

Pseudohaplocaulus infravacuolatus

(Foissner & Brozek, 1996)

Most likely ID: n.a.

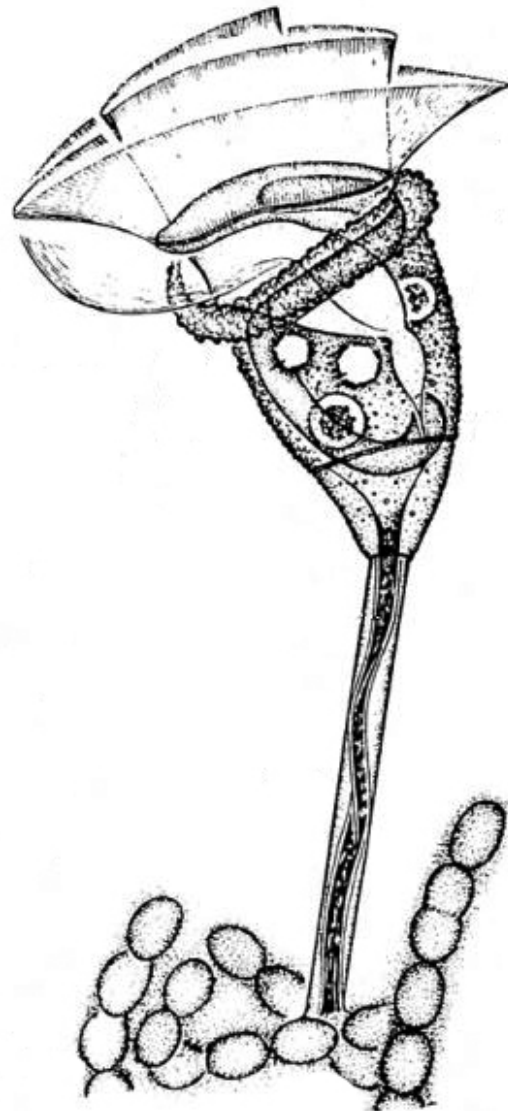
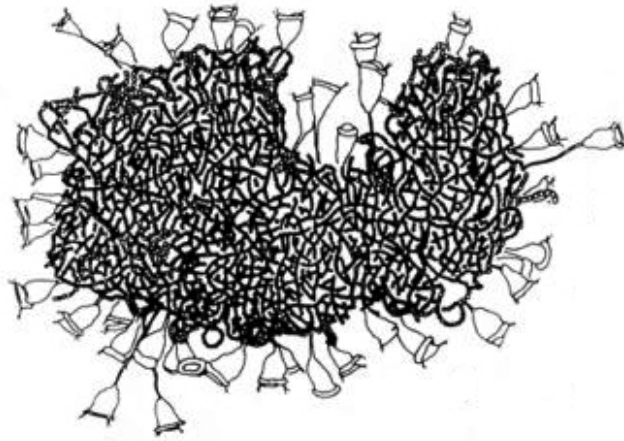
Synonym: n.a.

Sampling location: [Lake Constance](#)

Phylogenetic tree: [Pseudohaplocaulus infravacuolatus](#)

Diagnosis:

- cells 40–70 µm long
- extended cells campanulate
- contracted specimens barrel-shaped or clavate
- macronucleus J-shaped
- one micronucleus near anterior end of macronucleus
- two contractile vacuoles
- pellicle with conspicuous tubercles of various size
- stalk up to 200 µm long, unbranched and smooth, contracts sinuously due to distinct myoneme
- solitary, sessile on planktonic *Anabaena* coenobia



after Foissner & Brozek

Pseudohaplocaulus infravacuolatus

Pseudohaplocaulus infravacuolatus is enormously common in Lake Constance and can be found in the plankton throughout the year. However, I have never found this peritriche ciliate in other localities. One finds the pseudocolonies exclusively on floating coenobia of the cyanobacterium *Anabaena* (likely *Anabaena flos-aquae*) on which the specimens have settled. Some *Anabaena* coenobia carry up to 50 specimens. The cells in the population from Lake Constance were on average 50–60 μm in size. However, some cells reached a length of 70 μm . The species can be identified partly by its planktonic life on *Anabaena* spec. but also by the irregularly sized blister-shaped pellicular tubercles with which the pellicle is covered (s. fig. 7 a-d and fig. 8). Also the two contractile vacuoles are characteristic and that the stalk does not (as in *Vorticella*) contract in spirals, but is S-shaped.

