

***Cosmarium tumidum* Lundell, 1871**

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

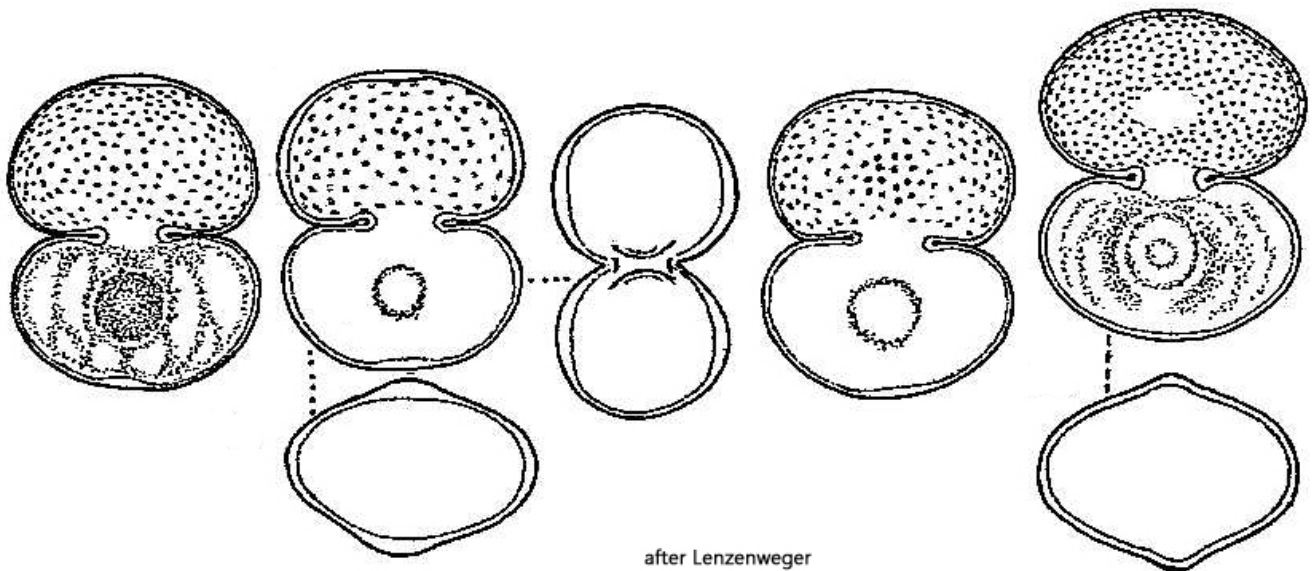
**Synonym:** n.a.

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

**Phylogenetic tree:** [Cosmarium tumidum](#)

**Diagnosis:**

- semi-cells broadly ellipsoidal
- length 30–40 µm, width 25–30 µm
- cell wall scattered pores
- central areas of semi-cells with flat protuberances
- one chloroplast with one pyrenoid per semi-cell

