

Chaetonotus italicus

Balsamo & Todaro, 1995

Most likely ID: n.a.

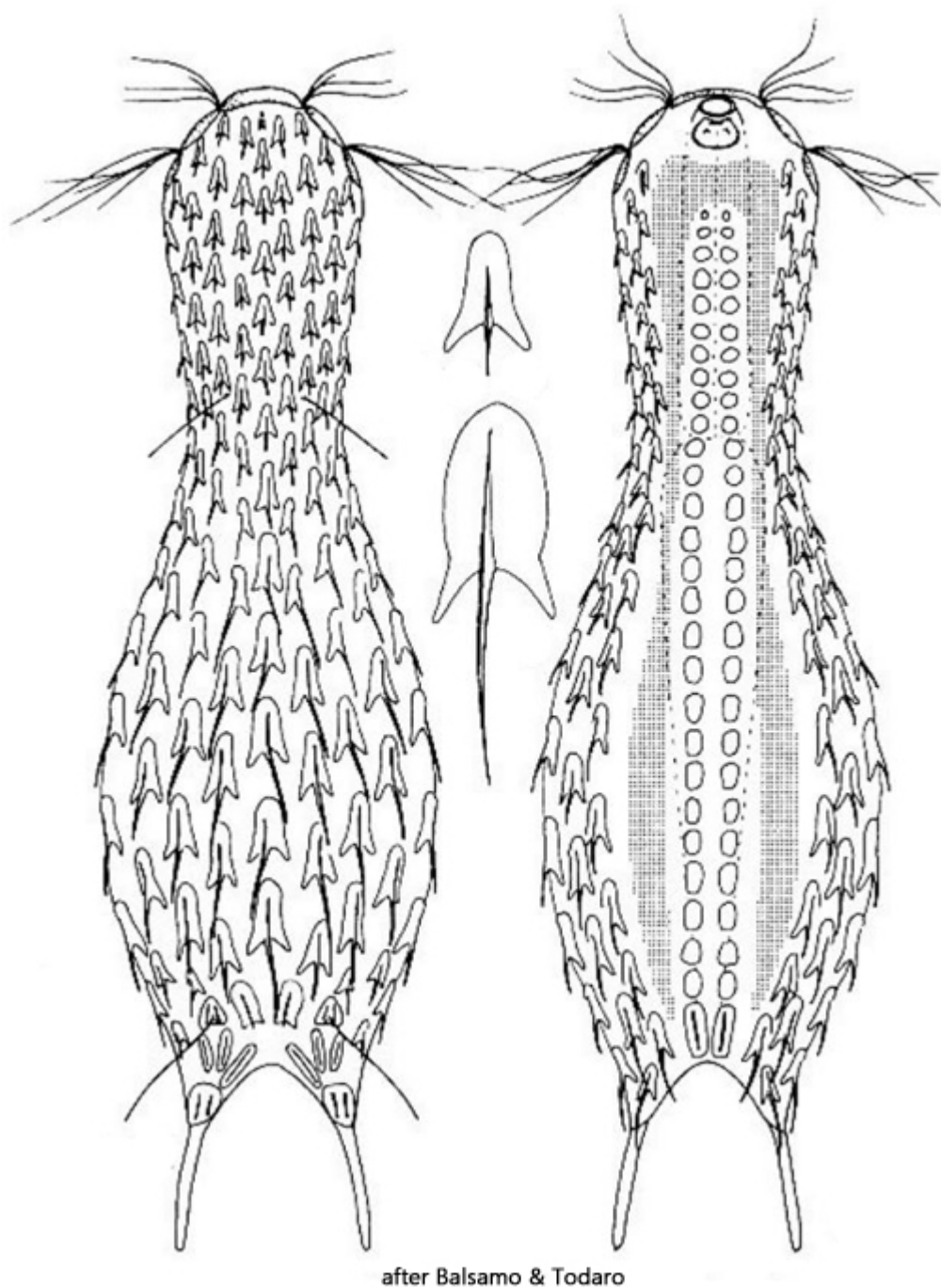
Synonym: n.a.

