

Campanella umbellaria

(Linnaeus, 1758) Goldfuss, 1820

Most likely ID: n.a.

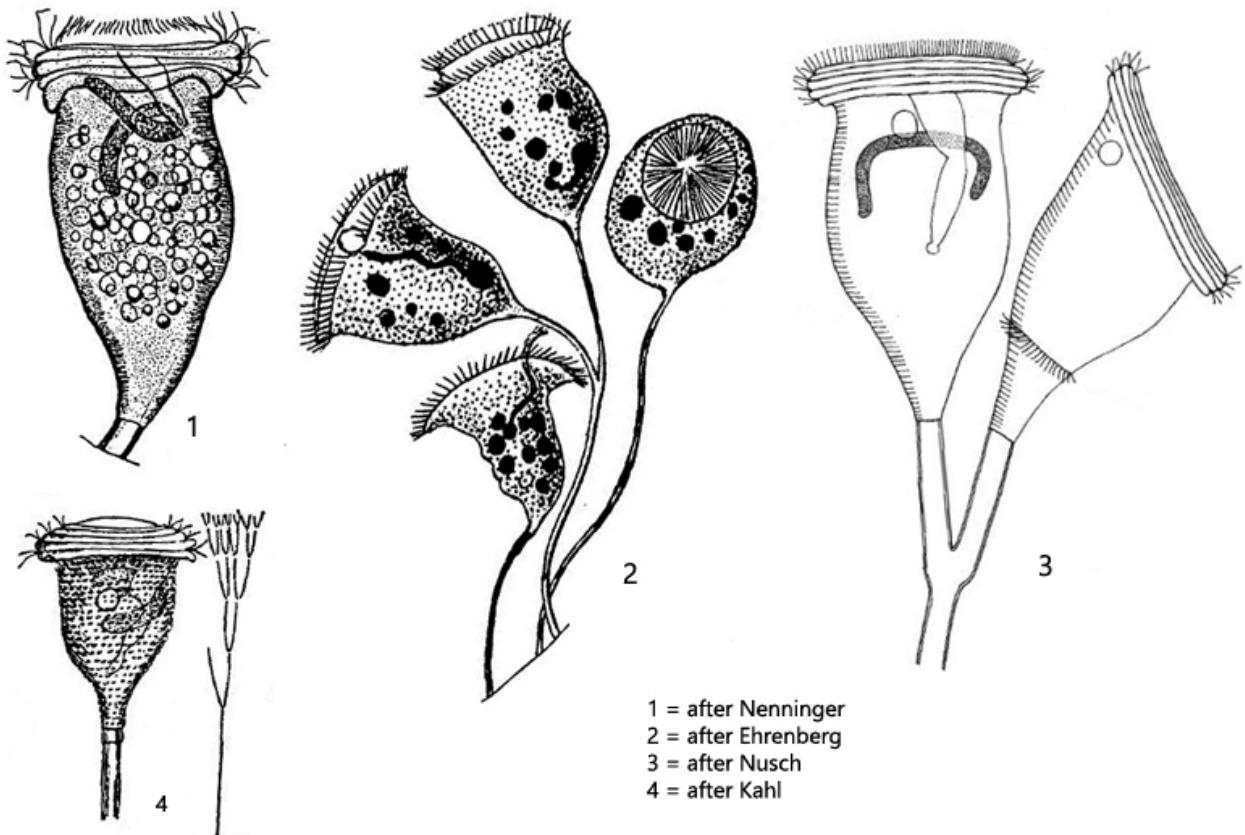
Synonym: n.a.

Sampling location: [Simmelried, Ulmisried](#)

Phylogenetic tree: [Campanella umbellaria](#)

Diagnosis:

