Beauchampiella eudactylota Gosse, 1886

Most likely ID: n.a.

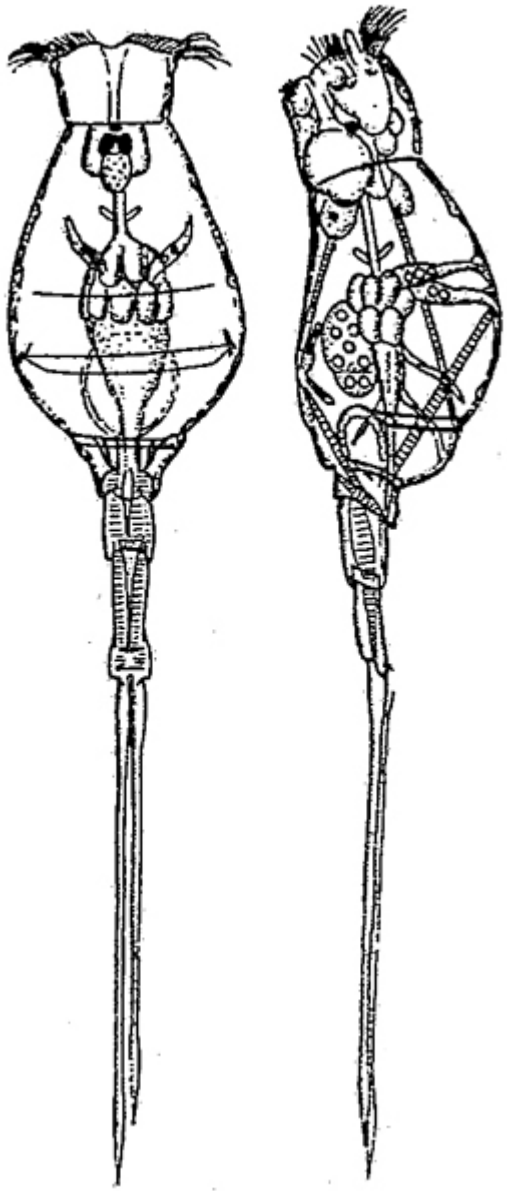
Synonym: *Eudactylota eudactylota*, *Manfredium eudactylotum*

Sampling location: **Simmelried**

Phylogenetic tree: ***Beauchampiella eudactylota***

Diagnosis:

- body pear-shaped
- lorica smooth
- length up to 740 µm
- foot bipartite
- toes up to 230 µm long
- toes with pointed ends
- swims slowly with wheel-organ or leaps by sudden movement of its toes
- one eyespot
- resting eggs with hairy projections



Beauchampiella eudactylota

In the literature *Beauchampiella eudactylota* is described as a widespread, but infrequent species. However, in Simmelried it is the most common rotifer and at times occurs in masses. Most specimens are found in decomposing plant masses and in the top layer of mud. The species is very conspicuous because of its long, two-limbed foot and two long, spreading toes. Jumping movements can be made by using the foot and spreading the toes. *Beauchampiella eudactylota* resembles *Scaridium longicaudum* at first glance. However, this is only a superficial resemblance. *Scaridium longicaudum* does not possess an eyespot, but an orange-red plate on the mastax. The mastax is also completely different in shape compared to *Beauchampiella eudactylota*. In young, transparent specimens, worm-like structures can sometimes be seen in the inner organs, with a length of 1–30 µm (s. fig. 5). Some of them seems to be branched. However, these structures appear only temporarily. They are actually too large for mitochondria. The purpose and nature

of these structures is unknown to me.

More images and information on *Beauchampiella eudactylota*: Michael Plewka-Freshwater life-*Beauchampiella eudactylota*