Sampling location: [Simmelried](#)

Phylogenetic tree: [Chaetonotus italicus](#)

Diagnosis:

- body short and stocky, shoe-shaped
- length 90-110 µm
- head five-lobed
- ventral a trapezoid hypostomium
- pharynx cylindrical, 27-29 µm
- dorsal 13 rows of 13-14 trilobed scales with simple spines
- dorsal scales 6.5×5 µm, simple spines 3-10 µm
- at dorsal posterior end three pairs of elongated keeled scales
- at base of furca rounded scales with two parallel keels
- two pairs of dorsal, tactile bristles
- ventrally two rows of 27 rectangular scale (1.2-4 µm)
- two ventral terminal scales (4.4-6.8 µm)



Chaetonotus italicus

Chaetonotus italicus was first described by Balsamo & Todaro in 1995 and has so far only been recorded in Italy. So far, I have only found *Chaetonotus italicus* in the [Simmelried](#), where the species is rarely found. The specimens shown below were found in September 2023 and July 2025.

Chaetonorus italicus is relatively small and sole-shaped. The specimens in my population were between 95-129 µm long, some of which were 30% longer than those reported by Balsamo & Todaro (1995). The pharynx of my specimens was also distinctly dumbbell-shaped and not cylindrical, as described by Balsamo & Todaro (s. fig. 3). I could not

recognize the trapezoidal hypostomium described by Balsamo and Todaro.

The dorsal side is 70% covered with three-lobed keeled scales, which have a simple, slightly curved spine (s. fig. 4). Only at the posterior end is there an area with elongated, keeled scales without spines, all of which are arranged at an angle to the longitudinal axis of the body (s. figs. 6 and 7). The dorsal scales at the base of the toes were described by Balsamo & Todaro as having a double keel. However, based on my observations, these could also be two scales lying very close together.

An essential identifying feature of *Chaetonotus italicus* is the arrangement of the scales on the ventral side. This consists of two parallel rows of approximately rectangular scales that are slightly curved upward at the lateral margins (s. fig. 8). At the posterior end, there are two elongated, keeled terminal scales (s. fig. 8).

More images and information on *Chaetonotus italicus*: [Dr. Michael Müller-The small world of freshwater gastrotrichs-*Chaetonotus italicus*](#)



Fig. 1 a-d: *Chaetonotus italicus*. L = 129 μ m. A freely swimming specimen from dorsal (a-c)

and from ventral (d). Obj. 60 X.