Pseudohaplocaulus infravacuolatus
Obj. 20 X

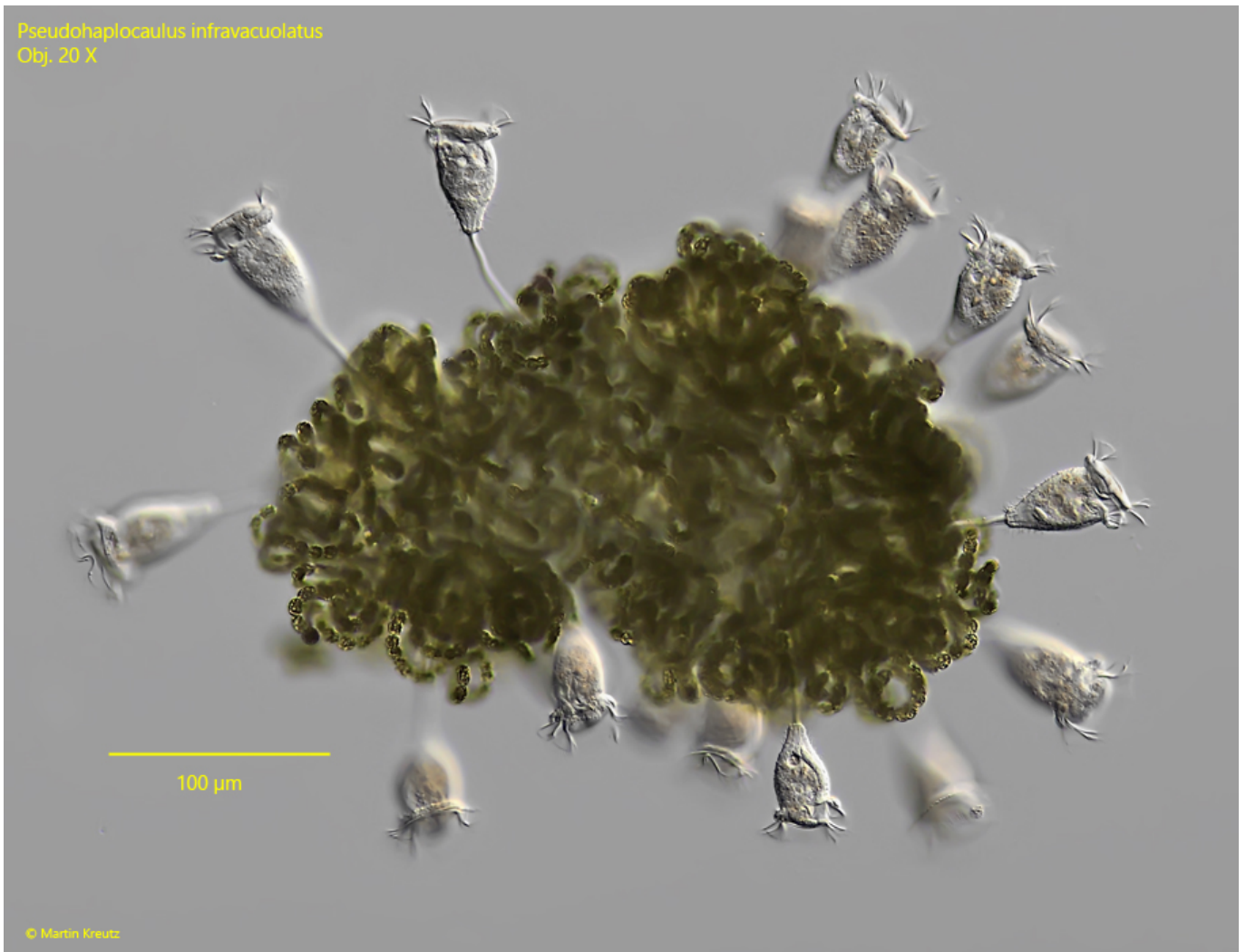


Fig. 1: *Pseudohaplocaulus infravacuolatus*. A pseudocolony on a freely floating *Anabaena* spec. coenobium. Obj. 20 X.

