Chaetonotus tricuspidatus Schwank, 1990

Most likely ID: n.a.

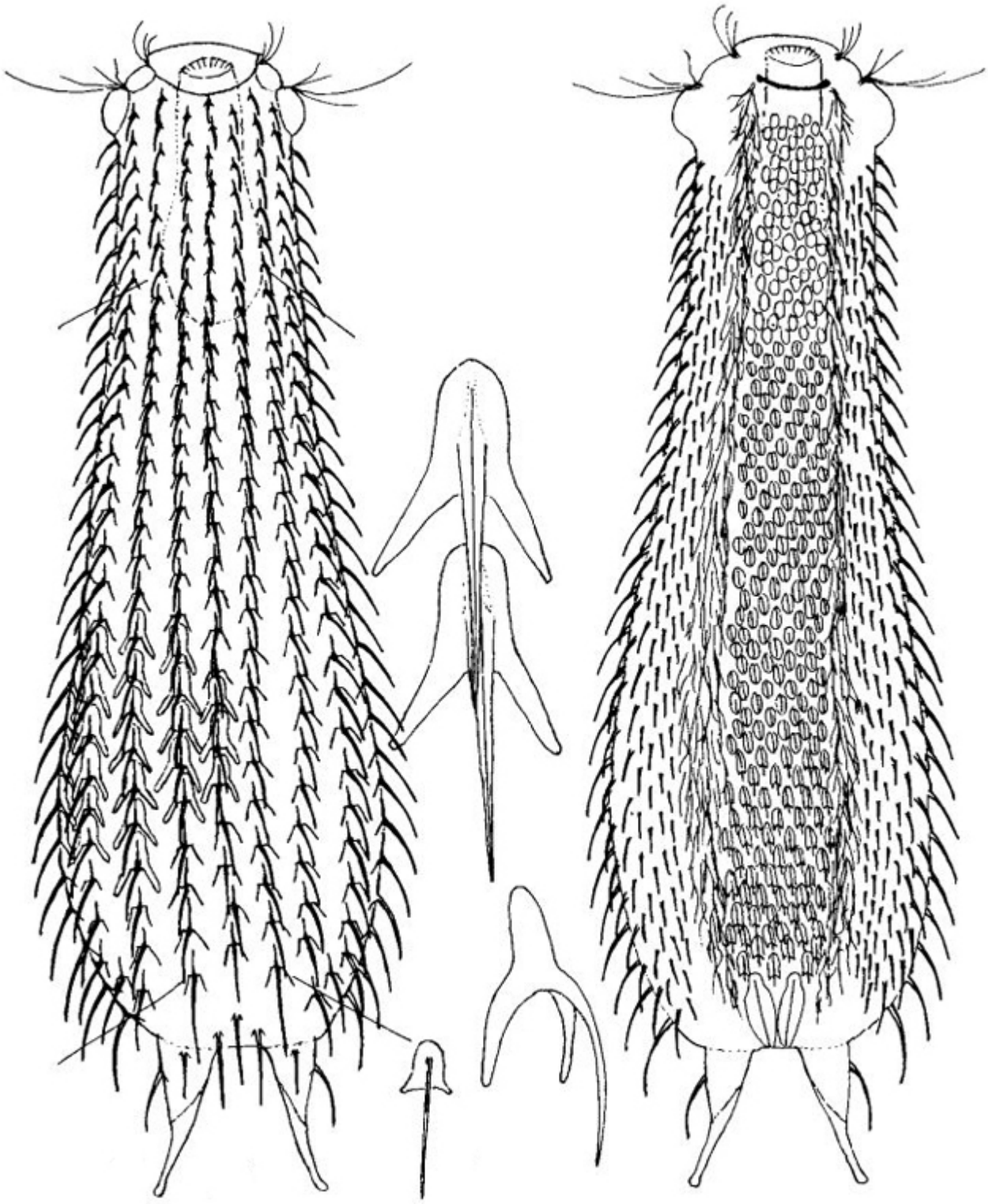
Synonym: n.a.

