Glaucoma chaetophorae Penard, 1922

Most likely ID: n.a.

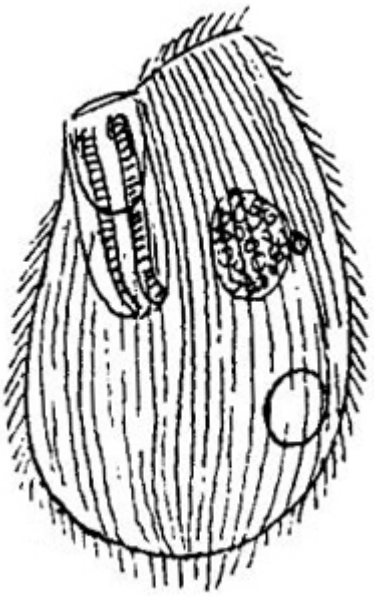
Synonym: n.a.

Sampling location: Schwemm Moor (Austria)

Phylogenetic tree: n.a.

Diagnosis:

- body ovoid, sack-shaped
- anterior end trancated
- length 28–33 µm
- oral cavity one third of body length
- oral apparatus *Glaucoma* type, undulating membrane right
- dense longitudinal rows of cilia
- cilia short
- contractile vacuole in posterior third
- sphaerical macronucleus central
- life style between *Chaetophora* algae



after Kahl

Glaucoma chaetophorae

Glaucoma chaetophorae was first described as *Balantiophorus chaetophorae* by Penard (1922). Later Kahl (1931) combined the species with *Glaucoma*.

I found only one specimen of Glaucoma chaetophorae in July 2025 in samples from the Schwemm Moor. Due to its small size, this species is easy to overlook.

At first glance, the ciliate does not immediately resemble *Glaucoma* because the mouth opening is apical and laterally shifted. In addition, the oral apparatus is very large, occupying about one-third of the body length. However, in the freely swimming specimen, one can recognize the fan-like movement of the membranelle in the oral cavity, which is typical for *Glaucoma*.

My specimen contained a large number of food vacuoles, which made it difficult to see the central macronucleus (s. fig. 1 c). The contractile vacuole is located in the posterior third, as described by Kahl (s. fig. 1 c). I counted approximately 22–26 longitudinal rows of cilia. The defecation pore is located in the posterior third on the ventral side (s. fig. 2 a-b).

Fig. 1 a-f: *Glaucoma chaetophorae*. L = 30 µm. Different focal planes of a freely swimming specimen from ventral (a-e) and from dorsal (f). CV = contractile vacuole, Ma = macronucleus, UM = undulating membrane. Obj. 100 X.

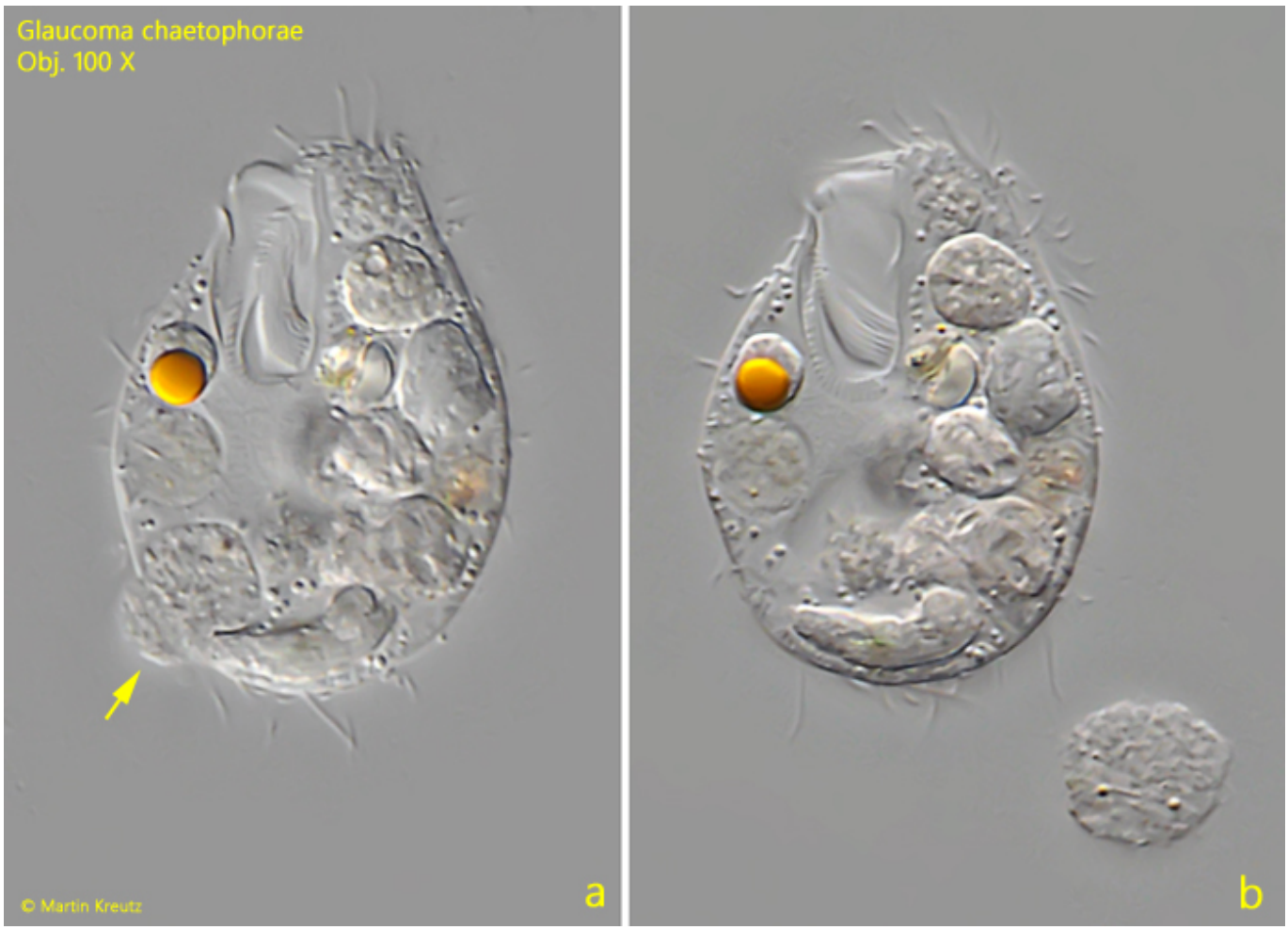


Fig. 2 a-b: *Glaucoma chaetophorae*. L = 30 µm. The same specimen as shown in fig. 1 a-f during the process of defecation (arrow). Obj. 100 X.