Coelastrum pseudomicroporum

Korshikov, 1953

Most likely ID: n.a.

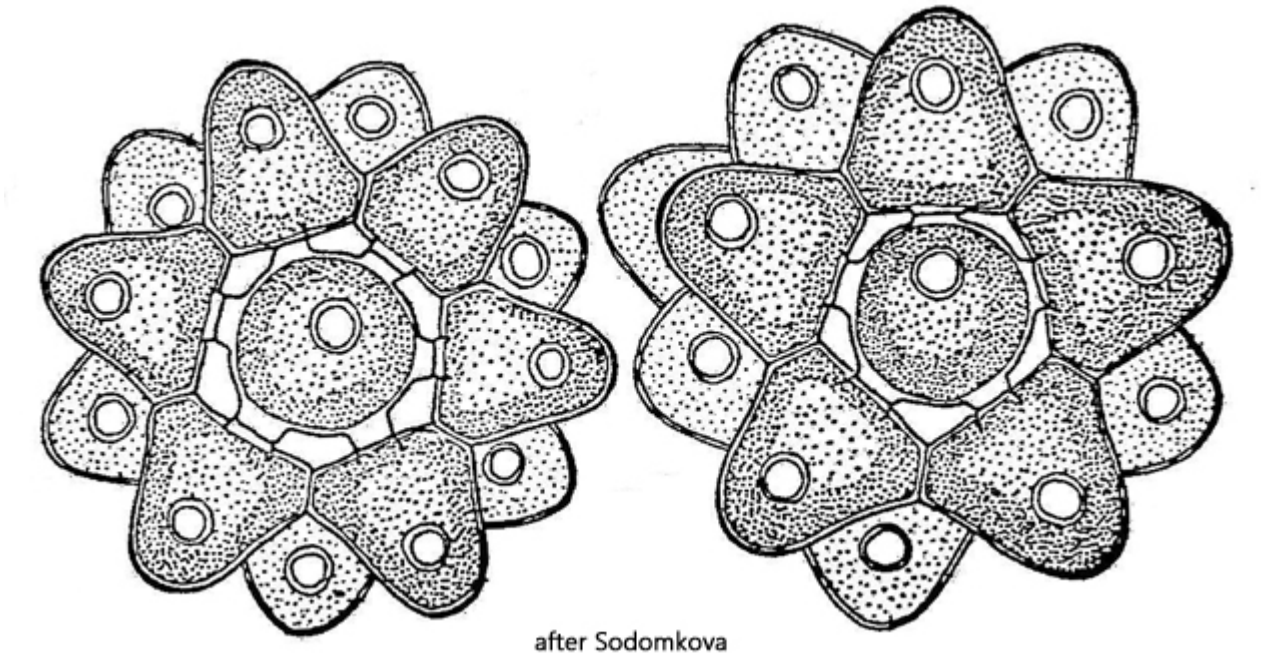
Synonym: n.a.

Sampling location: Pond of the waste disposal company Constance

Phylogenetic tree: *Coelastrum pseudomicroporum*

Diagnosis:

- coenobia spherical
- 4-8-16-32-64 cells
- coenobia 35–42 µm diameter
- cells ovoid
- diameter of cells 5–10 µm
- cells connected via short, blunt projections
- cells without polar projection
- intercellular spaces very small
- one parietal chloroplast with one pyrenoid



Coelastrum pseudomicroporum

I found many coenobia of *Coelastrum pseudomicroporum* in the plankton of the pond of the waste disposal company Constance. The coenobia had a diameter of 50–70 µm, which is about twice as large as reported by Komarek & Trebon (1983). This may be due to the strong eutrophication of this pond. I found most coenobia in the autumn.

The cells in the coenobia were not as strongly ovoid-shaped as drawn by Sodomkova (s. drawings above) but rather more compact, with only slight tapering of the polar end which points outward. This may be related to the strong eutrophication and the high food availability for the algae.

