

## ***Cosmarium tumidum* Lundell, 1871**

**Most likely ID:** n.a.

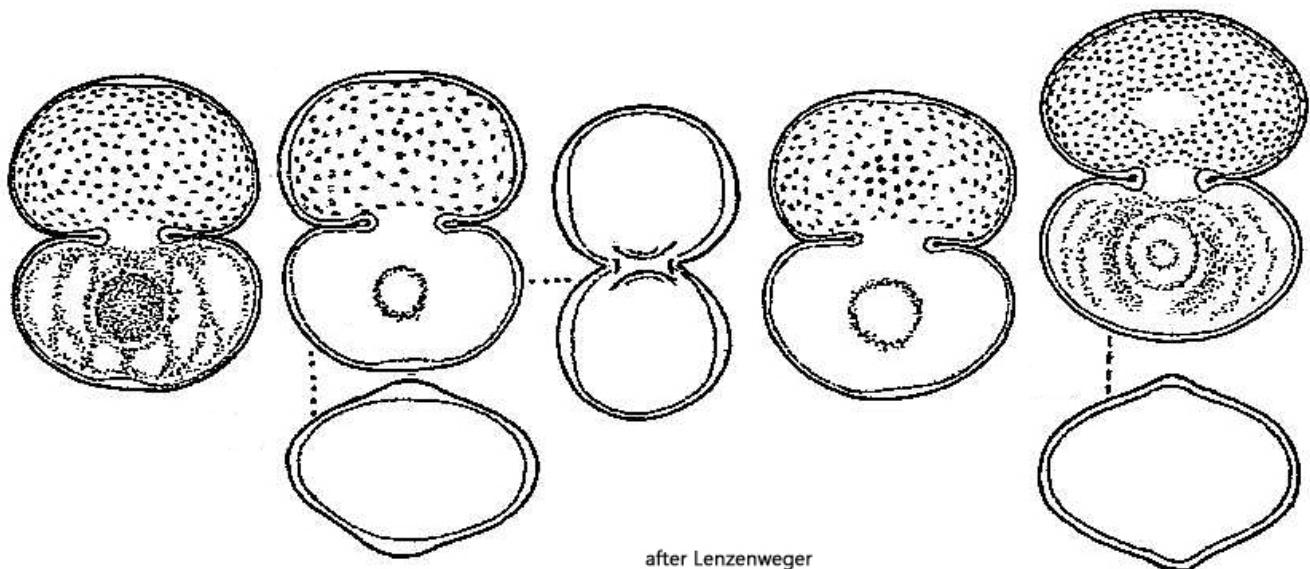
**Synonym:** n.a.

**Sampling location:** Schwemm Moor (Austria)

## Phylogenetic tree: *Cosmarium tumidum*

## Diagnosis:

- semi-cells broadly ellipsoidal
- length 30–40  $\mu\text{m}$ , width 25–30  $\mu\text{m}$
- cell wall scattered pores
- central areas of semi-cells with flat protuberances
- one chloroplast with one pyrenoid per semi-cell

