Mischococcus confervicola (Nägeli, 1849)

Most likely ID: n.a.

Synonym: n.a.

Sampling location: <u>Ulmisried</u>, <u>Simmelried</u>

Phylogenetic tree: Mischococcus confervicola

Diagnosis:

- cells spherical, cell wall smooth
- diameter 5-8-(11) μm
- cells attached to distal end of dichotomously branched mucilaginous stalks
- 1-2 parietal chloroplasts, pale yellow, without pyrenoid
- branched colonies often attached to filamentous algae
- swarmer with two flagella and two contractile vacuoles



Mischococcus confervicola

I rarely find *Mischococcus confervicola* in my samples. The colonies are usually found between floating plants or in algae tufts. The characteristic growth form makes this xanthophyte easy to identify, although the cells are very small. In my population mostly between $6-8 \mu m$. The cells are located at the ends of mucilaginous stalks, which are excreted by the cells. These mucilaginous stalks branch dichotomously at different angles, creating the characteristic appearance of the colonies.



Fig. 1: Mischococcus confervicola. D = 190 μ m (of colony). A slightly squashed, star-shaped colony. Obj. 40 X.



Fig. 2: *Mischococcus confervicola*. $D = 220 \mu m$ (of colony). A second, slightly squashed colony growing of a cluster of 5 cells of chlorophytes. Note the mucilaginous stalks (MS) of the cells. Obj. 60 X.



Fig. 3: *Mischococcus confervicola*. The spherical cells in a strongly squashed colony. Obj. 100 X.



Fig. 4 a-b: *Mischococcus confervicola*. $D = 5.7 - 6.8 \mu m$ (of cells). The cells in detail. Note the very small nucleus (Nu) in the center of the cell. Obj. 100 X.