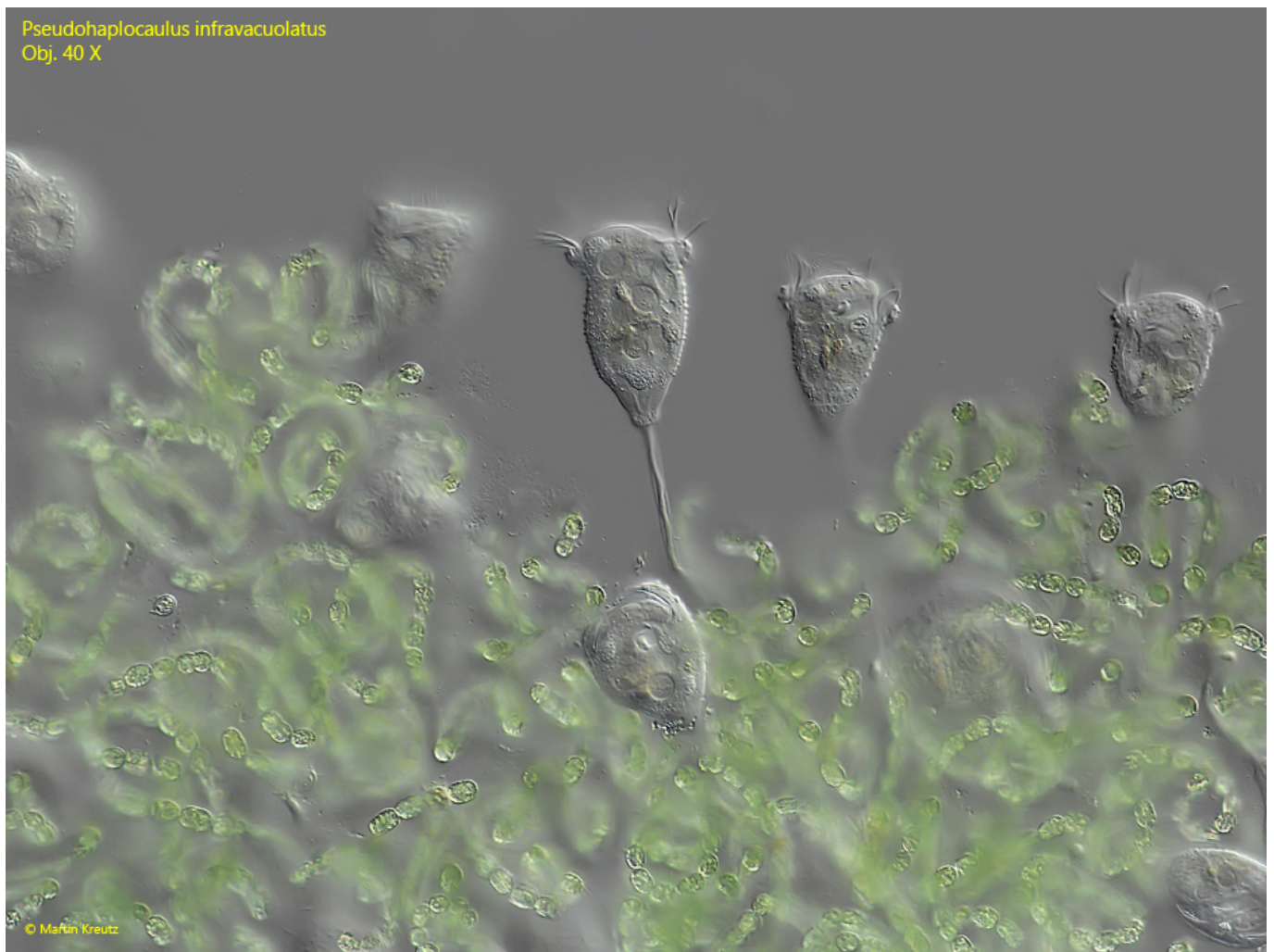


Fig. 2: *Pseudohaplocaulus infravacuolatus*. A pseudocolony on a slightly squashed *Anabaena* spec. coenobium. Obj. 40 X.