Coelastrum pseudomicroporum differs from the similar species *Coelastrum microporum* by the short projections with which the cells are connected to each other (s. fig. 4 a-b). In *Coelastrum microporum*, the cells touch directly without a connecting piece in between.

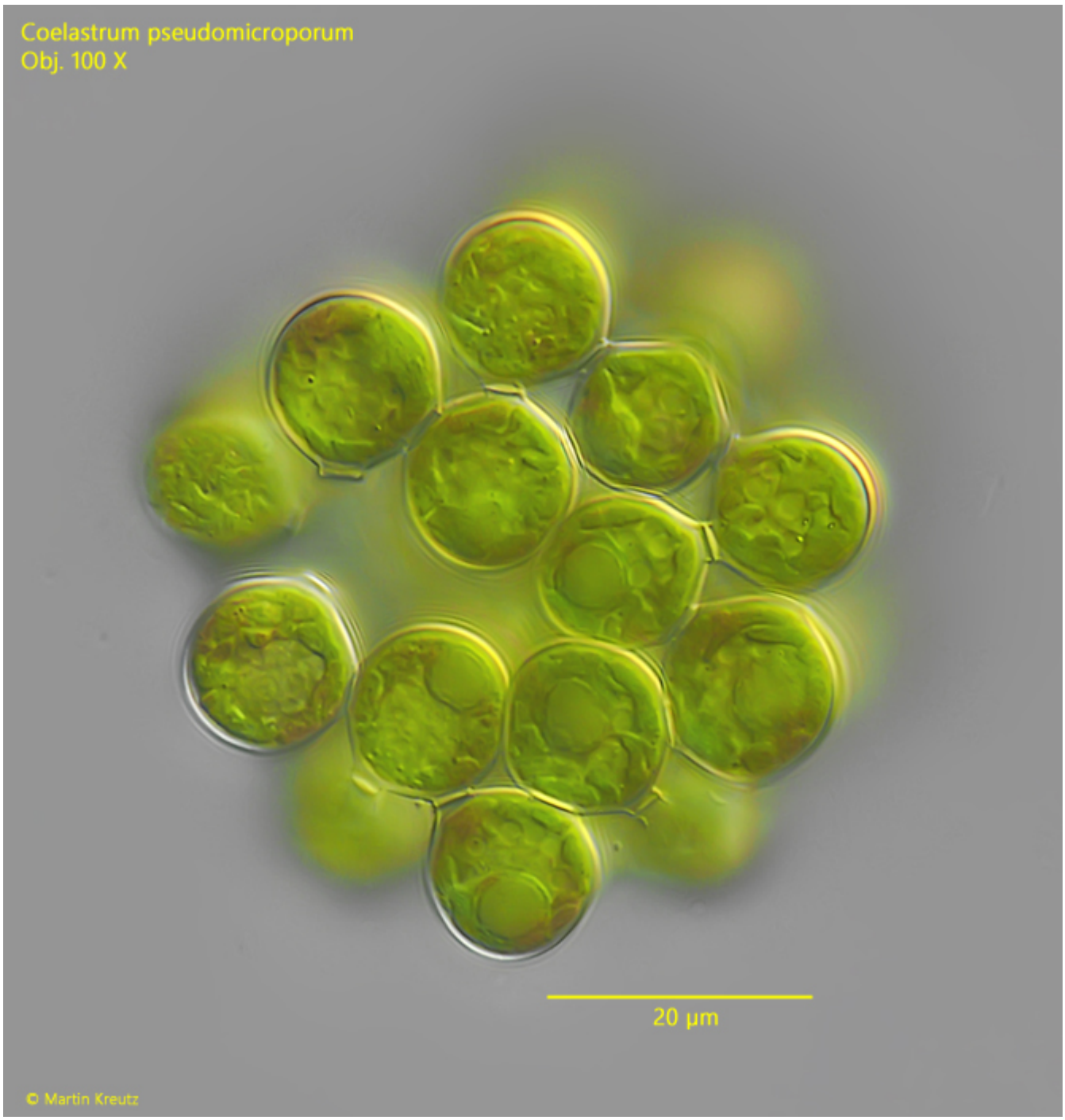


Fig. 1: *Coelastrum pseudomicroporum*. D = 58 µm (of coenobium). A coenobium of 32 spherical cells. Obj. 100 X.