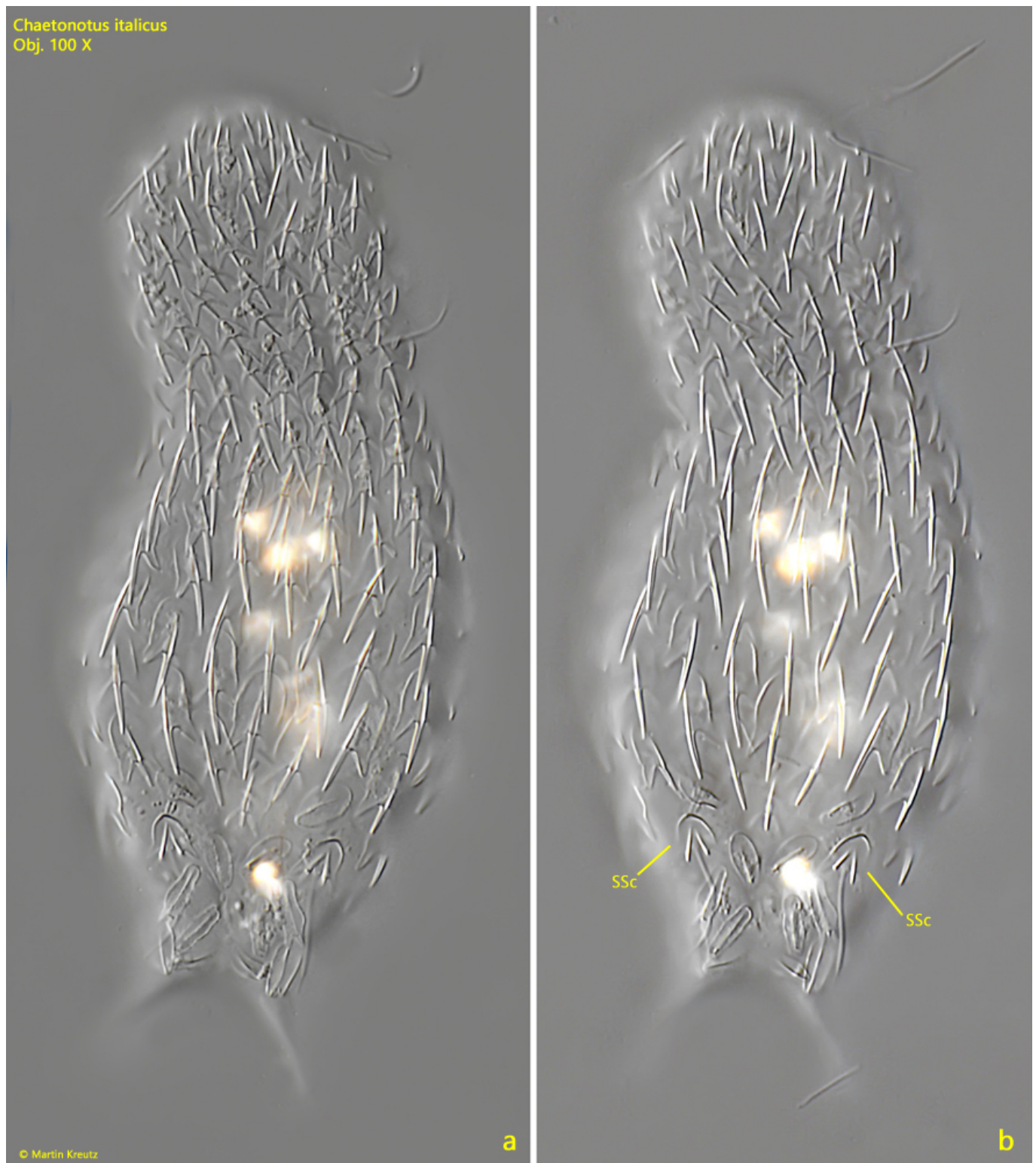
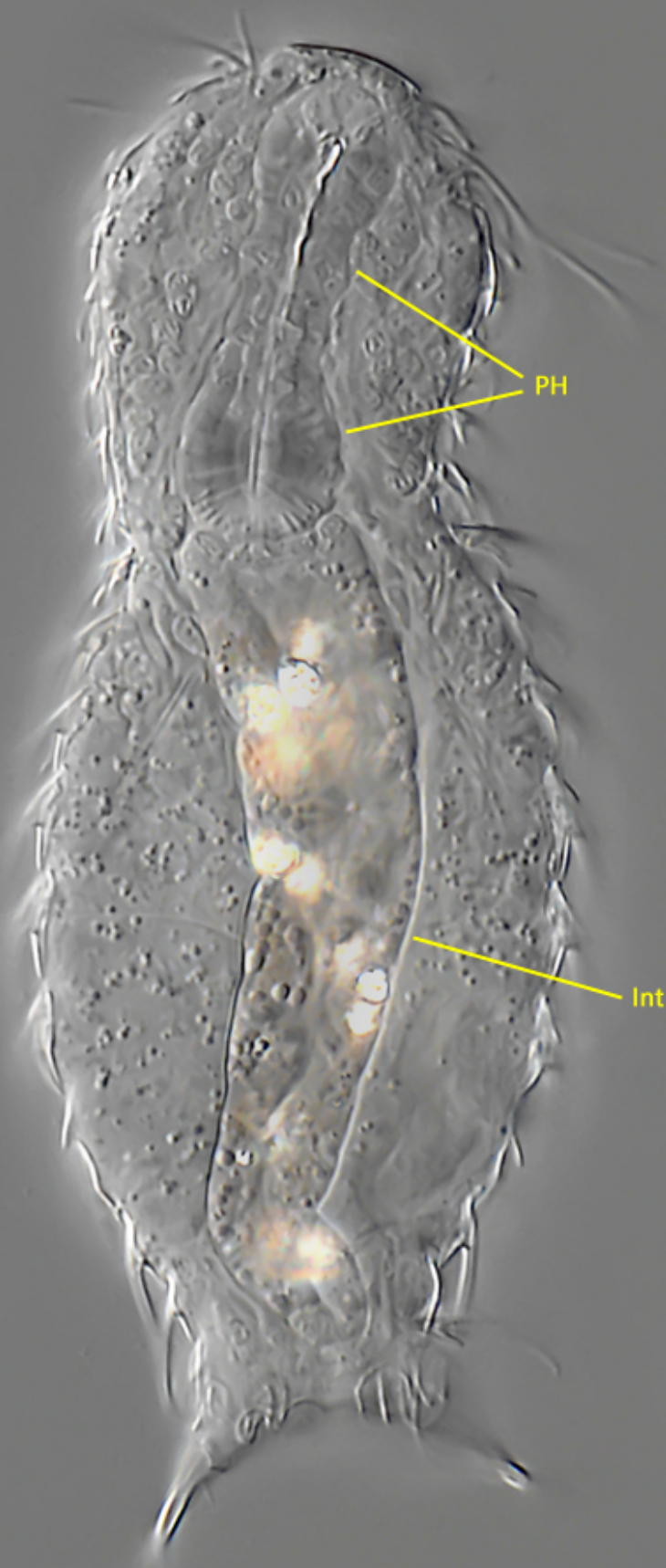