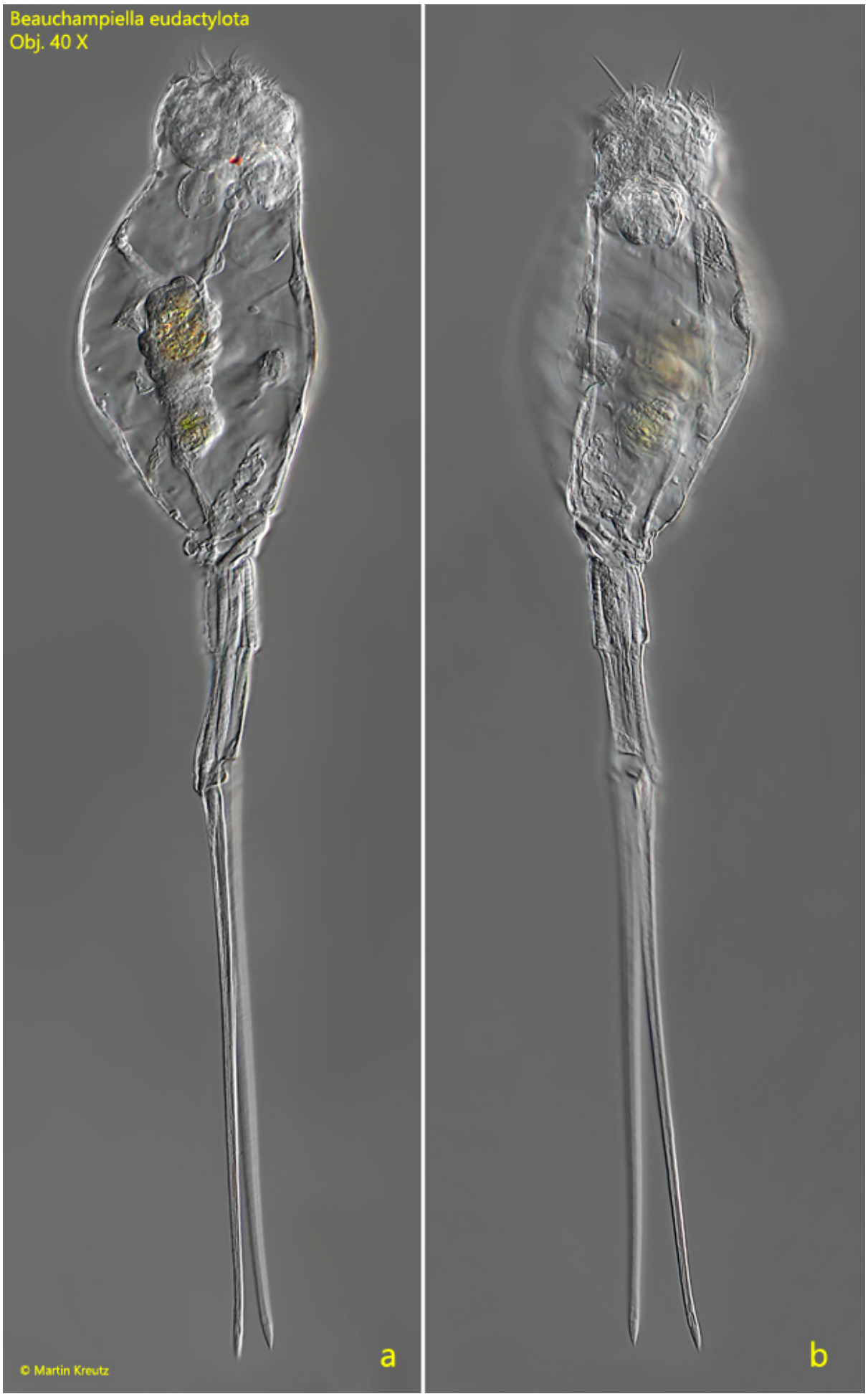

Beauchampiella eudactylota
Obj. 40 X
© Martin Kreutz
a
b

Fig. 1 a-b: *Beauchampiella eudactylota*. L = 485 µm. Lateral view from right (a) and ventral view (b) of a freely swimming specimen. Obj. 40 X.



Fig. 2 a-b: *Beauchampiella eudactylota*. L = 485 µm. Two focal planes from ventral of a slightly squashed specimen. Bl = bladder, EG = egg, ES = eye spot, MS = muscle strands, St = stomach, Vi = vitellarium. Obj. 100 X.



Fig. 3: *Beauchampiella eudactylota*. Part of the foot with an complex arrangement of muscle strands (MS). Bl = bladder. Obj. 100 X.



Fig. 4: *Beauchampiella eudactylota*. A specimen with a resting egg (RE). The egg is covered with hairy projections. Obj. 100 X.


Beauchampiella eudactylota
Obj. 100 X
LA
20 µm
© Martin Kreutz

Fig. 5: *Beauchampiella eudactylota*. A lateral view from left. Sometimes in young, transparent specimens worm-like structures can be recognized. These structures are present in all inner organs. The nature and purpose of them is unknown. LA = lateral antenna. Obj. 100 X.