Sampling location: Simmelried

Phylogenetic tree: *Chaetonotus tricuspidatus*

Diagnosis:

- body bottle-shaped with swollen rump
- head short, very broad with protruding pleural lobes
- length 270–290 µm
- hypostomium is formed as a crossbar
- pharynx about 70 µm long, terminally swollen
- 4 ciliary tufts, anterior ones very short
- 2 pairs of dorsal setolae
- dorsal 9–10 longitudinal rows with 25–27 trilobed, not overlapping scales
- trunk scales with a curved, simple spine
- neck scales are similar to the trunk scales
- base of the toes covered with small scales with short wings
- toes separated from trunk about 23–25 µm long



after Schwank

Chaetonotus tricuspidatus

So far I have only found two specimens of *Chaetontus tricuspidata* in May 2005 and August 2022. I found both specimens in the uppermost mud layer of the Simmelried. The images shown below are of the specimen from August 2022.

The specimens of my population were with 245 µm and 238 µm slightly smaller than described by Schwank (1990). However, the body shape was typical with a thickened posterior part of the rump. In both specimens I found, I was only able to examine the dorsal side.

The dorsal scales are three-lobed, with rather long and narrow wings. They have a clearly curved spine without secondary spines. In the middle of the trunk the scales had a length of 13–15 µm, as described by Schwank (s. fig. 5). The longest spines were 24–26 µm long. The scales in the head and neck area had basically the same shape as the scales of the trunk, but with clearly shortened wings. The spines of these scales were thicker and more curved (s. fig. 4). The scales at the posterior end are even more reduced with only rudimentary wings and the spines are very short and not curved (s. fig. 6). All scales on the dorsal side are clearly separated from each other and do not touch. Only the spines cross each other.

