

Cosmarium perforatum* var. *rauchii

Ducellier, 1918

Most likely ID: n.a.

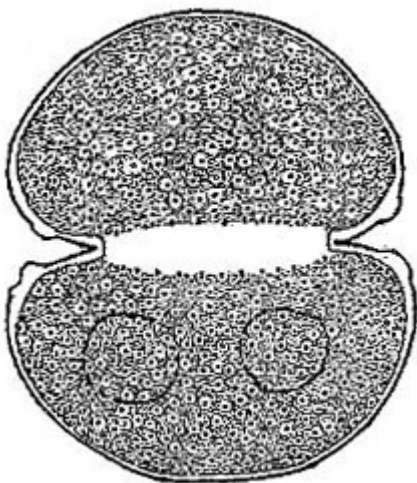
Synonym: n.a.

Sampling location: [Schwemm Moor \(Austria\)](#)

Phylogenetic tree: [Cosmarium perforatum](#) var. *rauchii*

Diagnosis:

- cells broadly oval
- semi-cells almost elliptical
- length 60–70 µm, width 50–65 µm
- isthmus broad (30–37 µm)
- sinus acutely angled dilated
- cell wall covered with fine pores
- both sides of isthmus larger pores
- papillae att the basal corners on one or both sides
- two pyrenoids per semi-cell



after Lenzenweger

Cosmarium perforatum var. *rauchii*

So far I have found only a few specimens of *Cosmarium perforatum* var. *rauchii* in about 6 weeks old samples from the [Schwemm Moor](#) in July 2026. This variety seems to be rare, since Lenzenweger (1999) was able to detect it only in the Egelsee near Abtenau (Austria).

The variety “rauchii” differs from the basic species *Cosmarium perforatum* only by papillae at the corners of the basal lobes (s. fig. 1 a). These are thickenings of the cell wall. They may be present only on one side or on both sides. In my specimens, they were always pronounced on only one side.

Contrary to the description by Lenzenweger, my specimens, with a length of 90 μm or even slightly more, were almost 30% longer than the range he specified. Whether this is a site-specific variety, or whether the variability of this species is greater than known, can only be shown by further findings and investigations.

