Ophiocytium majus Nägeli, 1849

Most likely ID: n.a.

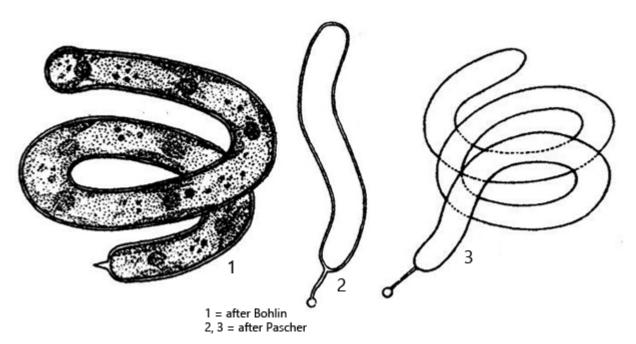
Synonym: Ophiocytium maius

Sampling location: Simmelried

Phylogenetic tree: Ophiocytium majus

Diagnosis:

- cylindrical cells curved, coiled or S-shaped
- length up to 600 μ m, width 8-17 μ m (sometimes up to 30 μ m)
- 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 <u>Simmelried</u> 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 μ m. 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.



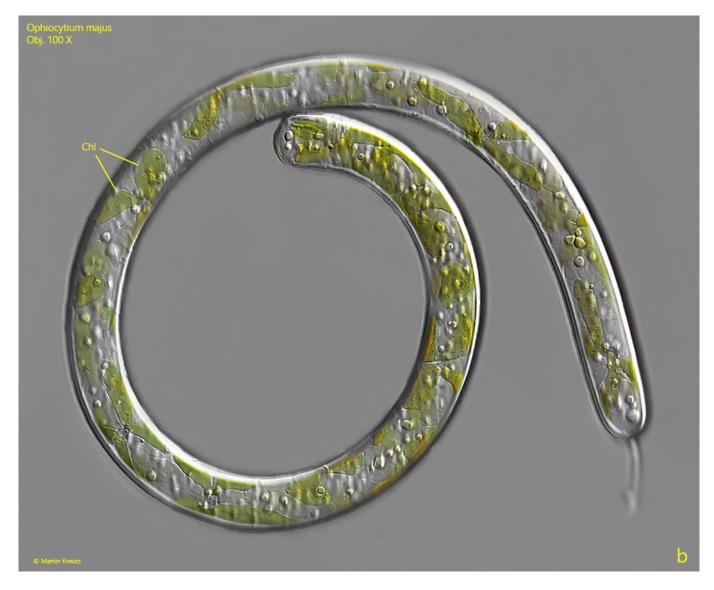


Fig. 1 a-b: Ophiocytium majus. $L = 450 \mu m$. Two focal planes of a curved specimen. Note the slightly thickened end (arrow) and the irregularly shaped, transparent chloroplasts (Chl). OD = oil droplets. Obj. 100 X.



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