Phialina caudata

(Kahl) Wang, Ji & Yin, 2019

Most likely ID: n.a.

Synonym: *Lacrymaria caudata*

Sampling location: Simmelried

Phylogenetic tree: *Phialina caudata*

Diagnosis:

- body cylindical or pouch-shaped with pointed tail
- length 80–170 µm, width 20–45 µm
- macronucleus ovoidal
- micronucleis ovoidal or spherical
- extrusomes straight rods
- contractile vacuole subterminal
- 20–24 somatic kineties

So far, I have only found a single specimen of *Phialina caudata* in July 2007 in the Simmelried. I have no further records to date.

Originally, the species was described as *Lacrymaria caudata* by Kahl (1933). His description is extremely brief, only 2 lines long, but he provided two drawings (s. drawings above). The species was then transferred to the genus *Phialina* by Wang, Ji & Yin (2019). The genus *Phialina* is characterized by a non-contractile neck.

The main features of *Phialina caudata* are the pointed posterior end, the ovoid macronucleus, and the subterminal contractile vacuole. Kahl reported a length of 80–100 µm, while Wang, Ji & Yin reported 80–170 µm.

The very similar species *Phialina vertens* has a broader head and is somewhat smaller (60–85 µm). Additionally, the number of somatic kineties is lower at 18–20 compared to *Phialina caudata*, which can only be recognized after silver impregnation.

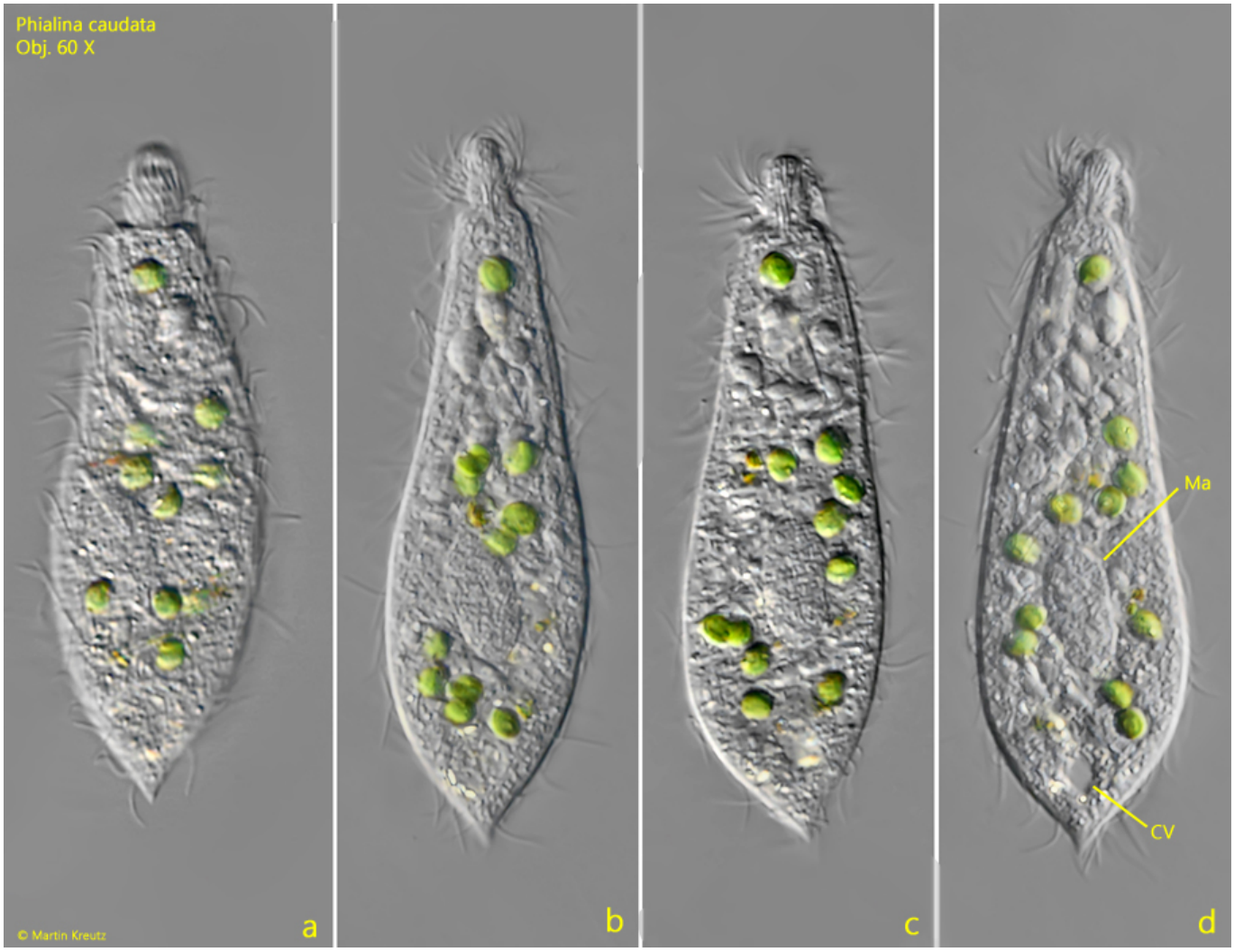


Fig. 1 a-d: *Phialina caudata*. L = 84 µm. A freely swimming specimen. CV = contractile vacuole, Ma = macronucleus. Obj. 60 X.