Cosmarium mansangense

West & G.S.West, 1908

Most likely ID: n.a.

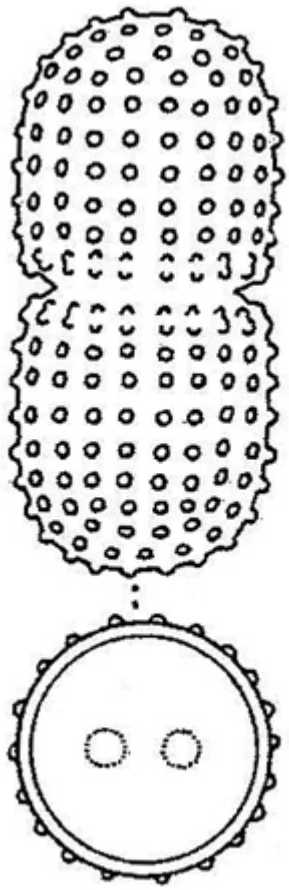
Synonym: n.a.

Sampling location: Simmelried

Phylogenetic tree: *Cosmarium mansangense*

Diagnosis:

- semi-cell almost cylindrical with broadly rounded apices
- in apical view circular
- length 48–80 µm, width 20–36
- cell wall with round granules in 9–11 horizontal rows per semi-cell
- two pyrenoids per semi-cell
- chloroplasts dicentric
- sinus wide



Cosmarium mansangense

Although *Cosmarium mansangense* is described as a common and widespread alga, I have so far found all specimens exclusively in the Simmelried, where the species occurs only very rarely. On average, I find a few specimens every 5 years.

Cosmarium mansangense can easily be recognized by its almost cylindrical half-cells, which are covered by regularly arranged tubercles. There are two pyrenoids in each half-cell. The very similar species *Cosmarium pseudoamoenum* has only one pyrenoid per half-cell. Over the years, the specimens in my population have all been the same length at around 55 µm.

