

## ***Coelastrum pulchrum* Schmidle, 1892**

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

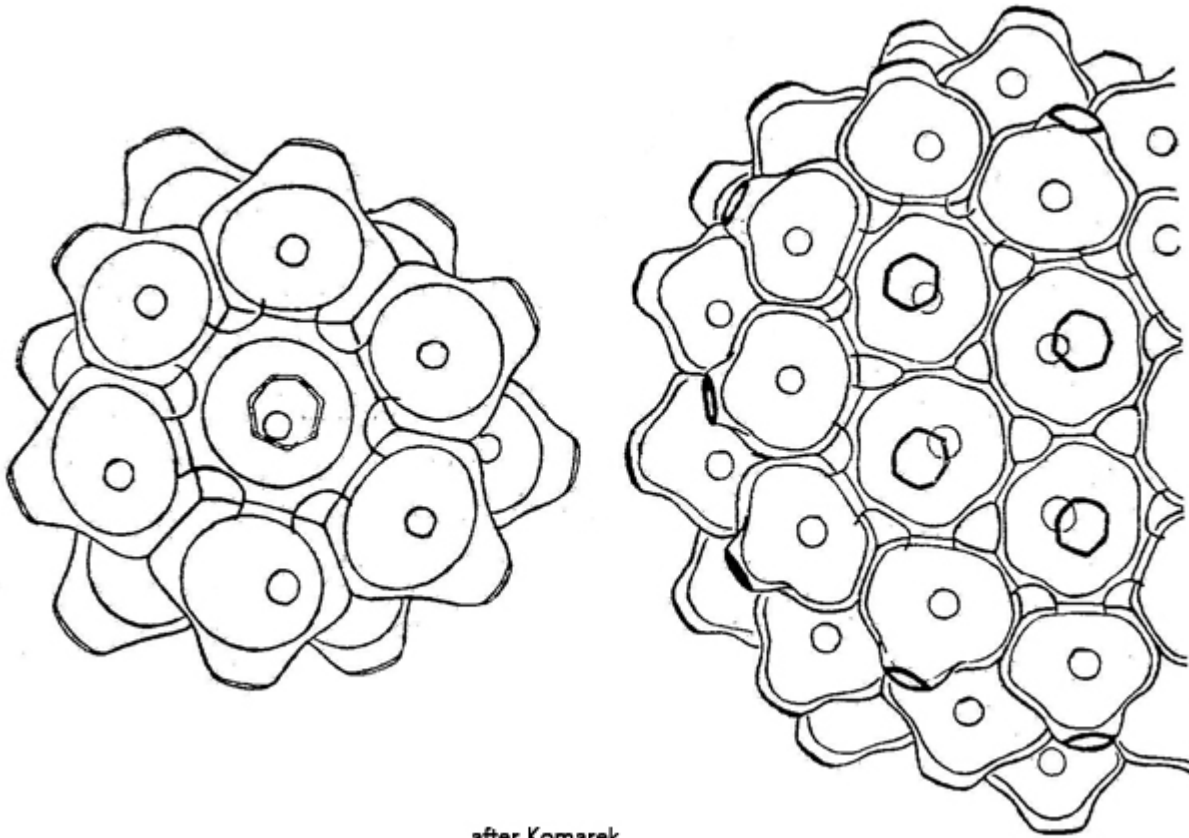
**Synonym:** n.a.

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

**Phylogenetic tree:** [Coelastrum pulchrum](#)

### **Diagnosis:**

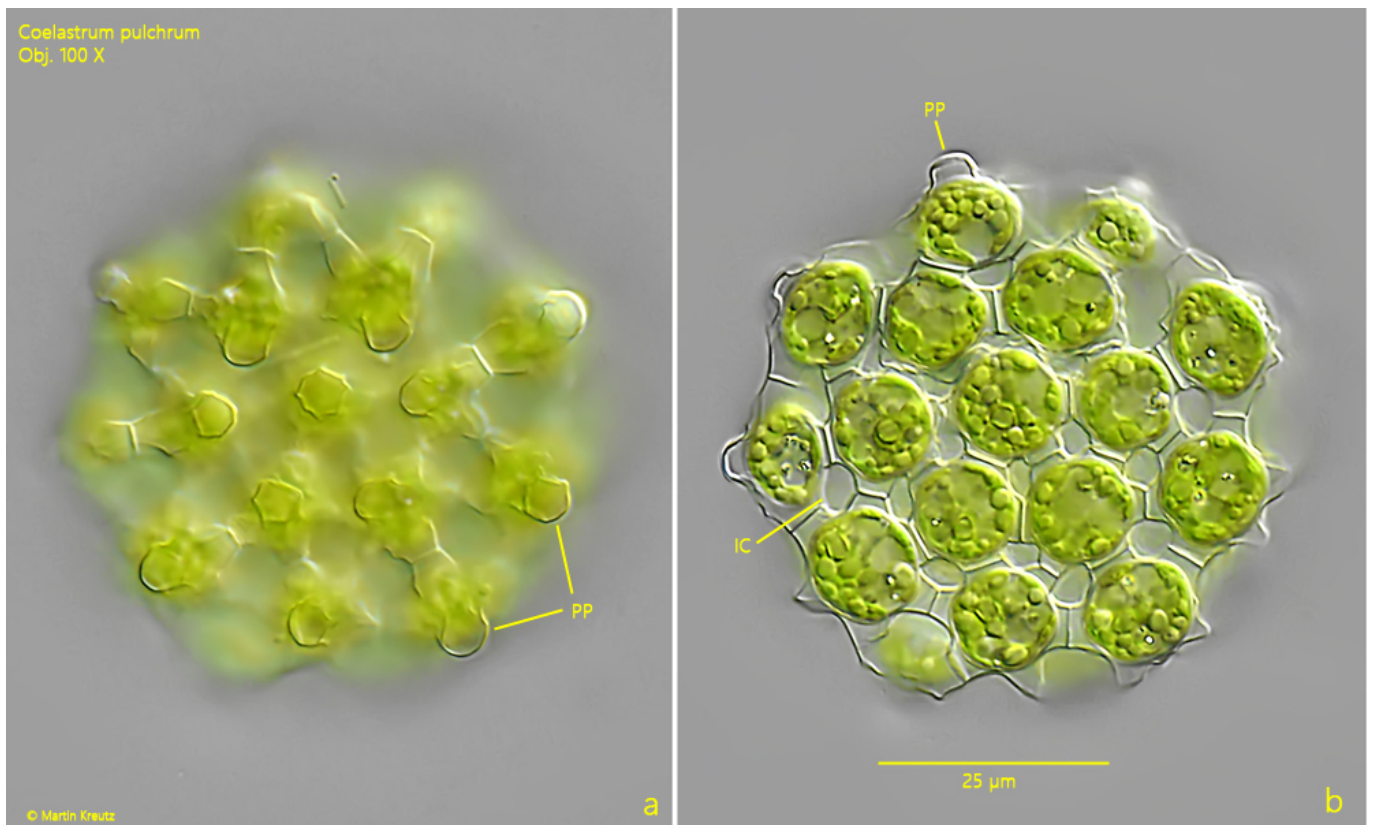
- coenobia spherical or tetrahedral
- 4-32 cells
- coenobia up to 86 µm diameter
- diameter of cells 6-16 µm
- cells connected via blunt projections
- each cell with a blunt polar projection
- gaps between the cells small
- one chloroplast with one pyrenoid