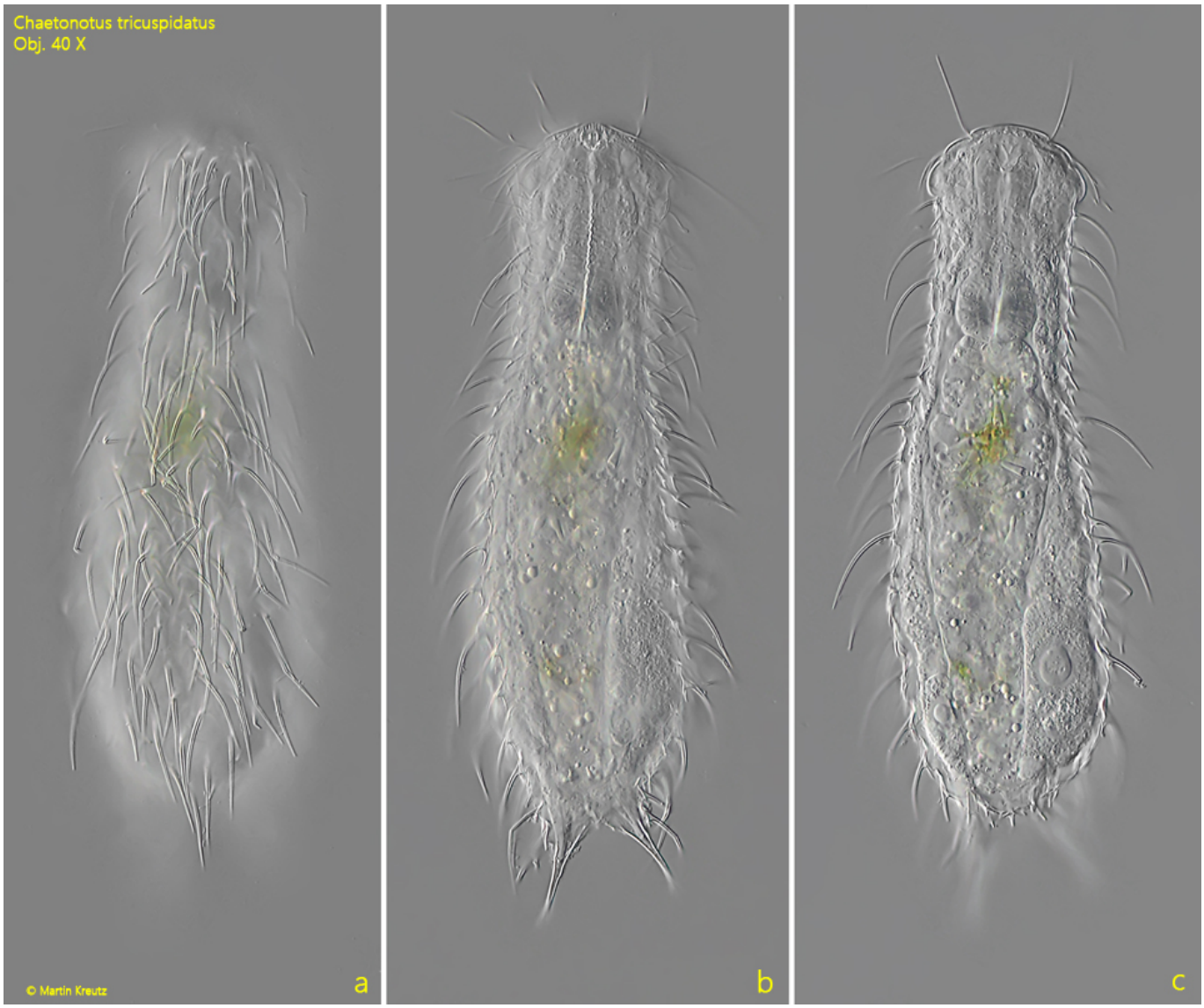


Fig. 1 a-c: *Chaetonotus tricuspidatus*. L = 228 µm. Three focal planes of a freely swimming specimen. Obj. 40 X.

Fig. 2 a-b: *Chaetonotus tricuspidatus*. L = 228 µm. The specimen as shown in fig. 1 a-c in detail. Note the swollen terminal end of the pharynx (PH). Obj. 60 X.

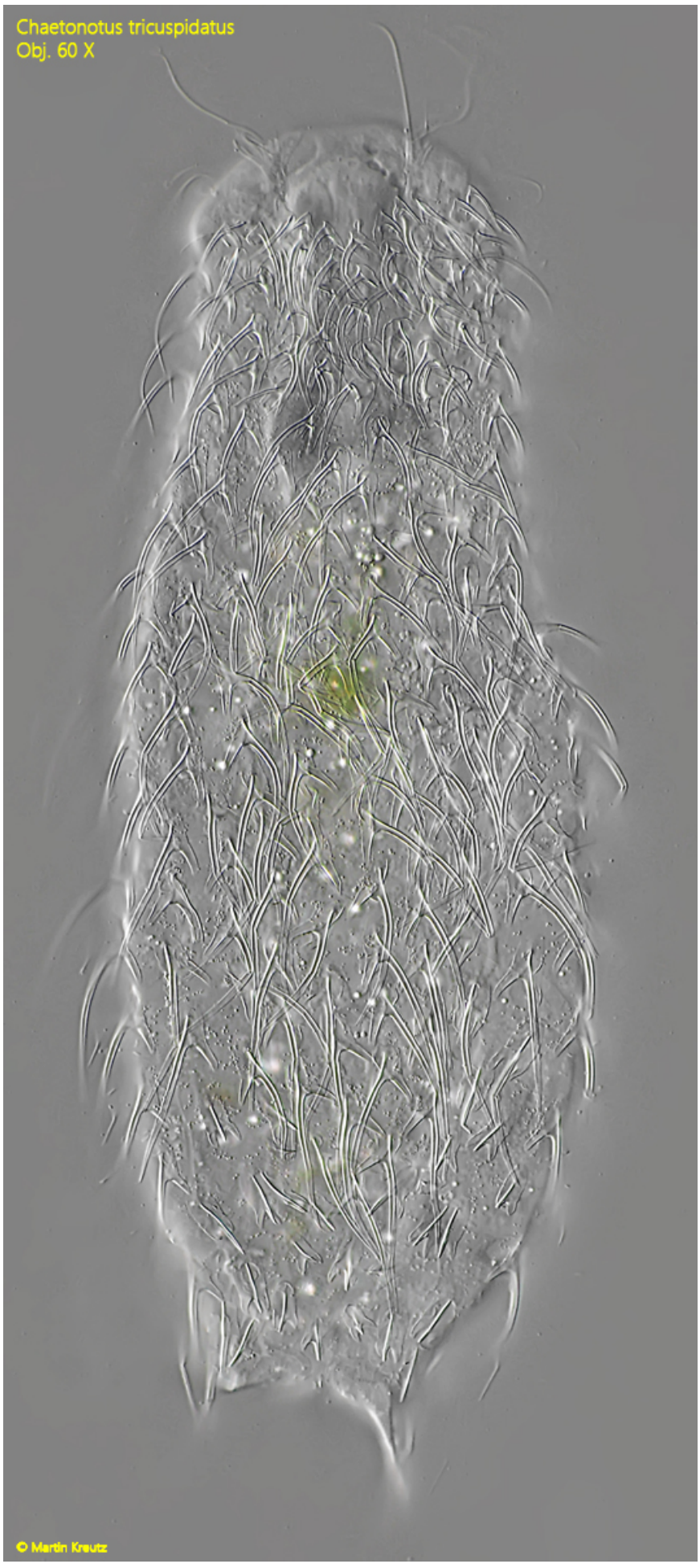

Chaetonotus tricuspidatus
Obj. 60 X
© Martin Kreutz

Fig. 3: *Chaetonotus tricuspidatus*. L = 228 µm. Total view of the squashed specimen as shown in fig. 1 a-c from dorsal. Obj. 60 X.

