Chilodontopsis depressa

(Perty, 1852) Blochmann, 1895

Most likely ID: n.a.

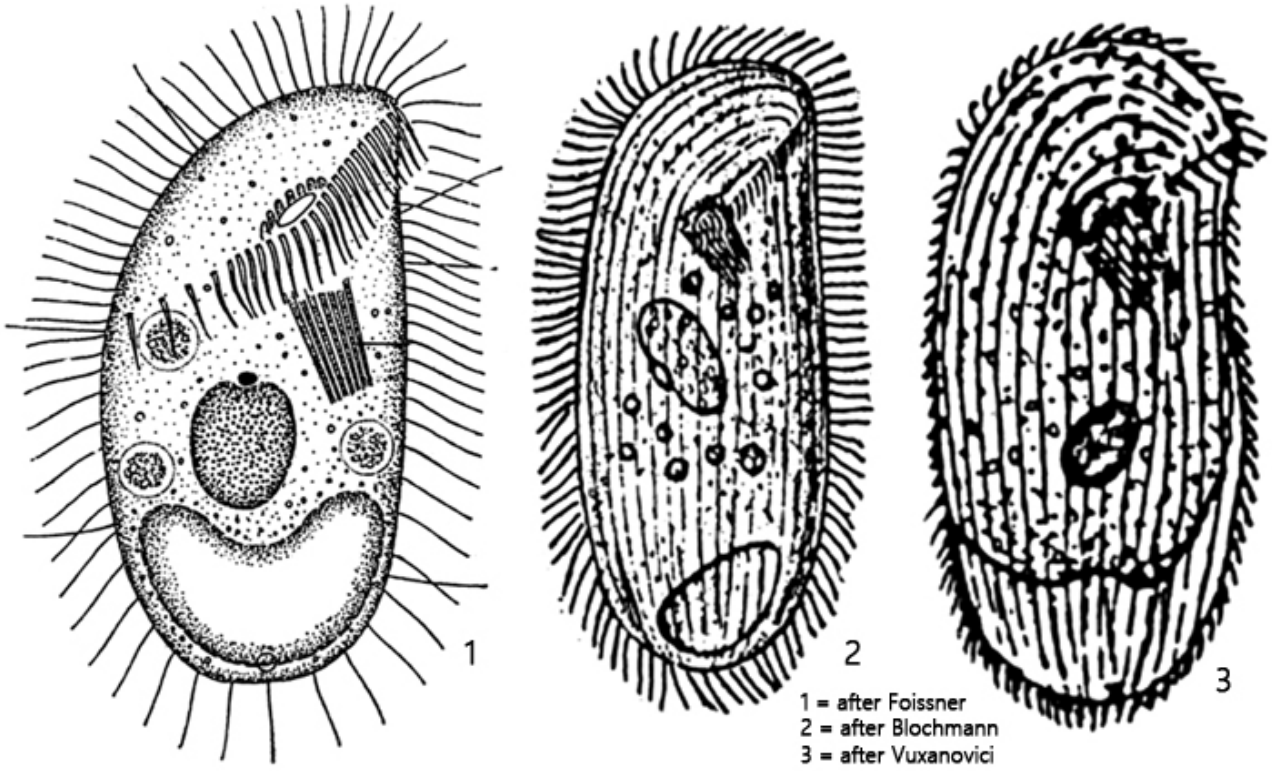
Synonym: n.a.

Sampling location: Ulmisried, Suploch (Island Hiddensee), Simmelried

Phylogenetic tree: *Chilodontopsis depressa*

Diagnosis:

- body ellipsoid, dorso-ventrally flattened
- inconspicuous anterior beak on right side
- length 50–80 µm
- oral apparatus in anterior third
- oral basked composed of 12–15 nematodesmal rods
- synhymenium running obliquely on ventral side
- macronucleus ellipsoid with one adjacent micronucleus
- large, terminal contractile vacuole
- contractile vacuole expands sometimes anteriorly
- 20–30 ventral ciliary rows, 7–12 dorsal rows



Chilodontopsis depressa

I do not find *Chilodontopsis depressa* frequently, but regularly. I usually find the specimens in floating plant masses. In the sample containers they collect at the bottom.

At small magnifications, *Chilodontopsis appears* shoe-shaped and strongly flattened. This can be seen particularly well in freely swimming specimens when they rotate around their longitudinal axis.