In June 2025, I found a male specimen of *Beauchampiella eudactylota* in an old sample from the Simmelried. The specimen had no trophi, stomach and intestine, but a clearly visible sperm reservoir (s. figs. 6 a-b and 7). I could not find any reference to male specimens of this species in the literature (e.g. Koste and Voigt). Perhaps none have yet been found.

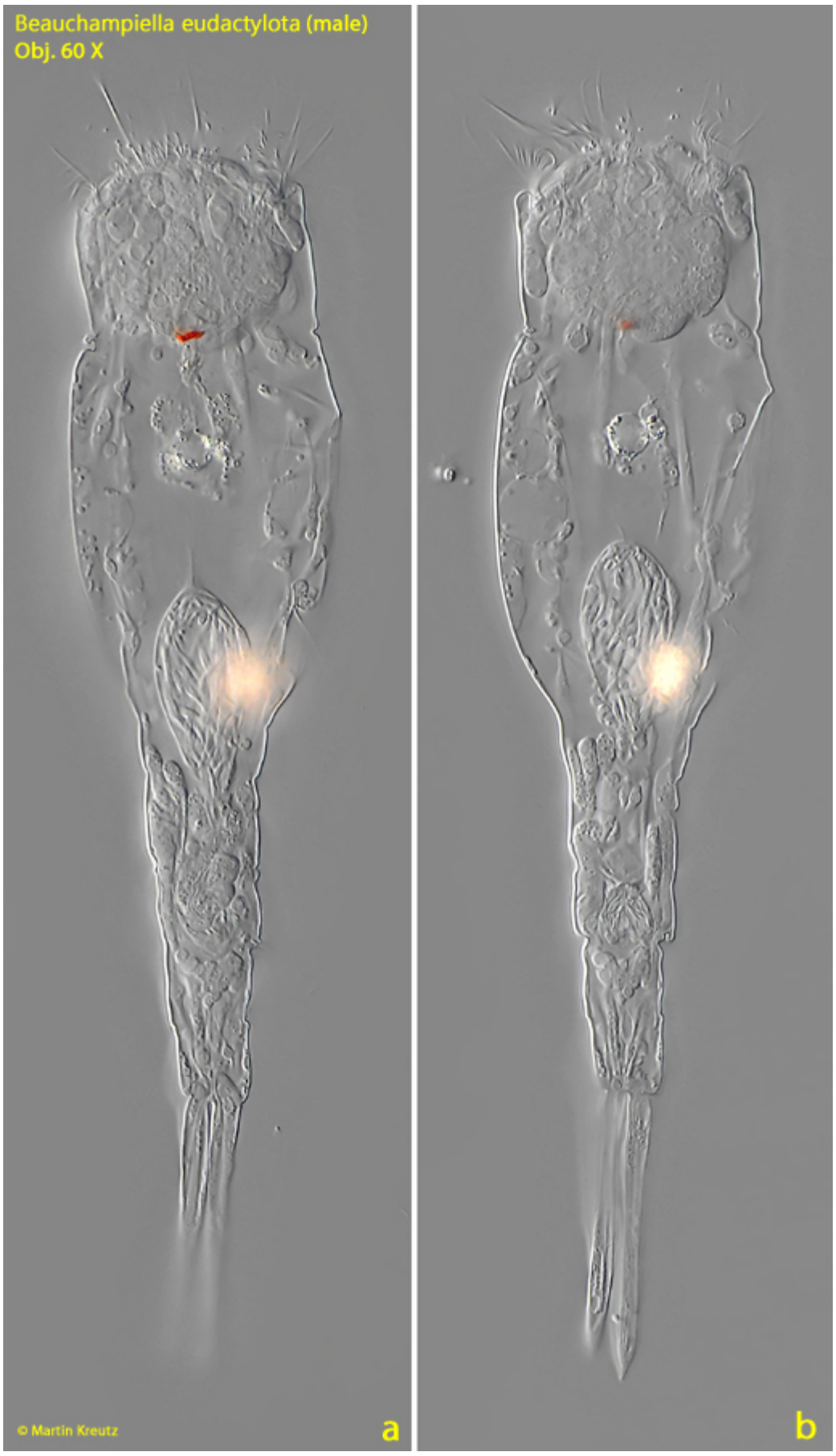


Fig. 6 a-b: *Beauchampiella eudactylota*, male. L = 212 µm. Two focal planes of the slightly squashed specimen. Obj. 60 X.