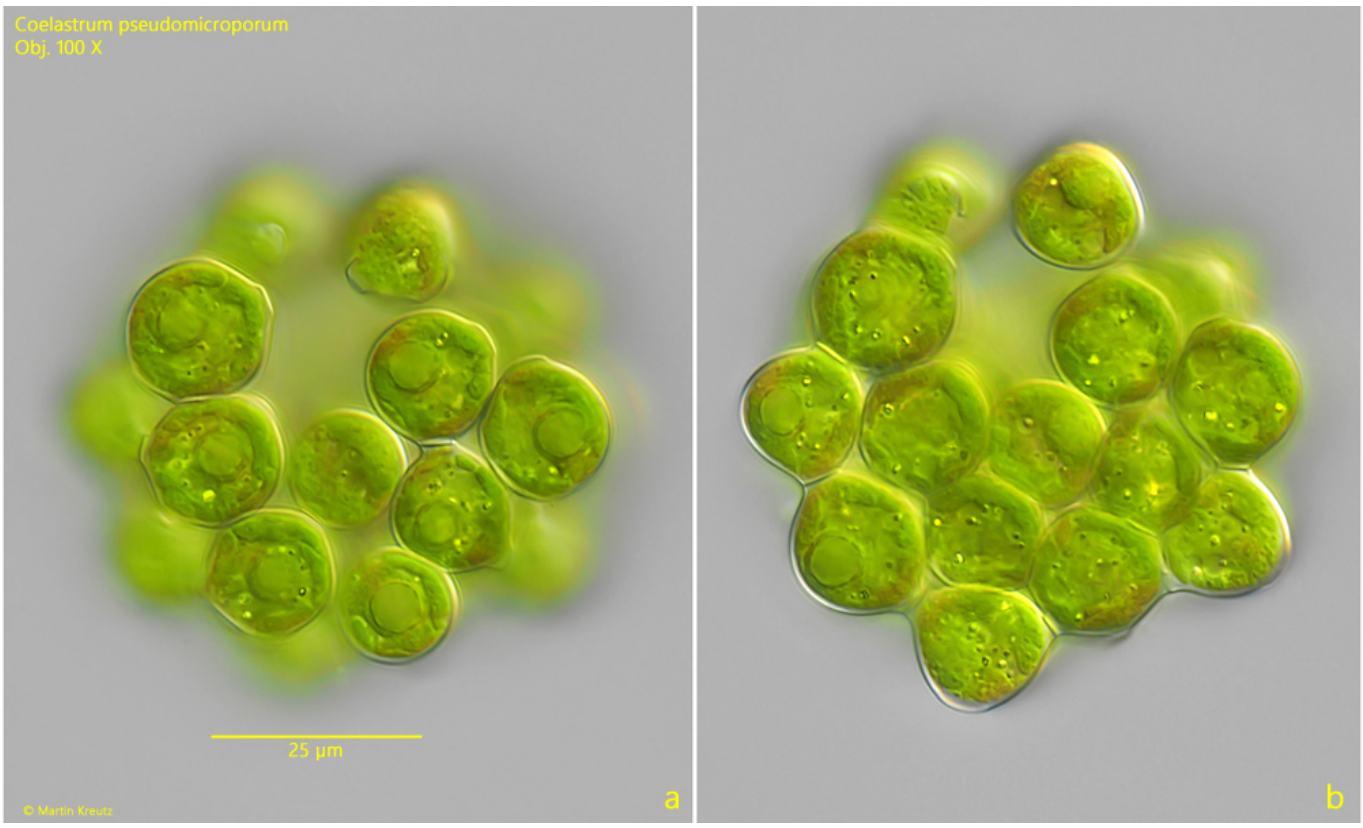


Fig. 2 a-b: *Coelastrum pseudomicroporum*. D = 69 µm (of coenobium). Two focal planes of a second coenobium of 32 cells. Obj. 100 X.