At higher magnifications, *Chilodontopsis depressa* can be recognized as a nassulid ciliate by the oral basket and the so-called synhymenium. The synhymenium, which is also called the hypostomial ciliary band, runs along the ventral side in the front third of the body. It runs underneath the oral basket. In the case of *Chilodontopsis depressa*, however, the synhymenium does not extend to the dorsal side, as is the case with the genera *Nassula* or *Obertrumia*, for example.

At the posterior end, *Chilodontopsis depressa* has a very large contractile vacuole with a subterminal excretory pore. The contractile vacuole widens considerably on the left side of the body and reaches the level of the oral basket with a canal-like extension. During systole, vacuoles remain, which can be described as auxiliary

vacuoles (s. figs. 1 a and 2 a).

Chilodotopsis depressa can be distinguished from the similar species *Trithigmostoma cucullus* or *Zosterodasys transversa* by its smaller size and the large, terminal contractile vacuole.

More images and information on *Chilodontopsis depressa*: Jeffrey Silverman-iNaturalist-*Chilodontopsis depressa*



Fig. 1 a-c: *Chilodontopsis depressa*. L = 62 µm. Three focal planes of a feeely swimming specimen. Note the subterminal excretion pore (EP) of the contractile vacuole (CV) and the synhymenium (SY) running obliquely ober the anterior half of the body. AV = auxiliary vakuole, OB = oral basket. Obj. 100 X.

