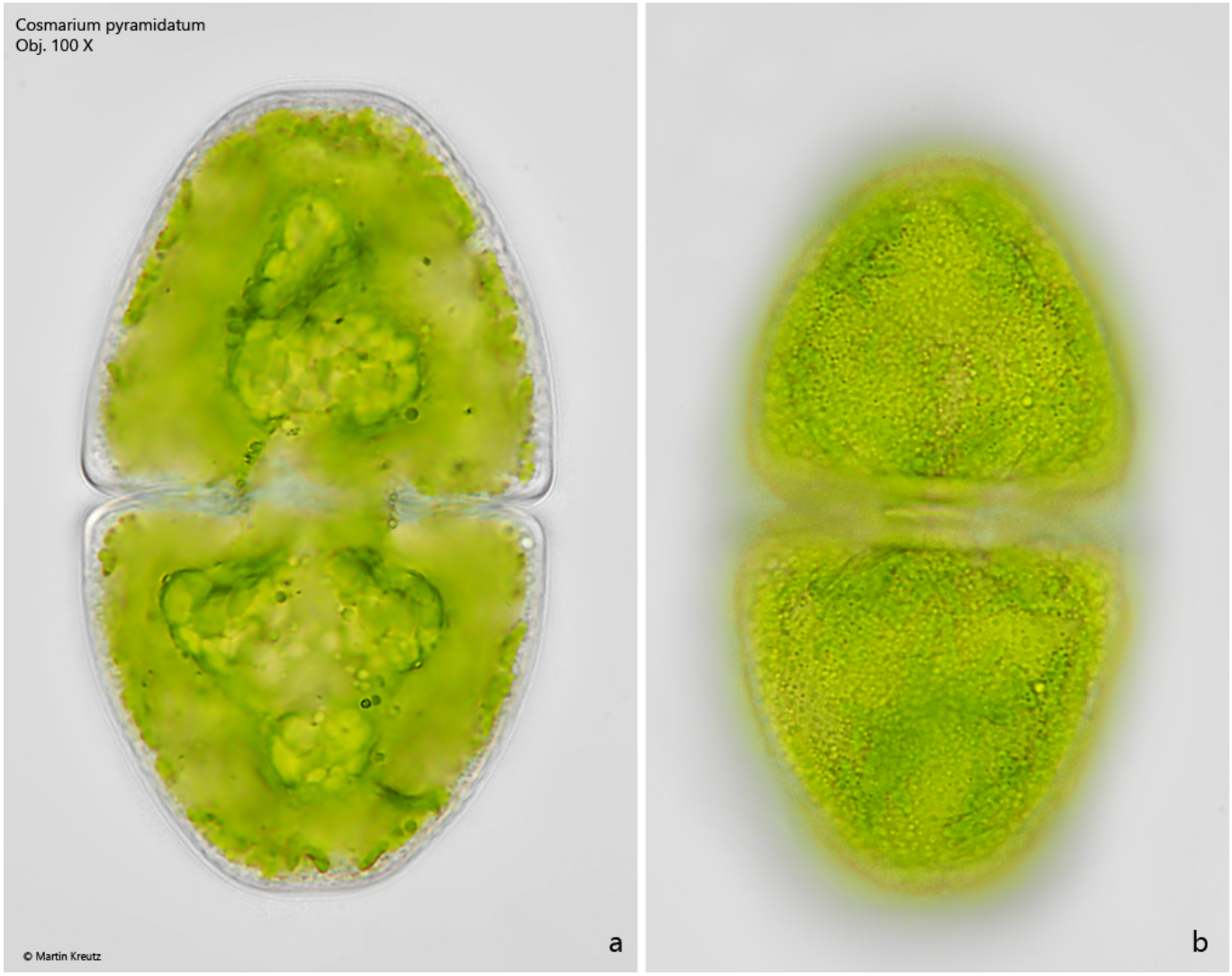


Fig. 2 a-b: *Cosmarium pyramidatum*. L = 88 µm. The specimen as shown in fig. 1 a-b in brightfield illumination. Obj. 100 X.