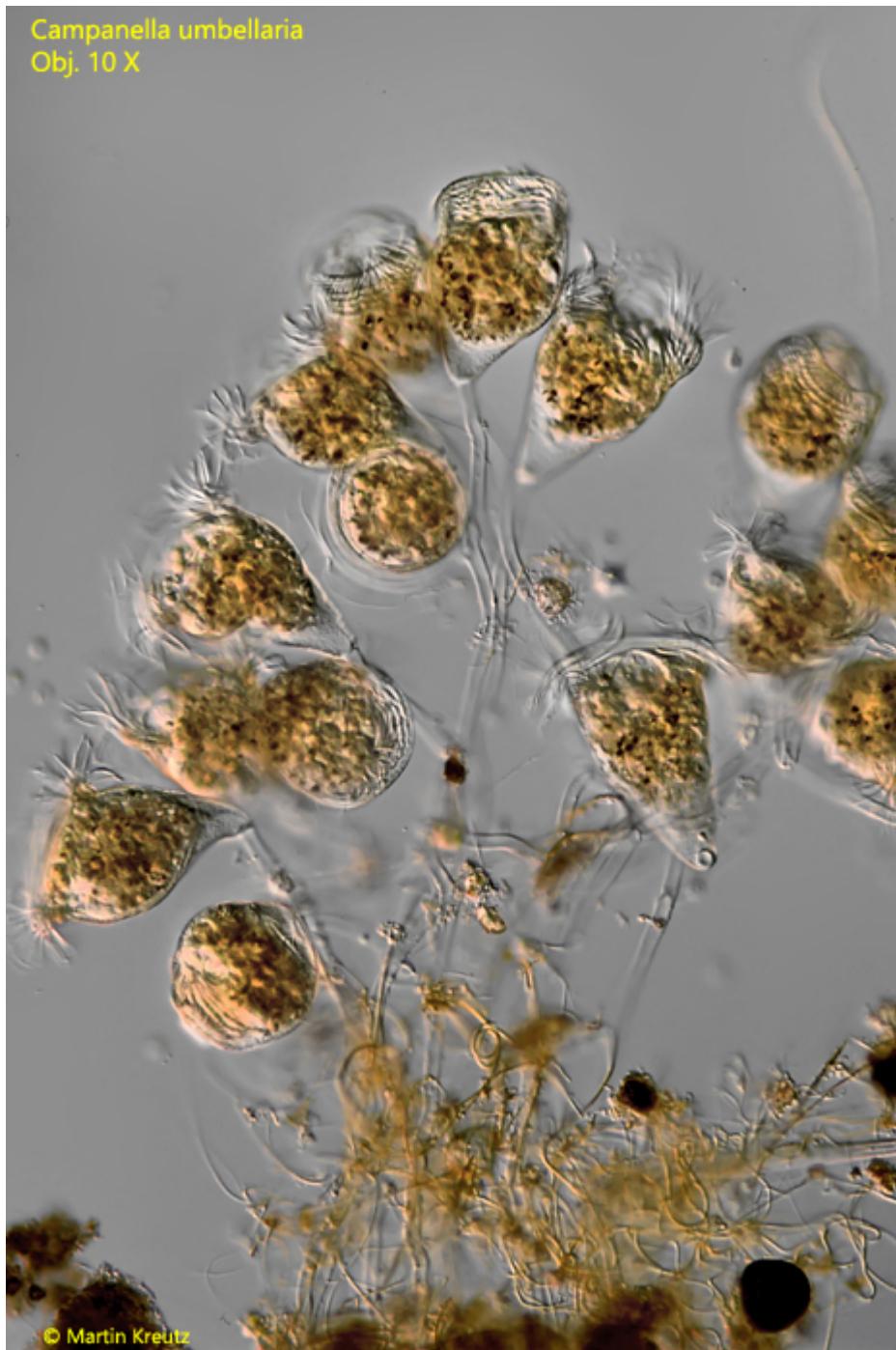
- length 200–305 µm, width 108–135 µm
- cells bell-shaped or cylindrical
- contracted cells almost spherical
- plasm colorless or yellow, filled with food vacuoles
- peristome with 3–7 ciliary rows
- one contractile vacuole
- macronucleus horseshoe-shaped in anterior half of cell
- pellicle covered with rows of rectangular or spherical tubercles
- dichotomous, non-contractile stalk.
- colonial



Campanella umbellaria

Campanella umbellaria is one of the most common peritrichous ciliates. Colonies are often found en masse as fuzzy coverings on decaying leaves or plant stems. The species forms large colonies on branched stems. As an important distinguishing feature from *Vorticella* or *Pseudovorticella*, the stems are non-contractile. Only the individuals can contract. The individuals are very large, 200–300 µm, and usually completely filled with yellowish or brownish food vacuoles. As another distinctive feature *Campanella umbellaria* has a peristome with 3 to a maximum of 7 rows of cilia. The high number of cilia rows is already well visible in lateral view at low magnification.

