Cyclidium pellucidum Kahl, 1931

Most likely ID: n.a.

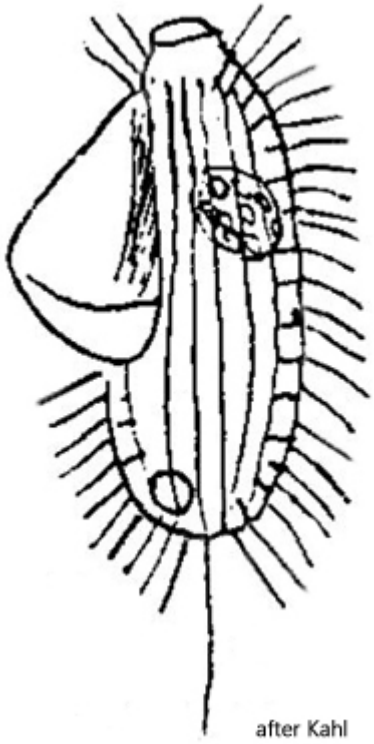
Synonym: n.a

Sampling location: Simmelried

Phylogenetic tree: *Cyclidium pellucidum*

Diagnosis:

- body ovoid
- distinct frontal plate
- length about 40 µm
- oral apparatus two-third of length
- on right side L-shaped undulating membrane
- very smal adoral membrane (hard to see)
- extrusomes rod-shaped, beneath pellicle
- one spherical macronucleus in anterior half
- one spherical micronucleus adjacent to macronucleus
- contractile vacuole terminal
- one caudal cilium



Cyclidium pellucidum

So far, I have only been able to find a single specimen of *Cyclidium pellucidum*. The specimen was found in a sample with decaying aquatic plants from the Simmelried. However, I only discovered it after placing the coverslip, when the specimen was already slightly squashed.

There is only a very brief description and a drawing of *Cyclidium pellucidum* by Kahl (1935). The species, at about 40 µm in length, is already one of the larger species within the genus *Cyclidium*. The essential characteristic, however, are the extrusomes arranged scattered beneath the pellicle (s. fig. 1 b). Kahl does not specify the length of the extrusomes. According to my measurements, the thin, rod-shaped extrusomes are consistently 4.6 µm long. Because of the presence of the extrusomes, *Cyclidium pellucidum* cannot be confused with any other species. Kahl suspects it might be a form of *Calyptotricha lanuginosa* (syn. *Cyclidium lanuginosum*). However, *Calyptotricha lanuginosa* lives in a lorica, has two elongated apical cilia, and the extrusomes of this species are very short and inconspicuous.

In the macronucleus of my specimen of *Cyclidium pellucidum*, I was able to recognize several, plate-shaped nucleoli arranged marginally (s. fig. 1 f). Kahl roughly indicates these in his drawing but does not mention them in his description. It remains unclear whether this is a consistent characteristic.

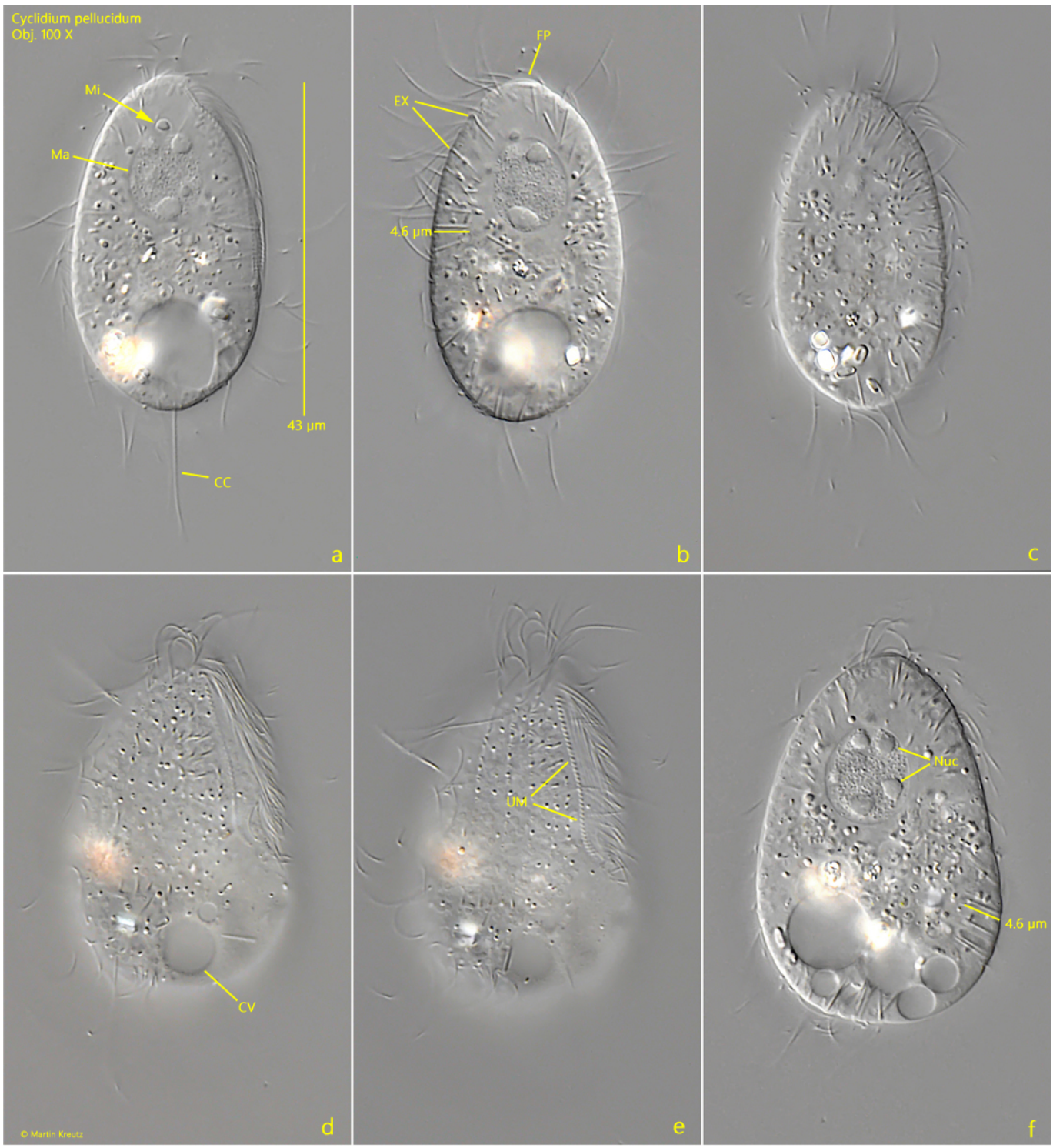


Fig. 1 a-f: *Cyclidium pellucidum*. L = 43 µm. In the macronucleus (Ma) several nucleoli (Nuc) are scattered. The rod-shaped extrusomes (EX) have a constant length of 4.6 µm. CC = caudal cilium, CV = contractile vacuole, FP = frontal plate, Mi = micronucleus, UM = undulating membrane. Obj. 100 X.