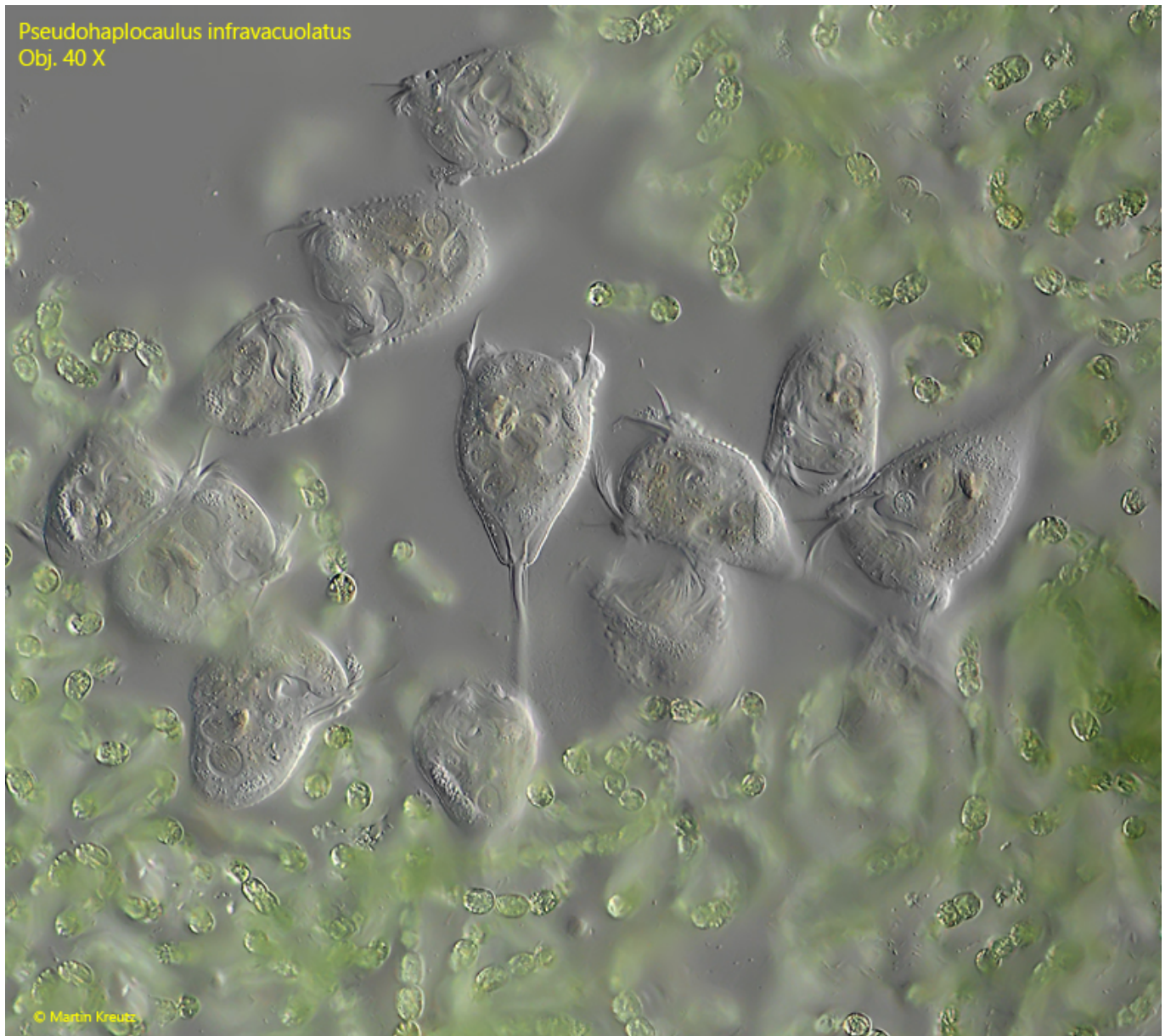


Fig. 3: *Pseudohaplocaulus infravacuolatus*. A second pseudocolony on a slightly squashed *Anabaena* spec. coenobium. Obj. 40 X.