after Komarek

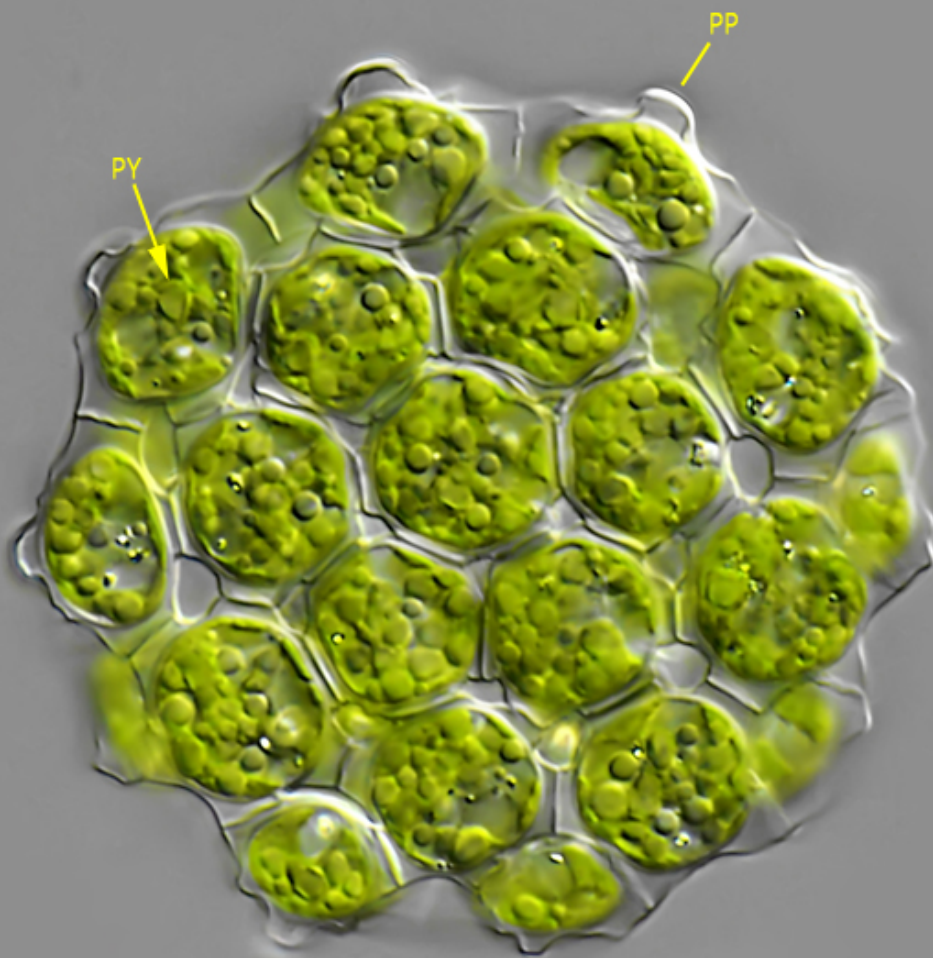
## Coelastrum pulchrum

I find *Coelastrum pulchrum* only very rarely. The coenobia are quite small at about 50–60  $\mu\text{m}$ . In the coenobia, each cell is connected to 6 of its neighboring cells via short extensions to form a hollow sphere. This construction results in small, asymmetrically shaped gaps between the cells. In addition, each cell has a seventh, blunt projection that is directed outwards and has a thickened cell wall.



**Fig. 1 a-b:** *Coelastrum pulchrum*.  $D = 50\ \mu\text{m}$  (of coenobium). Two focal planes of a coenobium consisting of 32 cells. Note the blunt polar projections (PP) of the cells. IC = intercellular space. Obj. 100 X.

Coelastrum pulchrum  
Obj. 100 X



© Martin Kreutz

**Fig. 2:** *Coelastrum pulchrum*. The squashed coenobium as shown in fig. 1 a-b. PP = polar projection, PY = pyrenoid. Obj. 100 X.