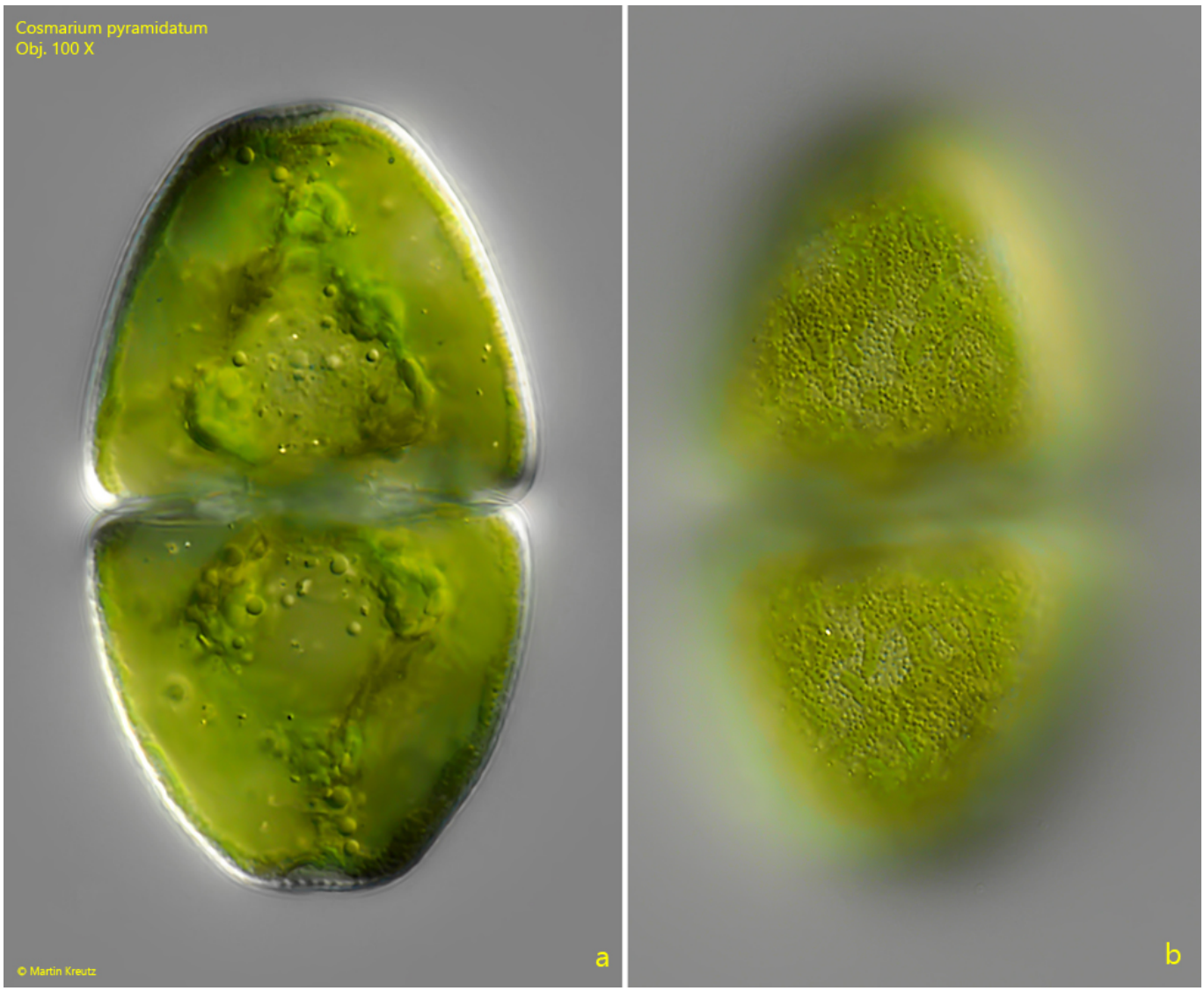


Fig. 3 a-b: *Cosmarium pyramidatum*. L = 85 µm. Two focal planes of a second specimen. Obj. 100 X.

