Cylindrocystis brebissonii

(Ralfs) De Bary, 1858

Most likely ID: n.a.

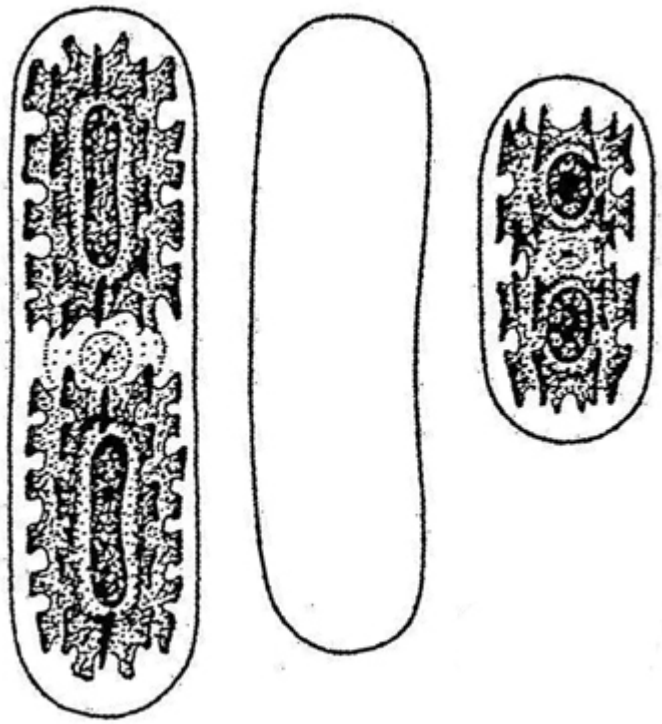
Synonym: n.a.

Sampling location: Sima Moor (Austria), Simmelried

Phylogenetic tree: *Cylindrocystis brebissonii*

Diagnosis:

- cells cylindrical with rounded apices, sometimes slightly curved
- lateral sides straight and parallel
- length 35–80 µm long
- two stellate chloroplasts with each one pyrenoid
- pyrenoids spherical or elongated
- ridges of chloroplasts longitudinally
- acidophile



Cylindrocystis brebissonii

Cylindrocystis brebissonii is an extremely common algae, but it is bound to acidic locations. It is therefore very common in bog waters. In the Simmelried I only find it in the bank zones and puddles with *Sphagnum* growth.

The cell wall of *Cylindrocystis brebissonii* is smooth. The fine dotting that can be seen in the images below is caused by the pore apparatus in the cell wall, which is responsible for the secretion of mucus. I have described elsewhere how the pore apparatuses can be easily stained and visualized (s. *Micrasterias rotata*).

