## Vorticella aquadulcis (Stokes, 1887)

## Most likely ID: n.a.

**Synonyms:** Vorticella striata octava, Vorticella octava, Vorticella striata, Vorticella latestriata, Vorticella platysoma, Vorticella astyliformis, Vorticella octava costata.

Sampling location: Hagstaffel pond, Simmelried

## Phylogenetic tree: <u>Vorticella aquadulcis</u>

## **Diagnosis**:

- length 25–55  $\mu m$  , width 15–35  $\mu m$
- cells pyriform
- contracted cells oviform
- plasm colorless
- one contracile vacuole
- macronucleus horseshoe-shaped, located in anterior half
- pellicle is widely striped, 13-30 horizontal stripes
- stalk contracts in spirals
- solitary



<sup>1, 2 =</sup> after Foissner 3 = after Noland & Finlay (contracted specimen)

Vorticella aquadulcis

I found *Vorticella aquadulcis* in 1998 in <u>Hagstaffel pond</u> attached to colonies of the planktonic cyanobacterium *Anabaena flos-aquae* and 2023 on coverslips floating on samples from <u>Simmelried</u>. *Vorticella aquadulcis* can be easily recognized by the widely spaced striation of the pellicle and the horseshoe-shaped macronucleus, which is located in the anterior half of the cell. The species occurs exclusively solitary and does not form pseudocolonies as do many other species of the genus Vorticella. Many synonymous species are grouped under *Vorticella aquadulcis*, which is why it is also called the "*Vorticella aquadulcis* complex" (s. Synonyms above).



**Fig. 1 a-c:** *Vorticella aquadulcis*.  $L = 32 \mu m$ . Two focal planes of a fully extended specimen (a, b) and a fully contracted specimen (c). Note the widely spaced striation of the pellicle (b). Obj. 60 X.



Fig. 2 a-b: Vorticella aquadulcis. L = 31  $\mu$ m. Two focal planes of a seceond, fully extended specimen. Obj. 60 X.





**Fig. 3:** *Vorticella aquadulcis.* L = 33 µm. A fully extended specimen in detail. Obj. 100 X.

**Fig. 4:** *Vorticella aquadulcis.* A strongly squashed specimen to visualize the single contractile vacuole (CV) and the horseshoe-shaped macronucleus (Ma). Obj. 100 X.