Fig. 2 a-b: *Chaetonotus italicus*. L = 95 μ m. Different focal planes of a slightly squashed specimen from dorsal. Note the two special scales (SSc) bearing the setolae. Obj. 100 X.

Chaetonotus italicus
Obj. 100 X



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Fig. 3: *Chaetonotus italicus*. L = 95 μm . A slightly squashed specimen from dorsal with focal plane on the pharynx (PH) and the intestine (Int). Obj. 100 X.

Chaetonotus italicus
Obj. 100 X

20 μ m

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Fig. 4: *Chaetonotus italicus*. L = 128 μ m. Total view of the dorsal scales. Obj. 100 X.

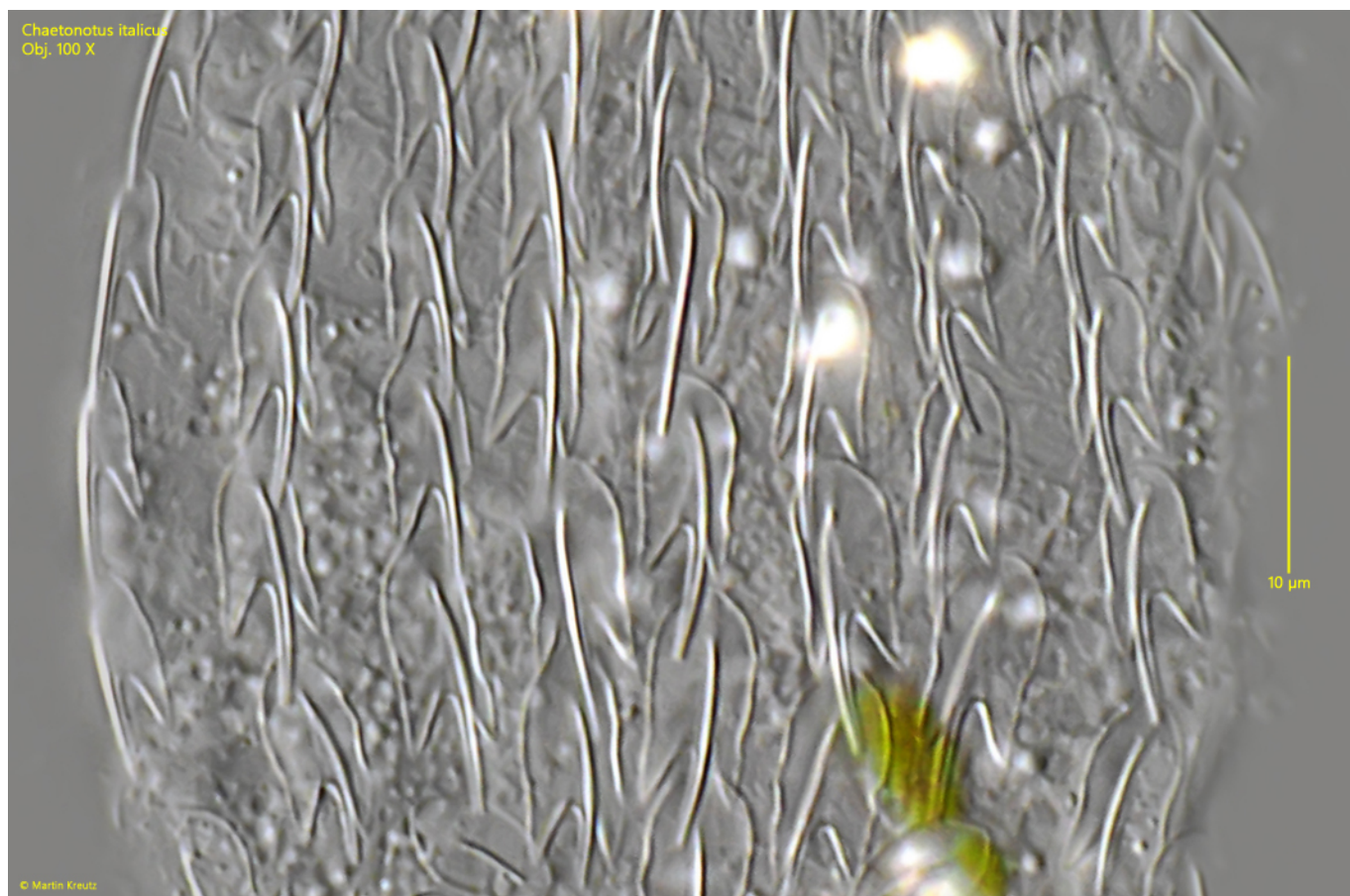


Fig. 5: *Chaetonotus italicus*. The dorsal scales of the mid-body region in detail. Obj. 100 X.

