

***Opisthodon niemeccense* (Stein, 1859)**

**Most likely ID:** n.a.

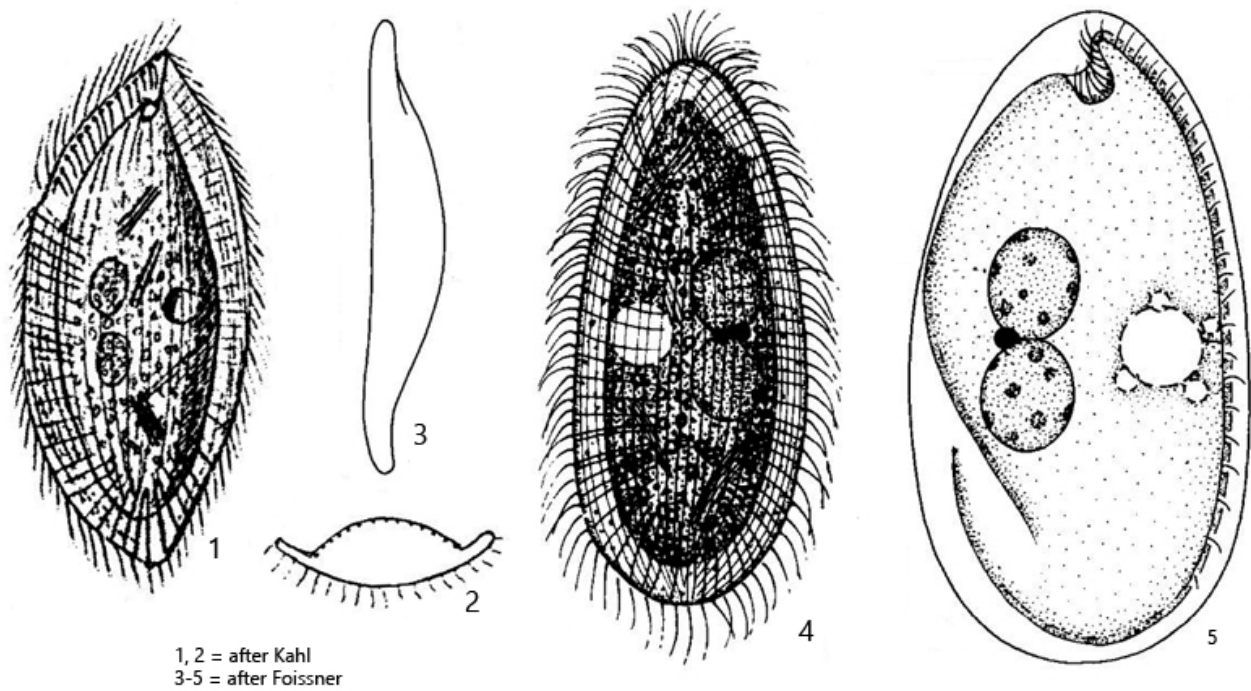
**Synonym:** n.a.