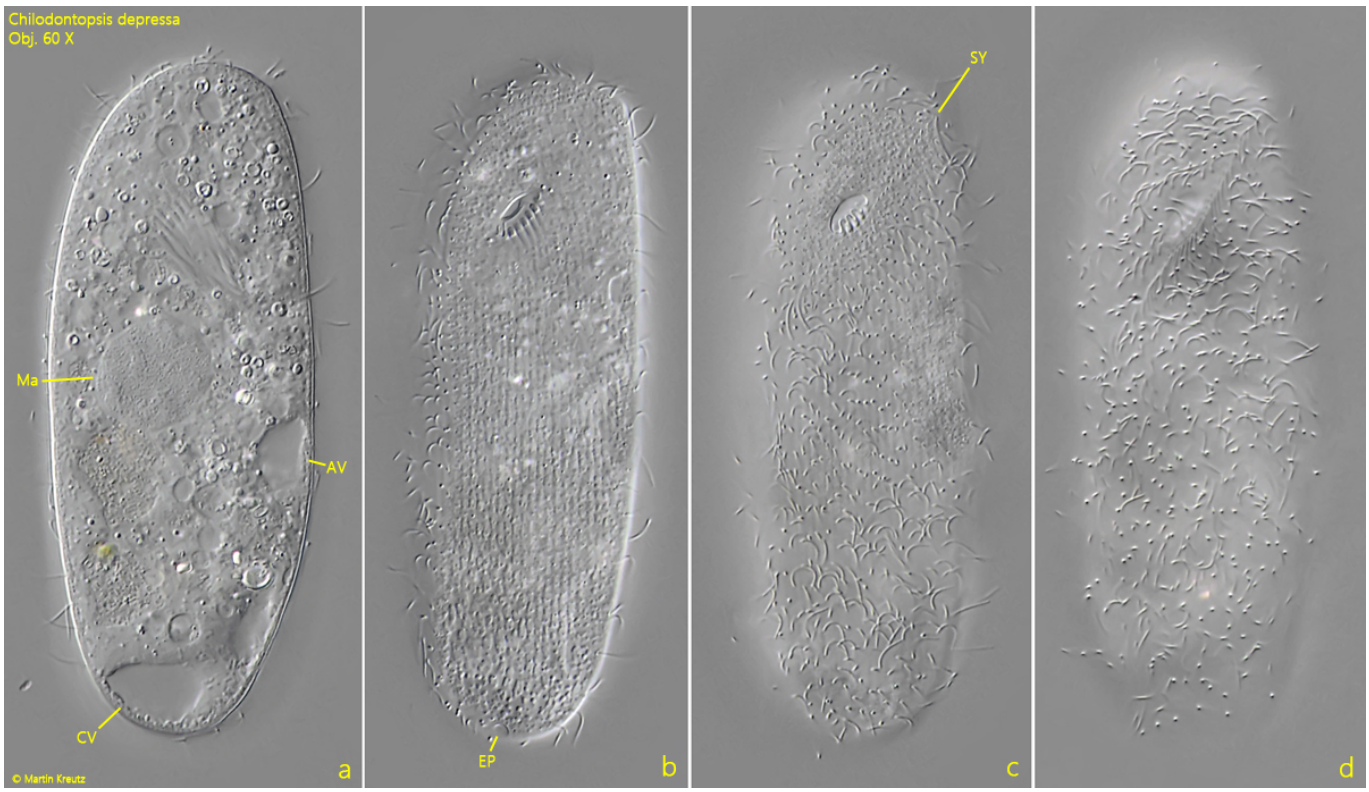


Fig. 2 a-d: *Chilodontopsis depressa*. L = 102 µm. A second, more slender specimen. AV = auxiliary vakuole, CV = contractile vacuole, Ma = macronucleus, OB = oral basket, SY = synhymenium. Obj. 100 X.

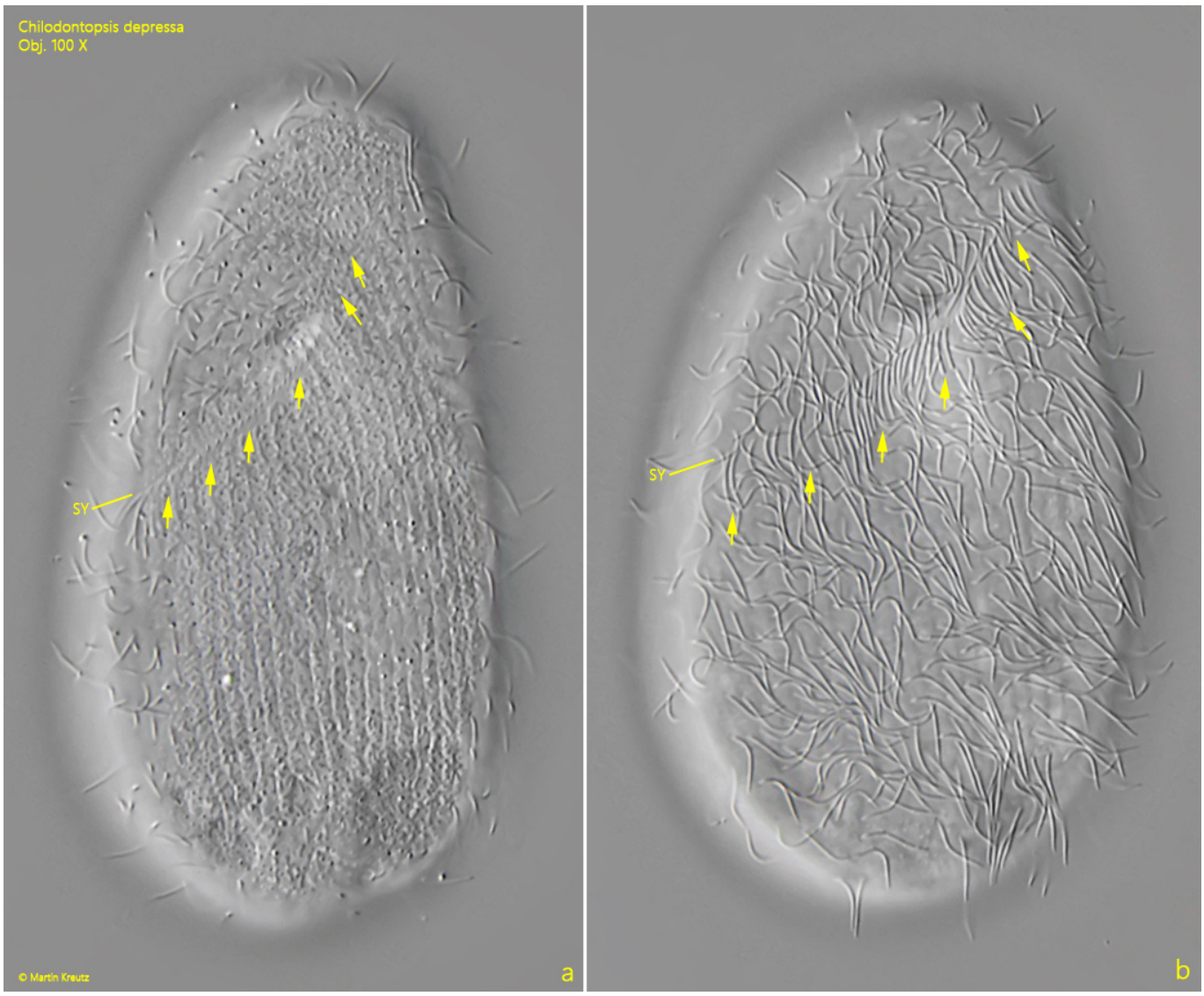


Fig. 3 a-b: *Chilodontopsis depressa*. L = 80 µm. Focal plane on the basal bodies (a) and the fringe of cilia (b) of the synhymenium (SY, arrows). Obj. 100 X.

