Ophiocytium majus Nägeli, 1849

Most likely ID: n.a.

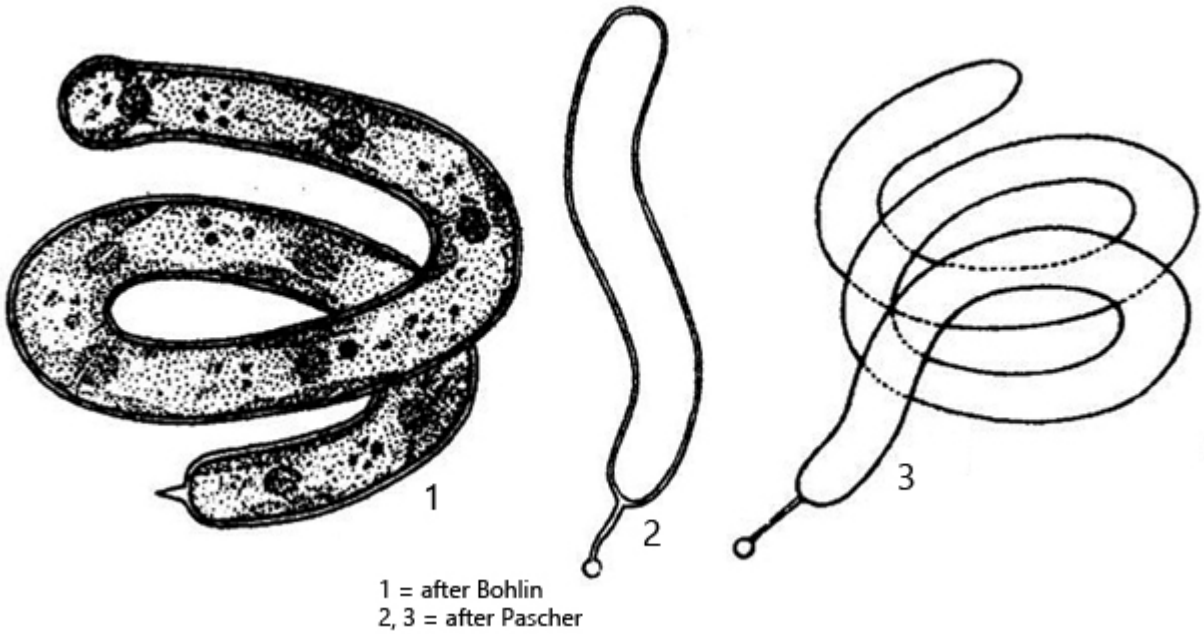
Synonym: *Ophiocytium maius*

Sampling location: Simmelried

Phylogenetic tree: *Ophiocytium majus*

Diagnosis:

- cylindrical cells curved, coiled or S-shaped
- length up to 600 µm, width 8-17 µm (sometimes up to 30 µm)
- one end thickened, the second end with short stalk
- many oil droplets scattered in cytoplasm
- chloroplasts yellowish-green, disc-shaped with irregular margin
- pyrenoids absent
- free-floating or epiphytical



Ophiocytium majus

I find the yellow-green algae *Ophiocytium majus* only very rarely and exclusively in the Simmelried. I have not yet been able to find this species in my other sampling sites.

Most of the specimens from the Simmelried are almost circularly curved. Important characteristics are the diameter of the cell, the shape of the chloroplasts and the shaped of the cell ends. *Ophiocytium majus* is one of the largest members of the genus *Ophiocytium*. The specimen shown below has a diameter of 15 µm. Almost all other species have a smaller diameter. One end of *Ophiocytium majus* is slightly thickened and the other has a short stalk, which is either spherical in shape of an adhesive disc (s. fig. 2). The chloroplasts of *Ophiocytium majus* are plate-like and irregularly shaped (s. fig. 1 b). They are only weakly colored and transparent.