Campanella umbellaria
Obj. 10 X



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Campanella umbellaria
Obj. 10 X

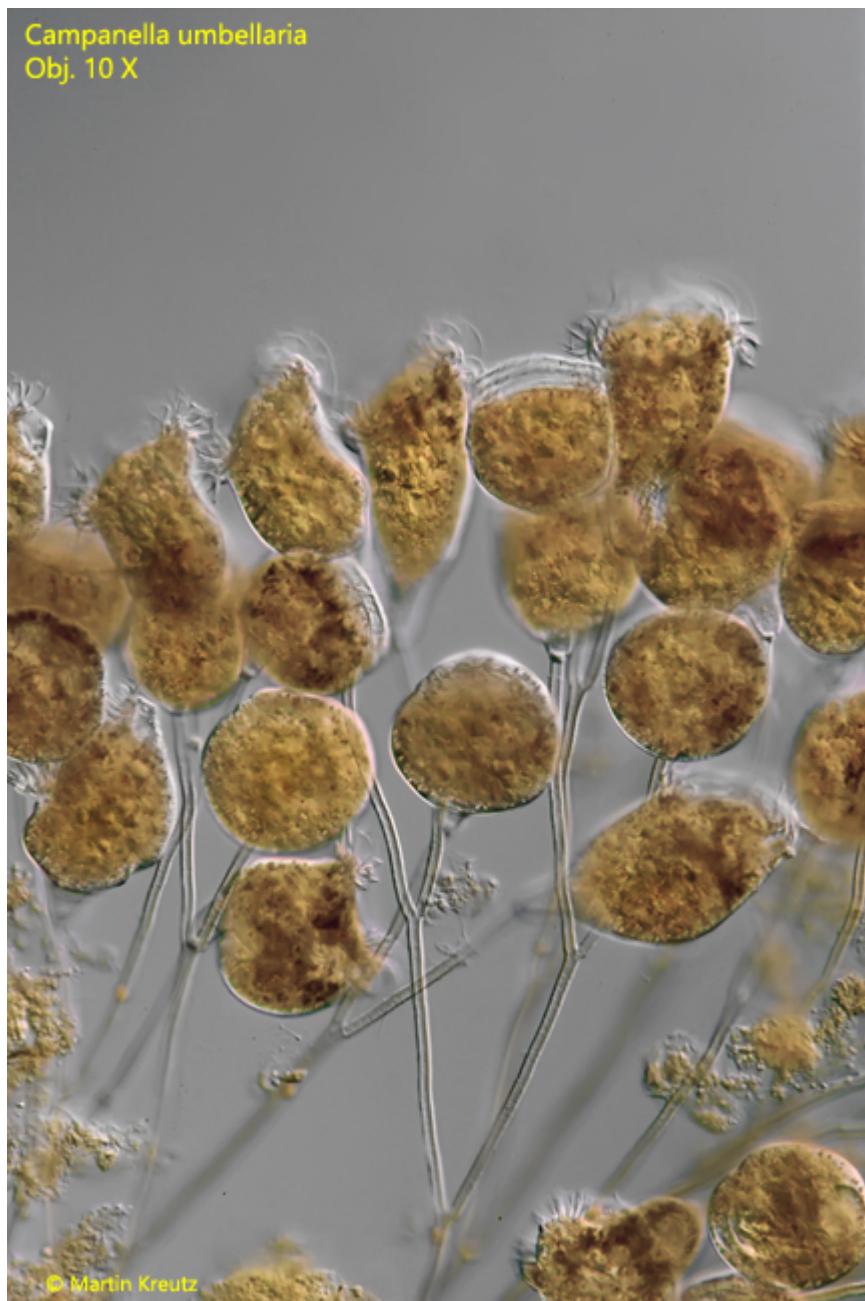


Fig. 1, 2: *Campanella umbellaria*. L = 190–250 μm . Overview of two colonies at low magnification. Obj. 10 X.

Campanella umbellaria
Obj. 20 X



Fig. 3: *Campanella umbellaria*. L = 205 μ m. An extended individuum in a colony.
Obj. 20 X.

Campanella umbellaria
Obj. 20 X



Fig. 4: *Campanella umbellaria*. L = 190-230 μm . An extended specimen with focal plane on the fine, transverse striation of the pellicle. Obj. 40 X.

Campanella umbellaria
Obj. 40 X



Fig. 5: *Campanella umbellaria*. L = 220-240 μ m. Some extended individuals in a colony. Obj. 40 X.

