Stauridium tetras

(Ehrenberg) E.Hegewald, 2005

Most likely ID: n.a.

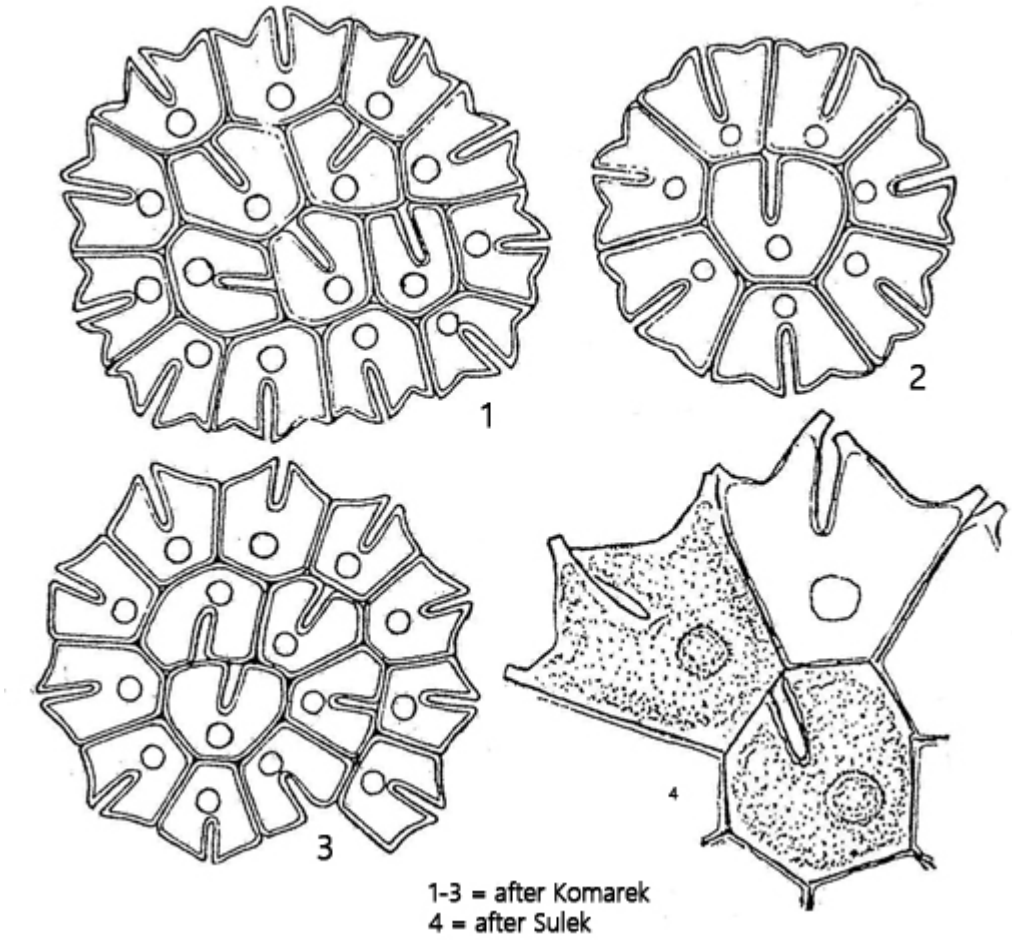
Synonym: *Pediastrum tetras*

Sampling location: Pond of the convent Hegne, Pond of the waste disposal company Constance, Ulmisried, Simmelried

Phylogenetic tree: *Stauridium tetras*

Diagnosis:

- coenobium star-shaped, flat and single layered
- diameter coenobium up to 55 µm
- coenobium of (4)–8–16–32–(64) cells
- cell wall smooth
- each cell with two lobes with each two short projections
- marginal cells with V-shaped incision
- inner cells with narrow incision
- without intercellular spaces
- single pyrenoid per cell



Stauridium tetras

I find *Stauridium tetras* in my sampling sites both in plankton and in the growth on aquatic plants and wood. However, the species is not very common in my sampling sites.

The species was describes as *Pediastrum tetras* and transferred to the new genus *Stauridium* in 2011 by Hegewald.