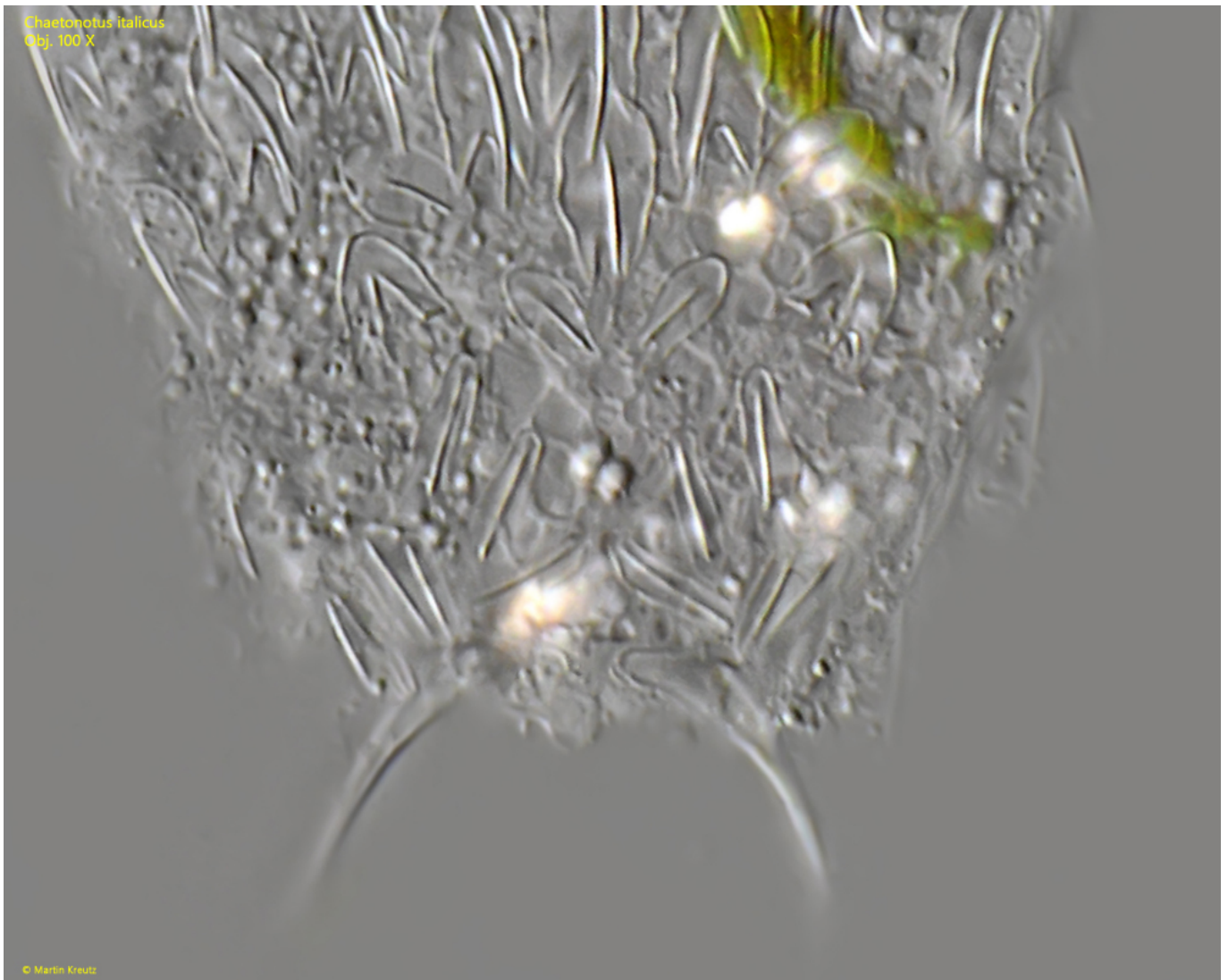


Fig. 6: *Chaetonotus italicus*. The arrangement of the dorsal scales at the posterior end in detail. Obj. 100 X.

