Stereonema terricola

Foissner & Foissner, 1993

Most likely ID: n.a.

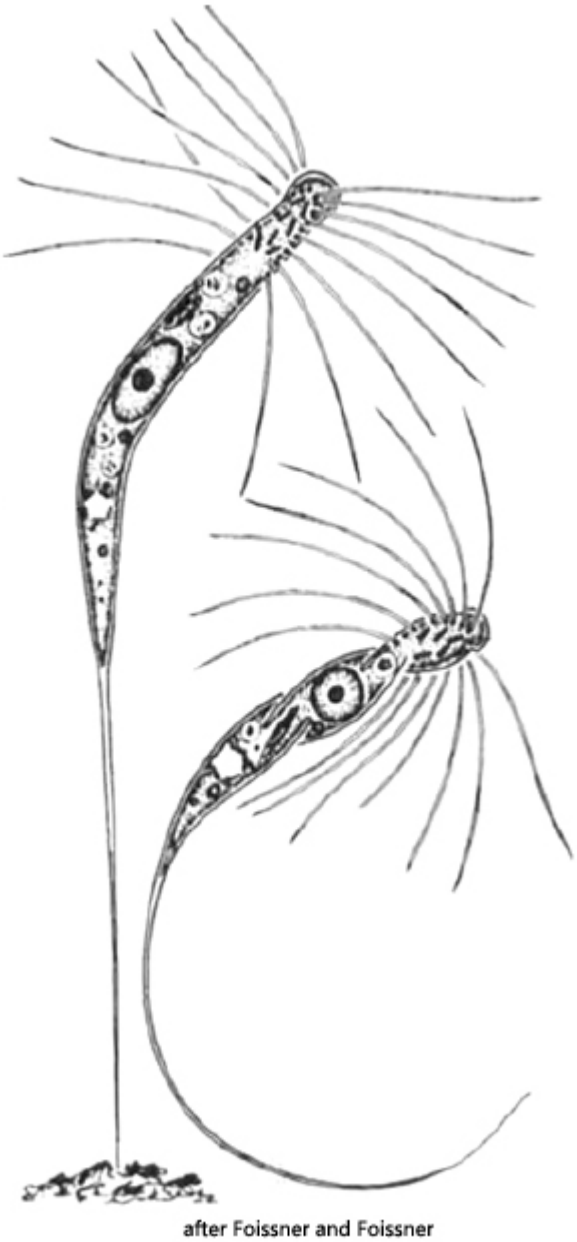
Synonym: n. a.

Sampling location: Simmelried

Phylogenetic tree: ***Stereonema terricola***

Diagnosis:

- cell vermiform with very thin tail
- tail half as long as cell
- length 30–50 µm, width 3–4 µm
- anterior capitulum conspicuous
- 8 kineties with 8 flagella each



Stereonema terricola

I have found *Stereonema terricola* in the Simmelried until 2007, but exclusively in pond 5 (s. Simmelried). At first sight *Stereonema terricola* looks like a ciliate, due to the numerous, short flagella. However, *Stereonema* does not have a micronucleus and has electron microscopically visible features of flagellates. *Stereonema* is a genus of flagellates that belong to the Hemimastigophora. They differ from the genus Spironema in that the cells cannot perform euglenoid movement, but are “stiff”. Several species of *Stereonema* were described by Wilhelm and Ilse Foissner in 1993, including *Stereonema terricola*. This species was first identified in soil samples from the Grand Canyon. The characteristics of the cells of my population agree to a large extent with the description by Foissner & Foissner. The only difference was that my specimens also had flagella below the middle of the body (s. fig. 1 a-d). In the drawings of Foissner & Foissner they are localized only in the anterior quarter. However, since this is a little studied genus, I consider this to be a

common variance. The alternative would be the similar species *Stereonema geiseri*. However, this one grows only 15 – 20 µm long, while my specimens were on average 40 µm long. In addition, the tail of *Stereonema geiseri* is only a quarter of the body length and the shape is also plumper, without a conspicuous capitulum. In contrast, *Stereonema terricola* is very slender, with parallel sides and a bulbous capitulum, as shown by the cells of my population.