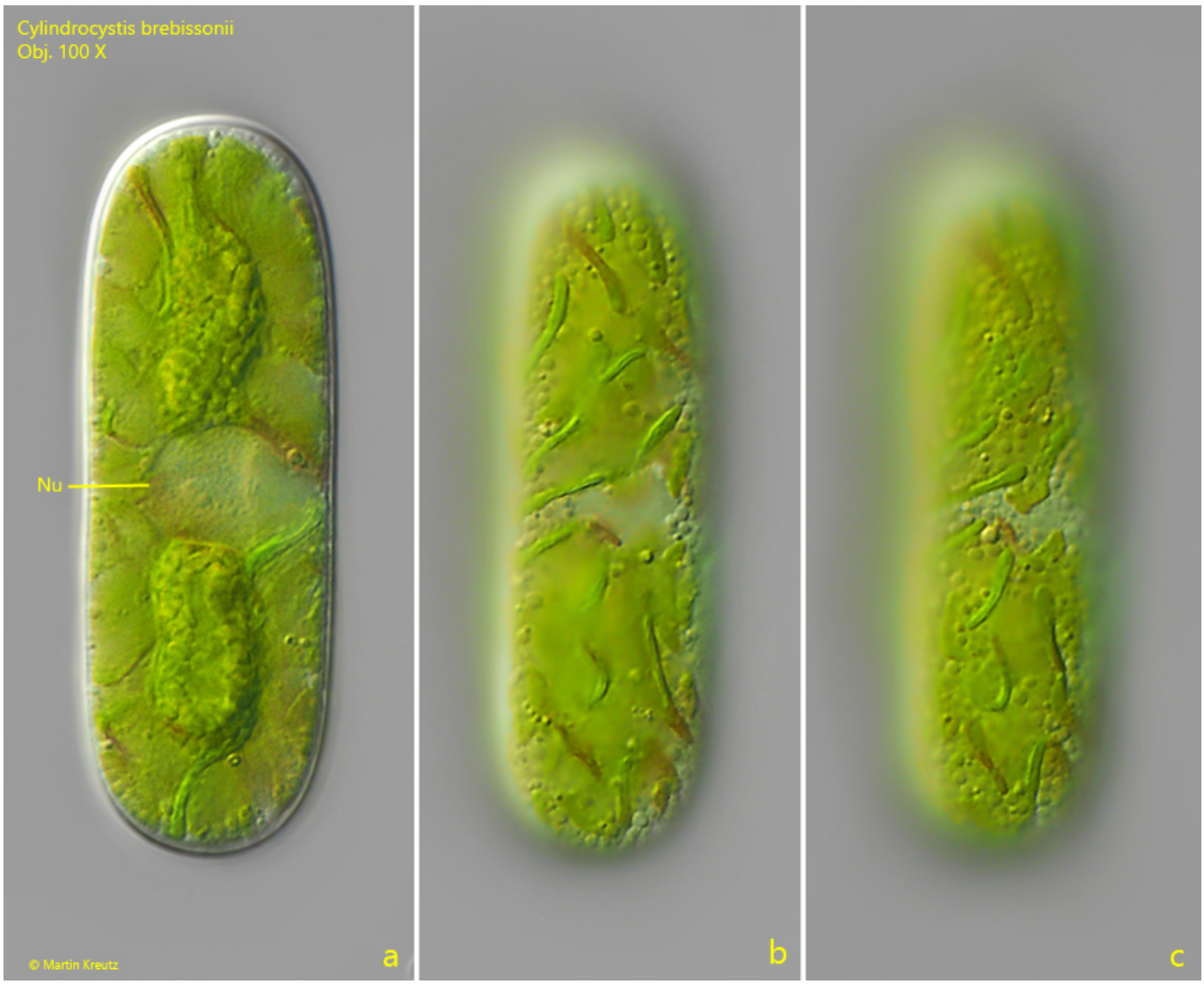


Fig. 1 a-c: *Cylindrocystis brebissonii*. L = 65 µm. Three focal planes of a specimen found in June 2024 in the Sima Moor. Nu = nucleus. Obj. 100 X.

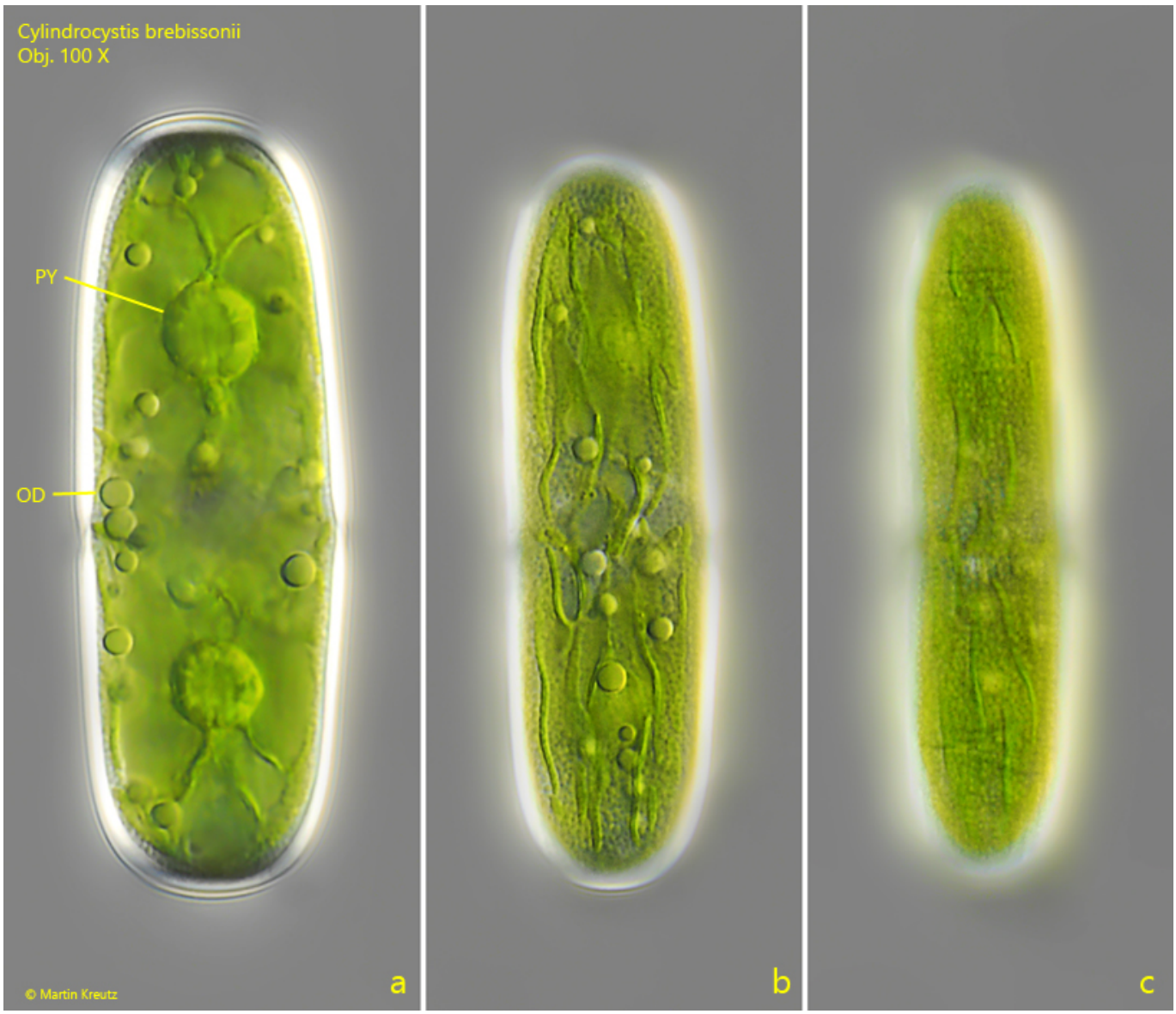


Fig. 2 a-c: *Cylindrocystis brebissonii*. L = 65 µm. Three focal planes of a second specimen from the Sima Moor. OD = oil droplets, PY = pyrenoid. Obj. 100 X.

Fig. 3 a-c: *Cylindrocystis brebissonii*. L = 65 µm. The same specimen as shown in fig. 2 a-c in brightfield illumination. Obj. 100 X.