Ichthydium skandicum

Kanneby, Todaro & Jondelius, 2009

Most likely ID: n.a.

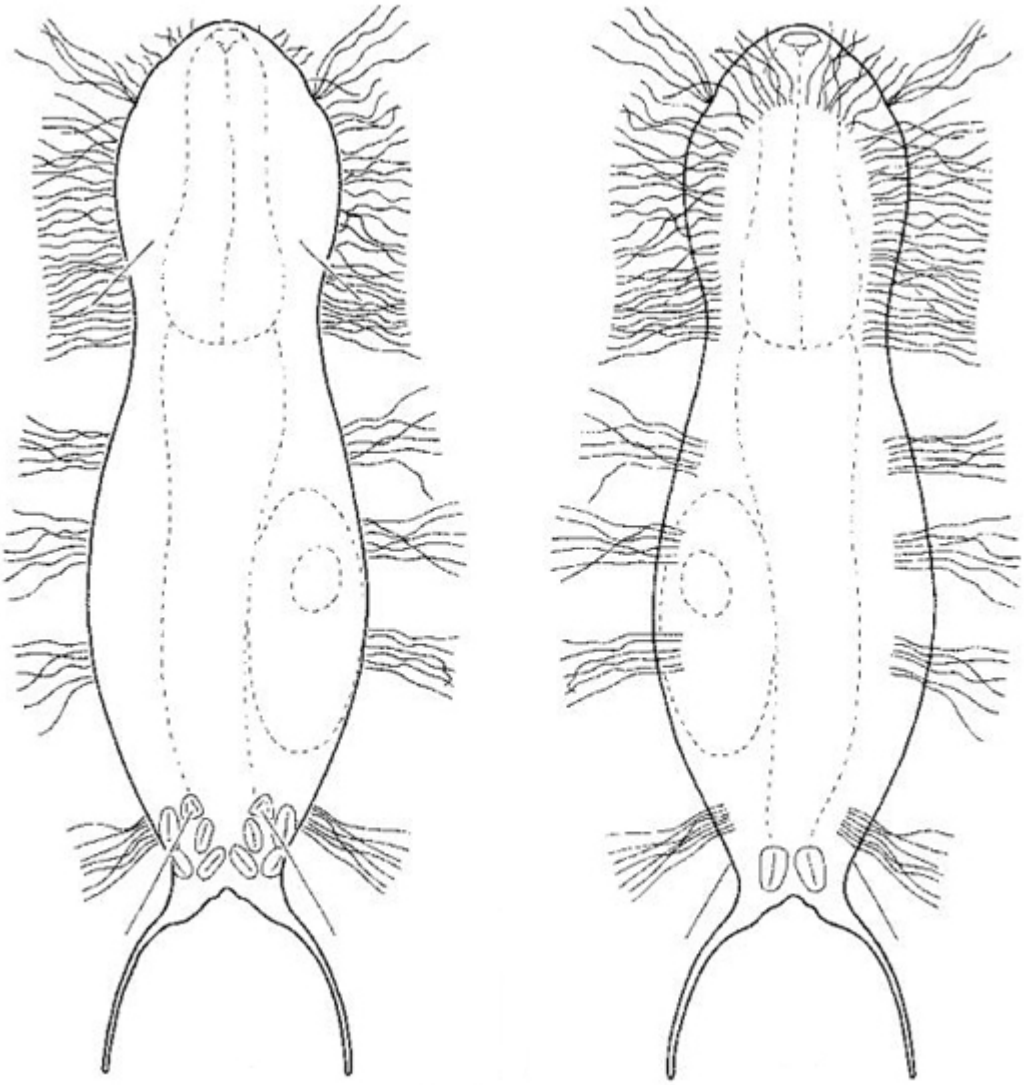
Synonym: n.a.

Sampling location: Effluent of the seawage plant Constance, Simmelried

Phylogenetic tree: *Ichthydium skandicum*

Diagnosis:

- body slender and elongated
- head three lobed, one pai of ciliary tufts
- length 132–142 µm
- pharynx cylindrical, posteriorly swollen
- two dorsal setolae emergeing from keeled subrectangular scales
- dorsal 4 pairs of scales near base of furca
- furca strongly elongated, adhesive tubes pincer-shaped
- invagination between abhesive tubes
- ventral ciliation bands separated in 4 pairs of tufts
- ventral two subrectangular terminal scales



Ichthydium skandicum

I have found three specimens of *Ichthydium scandicum* so far. Two specimens came from the Simmelried and one from the effluent of the seawage plant Constance. The latter location is quite surprising, as the effluent is heavily eutrophicated.

