Metopus minor (Kahl, 1927)

Most likely ID: n.a.

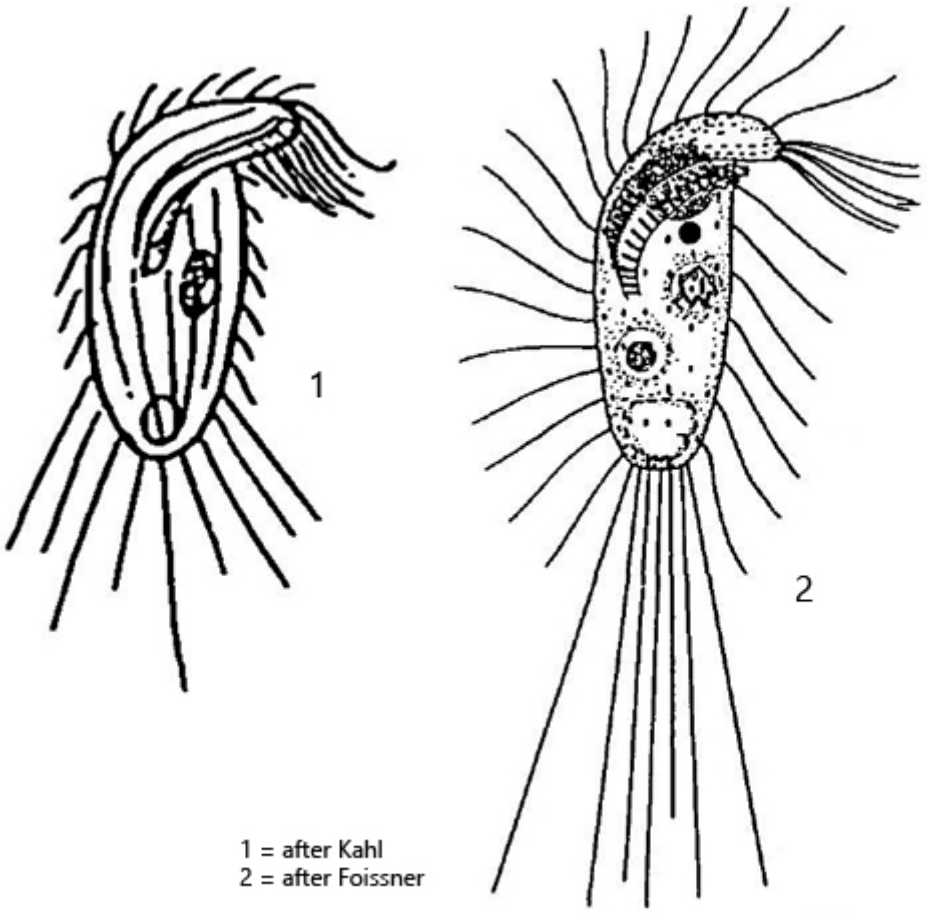
Synonyms: *Metopus setosus var. minor*, *Metopus recurvatus*, *Metopus recurvatus var. pusillus*

Sampling location: Simmelried

Phylogenetic tree: *Metopus minor*

Diagnosis:

- body oblong with a distinct overhanging apical dome on left side
- length 30–40 µm
- adoral zone short, 5–6 membranelles, running obliquely before ist bent to posterior end
- mouth opening near cell equator
- perizonal stripe consisting of 5 ciliary rows
- one spherical to slightly ellipsoidal macronucleus, diameter 7–8 µm, with many nucleoli
- one spherical micronucleus, diameter 2–3 µm
- very long caudal cilia (30–50 µm)
- contractile vacuole terminal



Metopus minor

Metopus minor was first described in 1927 by Kahl as *Metopus setosus var. minor*. His description is very short (2 lines) and is very superficial. In 1980 Foissner published a detailed redescription in the course of which he united the species and varieties *Metopus setosus var. minor, Metopus recurvatus* and *Metopus recurvatus var. pusillus* under Metopus minor.

So far I could detect *Metopus minor* exclusively in the Simmelried. Possibly I have overlooked this species so far in my other localities because of the small size of *Metopus minor*. The ciliate is fast swimming and rotating around its longitudinal axis. In addition, *Metopus minor* is very coverslip sensitive, which makes it much more difficult to examine. The species is very characteristic by the protruding apical dome and the long caudal cilia. I could observe that the posterior cell pole is cilia-free and that the caudal cilia arise around this bare field (s. fig. 1 i). This arrangement was not mentioned by Kahl or Foissner. In some specimens I could see attached bacteria on the pellicle (s. fig. 1 f). I could also observe this phenomenon in *Metopus gibbus* and *Ludio parvulus*. Whether these attached bacteria are symbionts or if the ciliate is used as a transport vehicle cannot be decided without further investigation.

