Cosmarium neodepressum* var. *planctonicum

(Reverdin) G.J.P.Ramos & C.W.N.Moura, 2020

Most likely ID: n.a.

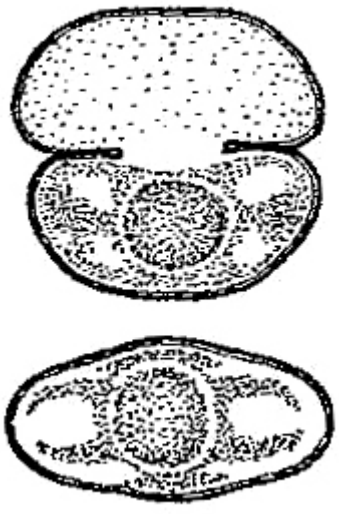
Synonym: *Cosmarium depressum* var. *planctonicum*

Sampling location: Pond of St. Ulrich (Austria)

Phylogenetic tree: *Cosmarium neodepressum* var. *planctonicum*

Diagnosis:

- semi-cells broad elliptical, slightly depressed
- cells wider than long
- cells covered with gelatinous sheath
- length 20–28 µm, width 17–20 µm
- apices almost flat or slightly convex
- sinus narrow, linear
- isthmus 8-10 µm wide
- cell wall covered with fine pores
- one pyrenoid per semi-cell



after Lenzenweger

Cosmarium neodepressum var. planctonicum

I found *Cosmarium neodepressum* var. *planctonicum* in samples from the pond of St. Ulrich in September 2026. Various varieties of the nominate form *Cosmarium neodepressum* have been described, but they are all either larger or smaller in dimensions than the specimens in my population. In addition, my specimens were surrounded by a mucilage sheath that is difficult to contrast under DIC. This is a typical feature of *Cosmarium neodepressum* var. *planctonicum*. The similar species *Cosmarium contractoideum* and *Cosmarium crassangulatum* var. *ellipicum* are larger.