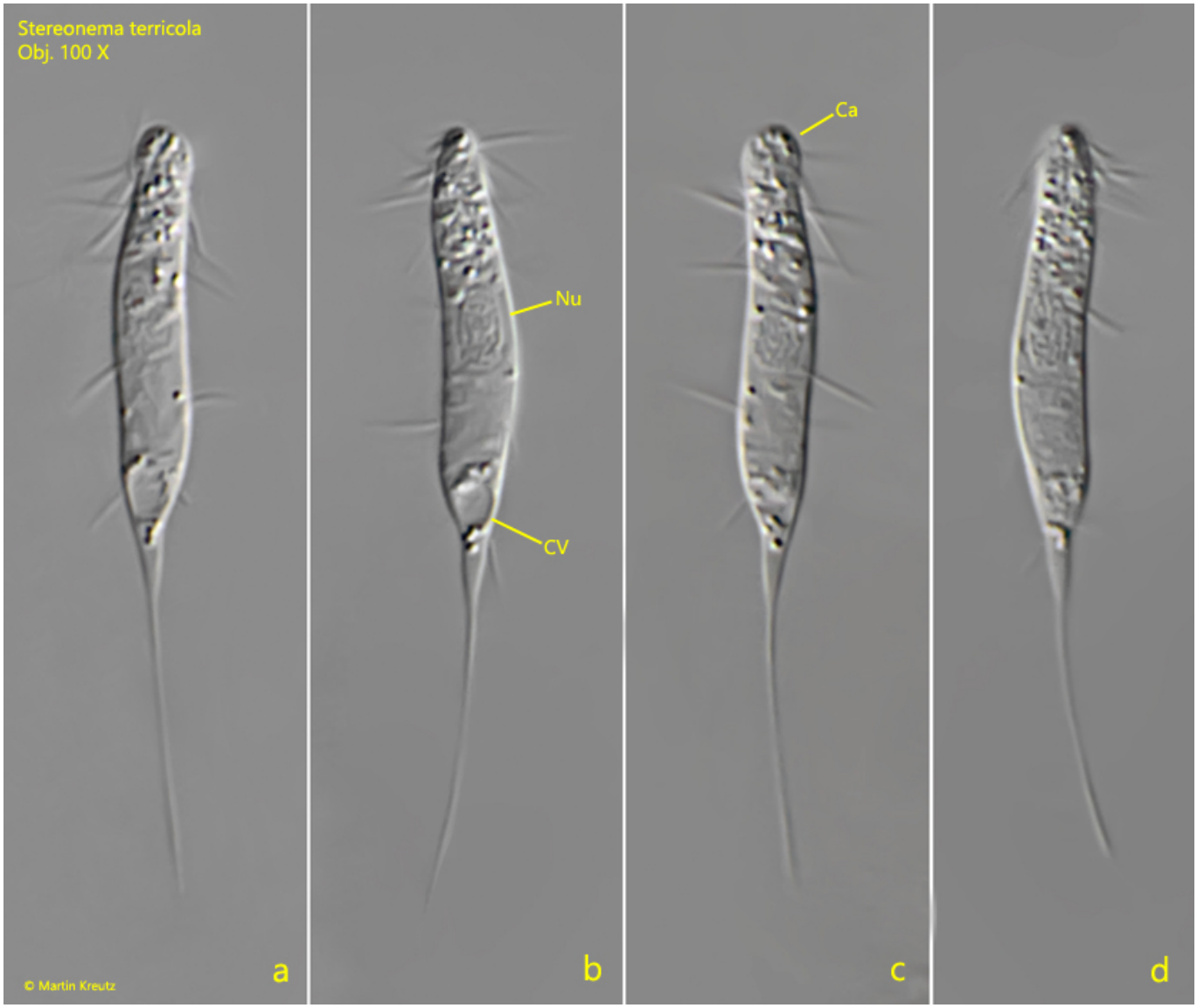


Fig. 1 a-d: *Stereonema terricola*. L = 41 µm. A freely swimming specimen. Ca = bulbous capitulum, CV = contractile vacuole, Nu = nucleus. Obj. 100 X.