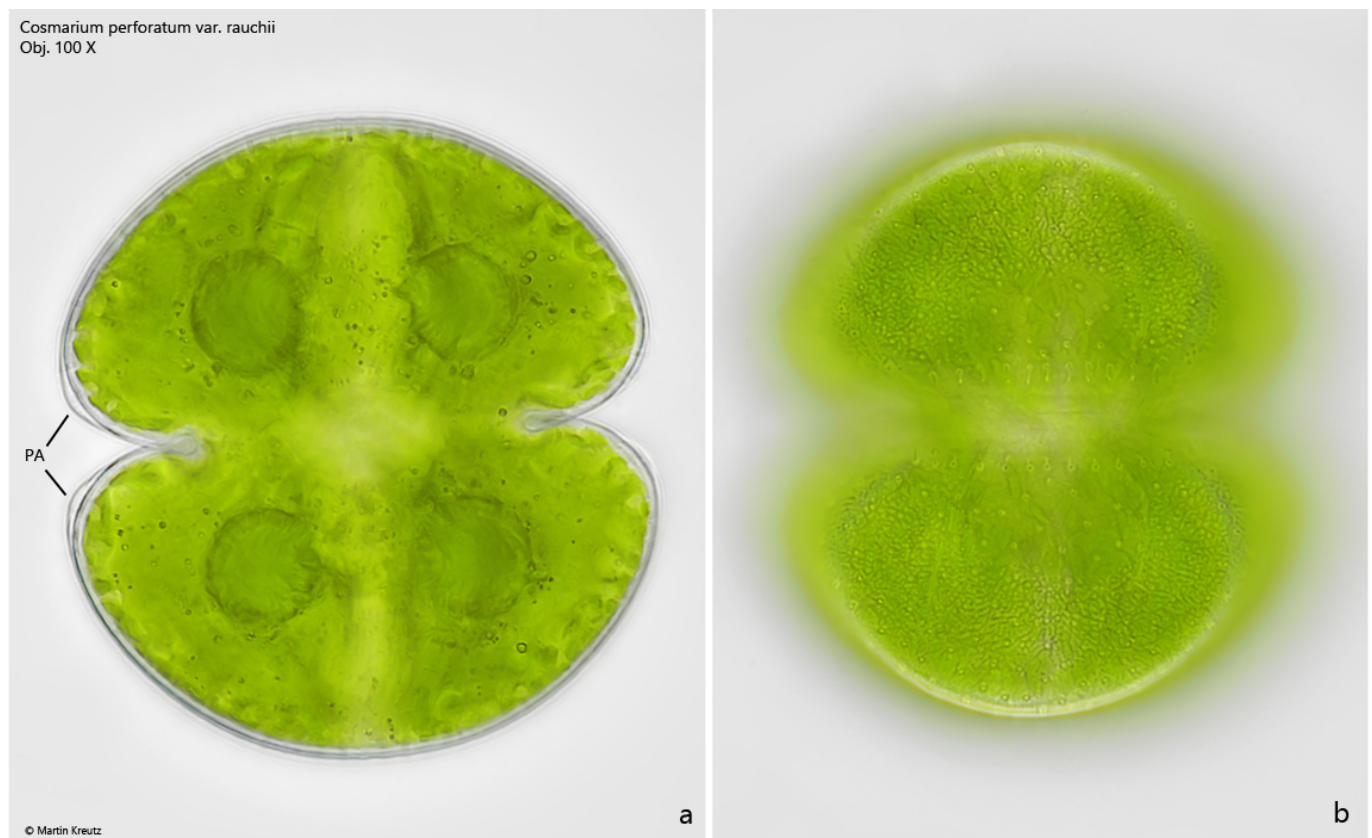
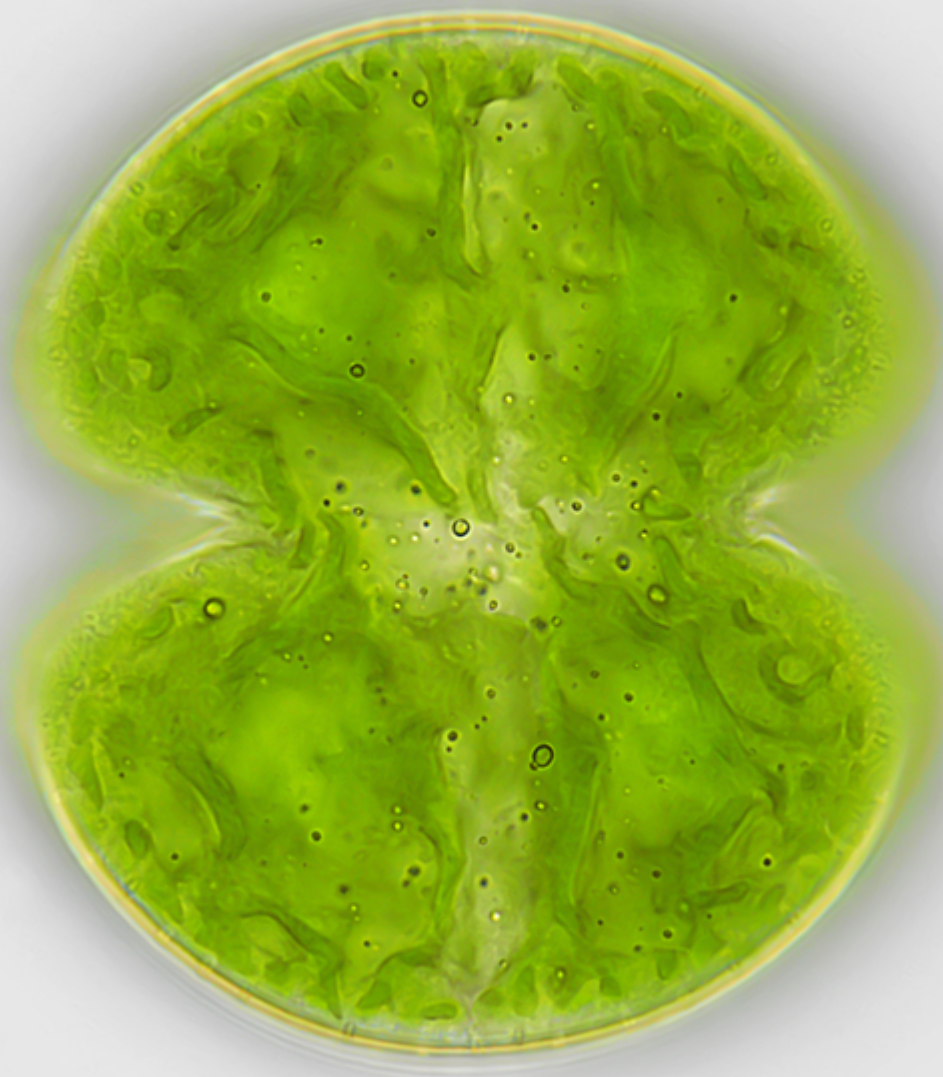


Fig. 1 a-b: *Cosmarium perforatum* var. *rauchii*. L = 92 μm . Two focal planes of a specimen in brightfield illumination. Note the papillae (PA) on one side as a thickening of the basal corners. Obj. 100 X.