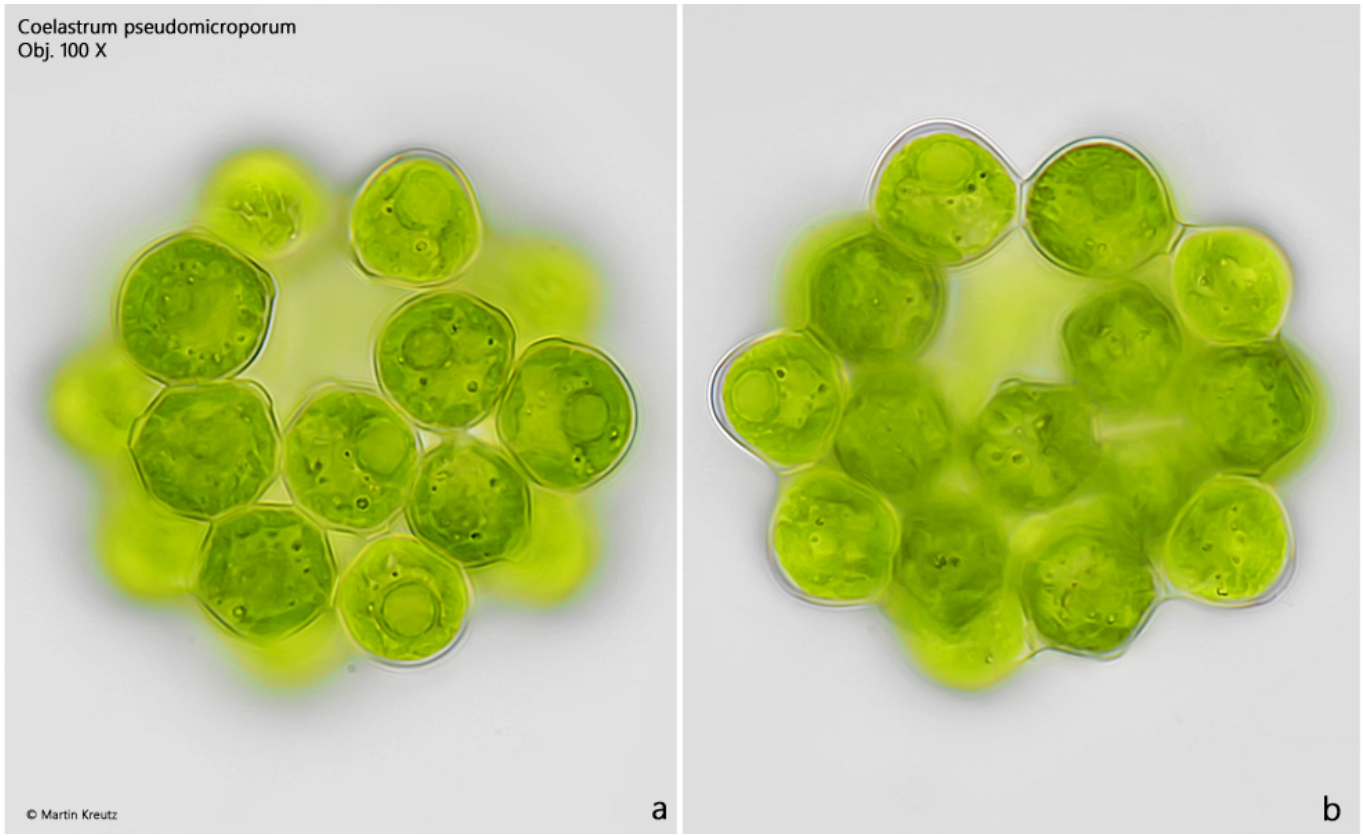


Fig. 3 a-b: *Coelastrum pseudomicroporum*. D = 69 µm (of coenobium). The same coenobium as shown in fig. 2 a-b in brightfield illumination. Obj. 100 X.