**Sampling location:** [Purren pond](#), [Ulmsried](#), [Simmelried](#)

**Phylogenetic tree:** [Opisthodon niemeccense](#)

**Diagnosis:**

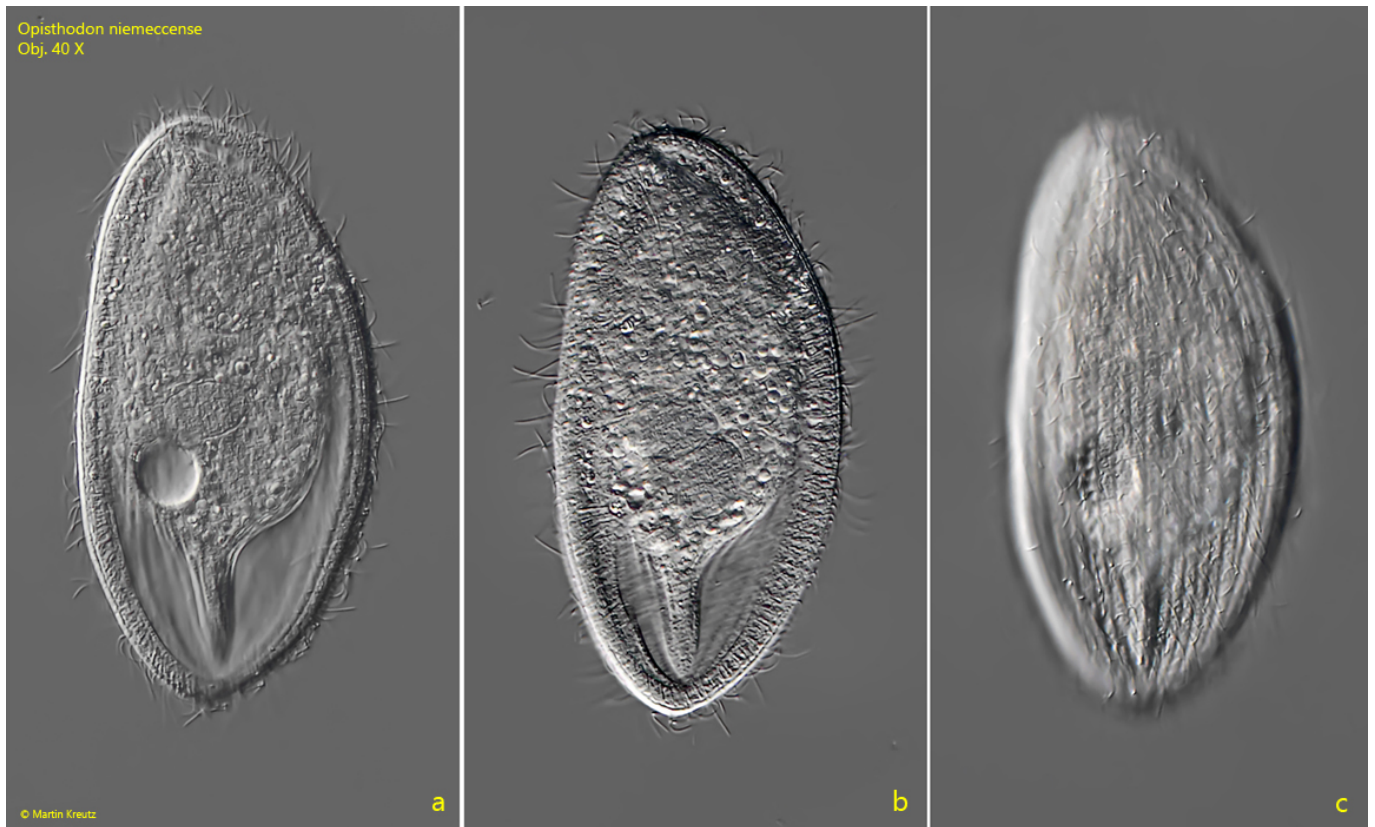
- body asymmetrically oval or broadly ellipsoid, flexible and deformable
- laterally flattened
- right side ciliated
- left side naked, margin is curved upwards
- a distinct indentation near anterior end on left side
- mouth slit ventral in anterior third (only visible during ingestion of food)
- length 80-180 µm, width 35-55 µm
- whole margin of the body flattened with a fringe of delicate, long extrusomes
- cytoplasm opaque by fine granula
- one micronucleus in the vicinity of two macronuclei
- contractile vacuole near midbody, shifted dorsally