Ichthydium skandicum was only described by Kanneby et al. in 2009. This may be due to the fact that the features for identification are not easy to see. The main feature are the 4 pairs of scales, which are located dorsally directly at the base of the furcae (s. figs. 4 a and 5). Apart from the small field of scales at the posterior end (s. fig. 4 a), the entire dorsal side is naked. The arrangement of the dorsal scales can only be recognized in strongly squashed specimens (s. fig. 5). Otherwise *Ichthydium skandicum* is very similar to the similar species *Ichthydium forficula* and *Ichthydium tanytrichum*, which, however, are naked on the dorsal side. In addition, *Ichthydium forficula* is somewhat larger and more slender while *Ichthydium*

tanytrichum is smaller and stockier.

On the ventral side *Ichthydium scandicum* is naked apart from the two almost rectangular terminal scales (s. figs. 4 b and 8). The two ventral ciliary bands are not continuous but divided into 4 separate tufts (s. fig. 7).

The specimens of my population were 135–145 µm long. Obviously, the range of variation is very small and corresponds exactly to the range given by Kanneby et al. (132–142 µm).

Fig. 1 a-d: *Ichthydium skandicum*. L = 145 µm. A freely swimming specimen from ventral (a-c) and from left (d). Obj. 40 X.

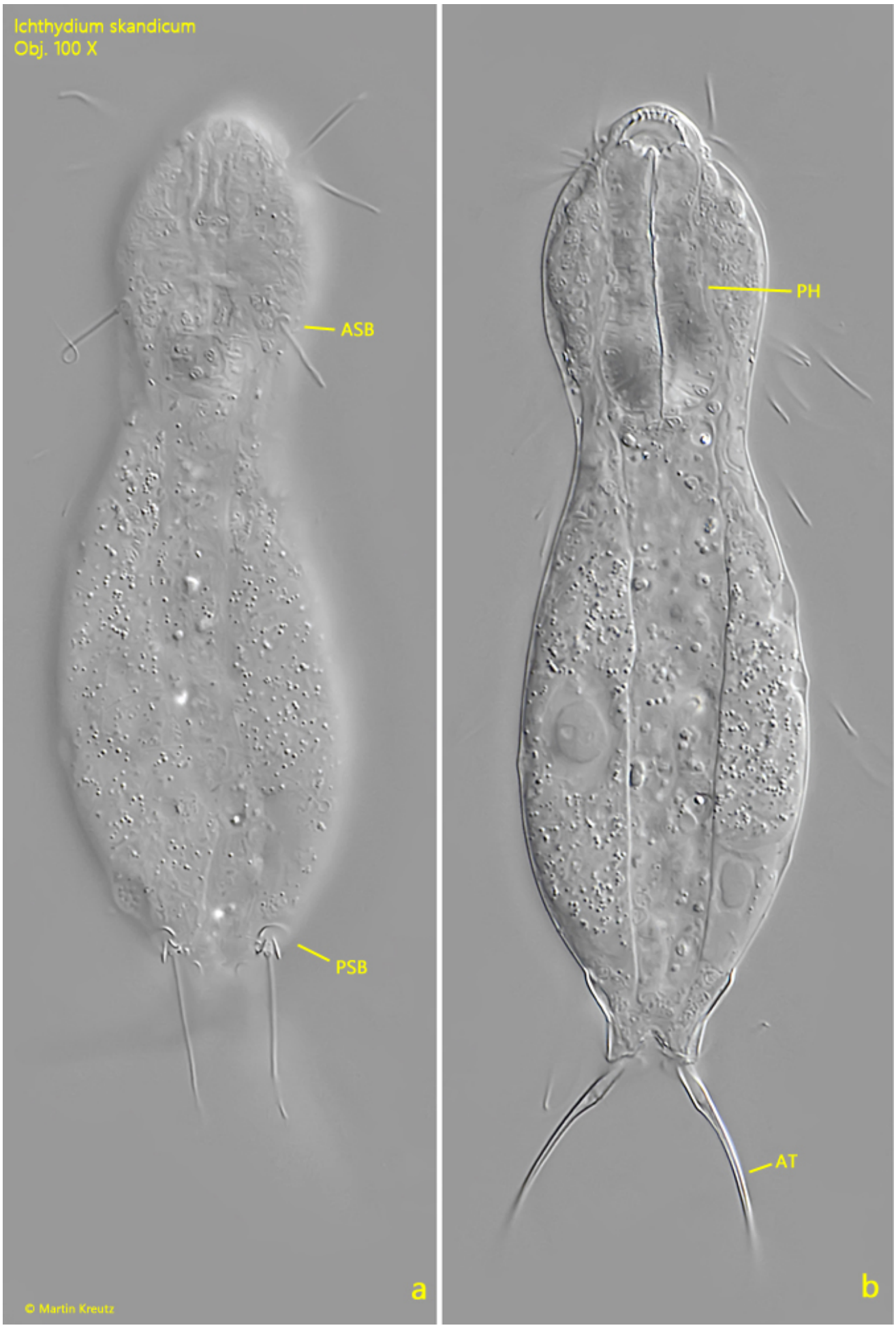

Ichthydium skandicum
Obj. 100 X
ASB
PSB
a
© Martin Kreutz
PH
AT
b

Fig. 2 a-b: *Ichthydium skandicum*. L = 136 µm. Two focal planes of a slightly squashed specimen from dorsal. Note the two posterior sensory bristles (PSB) on papillae. The pharynx (PH) is slightly swollen at both ends. ASB = anterior sensory bristles, AT = adhesive tubes. Obj. 100 X.