Cosmarium perforatum var. *rauchii*
Obj. 100 X



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Fig. 2: *Cosmarium perforatum* var. *rauchii*. L = 92 μ m. Focal plane on the lobed chloroplast of the specimen. Obj. 100 X.

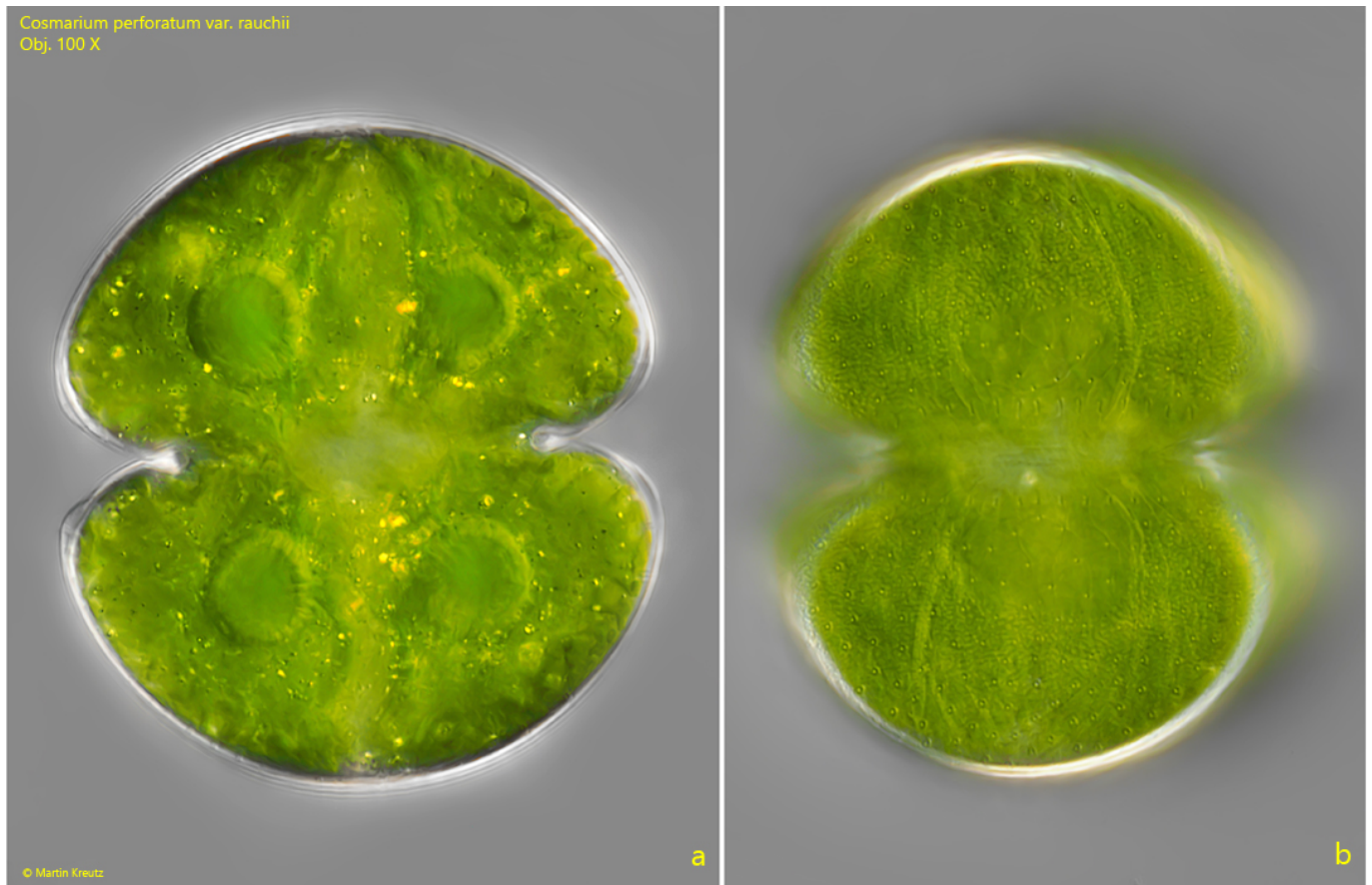


Fig. 3 a-b: *Cosmarium perforatum* var. *rauchii*. L = 92 μ m. The same specimen as shown in fig. 1 a-b in DIC. Obj. 100 X.