The coenobia in my population mostly consist of 8 cells and are quite small (approx. 30–35 µm). Only very rarely do I find coenobia with 16 cells (s. fig. 2) and I have never found coenobia with 32 or 64 cells.

The coenobia have no intercellular spaces and the cells touch each other. The marginal cells each have a total of 4 short processes, which are sometimes only warty or not present at all (s. drawing 2, above). The marginal cells have a V-shaped incision, whereas this is only slit-shaped in the inner cells. The cell wall is

completely smooth.

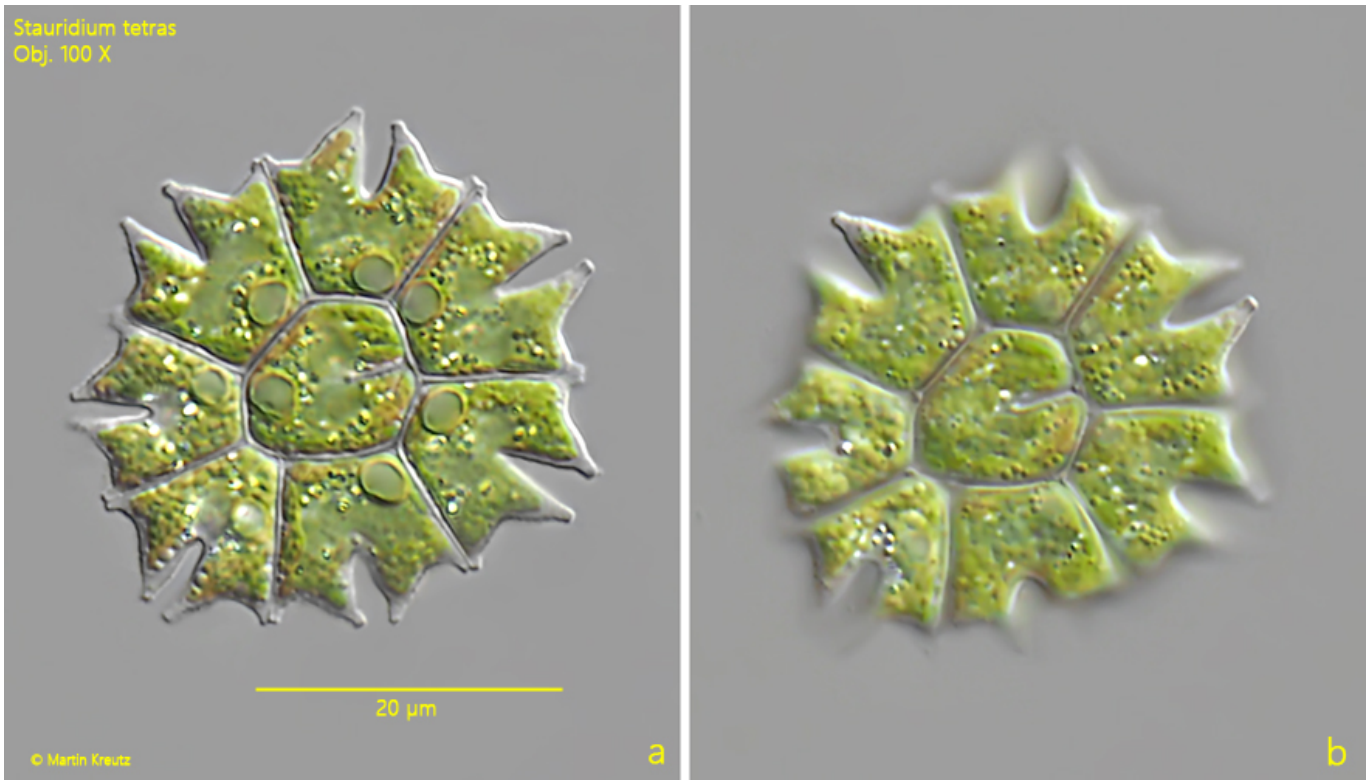


Fig. 1 a-b: *Stauridium tetras*. D = 36 µm (of coenobium). Two focal planes of a coenobium of 8 cells. Note the smooth cell wall (b). Obj. 100 X.