Fig. 4: *Pseudohaplocaulus infravacuolatus*. L = 55 μm . A fully extended specimen in detail. The pellicle is covered with blister-shaped pellicular tubercles (PT) of different sizes. Obj. 100 X.

Pseudohaplocaulus infravacuolatus
Obj. 100 X

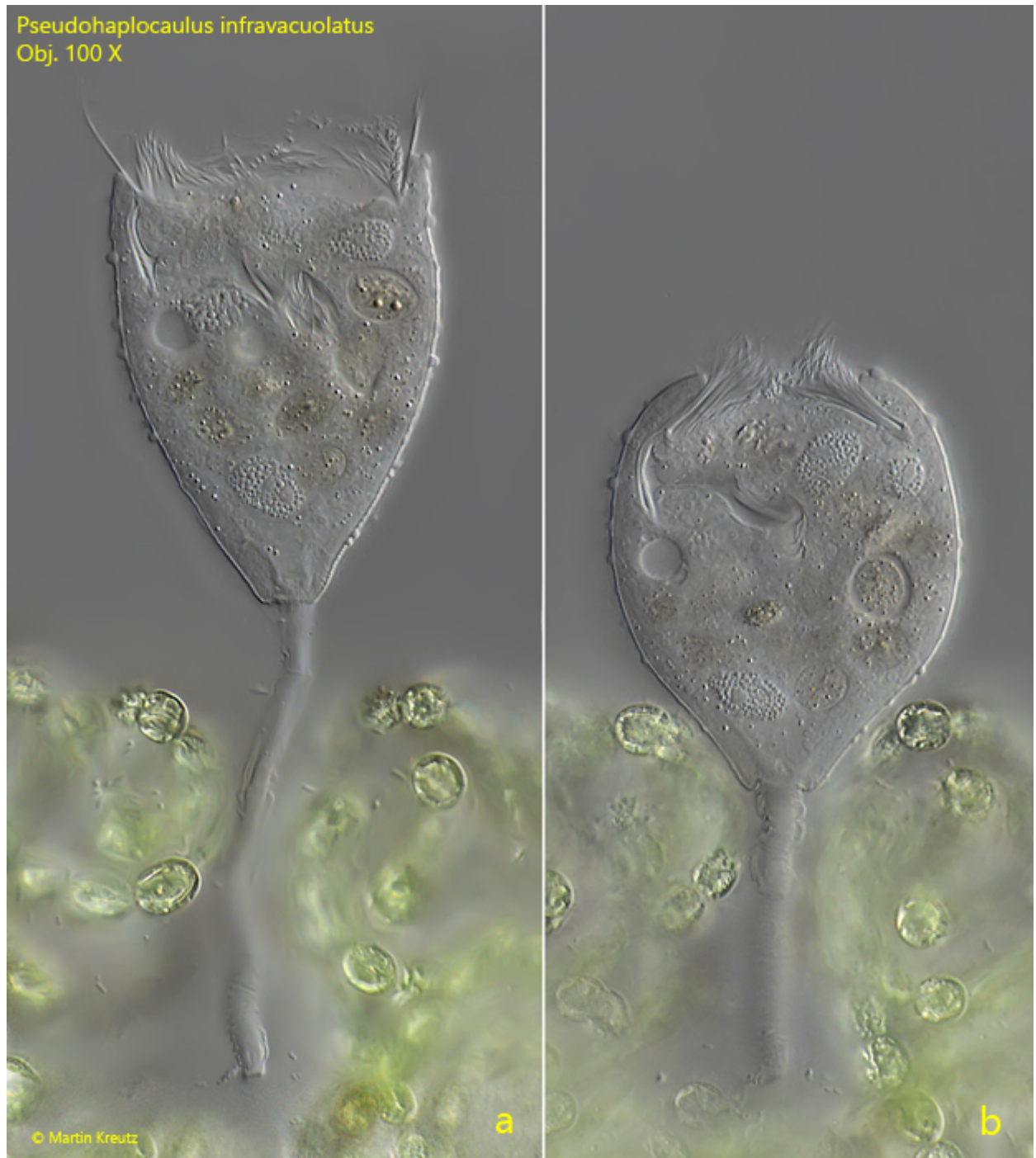


Fig. 5: *Pseudohaplocaulus infravacuolatus*. L = 56 μ m. An extended (a) and contracted specimen (b) attached to an *Anabaena* spec. coenobium. Obj. 100 X.