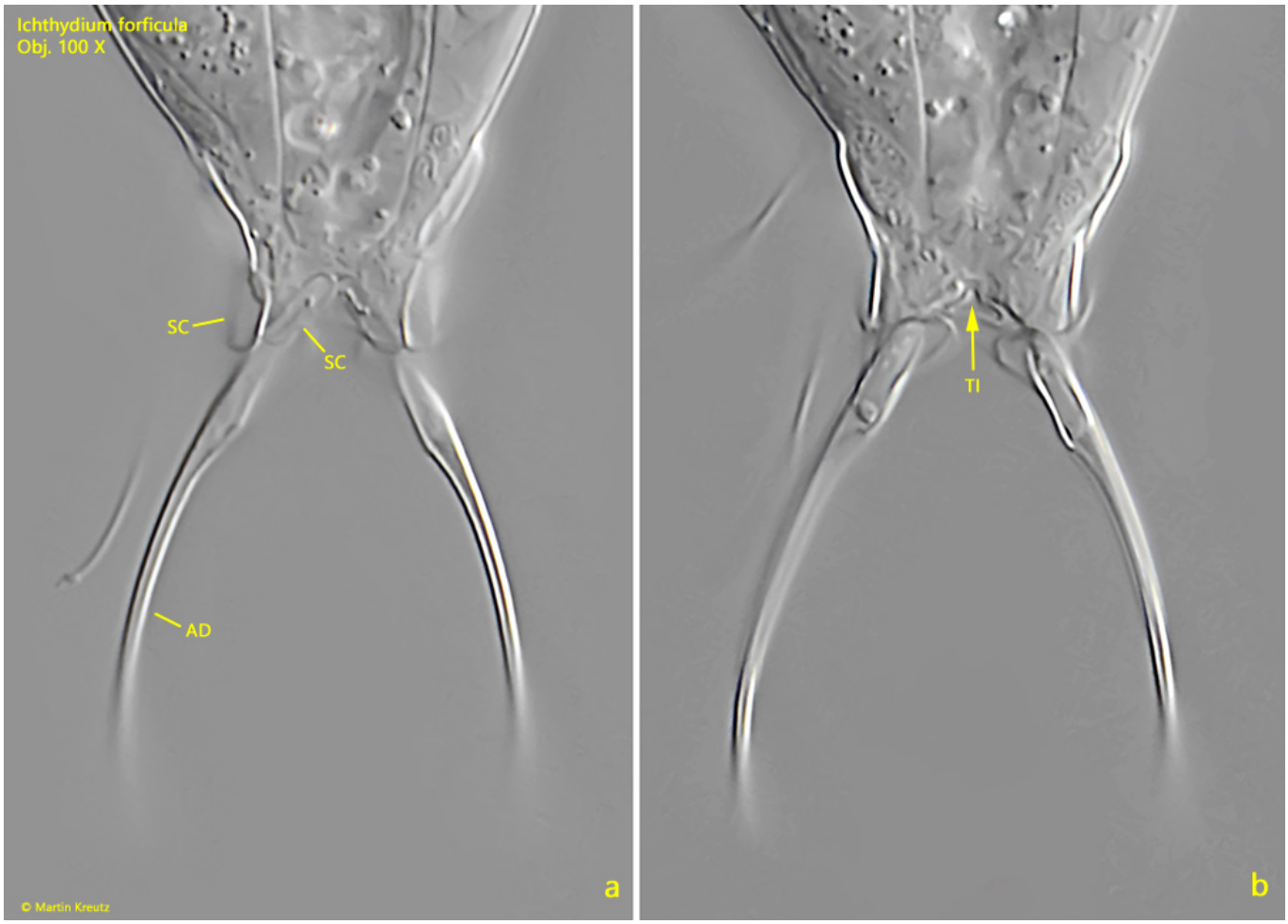


Fig. 3 a-b: *Ichthydium skandicum*. Two focal planes of the posterior end from dorsal with the pincer-shaped adhesive tubes (AT). Note the scales (SC) adhering to the base of the tubes and the terminal invagination (TI) between the adhesive tubes. Obj. 100 X.

Ichthydium skandicum
Obj. 100 X
DS
© Martin Kreutz
a
TS
b

Fig. 4 a-b: *Ichthydium skandicum*. L = 145 µm. A slightly squashed specimen from dorsal (a) and from ventral (b). Note the small field of dorsal scales (DS) at the posterior end and the two large terminal scales (TS) on the ventral side. Obj. 100 X.