Campanella umbellaria
Obj. 40 X



a



b

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Fig. 6 a -b: *Campanella umbellaria*. L = 240 μ m. Two focal planes of some extended individuals in a colony. Obj. 40 X.

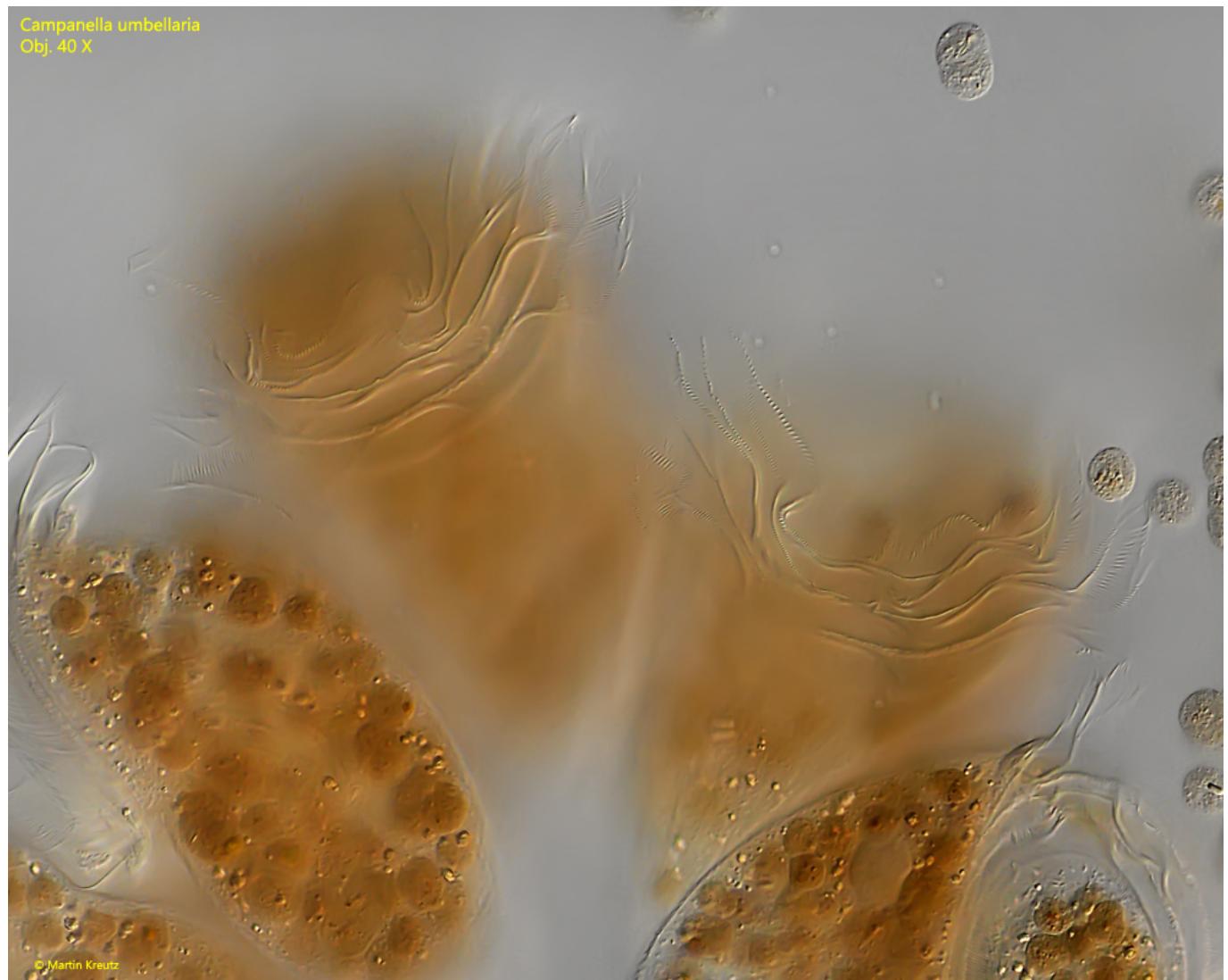


Fig. 7: *Campanella umbellaria*. Focus on the peristomial ciliary rows of some extended individuals. Obj. 40 X.

