Uroleptus caudatus

(Claparède & Lachmann, 1858) Kahl, 1930

Most likely ID: n.a.

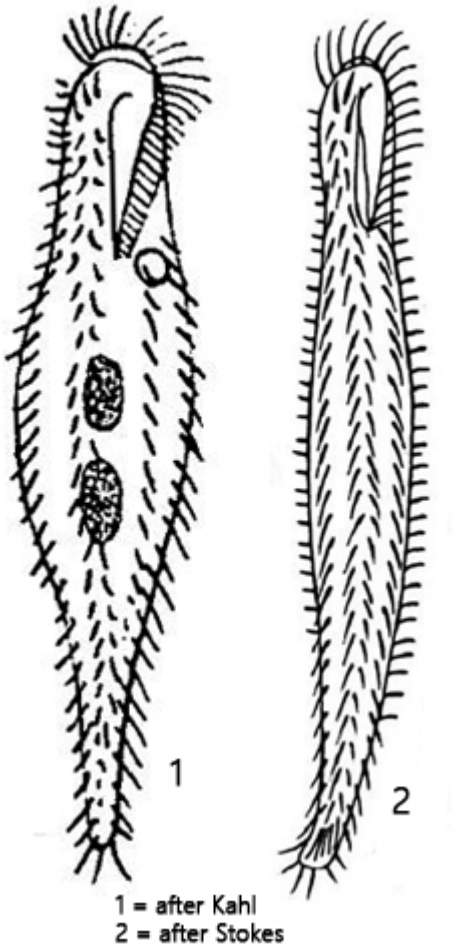
Synonym: *Paruroleptus caudatus*

Sampling location: Ulmisried, Purren pond, Simmelried

Phylogenetic tree: *Uroleptus caudatus*

Diagnosis:

- body long elliptical, clearly tailed, front broadly rounded
- length about 120–350 µm
- adoral zone about a fifth of body length
- contractile vacuole on left margin, level of mouth
- two ellipsoidal macronuclei with one micronucleus each
- 2 rows of midventral cirri
- right and left marginal rows of cirri
- 3–5 transverse cirri
- 3 frontal cirri
- 1 bucaal cirrus



Uroleptus caudatus

Uroleptus caudatus is a fairly common hypotrichous ciliate that I find in various locations. The specimens are usually found in floating or decomposing plant material.

The specimens in my population usually have a length of approx. 200 µm. The body is slender with a clearly developed tail. Dorsally 4 longitudinal rows of cirri can be recognized. The two middle rows are the midventral cirri (s. figs. 3 and 5 b). To the right and left of these are the marginal rows of cirri (s. figs. 3 and 5 b). Rigid, bristle-like cilia can often be seen on the edge of the body (s. fig. 2 a). These are the dorsal, marginal cilia, which are recognizable at the margin of the body.

The similar species *Uroleptus piscis* is larger (up to 500 µm), has 3 caudal cilia and the cirri of the left marginal row are clearly elongated near the posterior end. *Uroleptus musculus* can also be confused with *Uroleptus caudatus*. However, this species does not have a caudal process.

More images and information on *Uroleptus caudatus*: Michael Plewka-Freshwater life-*Uroleptus caudatus*



Fig. 1 a-d: *Uroleptus caudatus*. L = 206 µm. Different focal planes of a freely swimming specimen. CV = contractile vacuole. Obj. 40 X.