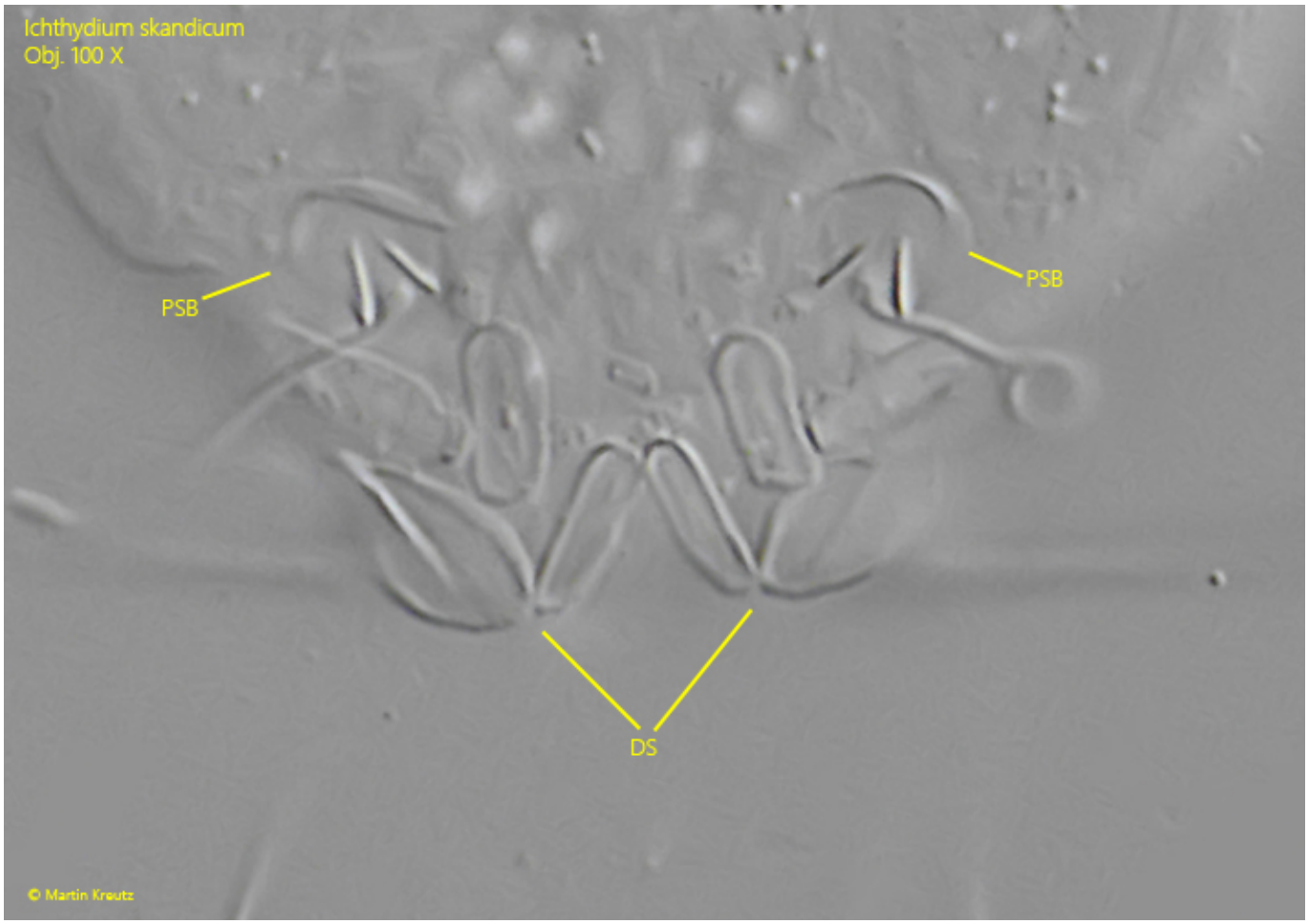


Fig. 5: *Ichthydium skandicum*. The arrangement of the dorsal scales (SC) near the posterior end in a squashed specimen. Note the scale of the sensory bristle (PSB). DS = dorsal scales. Obj. 100 X.

Fig. 6 a-c: *Ichthydium skandicum*. L = 135 µm. A slightly squashed specimen from ventral. Note the almost rectangular terminal scales (TS). Obj. 100 X.