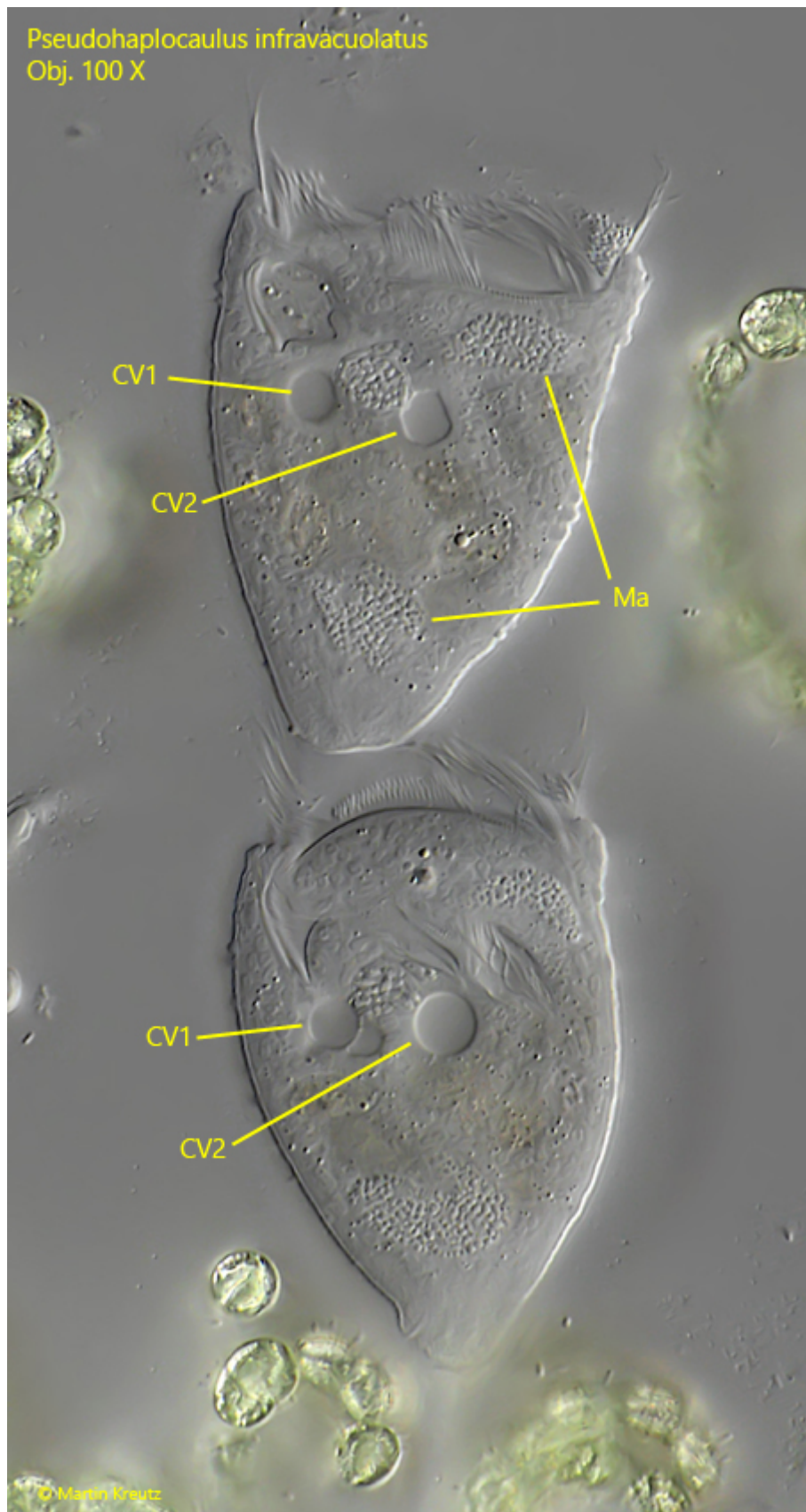


Fig. 6: *Pseudohaplocaulus infravacuolatus*. L = 52 μ m. Two specimens with the clearly visible two contractile vacuoles (CV1, CV2) in each of them. Obj. 100 X.