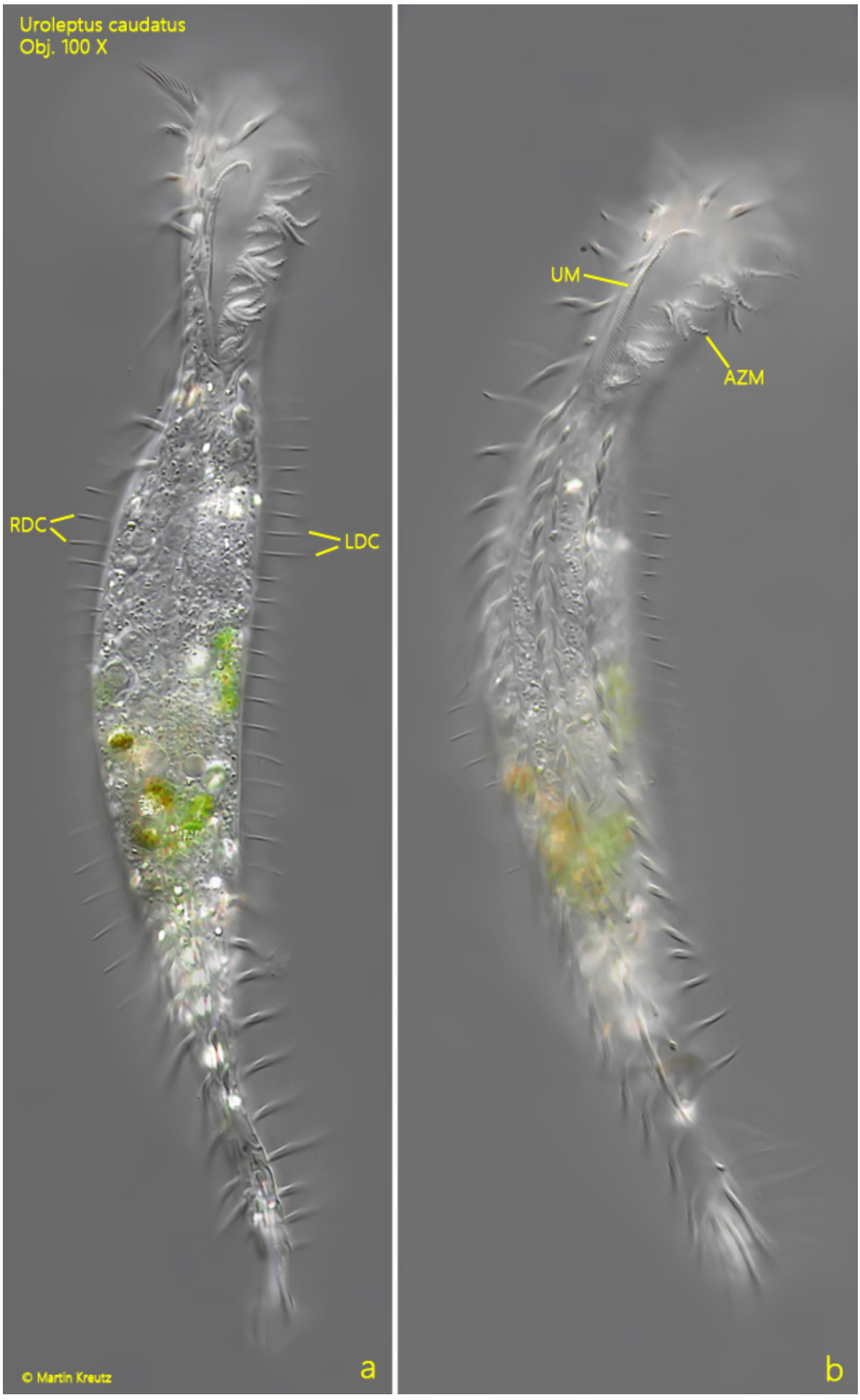

Uroleptus caudatus
Obj. 100 X
RDC
LDC
© Martin Kreutz
a
UM
AZM
b

Fig. 2 a-b: *Uroleptus caudatus*. L = 192 µm. Two focal planes of a freely swimming specimen. The bristle like lateral cirri are the left and right dorsal marginal cirri (RDC, LDC). AZM = adoral zone of membranelles, UM = undulating membrane. Obj. 100 X.

