

***Phascolodon vorticella* Stein, 1859**

Most likely ID: n.a.

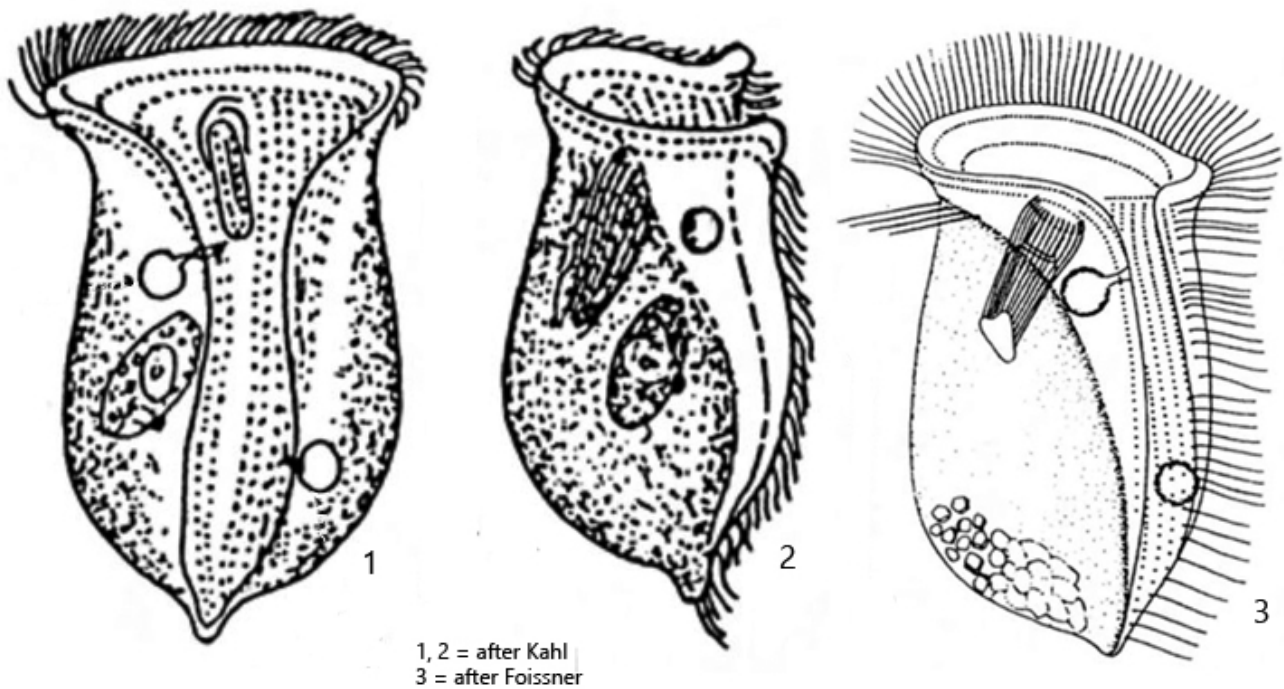
Synonym: n.a.

Sampling location: [Mühlhalden pond](#), [Pond of the waste disposal company Constance](#)

Phylogenetic tree: [Phascolodon vorticella](#)

Diagnosis:

- body saddle-shaped, C-shaped in cross section
- length 60–110 µm, width 35–50 µm
- deep ventral groove, laterally ciliated
- oral basket located in ventral groove
- macronucleus ellipsoidal, in posterior third
- one oval or spherical micronucleus
- two contractile vacuoles below oral basket and in posterior half
- dorsal brush of long, needle-like cilia at anterior end
- planktonic lifestyle



Phascolodon vorticella

So far I have only found *Phascolodon vorticella* a few times in plankton samples. These were always in heavily eutrophic waters. In March 2024, I was able to observe a mass development in the [pond of the waste disposal company Constance](#).