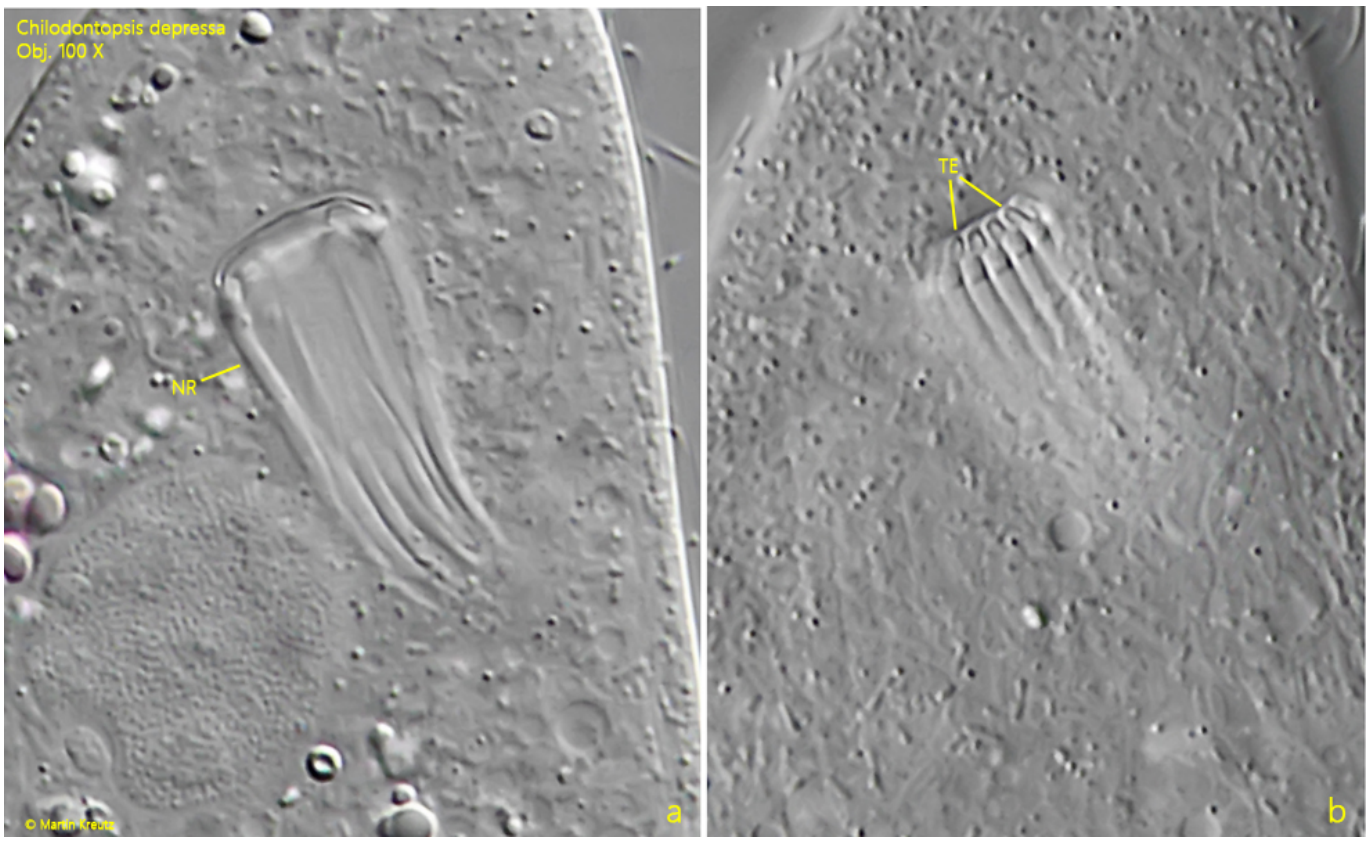


Fig. 4 a-b: *Chilodontopsis depressa*. Two focal planes of the oral basket composed of nematodesmal rods (NR). Note the teeth (TE) at the distal end of the rods. Obj. 100 X.