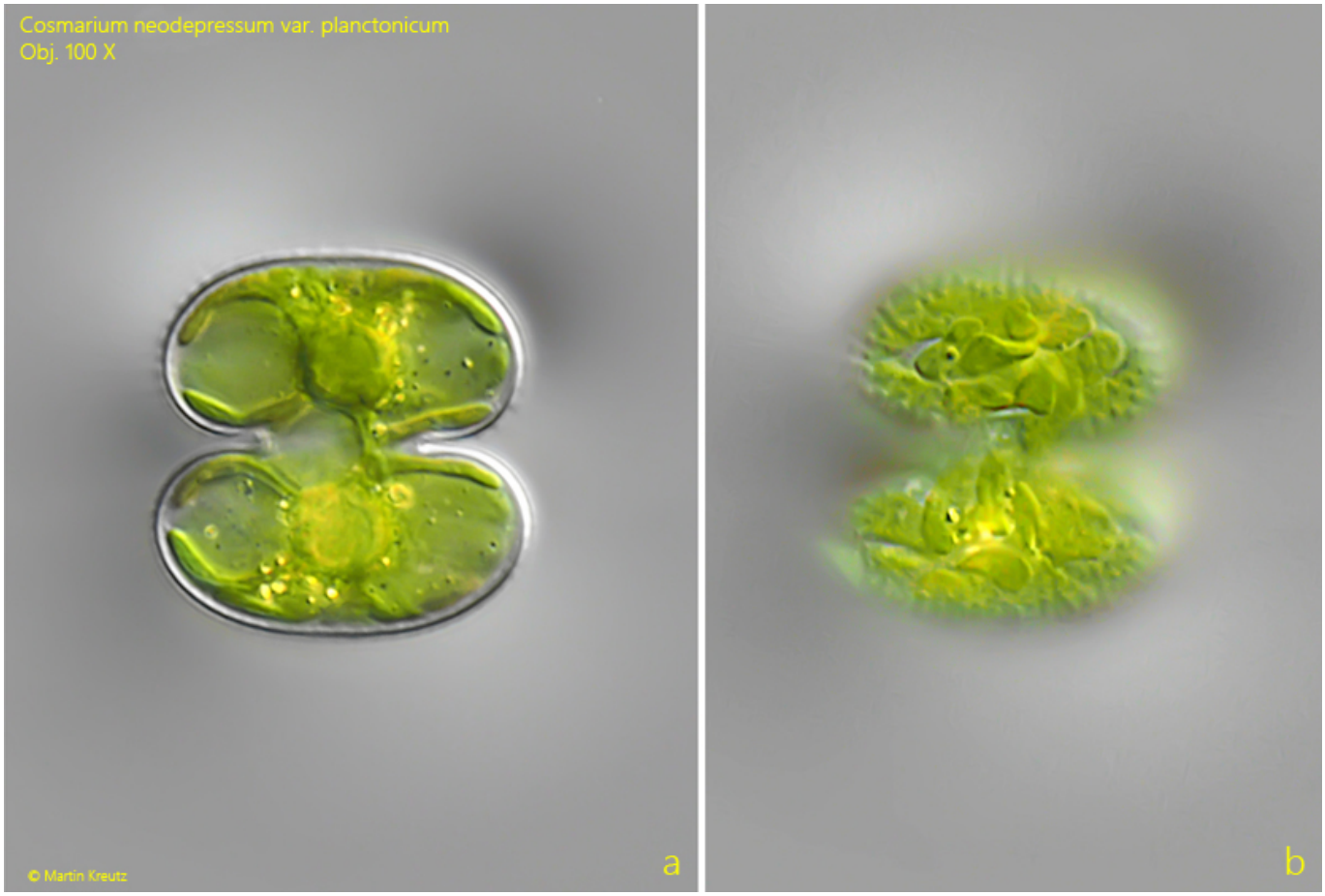


Fig. 1 a-b: *Cosmarium neodepressum* var. *planctonicum*. L = 28 µm. Two focal planes of a specimen covered in a gelatinous sheath, visible by the DIC gradient. Obj. 100 X.

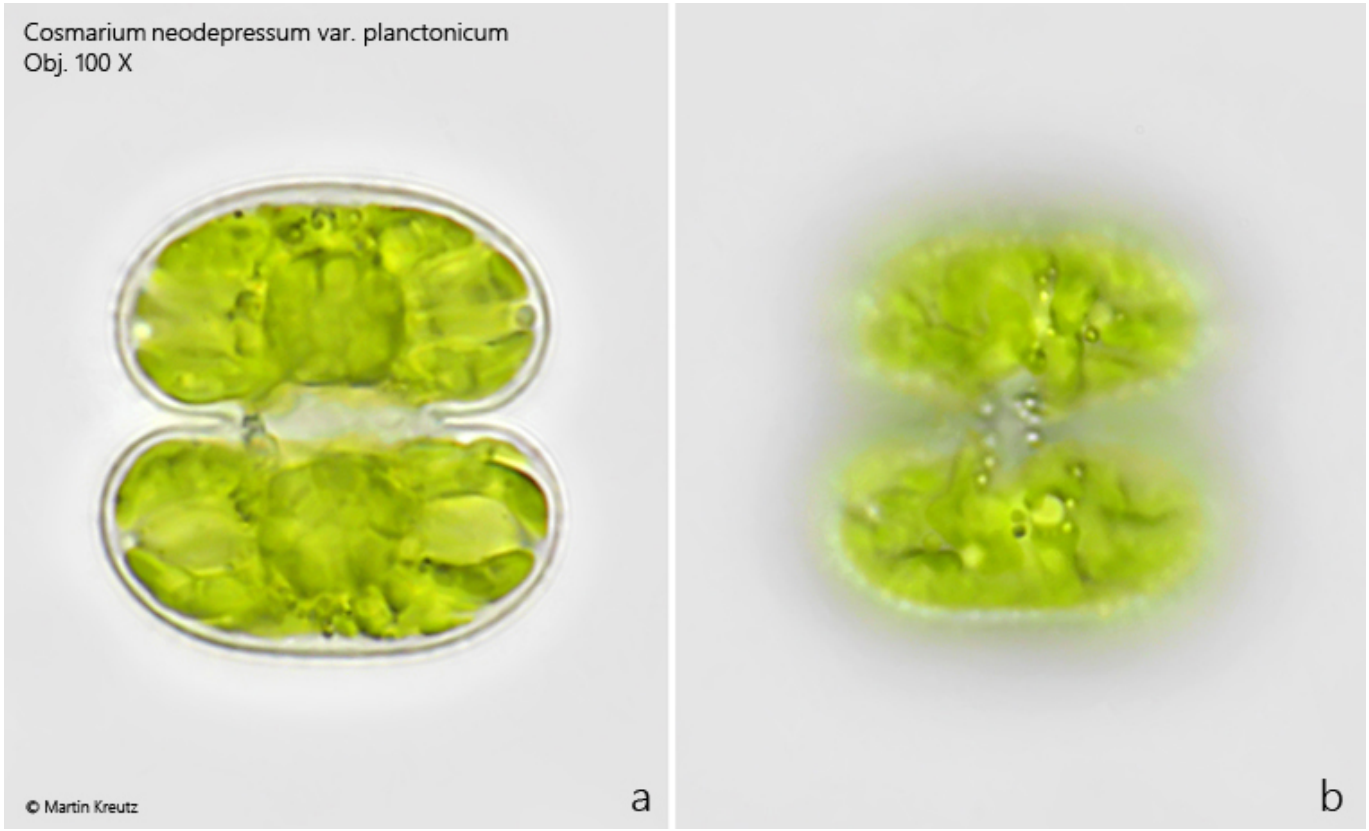


Fig. 2 a-b: *Cosmarium neodepressum* var. *planctonicum*. L = 27 µm. A second specimen in brightfield illumination. Obj. 100 X.