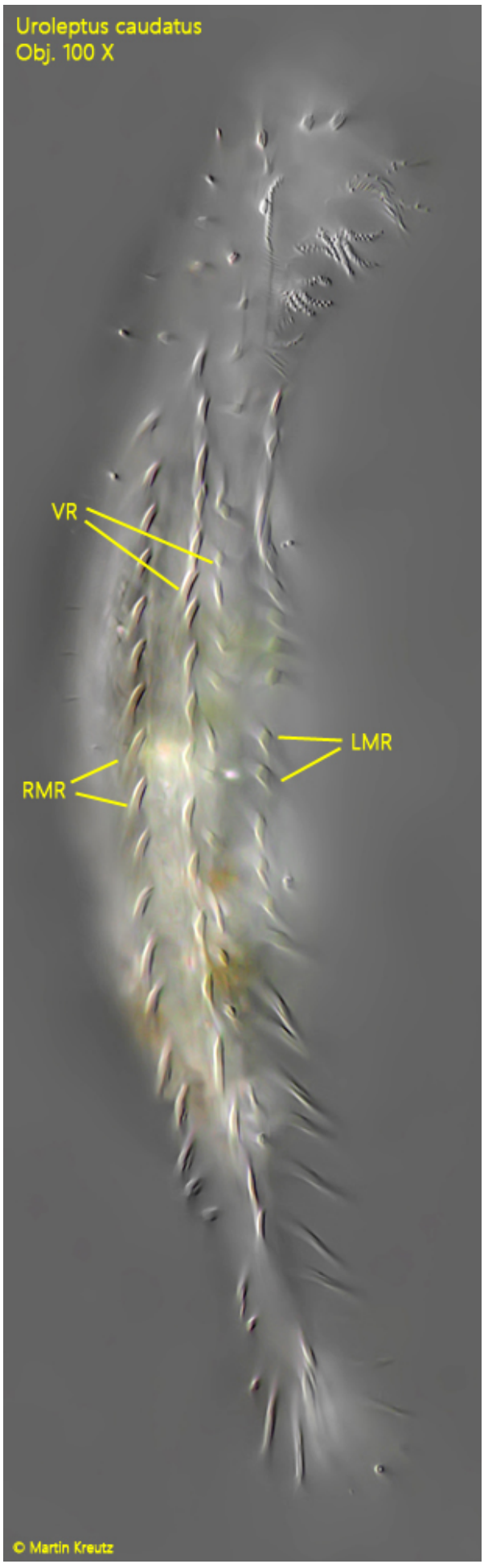

Uroleptus caudatus
Obj. 100 X
VR
LMR
RMR
© Martin Kreutz

Fig. 3: *Uroleptus caudatus*. L = 198 µm. Dorsal view on the two rows of ventral cirri (VR) and the left and right rows of marginal cirri (LMR, RMR). Obj. 100 X.

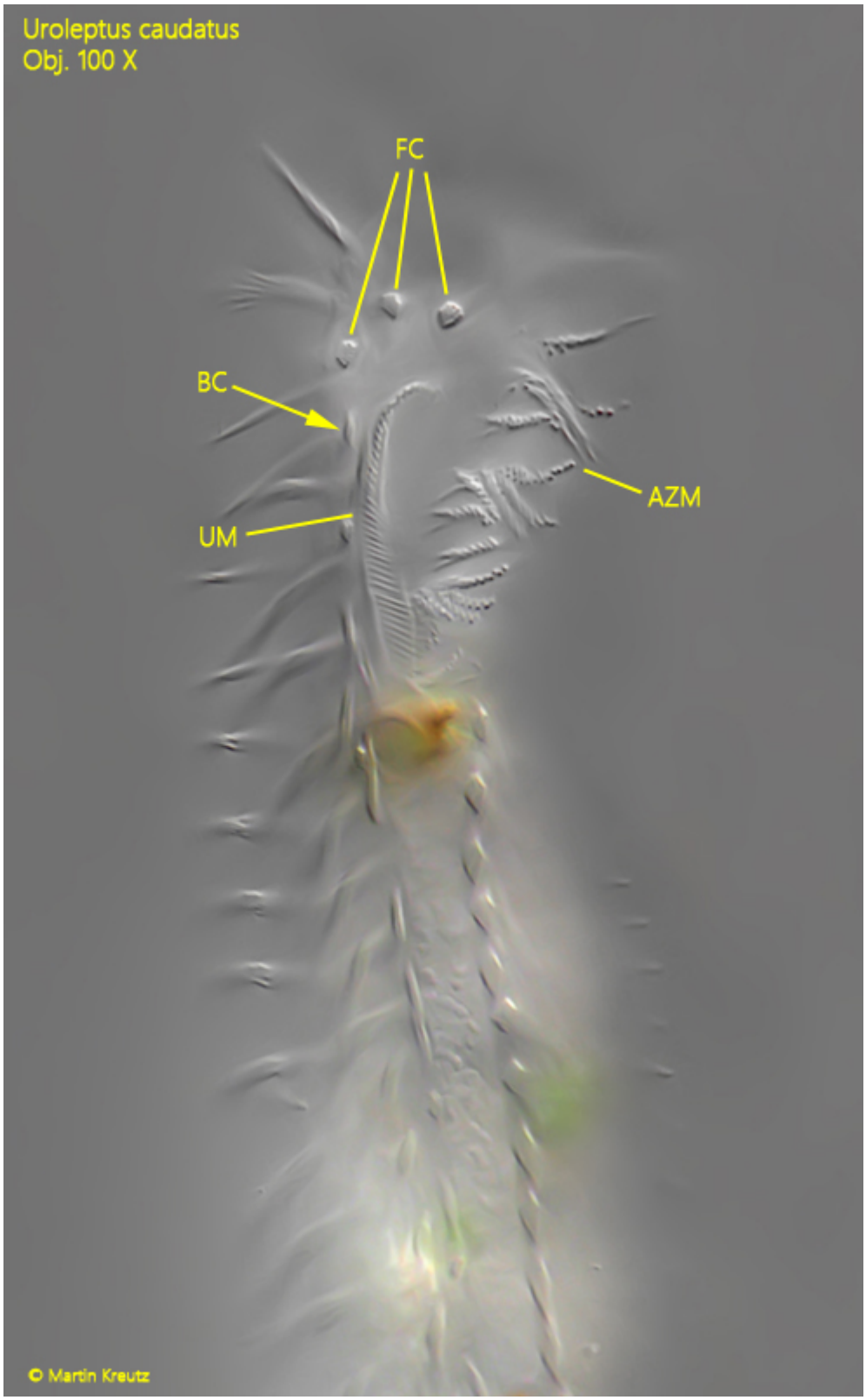


Fig. 4: *Uroleptus caudatus*. The oral apparatus in detail. On the left side the undulating membrane (UM) is visible and on the right side the adoral zone of membranelles (AZM). FC = frontal cirri, BC = buccal cirrus. Obj. 100 X.