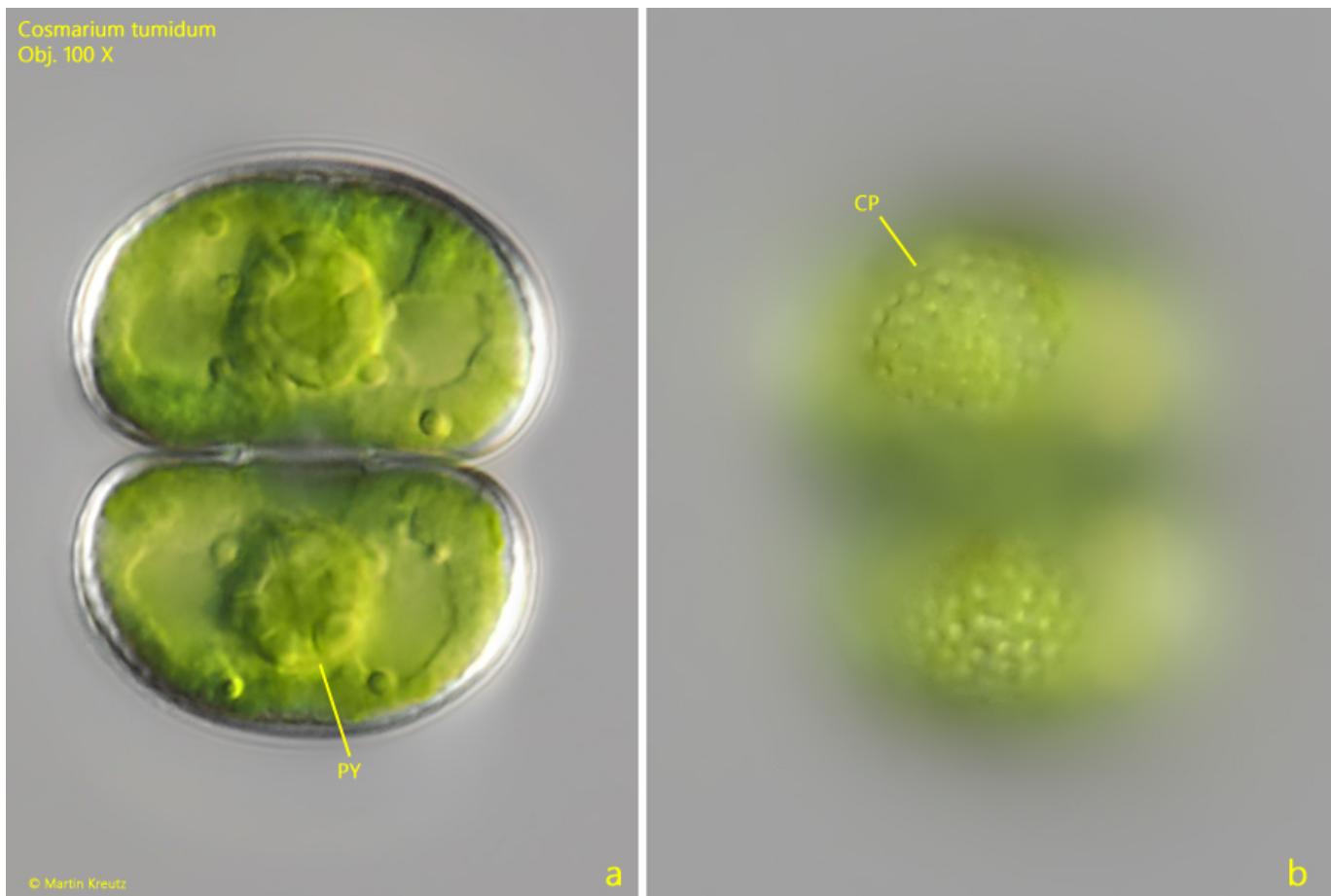


## **Cosmarium tumidum**

So far, I have only found *Cosmarium tumidum* in the [Schwemm Moor](#) in Austria. Only a few specimens were found in the samples.