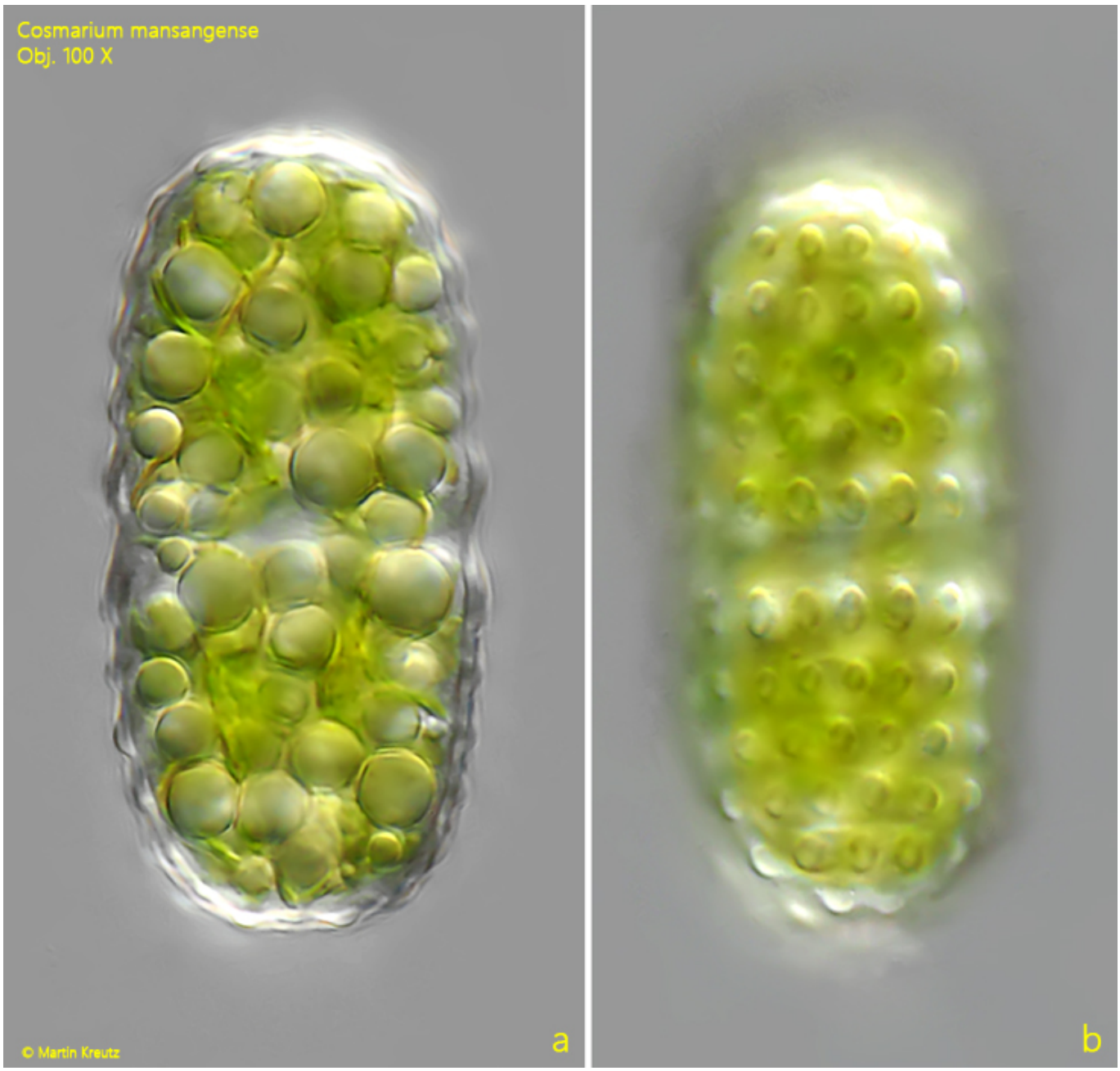


Fig. 1 a-b: *Cosmarium mansangense.* L = 53 µm. Two focal planes of a specimen filled with starch grains. Obj. 100 X.

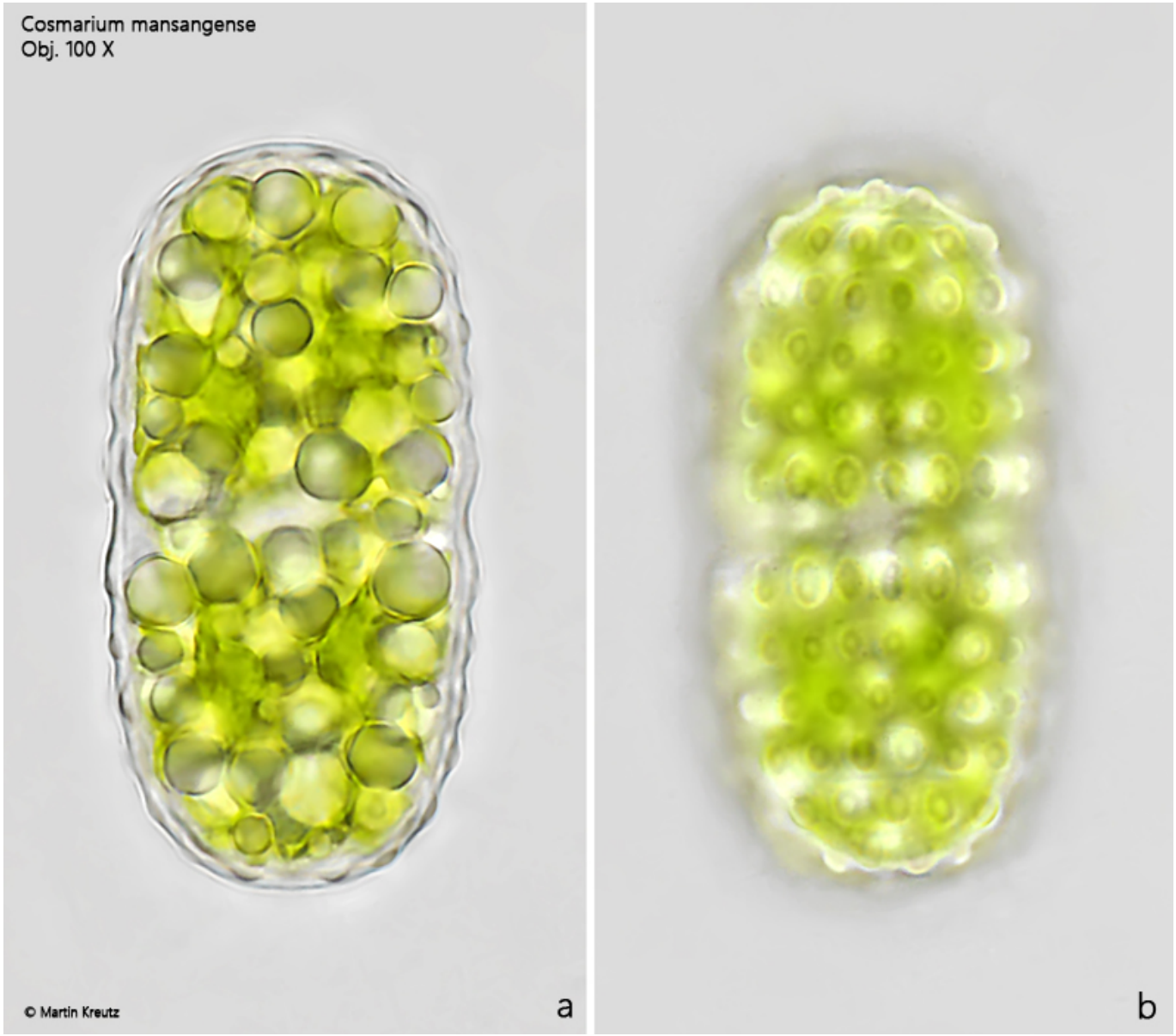


Fig. 2 a-b: *Cosmarium mansangense.* L = 53 µm. The same specimen as shown in fig. 1 a-b in brightfield illumination. Obj. 100 X.