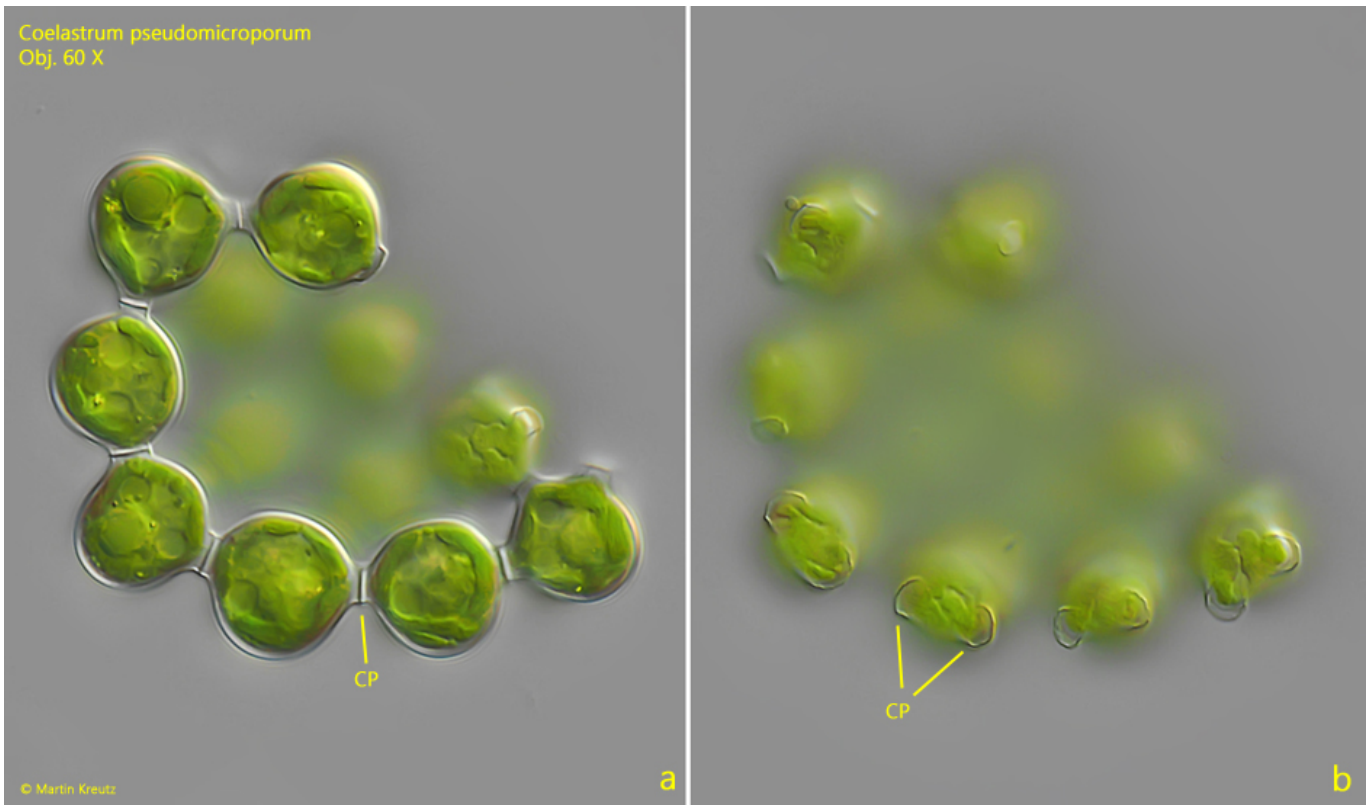


Fig. 4 a-b: *Coelastrum pseudomicroporum*. A broken coenobium with focal plane on the connecting projections (CP) of the cells. Obj. 60 X.

