

## ***Vorticella aquadulcis* Stokes, 1887**

**Most likely ID:** n.a.

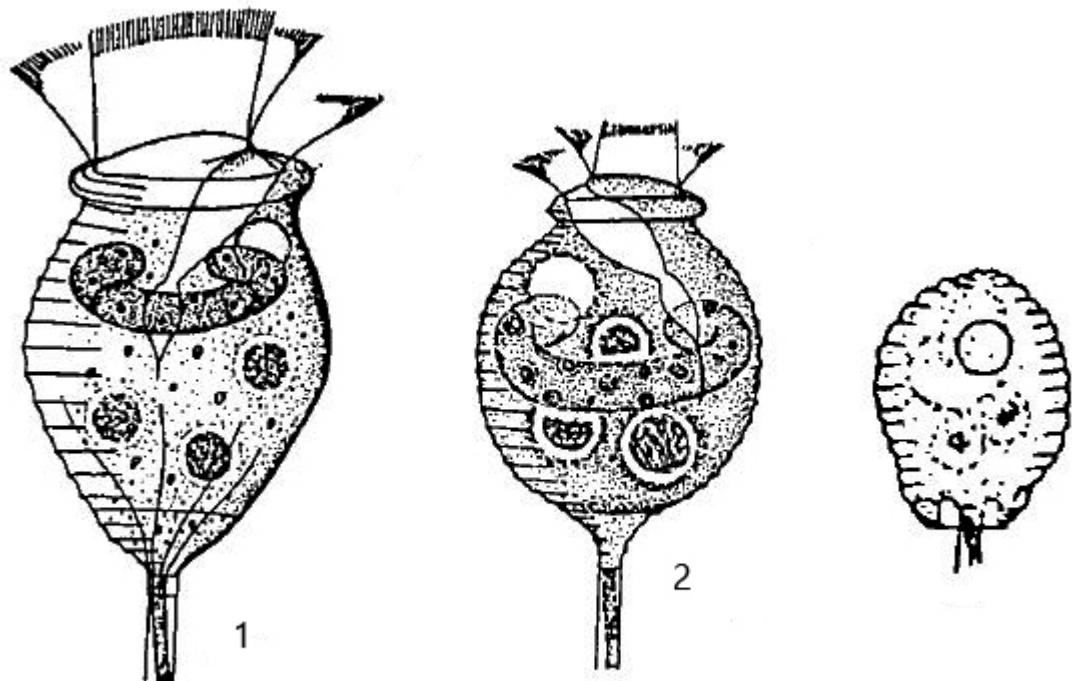
**Synonyms:** *Vorticella striata octava*, *Vorticella octava*, *Vorticella striata*, *Vorticella latestriata*, *Vorticella platysoma*, *Vorticella astyliformis*, *Vorticella octava costata*.