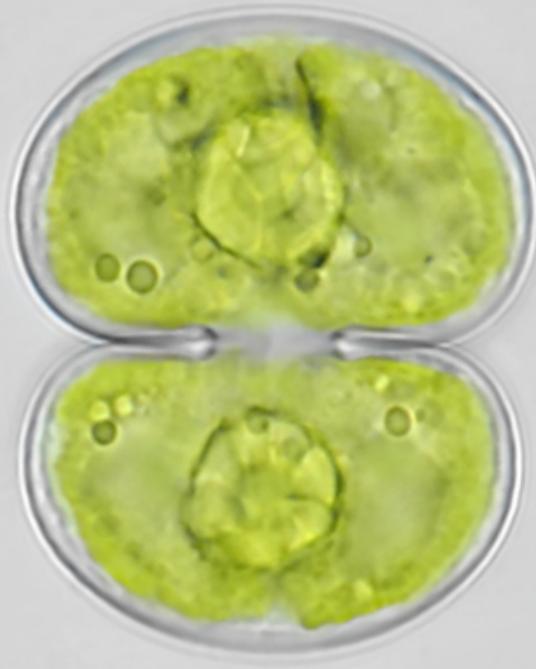
*Cosmarium tumidum* is a rather inconspicuous and small species. Its main characteristics are its cell wall with scattered small pores and a central protuberance on the sides of the semi-cells. These protuberances can only be seen when focusing carefully (s. fig. 1 b).

*Cosmarium tumidum* can easily be confused with *Cosmarium subtumidum*. However, this species has slightly trapezoidal semi-cells, while the semi-cells of *Cosmarium tumidum* are clearly broad elliptical.

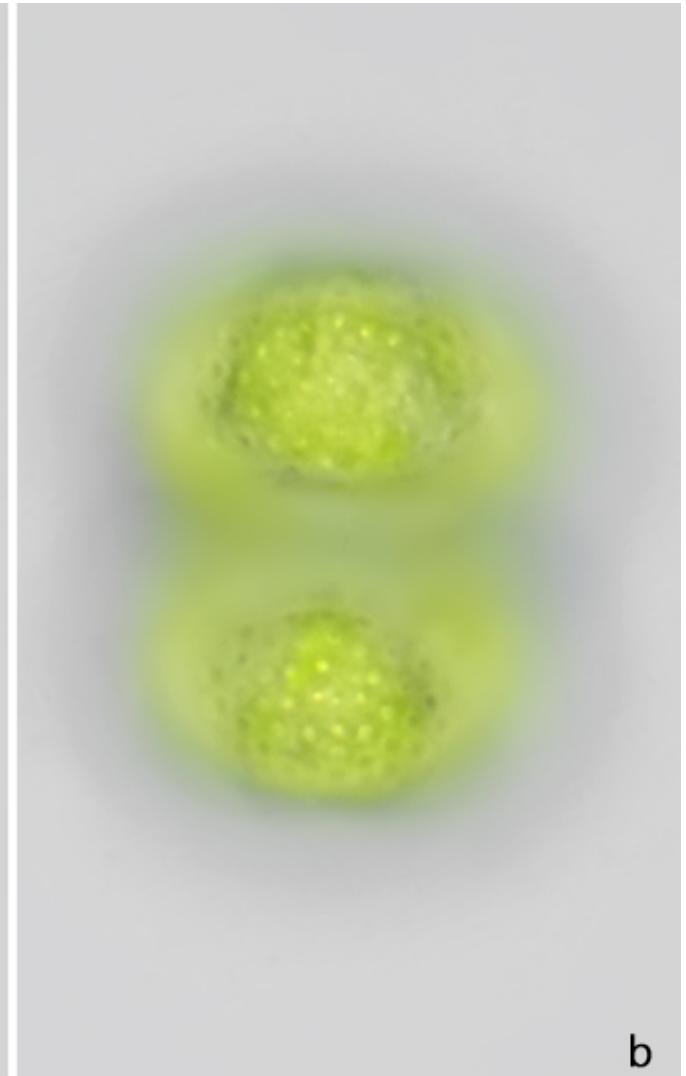


**Fig. 1 a-b:** *Cosmarium tumidum*. L = 32. Two focal planes of a specimen in DIC. The cell wall is covered with small pores and in the central areas of each semi-cell the protuberances (CP) are visible. Obj. 100 X.

*Cosmarium tumidum*  
Obj. 100 X



a



b

**Fig. 2 a-b:** *Cosmarium tumidum*. L = 32. The same specimen as shown in fig. 1 a-b in brightfield illumination. Obj. 100 X.