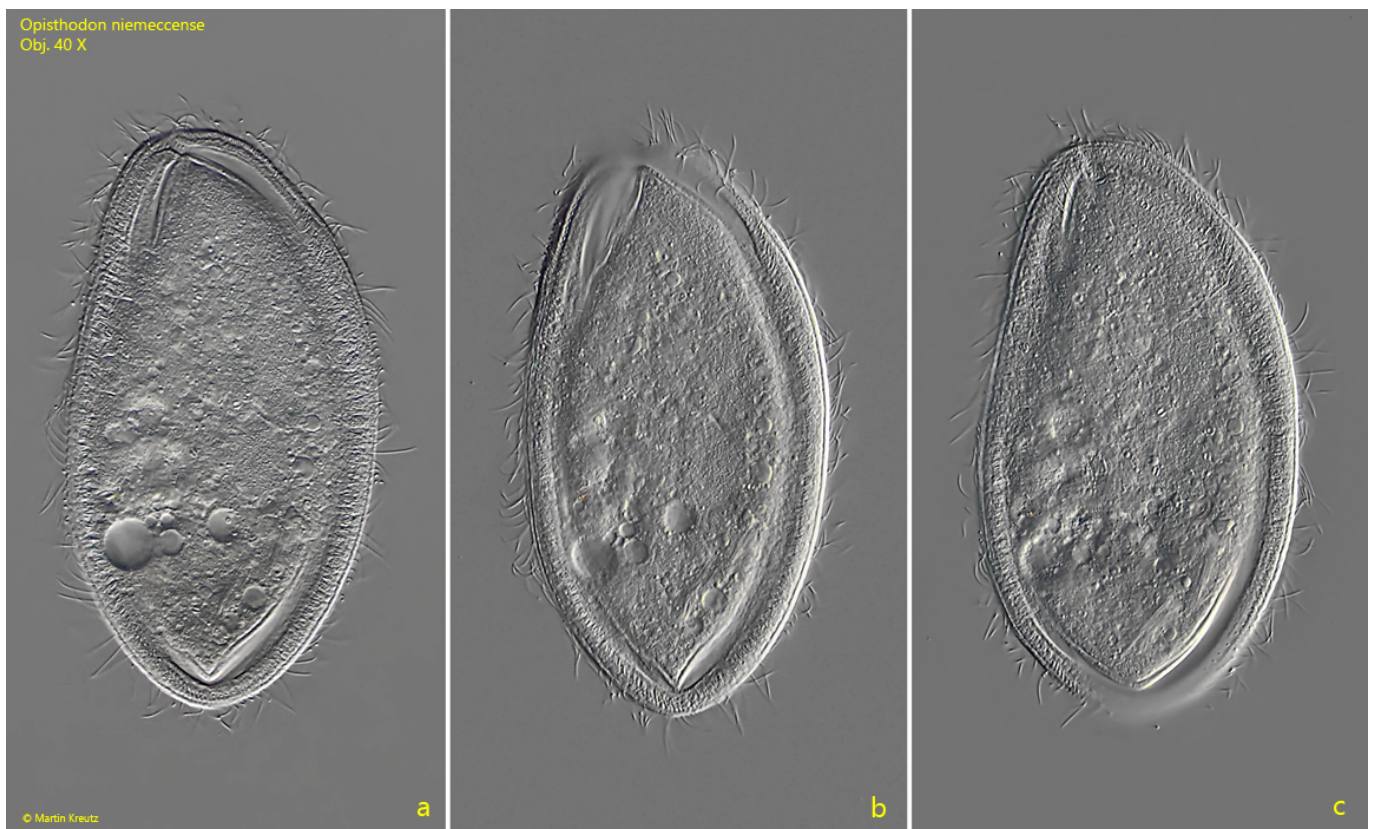
### *Opisthodon niemeccense*

I find *Opisthodon niemeccense* regularly, but never frequently in my sampling sites with a sapropelic zone. Even at low magnifications *Opisthodon niemeccense* can be recognized by its mostly oval shape with a transparent margin. In brightfield illumination the ciliate appears brownish or even black due to the dense, fine granules in the cytoplasm. In DIC the ciliate appears bright and opaque.

*Opisthodon niemeccense* has a characteristic cavity at the anterior end on the left (unciliated) side of the body. Unfortunately, I have not yet been able to document this because all the specimens I have photographed faced with their right (ciliated) side to the coverslip. In the specimens of my population I found the contractile vacuole below the cell equator (s. figs. 1 a, 2 a and 3 a), what is in contrast to the descriptions and drawings by Kahl and Foissner (s. drawings above). In addition, I was able to document a row of 10-15 excretory pores on the right side above the contractile vacuole (s. fig. 3 b), which to my knowledge has not been described before. In addition, I investigated the extrusomes in *Opisthodon niemeccense* in squashed specimens. I was able to recognize long, curved extrusomes with a length of 22-24  $\mu\text{m}$  but also a second type of shorter, straight rods with a constant length of 6.7  $\mu\text{m}$ .



**Fig. 1 a-c:** *Opisthodon niemeccense*. L = 124  $\mu$ m. Three focal planes from right of a freely swimming specimen. Obj. 40 X.



**Fig. 2 a-c:** *Opisthodon niemeccense*. L = 145  $\mu$ m. A second, freely swimming specimen from right. Obj. 40 X





**Fig. 3 a-b:** *Opisthodon niemeccense*. L = 130  $\mu\text{m}$ . Two focal planes of a slightly squashed specimen from right. Note the row of excretion pori (REP) of the contractile vacuole (CV). Ma = macronucleus. Obj. 100 X.