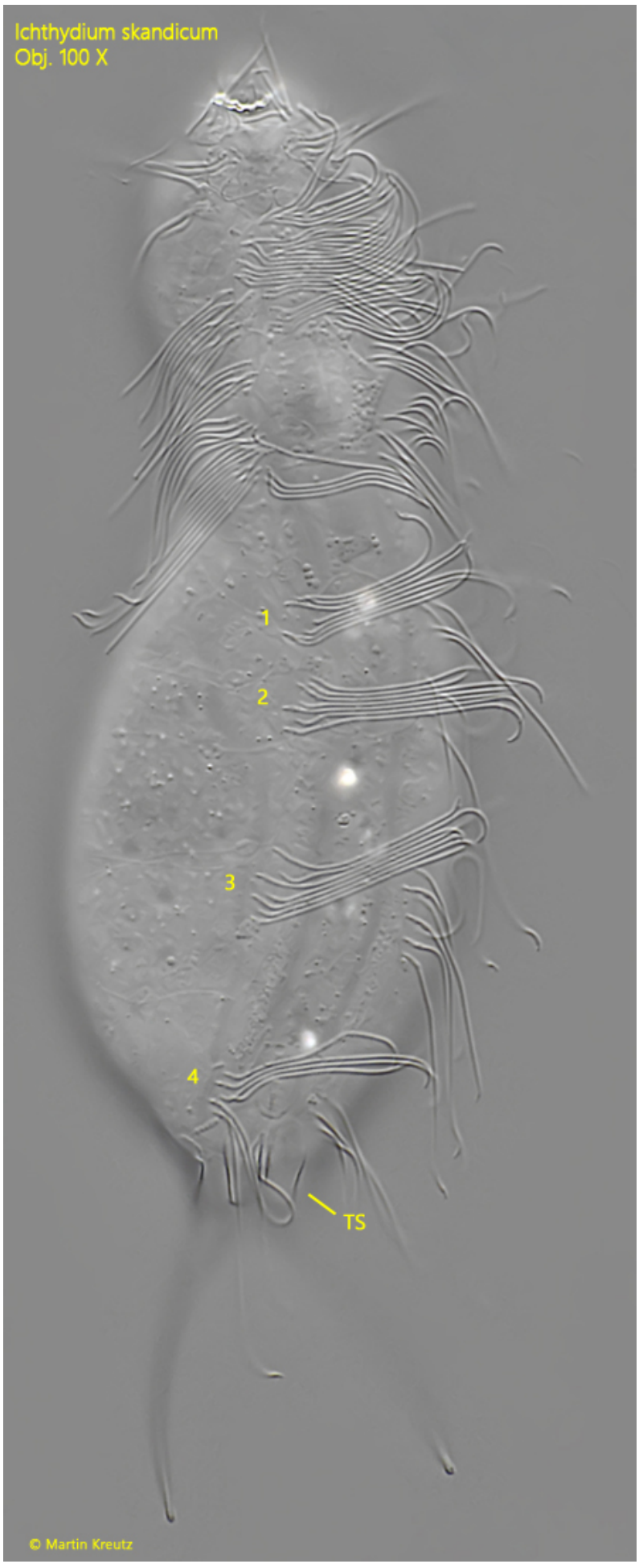

Ichthydium skandicum
Obj. 100 X
1
2
3
4
TS
© Martin Kreutz

Fig. 7: *Ichthydium skandicum*. L = 135 µm. The squashed specimen as shown in fig. 3 a-b from ventral. The ventral ciliary bands are separated in 4 tufts (1–4). TS = terminal scales. Obj. 100 X.