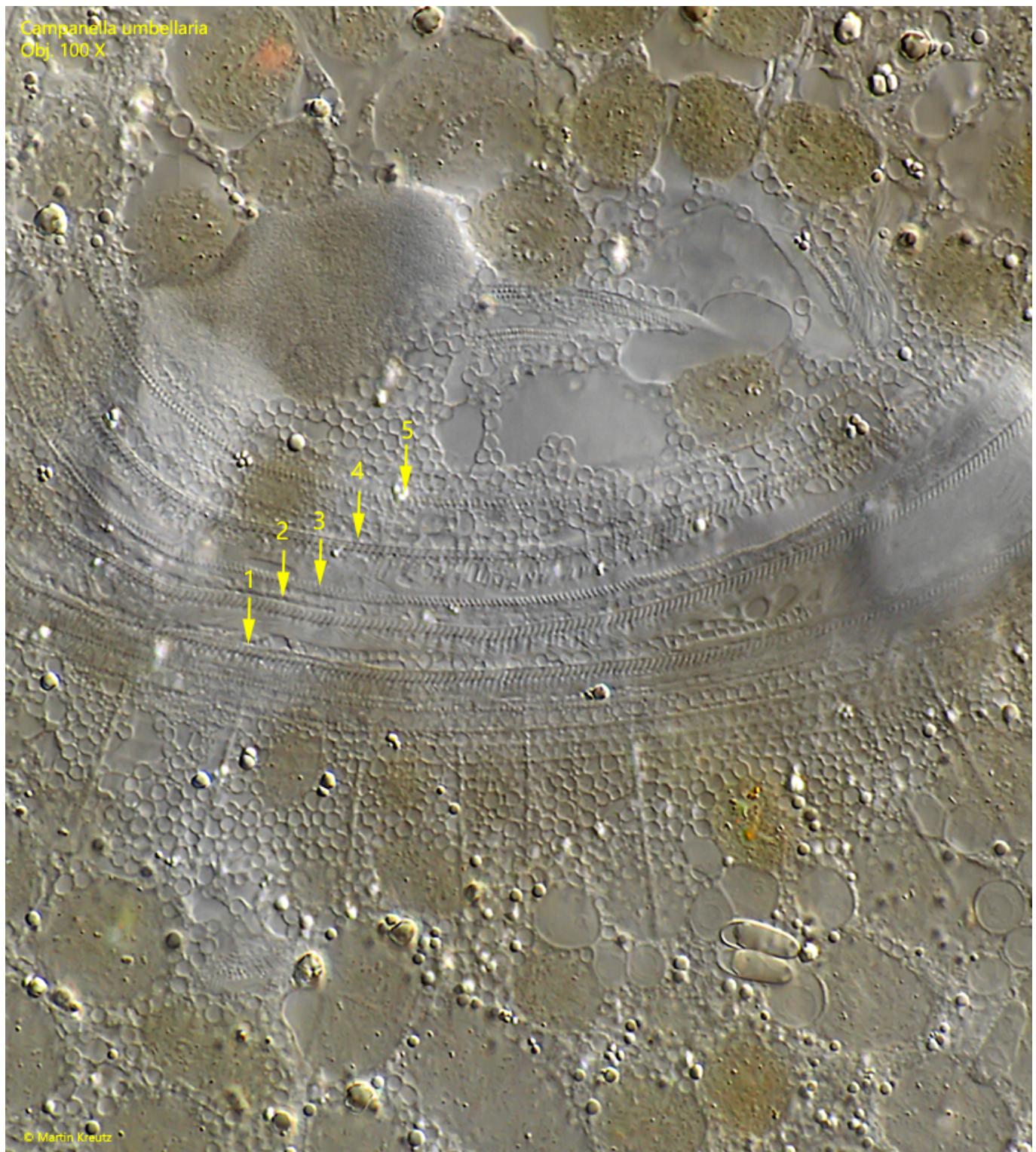


Fig. 8: *Campanella umbellaria*. The peristomial ciliary rows of a strongly squashed specimen. In this case the individuum has 5 of them. Obj. 100 X.

Campanella umbellaria
Obj. 100 X



Fig. 9: *Campanella umbellaria*. Due to the large number of food vacuoles details in the cells are hard to recognize. In this strongly squashed specimen the horseshoe-shaped macronucleus is visible (Ma). Obj. 100 X.

Campanella umbellaria
Obj. 100 X



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Fig. 10: *Campanella umbellaria*. Detail of the non-contractile stalk with a diameter of 12 μm . Note the parallel striation and that the stalk is hollow. In the upper right edge of the image two detached individuals are visible. Obj. 100 X.