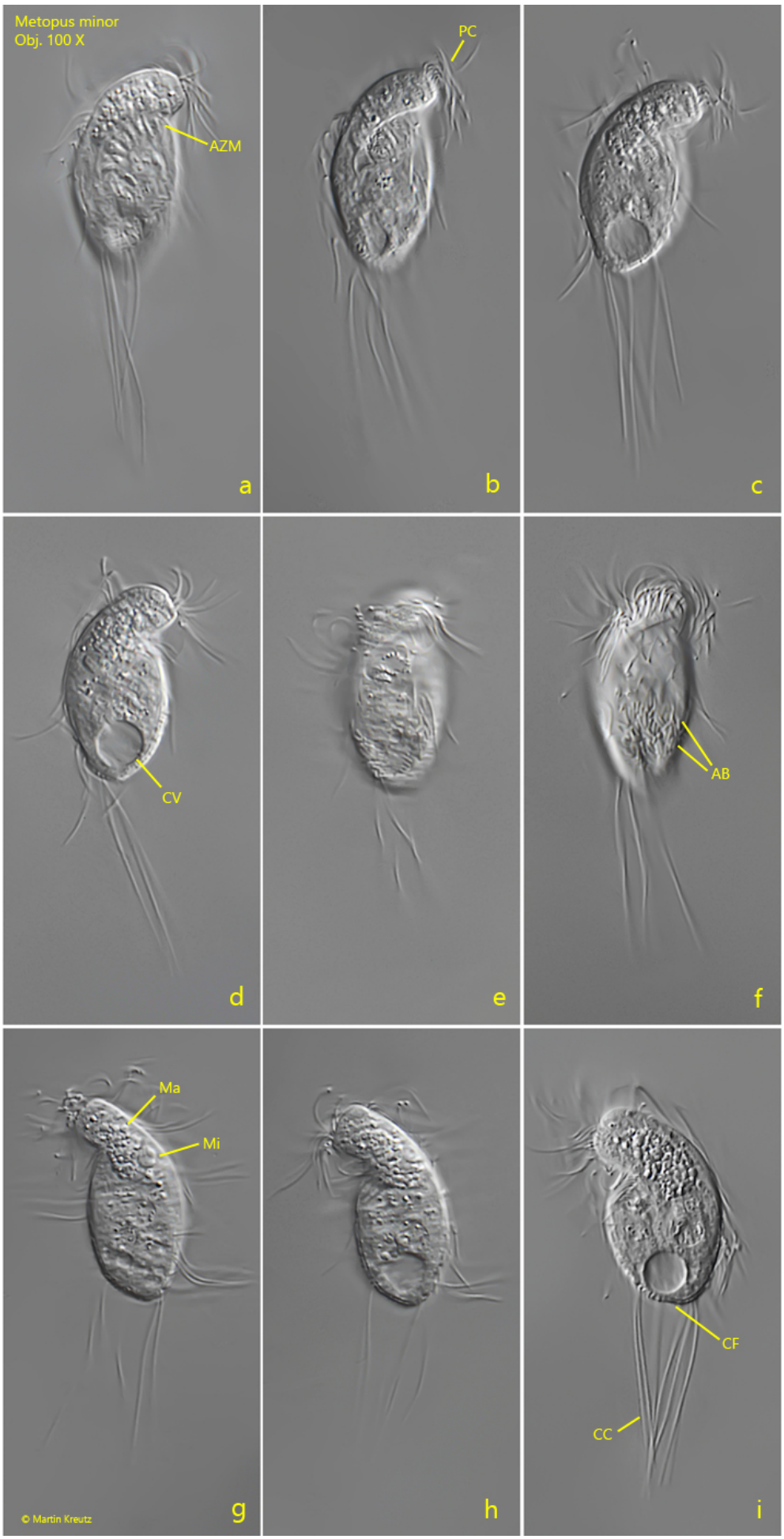

Metopus minor
Obj. 100 X
AZM
a
PC
b
c
CV
d
e
AB
f
Ma
Mi
g
h
CF
CC
i
© Martin Kreutz

Fig. 1 a-i: *Metopus minor*. L = 31 µm. A freely swimming specimen from ventral (a-f) and from dorsal (g-i). Note that the posterior cell pole is cilia-free (CF). The ventral side of this specimen was covered with adhering bacteria (AB). AZM = adoral zone of membranelles, CC = caudal cilia, Ma = macronucleus, Mi = micronucleus, PC = perizonal cilia. Obj. 100 X.