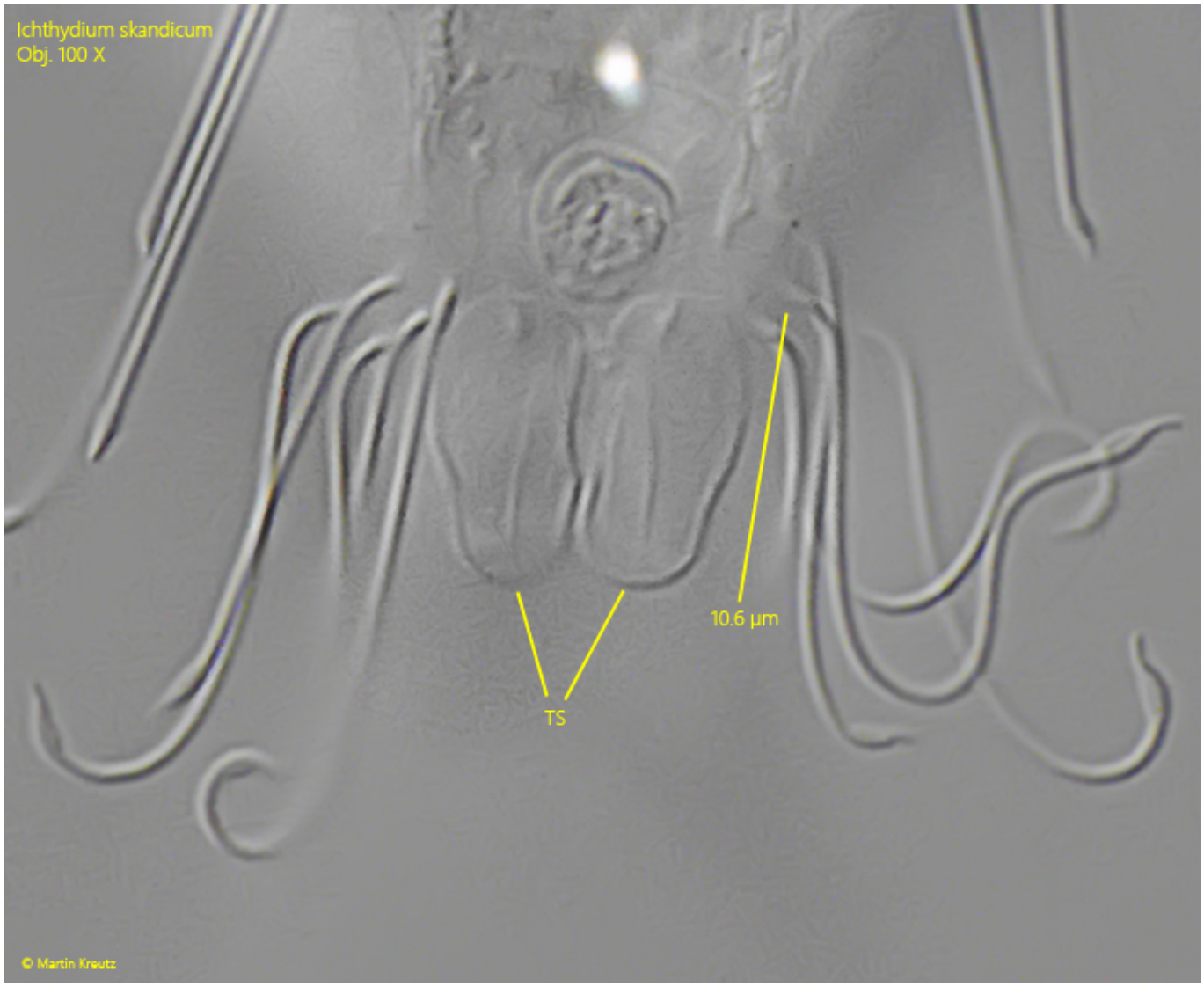


Fig. 8: *Ichthydium skandicum*. The terminal scales (TS) at the posterior end of the ventral side in detail. Obj. 100 X.