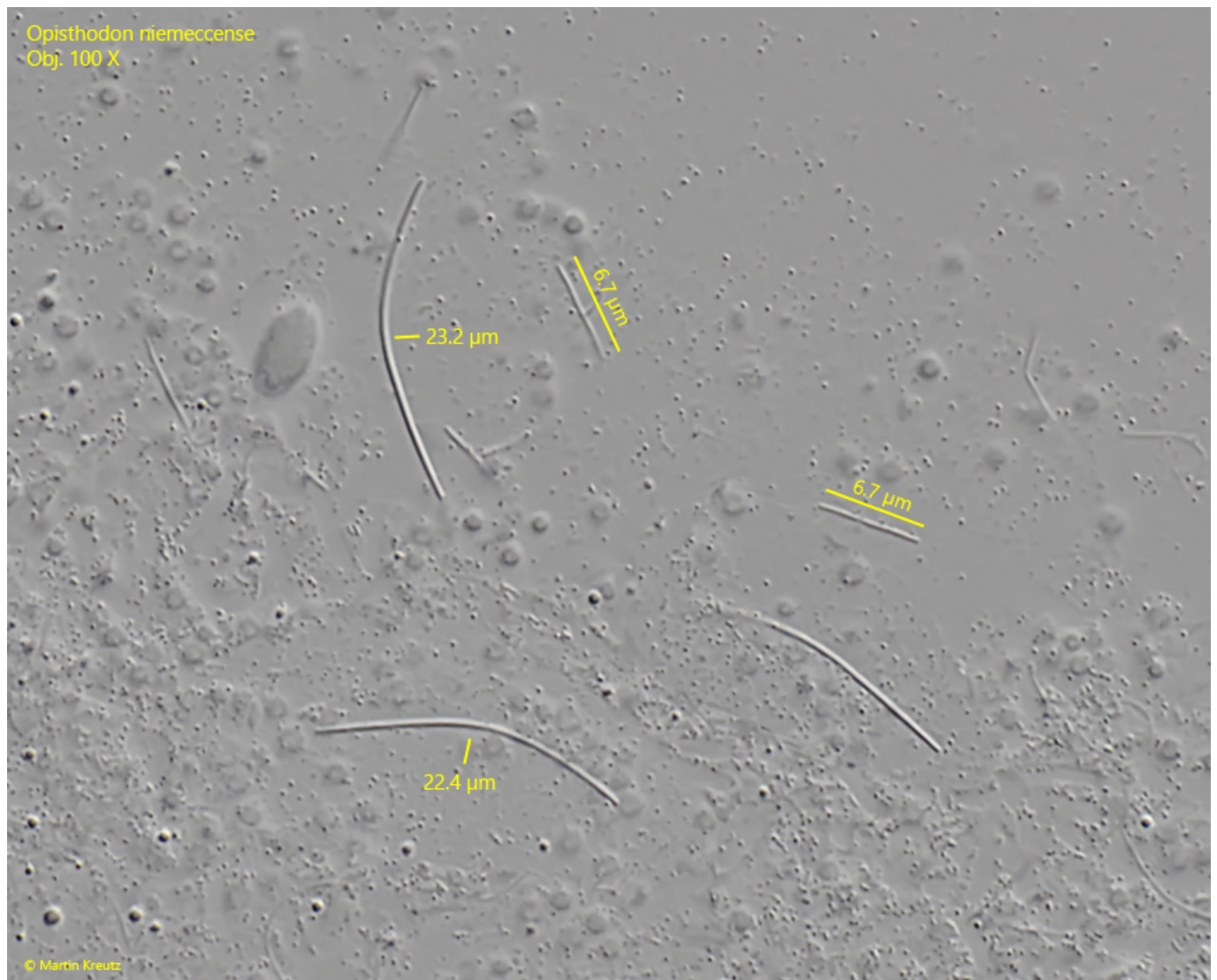
*Opisthodon niemeccense*  
Obj. 100 X



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**Fig. 4:** *Opisthodon niemeccense*. The micronucleus (Mi) between two oval macronuclei (Ma 1, Ma 2) in a squashed specimen from right. Note the fringe of long, curved extrusomes (EX). CV = contractile vacuole. Obj. 100 X.



**Fig. 5:** *Opisthodon niemeccense*. In a strongly squashed specimen curved extrusomes with a length of 22-24  $\mu\text{m}$  are visible as well as straight rods with a length of constantly 6.7  $\mu\text{m}$ . Obj. 100 X.