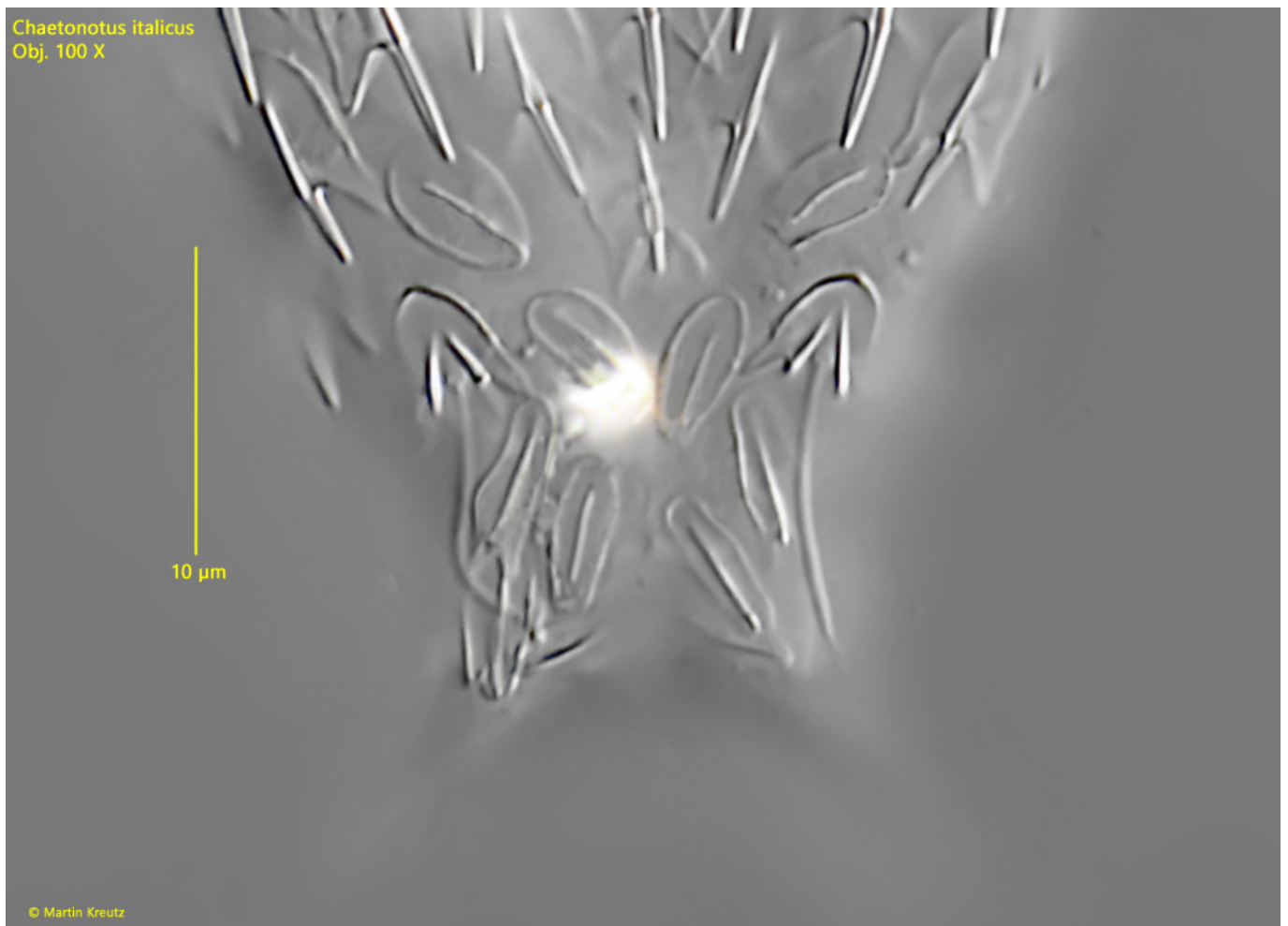
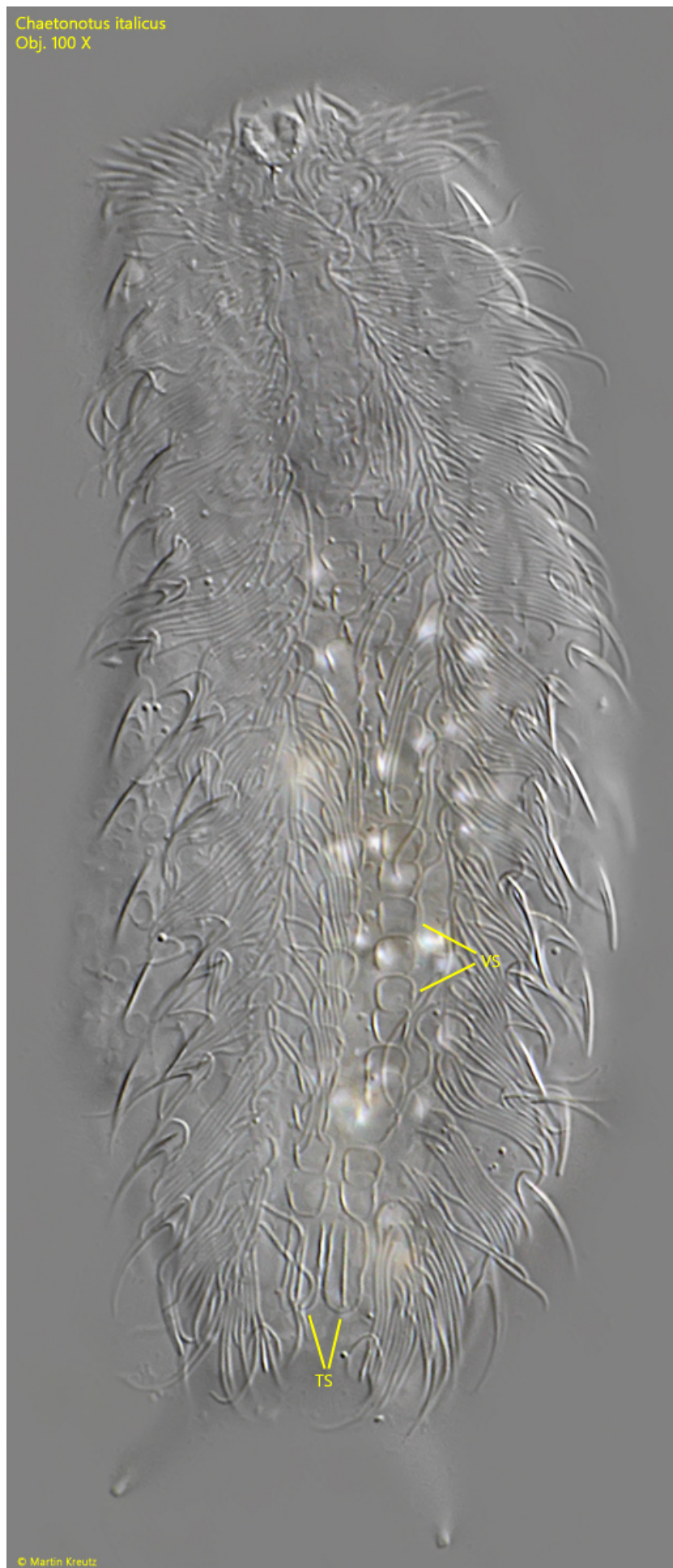


Fig. 7: *Chaetonotus italicus*. The arrangement of the dorsal scales of a second specimen. Obj. 100 X.

Chaetonotus italicus
Obj. 100 X



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Fig. 8: *Chaetonotus italicus*. L = 117 μ m. Total view of the ventral scales. There are two parallel rows of almost rectangular scales (VS) and two keeled, terminal scales (TS). Obj. 100 X.