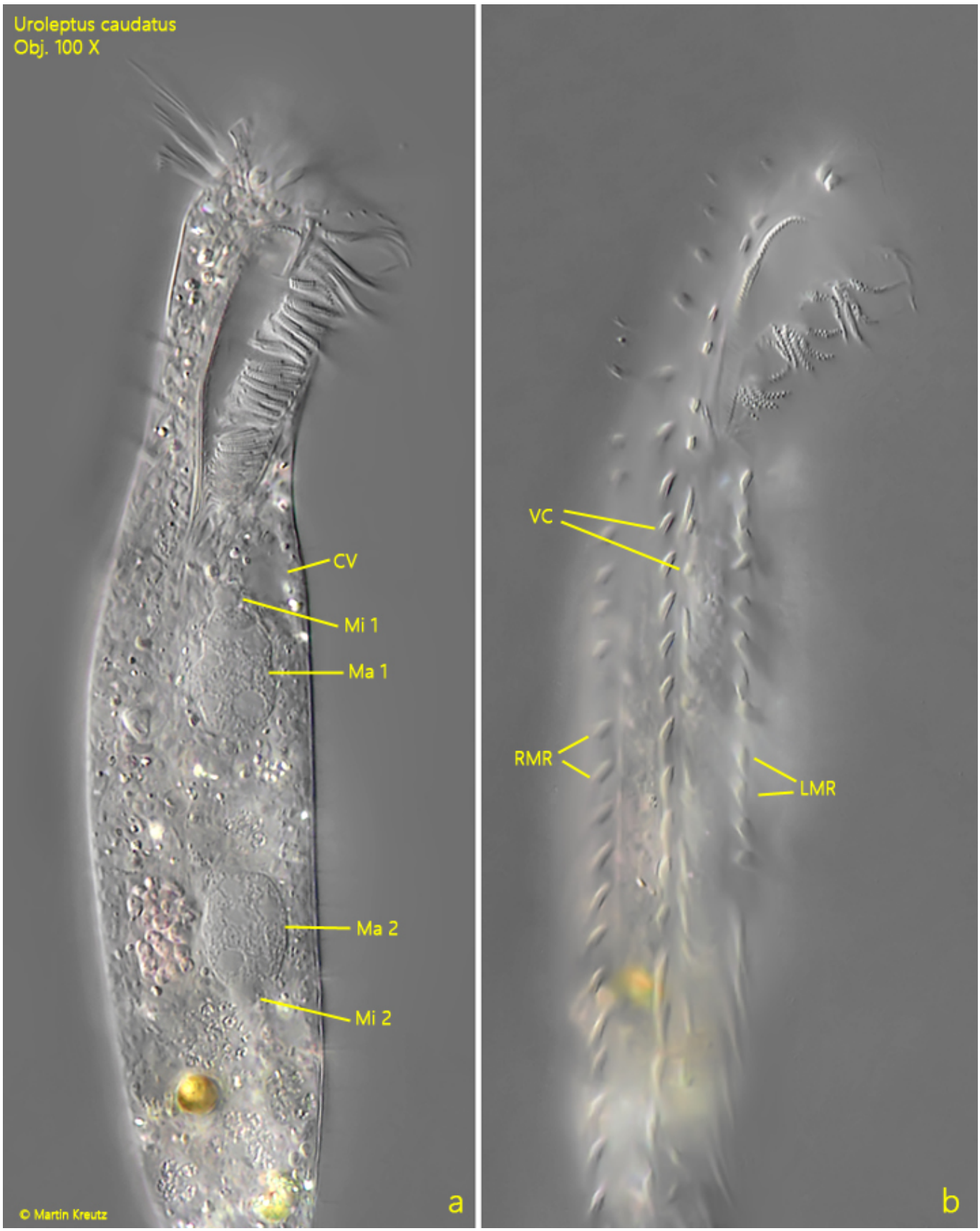


Fig. 5 a-b: *Uroleptus caudatus*. Tweo focal planes of a slightly squashed specimen. CV = contractile vacuole; Ma 1, Ma 2 = macronuclei; Mi 1, Mi 2 = micronuclei; VC = ventral rows of cirri; LMR = left marginal row of cirri; RMR = right mariginal row of cirri. Obj. 100 X