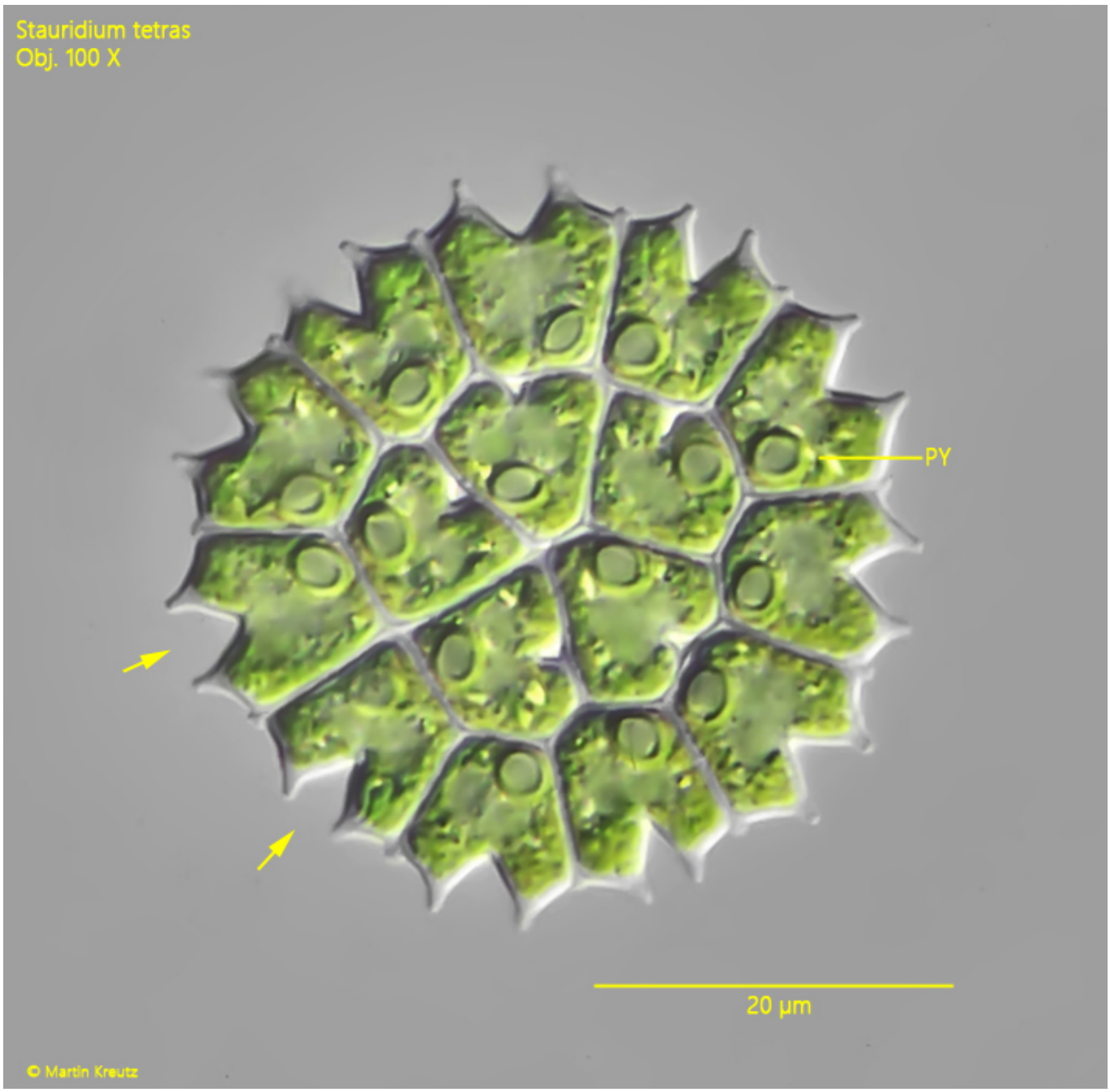


Fig. 2: *Stauridium tetras*. D = 43 µm (of coenobium). A coenobium of 16 cells. Note the V-shaped incisions (arrows) of the marginal cells. PY = pyrenoid. Obj. 100 X.