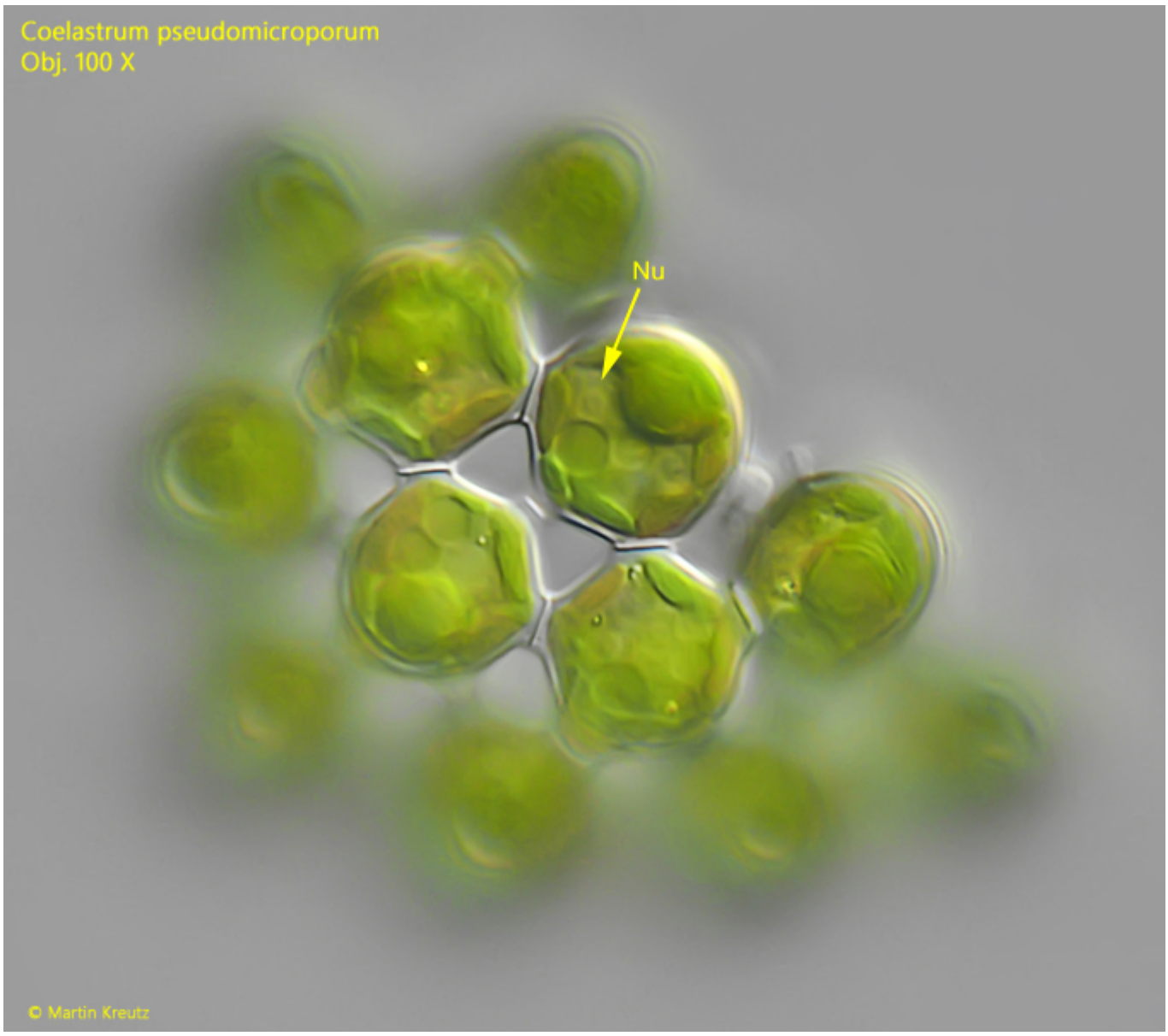


Fig. 5: *Coelastrum pseudomicroporum*. Another broken colony. The focus is on some outer cells that are still connected to their neighboring cells. Nu = nucleus. Obj. 100 X.