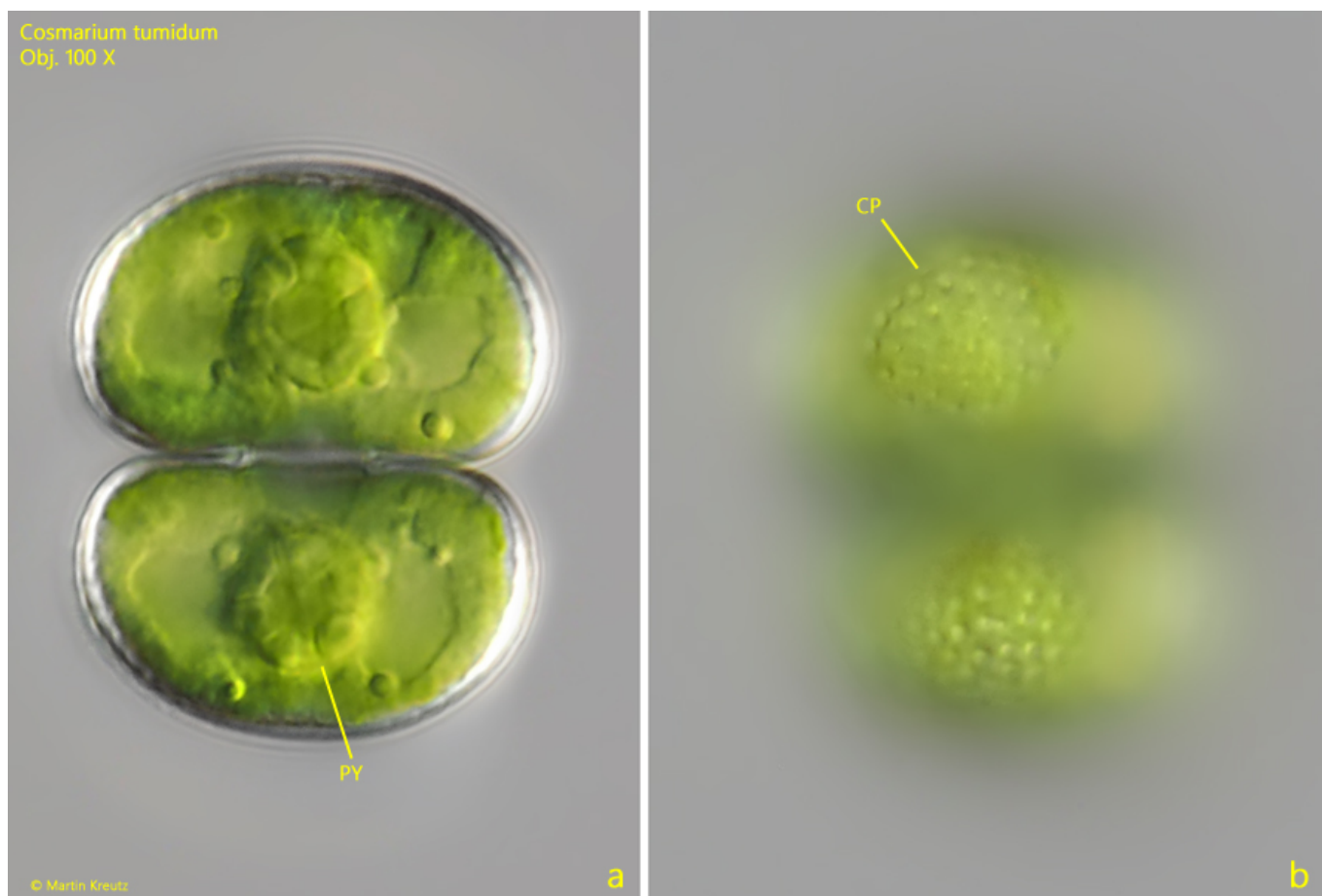


Cosmarium tumidum

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

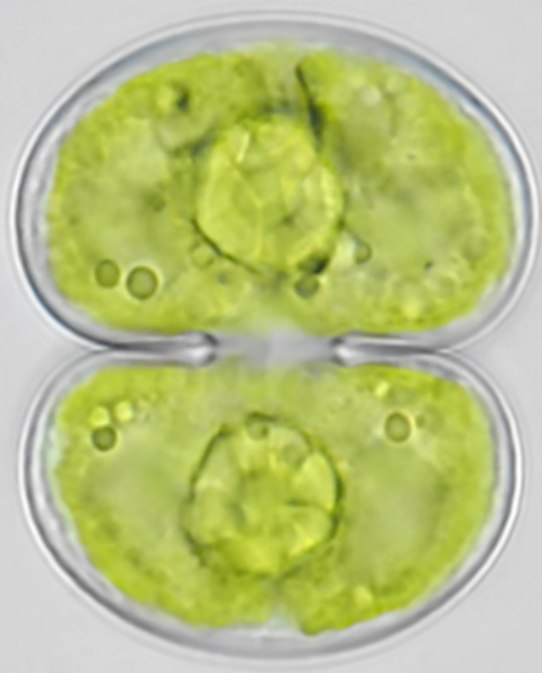
*Cosmarium tumidum* is a rather inconspicuous and small species. Its main characteristics are its cell wall with scattered small pores and a central protuberance on the sides of the semi-cells. These protuberances can only be seen when focusing carefully (s. fig. 1 b).

*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.



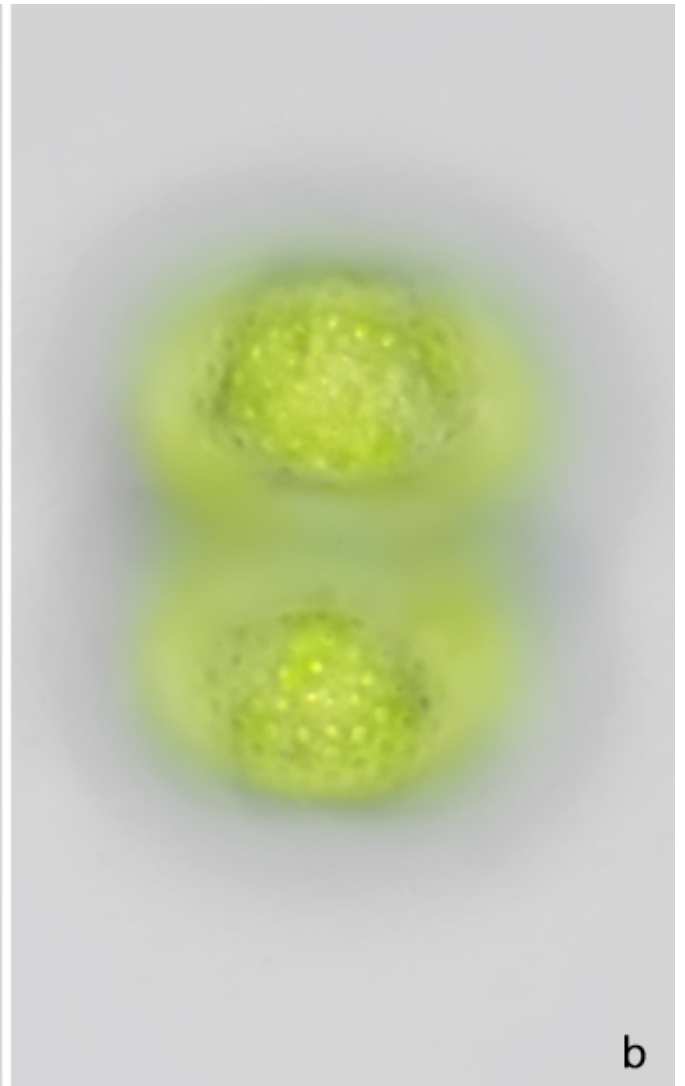
**Fig. 1 a-b:** *Cosmarium tumidum*. L = 32. Two focal planes of a specimen in DIC. The cell wall is covered with small pores and in the central areas of each semi-cell the protuberances (CP) are visible. Obj. 100 X.

*Cosmarium tumidum*  
Obj. 100 X



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**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.