Phascolodon vorticella can easily be recognize by its characterstic shape. Ventrally there is a groove that extends to the posterior end. The mouth opening is located in the upper third of this groove. In addition, rows of cilia run along the left and right edges of the groove. The posterior end of the ciliate is slightly pointed. There are two contractile vacuoles. The first is located directly below the oral basket and has a short tube for emptying (difficult to see), which ends into the groove. The second contractile vacuole is located in the posterior half on the right side.

Phascolodon vorticella belongs to the cyrthophorid ciliates and has a dorsal brush consisting of long, tapered cilia, which is located on the anterior margin. However, it is difficult to see because the ciliate usually turns with the ventral side towards the coverslip.

Phascolodon vorticella
Obj. 40 X



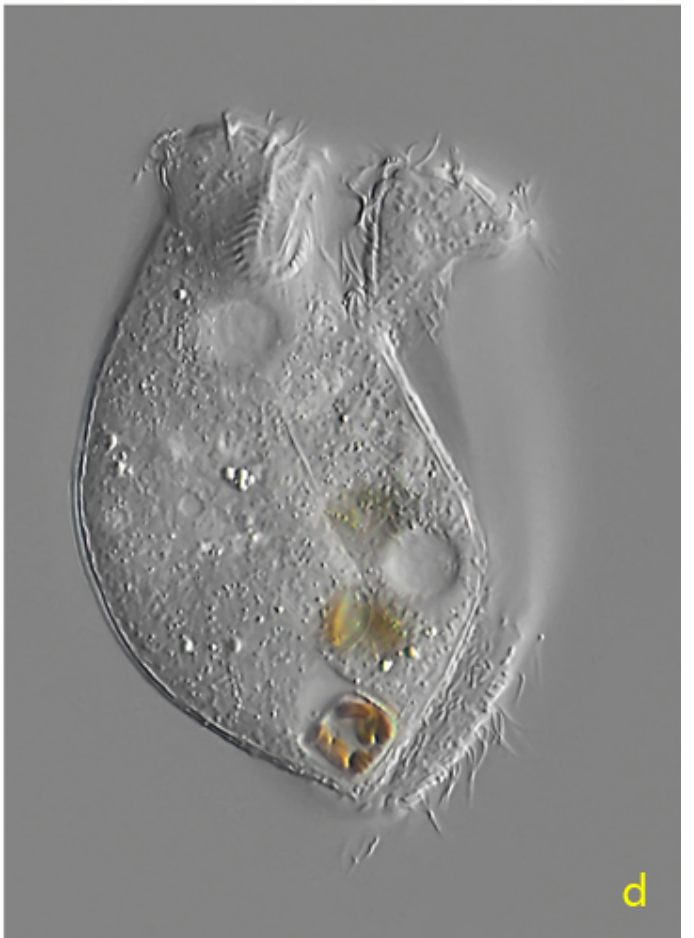
a



b



c



d

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Fig. 1 a-d: *Phascolodon vorticella*. L = 96 μ m. A freely swimming specimen from oblique right ventral. Obj. 40 X.