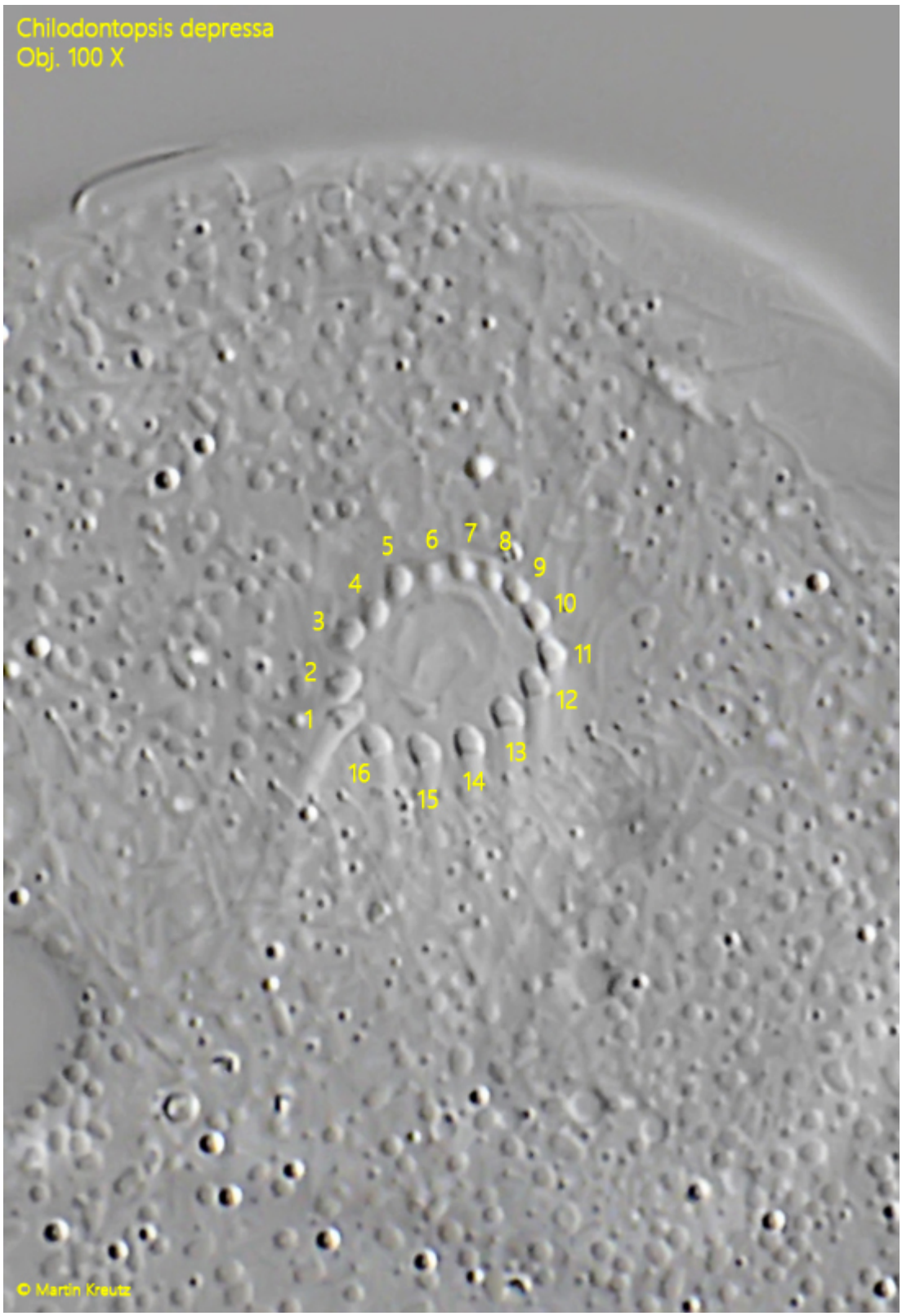


Fig. 5: *Chilodontopsis depressa*. Frontal view on the oral basked. This specimen has 16 nematodesmal rods (1–16). Obj. 100 X.



Fig. 6: *Chilodontopsis depressa*. The macronucleus (Ma) and the micronucleus (Mi) in the squashed specimen as shown in fig. 1 a-c. NR = nematodesmal rods of the oral basket. Obj. 100 X.