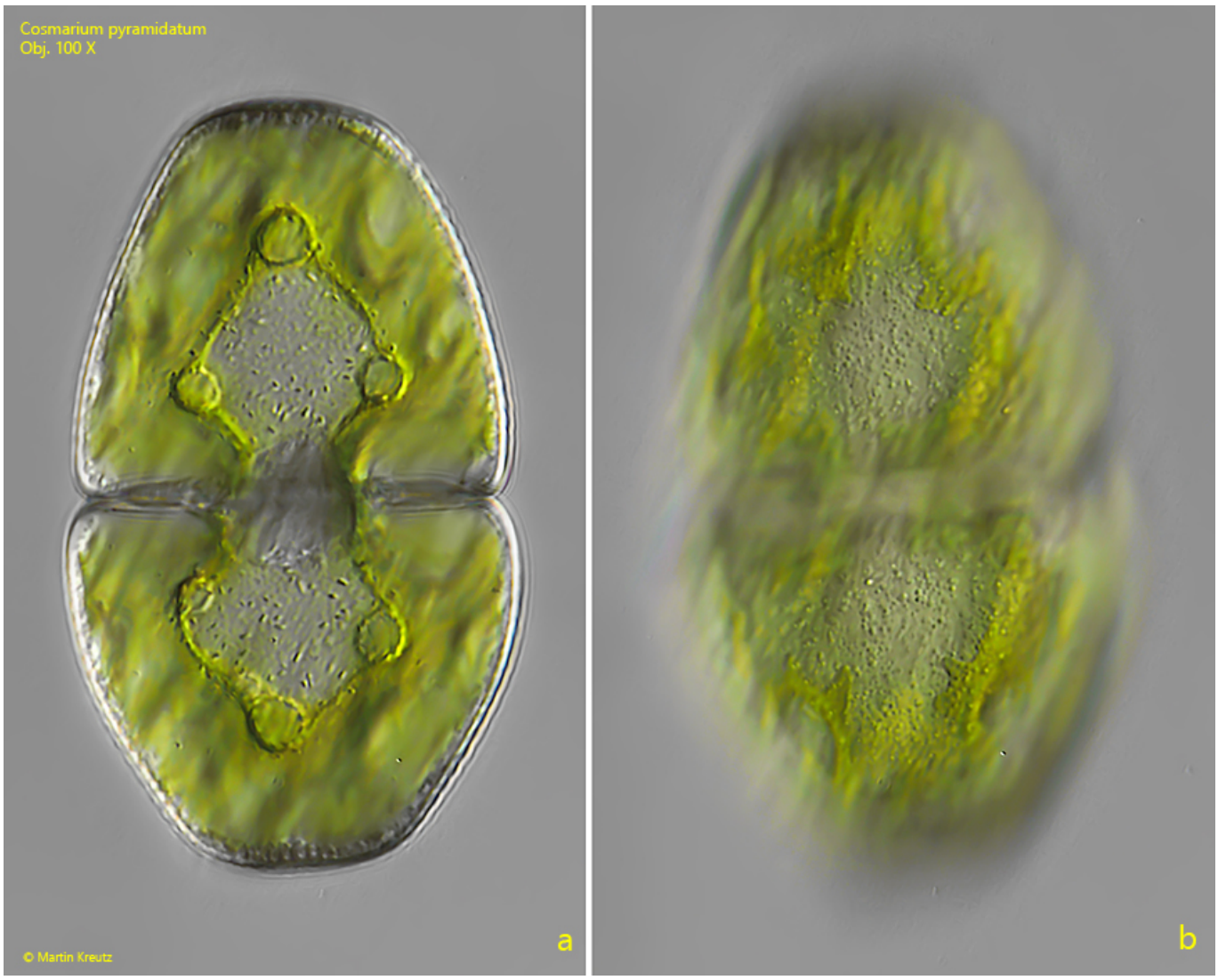


Fig. 4 a-b: *Cosmarium pyramidatum*. L = 78 µm. A third specimen found in July 2017 in the Sima Moor. Obj. 100 X.