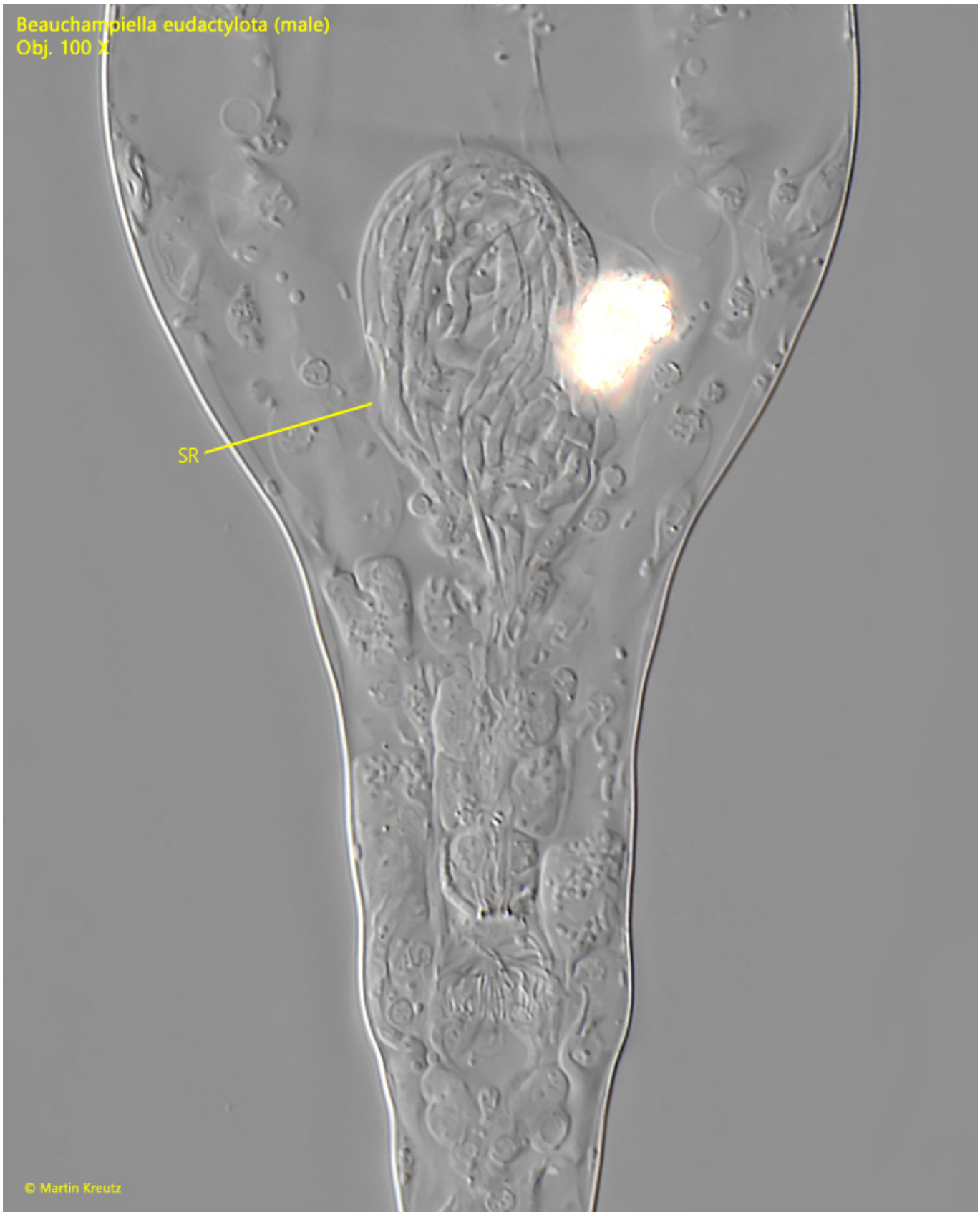


Fig. 7: *Beauchampiella eudactylota*, male. L = 212 µm. The sperm reservoir (SR) in detail of the specimen as shown fig. 6 a-b. Obj. 100 X.