## Cosmarium pyramidatum

## Brébisson ex Ralfs, 1848

Most likely ID: n.a.

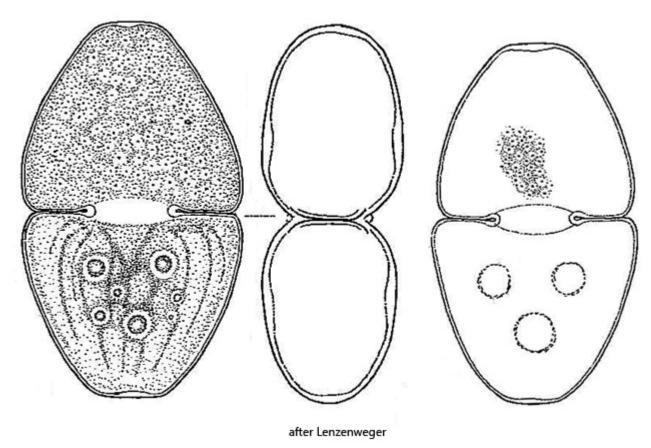
Synonym: n.a.

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.

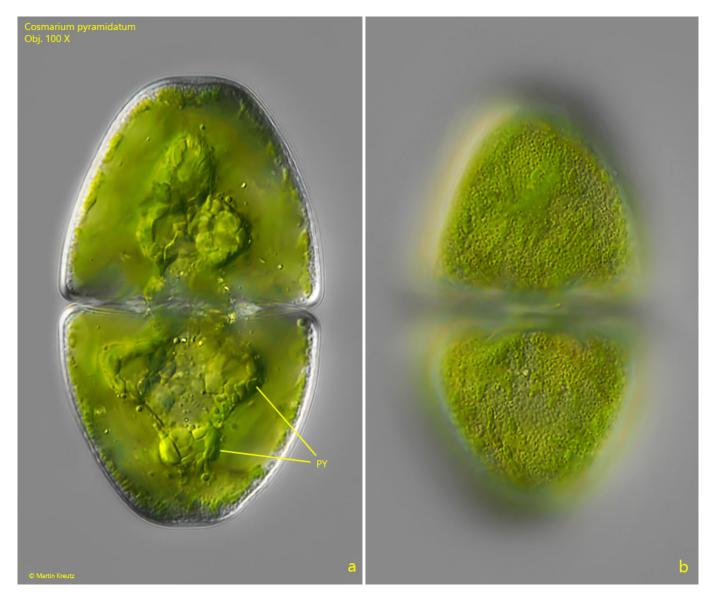


Fig. 1 a-b: Cosmarium pyramidatum. L = 88  $\mu m$ . Two focal planes on the pyrenoids (PY) and the granulated cell wall. Obj. 100 X.

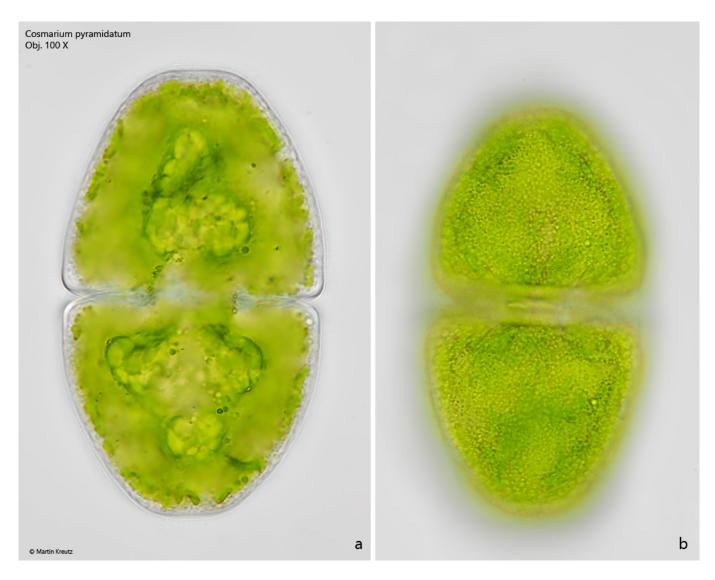


Fig. 2 a-b: Cosmarium pyramidatum.  $L=88~\mu m$ . The specimen as shown in fig. 1 a-b in brightfield illumination. Obj. 100 X.

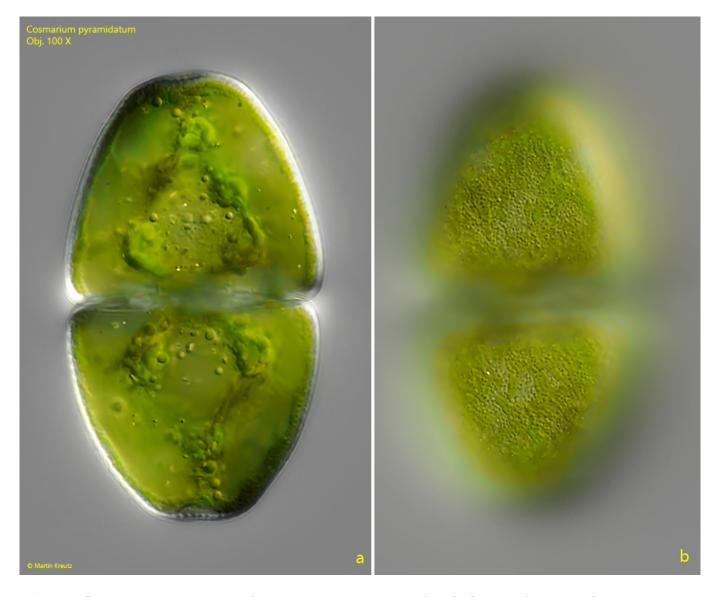


Fig. 3 a-b: Cosmarium pyramidatum.  $L=85~\mu m$ . Two focal planes of a second specimen. Obj. 100 X.

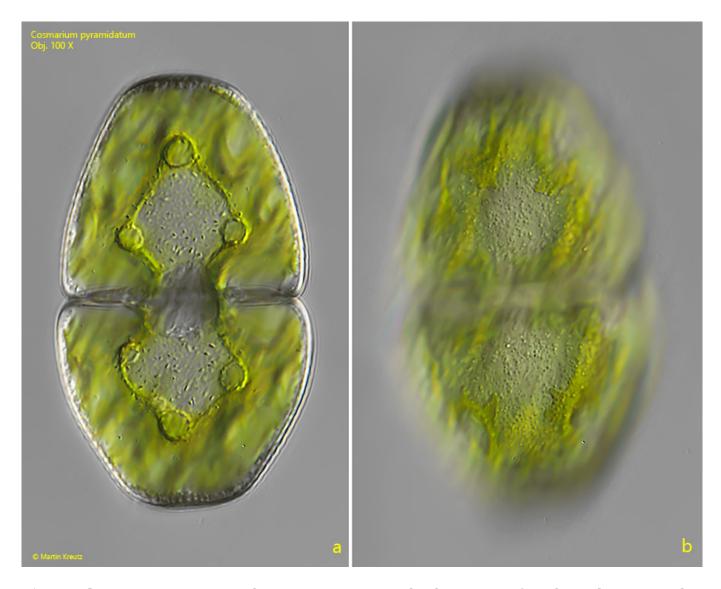


Fig. 4 a-b: Cosmarium pyramidatum.  $L=78~\mu m$ . A third specimen found in July 2017 in the Sima Moor. Obj. 100 X.