

Cosmarium carniolicum

(Lütkemüller) Kouwets, 2025

Most likely ID: n.a.

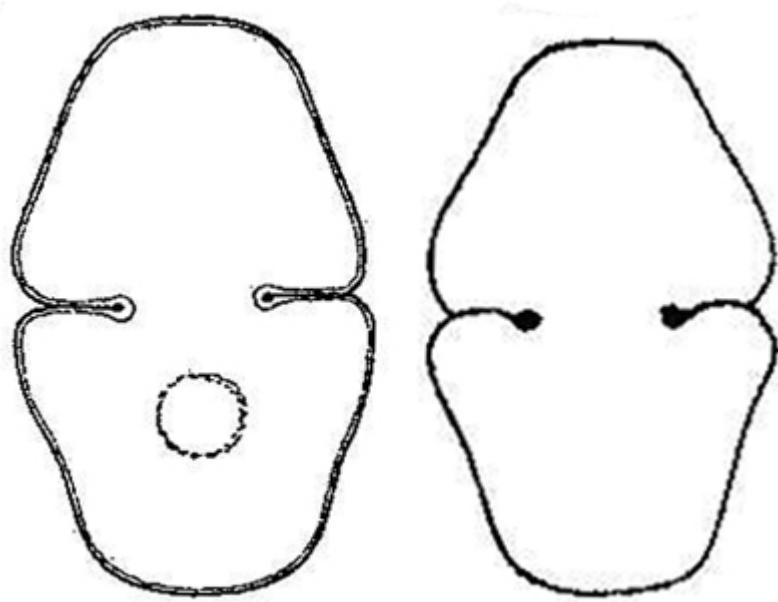
Synonym: *Cosmarium pseudopyramidatum* var. *carniolicum*

Sampling location: [Paradieswiesen \(Austria\)](#)

Phylogenetic tree: [Cosmarium carniolicum](#)

Diagnosis:

- semi-cells truncate-pyramidal
- lateral margins slightly concave
- length 48–60 µm, width 20–23 µm
- sinus deep, straight, internally dilated
- cell wall smooth, punctate
- one pyrenoid per semi-cell



after Lenzenweger

Cosmarium carniolicum

Cosmarium carniolicum was originally described by Lütkemüller (1900) as *Cosmarium pseudopyramidatum* var. *carniolicum*. It was not until 2025 that Kouwets elevated it to a separate species.

I found *Cosmarium carniolicum* for the first time in June 2024 in the [Paradieswiesen](#) in Austria. This *Cosmarium* species is quite inconspicuous in samples, as it is relatively small at approx. 50 µm and has no striking shape or ornamentation. It is much more similar to *Cosmarium pseudopyramidatum*. However, this species is slightly larger (approx. 70 µm) and its lateral margins are convex, whereas those of *Cosmarium carniolicum* are slightly concave (s. fig. 1 a).

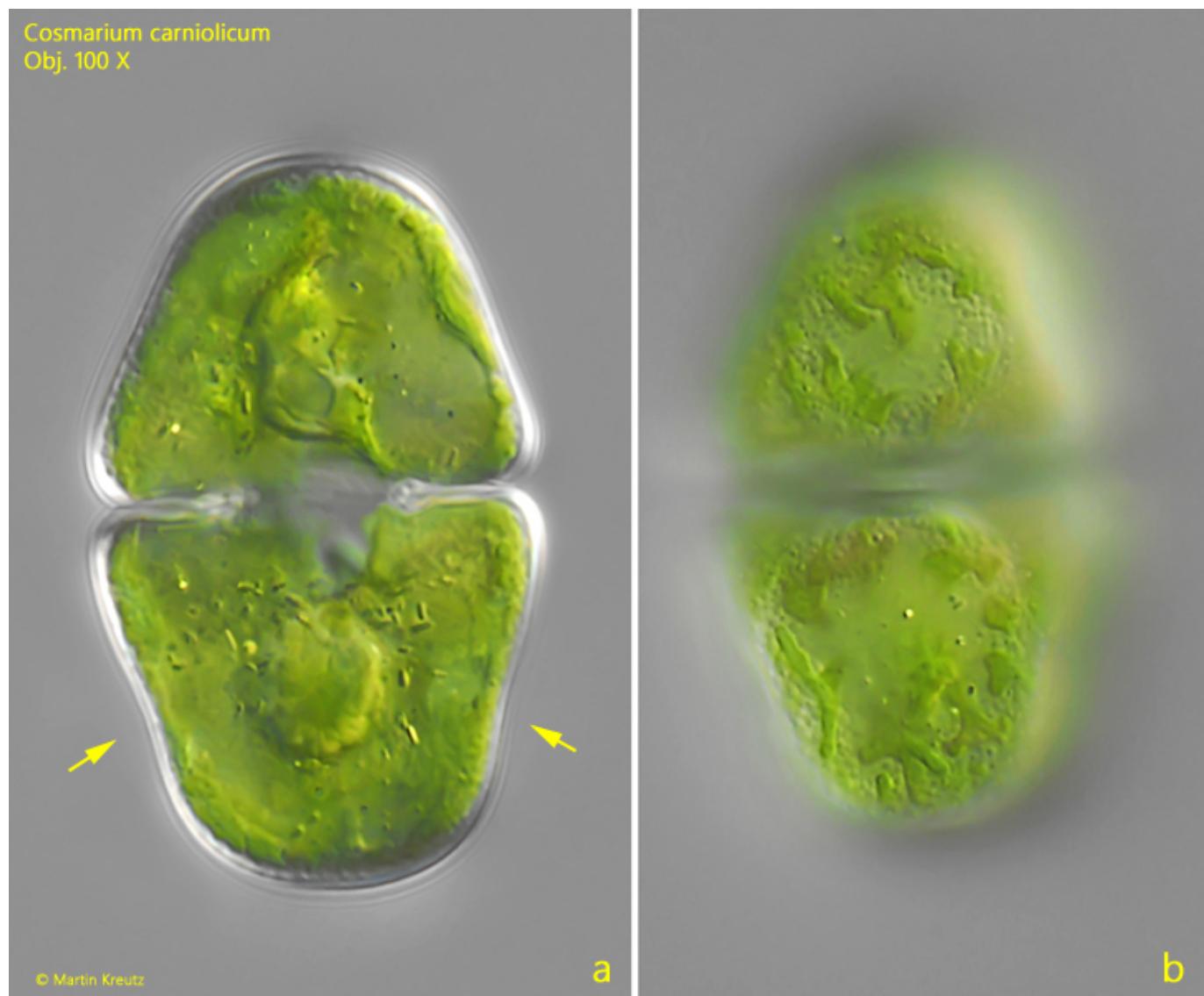


Fig. 1 a-b: *Cosmarium carniolicum*. L = 48 µm. Two focal planes of a specimen found in the [Paradieswiesen](#) (Austria). Note the concave lateral margins (arrows), what is characteristic for the species. Obj. 100 X.