**Sampling location:** [Hagstaffel pond, Simmelried](#)

**Phylogenetic tree:** [\*Vorticella aquadulcis\*](#)

**Diagnosis:**

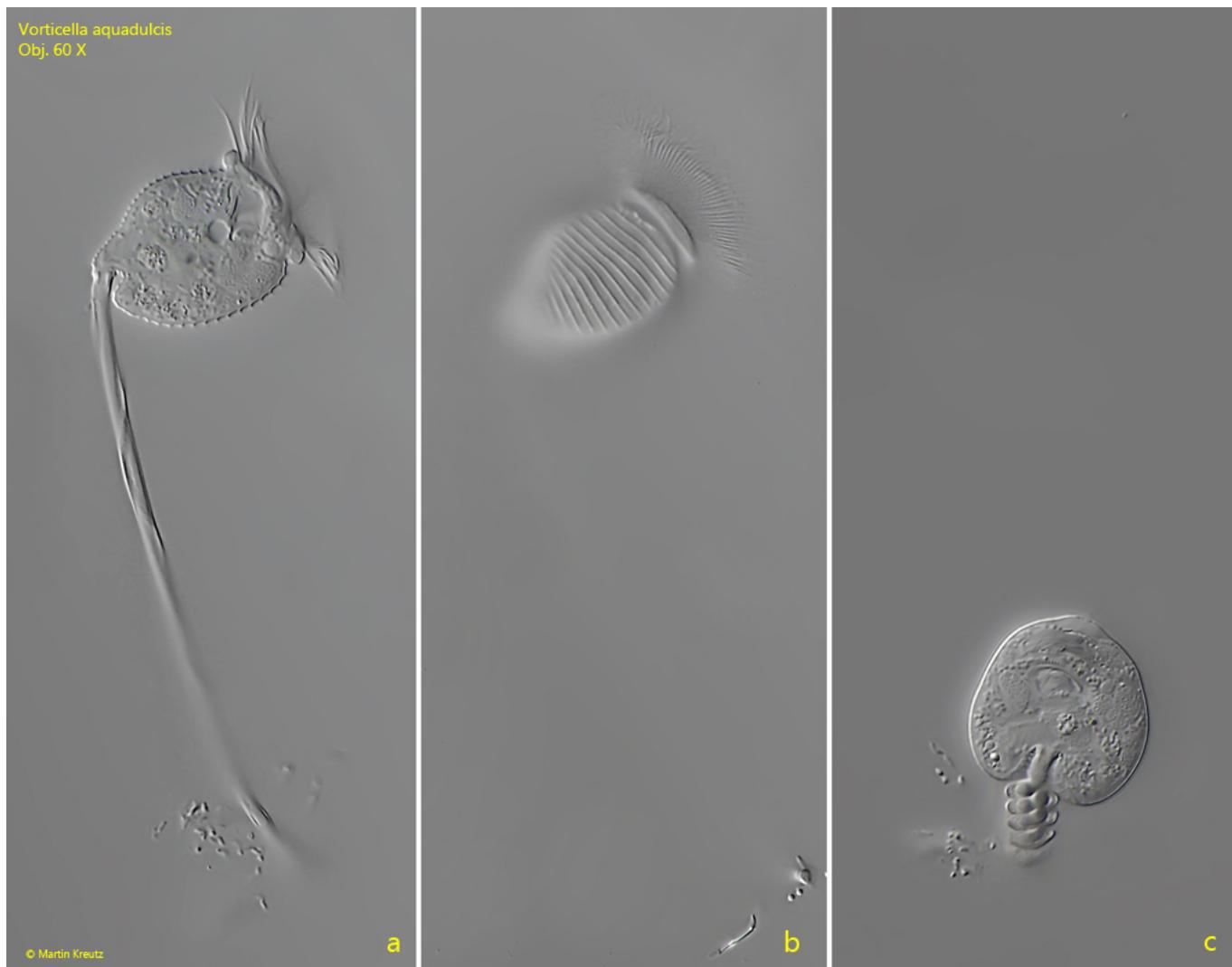
- length 25–55 µm, width 15–35 µm
- cells pyriform
- contracted cells oviform
- plasm colorless
- one contractile vacuole
- macronucleus horseshoe-shaped, located in anterior half
- pellicle is widely striped, 13–30 horizontal stripes
- stalk contracts in spirals
- solitary



1, 2 = after Foissner  
 3 = after Noland & Finlay (contracted specimen)

### *Vorticella aquadulcis*

I found *Vorticella aquadulcis* in 1998 in [Hagstaffel pond](#) attached to colonies of the planktonic cyanobacterium *Anabaena flos-aquae* and 2023 on coverslips floating on samples from [Simmelried](#). *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 striae of the pellicle (b). Obj. 60 X.

*Vorticella aquadulcis*  
Obj. 60 X



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

*Vorticella aquadulcis*  
Obj. 100 X



10  $\mu$ m

**Fig. 3:** *Vorticella aquadulcis*. L = 33  $\mu$ m. 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.