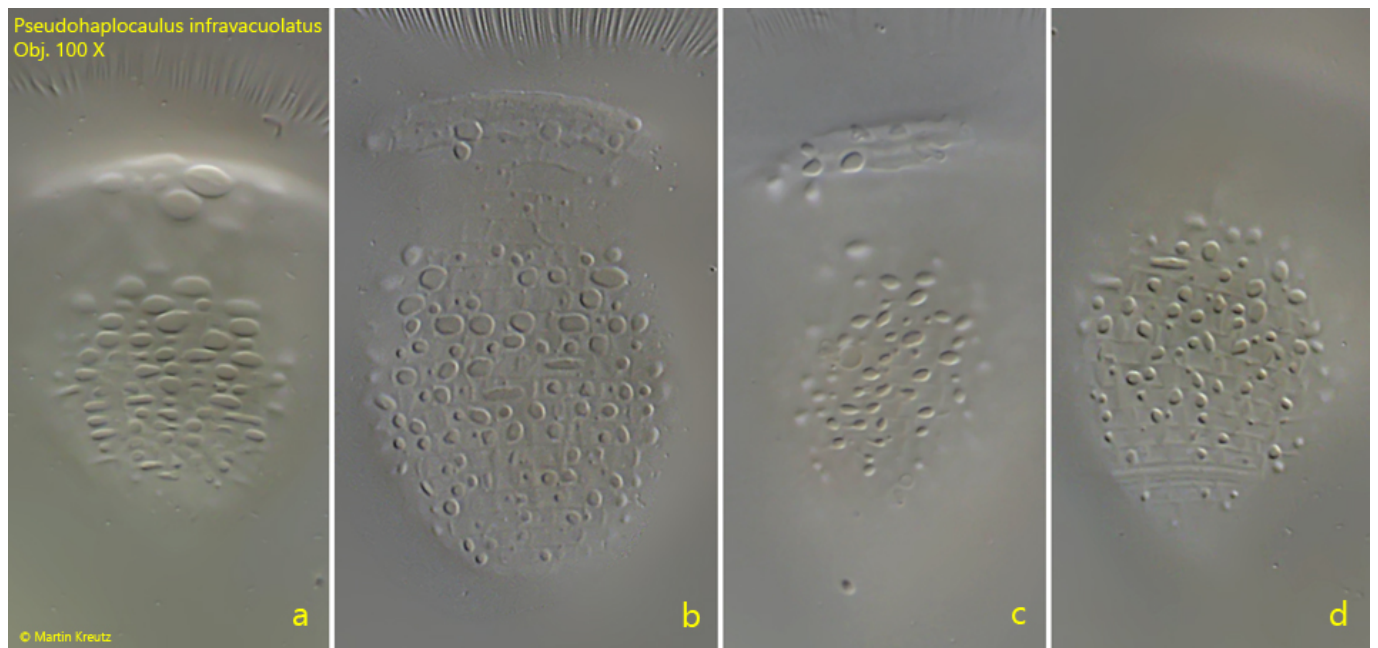


Fig. 7 a-d: *Pseudohaplocaulus infravacuolatus*. The different patterns of the pellicular tubercles of four specimens. Obj. 100 X.