Fig. 4: *Chaetonotus tricuspidatus*. The scales of the dorsal head and neck region in detail. Obj. 100 X.

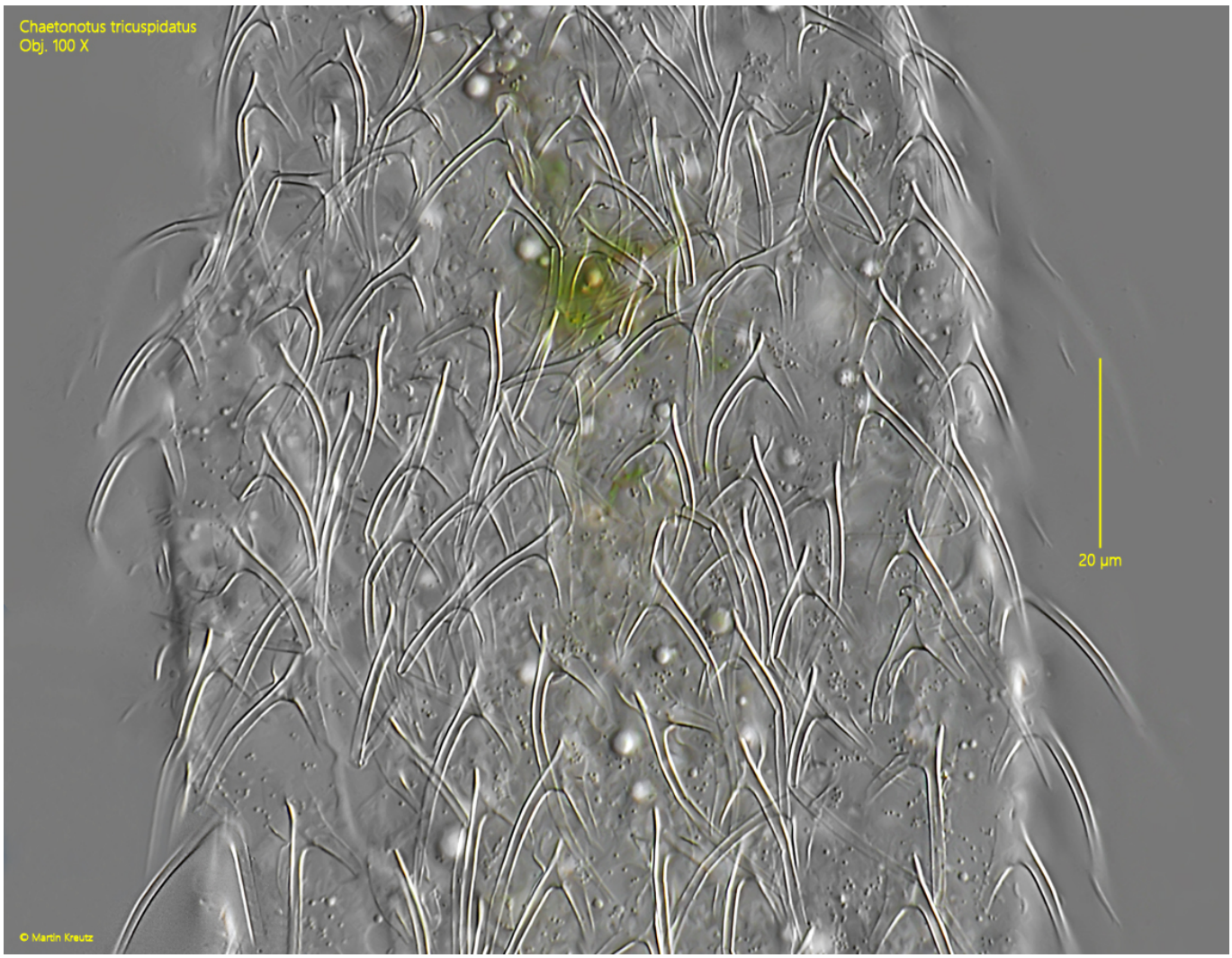


Fig. 5: *Chaetonotus tricuspidatus*. The scales of the dorsal trunk in detail. Note that the trilobed scales do not overlap. Obj. 100 X.