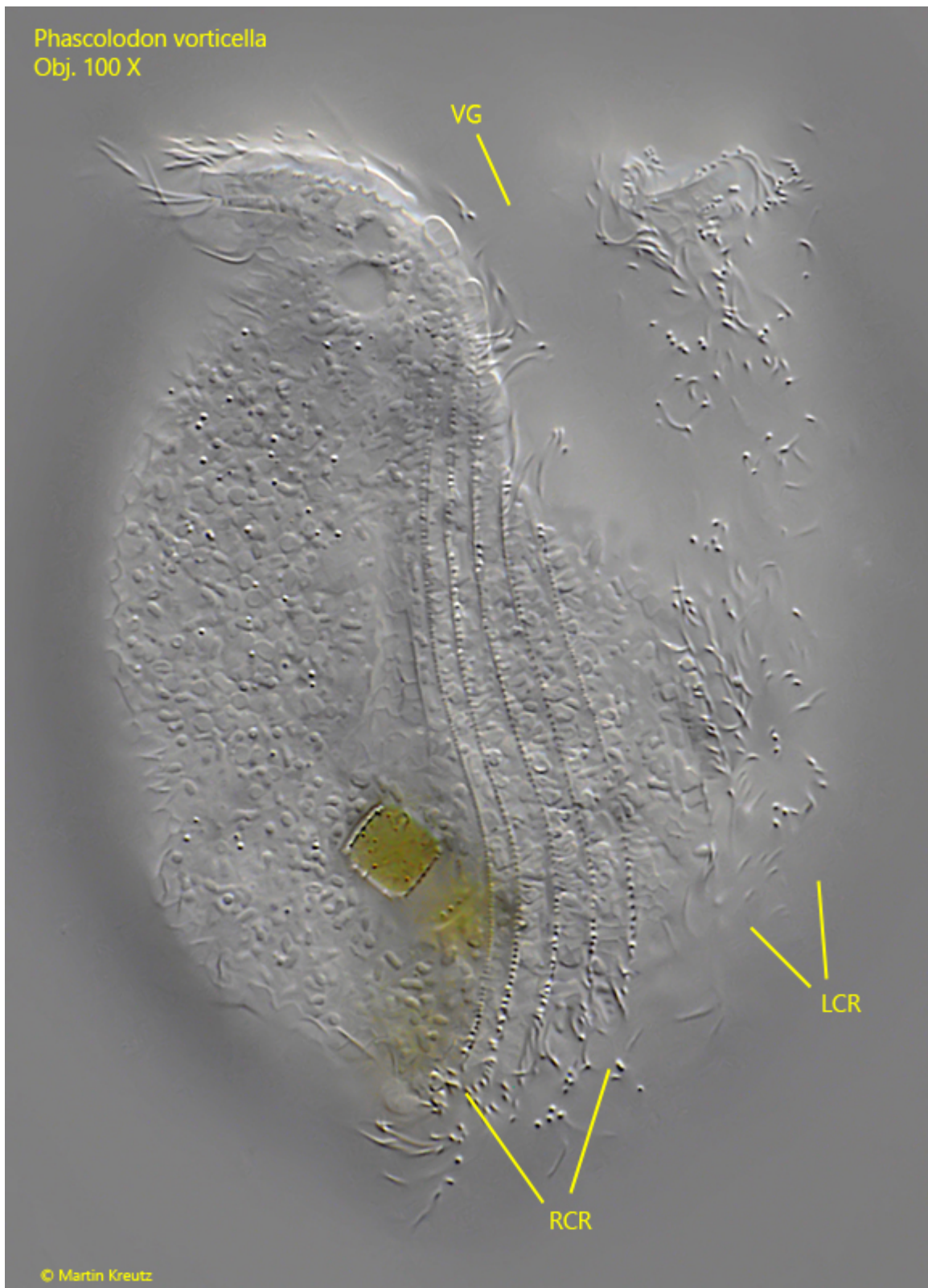


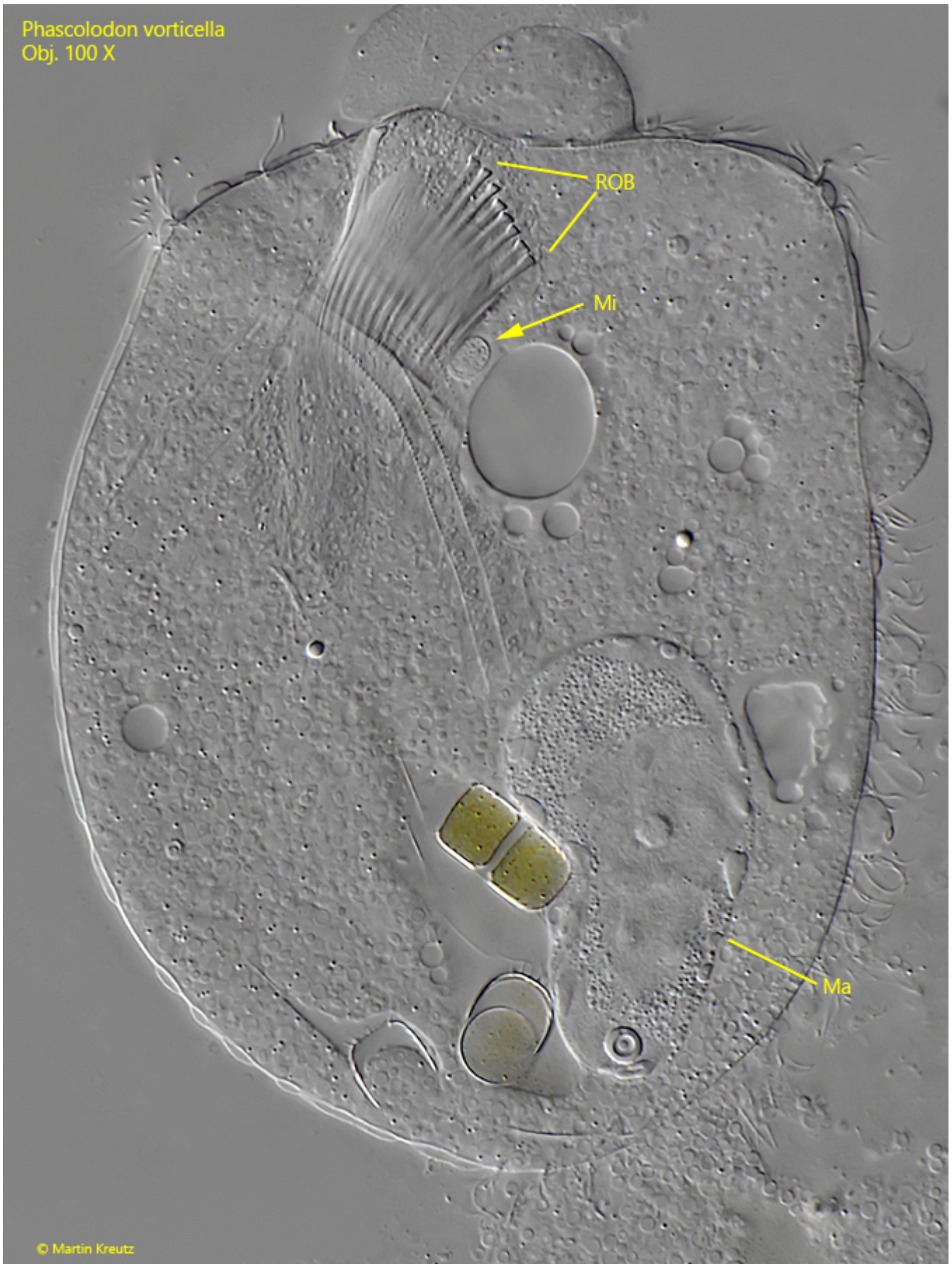
Fig. 2: *Phascolodon vorticella*. L = 96 μ m. the slightly squashed specimen as shown in fig. 1-d with focal plane on the ciliary row at the right side (RCR) of the ventral groove (VG). The left ciliary row (LCR) is visible in the blur. Obj. 100 X.

Phascolodon vorticella
Obj. 100 X



Fig. 3: *Phascolodon vorticella*. L = 96 μ m. A slightly squashed specimen from right with focal plane in on the two contractile vacuoles (CV 1, CV 2). Obj. 100 X.

Phascolodon vorticella
Obj. 100 X



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Fig. 4: *Phascolodon vorticella*. The macronucleus (Ma) and the micronucleus (Mi, detached from the macronucleus) in a squashed specimen. ROB = rods of the oral

basket. Obj. 100 X.