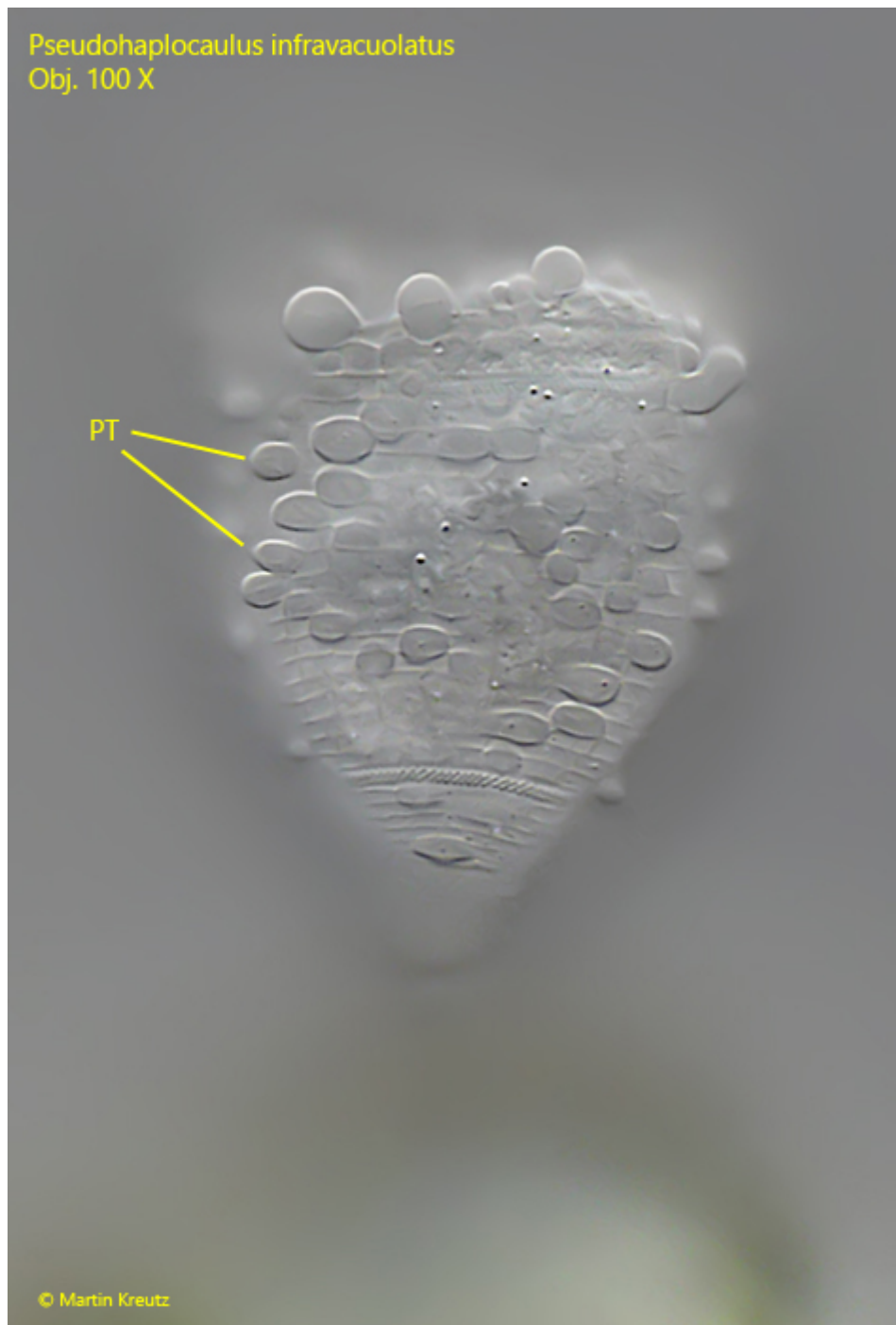


Fig. 8: *Pseudohaplocaulus infravacuolatus*. The pellicular tubercles (PT) of a slightly squashed specimen in detail. Obj. 100 X.