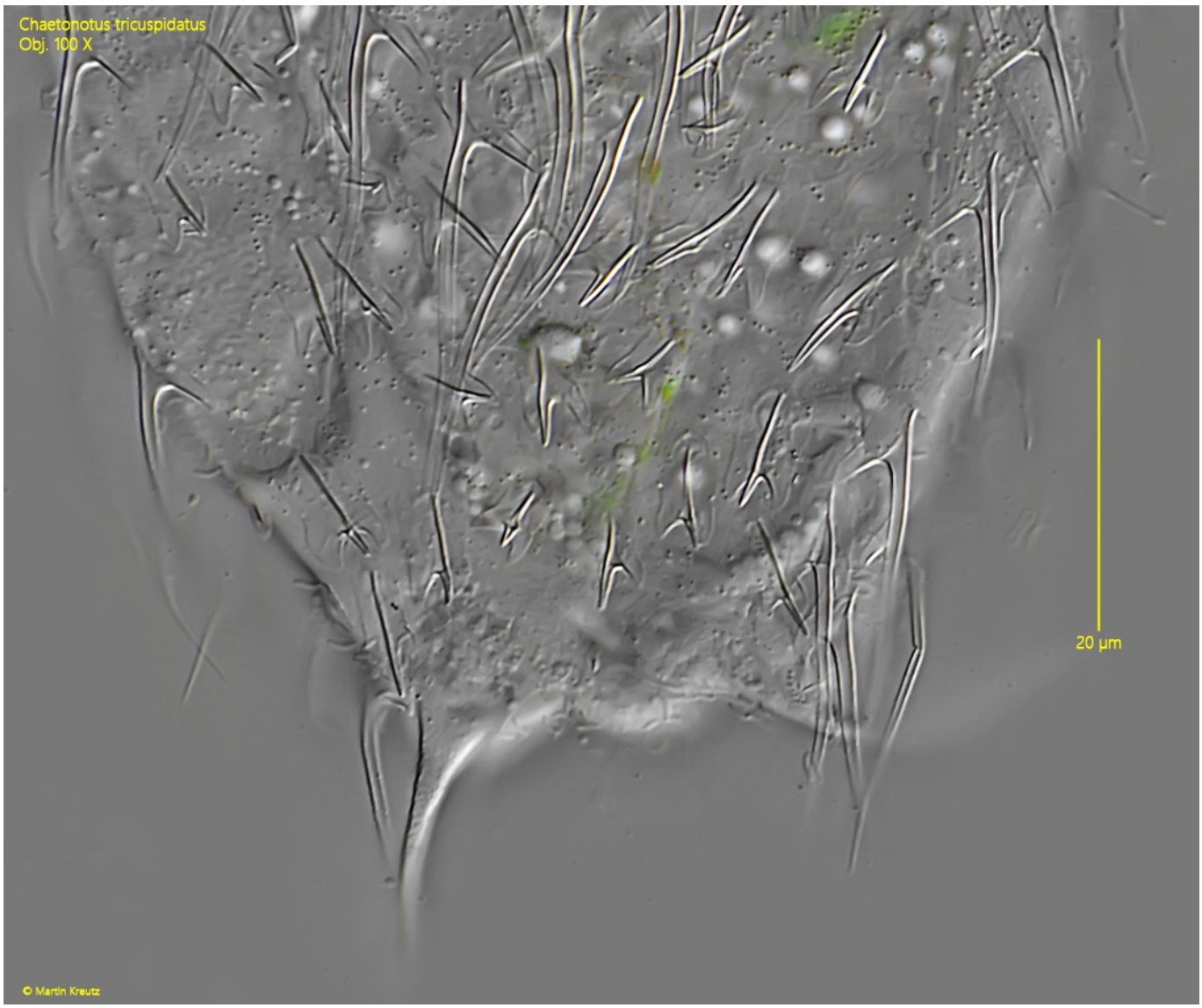


Fig. 6: *Chaetonotus tricuspidatus*. The scales of the dorsal posterior end. The wings as well as the simple spines of the trilobed scales are strongly reduced. Obj. 100 X.