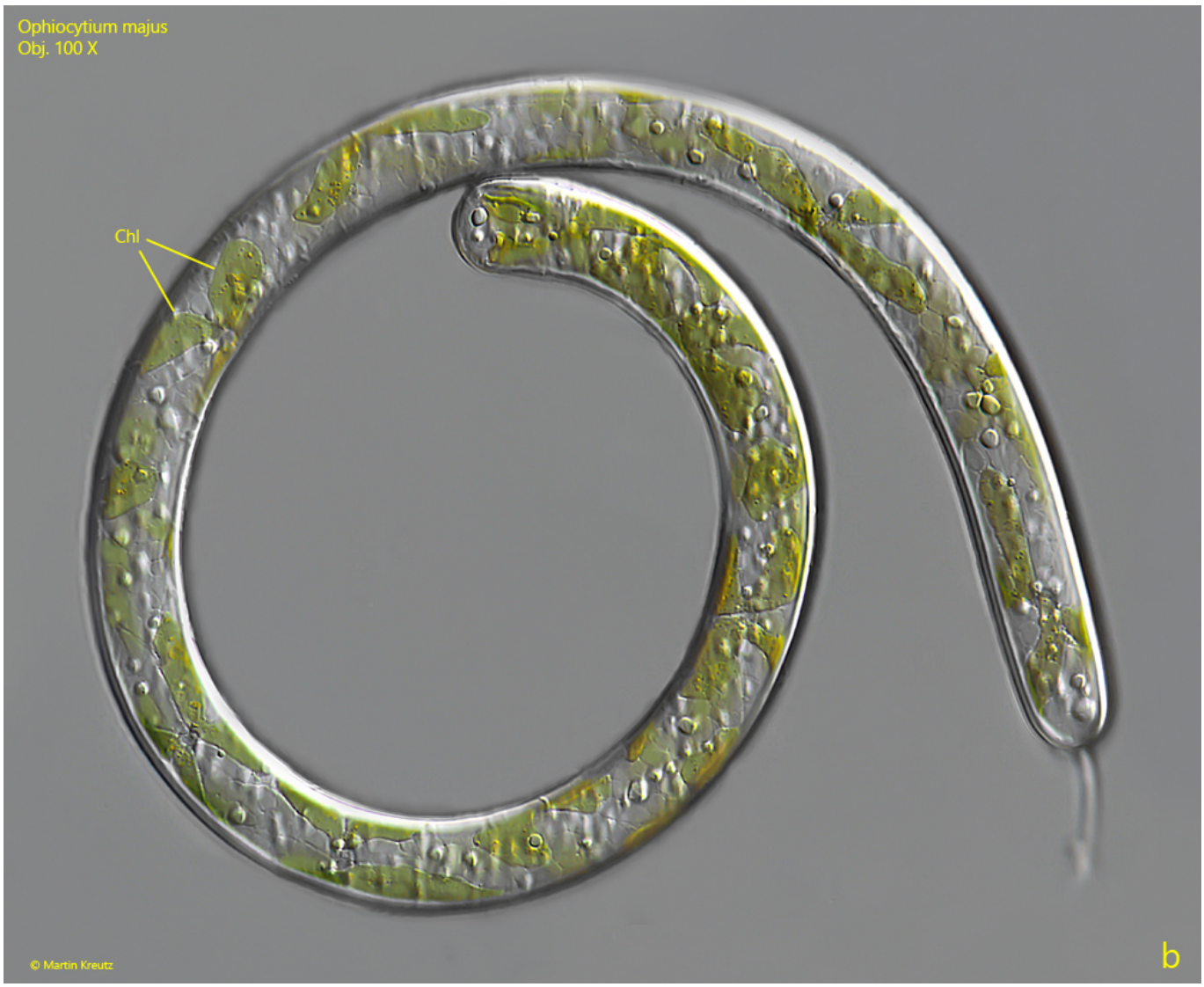


Fig. 1 a-b: *Ophiocytium majus*. L = 450 µm. Two focal planes of a curved specimen. Note the slightly thickened end (arrow) and the irregularly shaped, transparent chloroplasts (Chl). OD = oil droplets. Obj. 100 X.