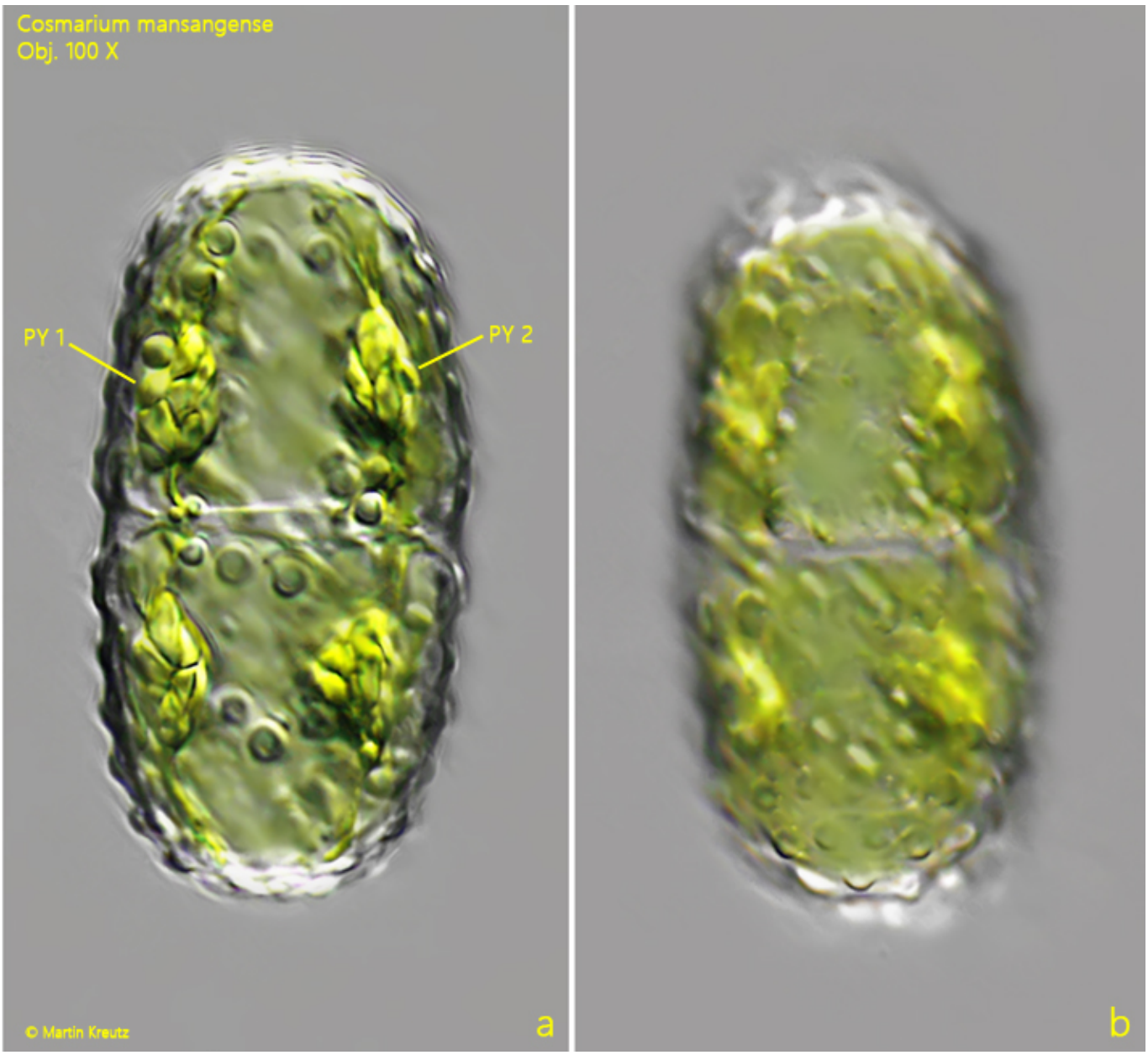


Fig. 3 a-b: *Cosmarium mansangense.* L = 54 µm. A third specimen found in April 2009 with the visible two pyrenoids (PY 1, PY 2) per semi-cell. Obj. 100 X.