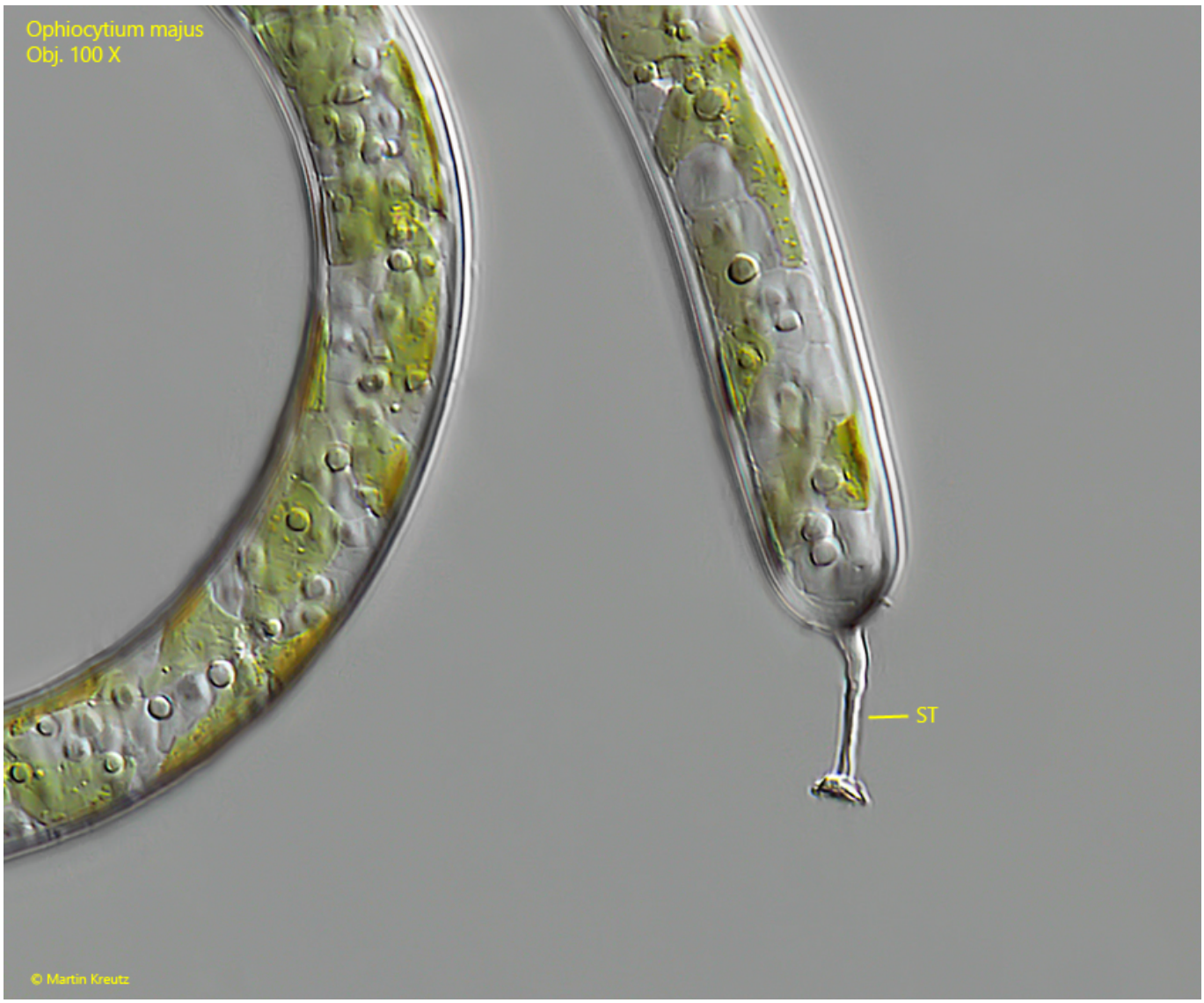


Fig. 2: *Ophiocytium majus*. L = 450 µm. Focal plane on the end with a short stalk (ST) of the same specimen as shown in fig. 1 a-b. Obj. 100 X.