Aspidiophorus slovinensis Kisielewski, 1986

Most likely ID: n.a.

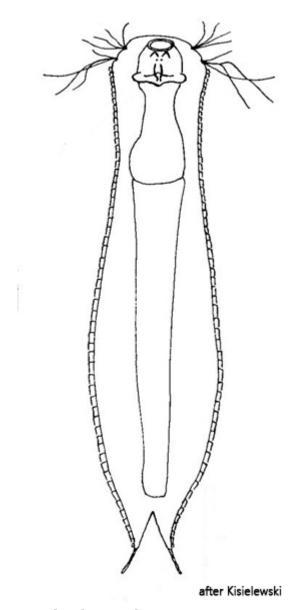
Synonym: n.a.

Sampling location: Simmelried

Phylogenetic tree: Aspidiophorus slovinensis

Diagnosis:

- body stocky, sole-shaped
- length 140-160 μm
- head weakly 5-lobed, cephalion present
- mouth armament with claps and buttons
- pharynx dumbbell-shaped with broad bulbi
- large trapezoidal hypostomium with transverse furrow
- toes close together, 22 µm long
- dorsal about 25 longitudinal rows of petiole scales



Aspidiophorus slovinensis

So far I have only found two specimens of *Aspidiophorus slovinensis*. Both specimens come from the uppermost mud layer in the <u>Simmelried</u>. I found the first specimen in July 2021 and the second one in January 2023.

Aspidiophorus slovinensis was only discovered relatively recently and described by Kisielewski (1986). He only superficially described the shape of the dorsal and ventral scales and based the differentiation from other species of the genus on the armament of the mouth opening, the large hypostomium and the dumbbell-shaped pharynx of this species. I was able to identify all these features in my finds (s. images below) and thus identify my two specimens as Aspidiophorus slovinensis.

In addition, I was able to clearly recognize and document the shape and size of the dorsal

scales. They are stalked and have a triangular shape with a length of 4-5 µm (s. figs. 5 and 6). The corners of the scales are rounded. Only one side is straight. The other two sides of the scales are convexly rounded. The stalks on which the dorsal scales sit are 1 µm long (s. fig. 7).

I could not resolve or contrast the ventral scales even at the highest magnification in the DIC. Only two terminal scales were recognizable, which are almost oval in shape and keeled (s. figs. 8 and 9).



Fig. 1 a-c: Aspidiophorus slovinensis. $L=160~\mu m$. Three focal planes of a freely swimming specimen from dorsal. Obj. 60 X.



Fig. 2 a-b: Aspidiophorus slovinensis. Two focal planes of the head with the dumbbellshaped pharynx (PH). Obj. 60 X.



 $\textbf{Fig. 3:} \ A spidiophorus \ slovinensis. \ Focal \ planes \ on \ the \ trapezoidal \ hypostomium \ (HY). \ Obj. \ 100 \ X.$

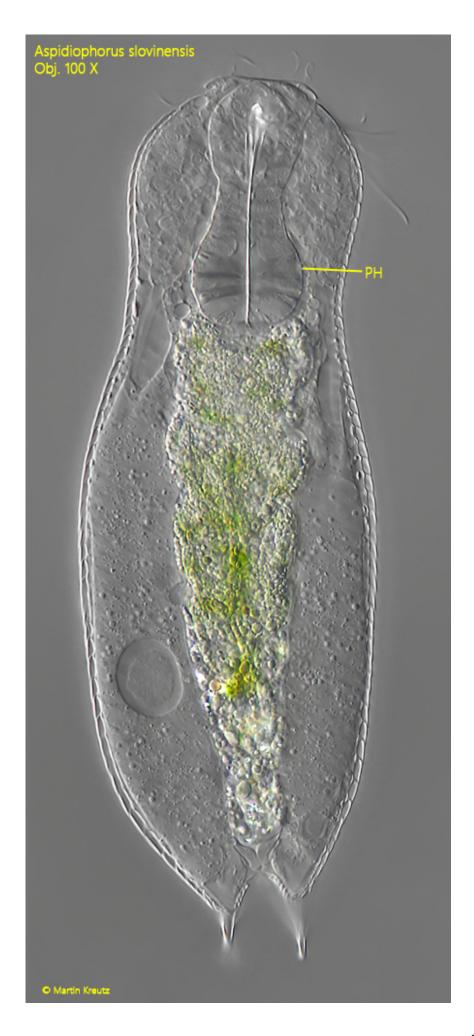






Fig. 5: Aspidiophorus slovinensis. Focal plane on the dorsal scales. Obj. 100 X.

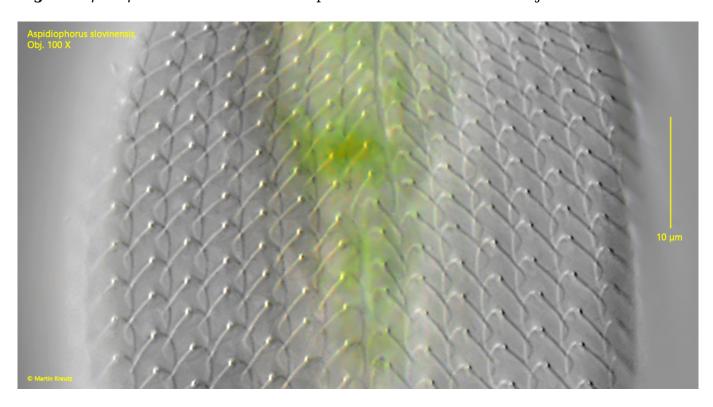


Fig. 6: Aspidiophorus slovinensis. The dorsal scales in detail. They are arranged mirrorsymmetrically along the center of the back. The scales have a triangular shape with rounded corners. Only one side is straight, while the other two are slightly convex and rounded. Obj. 100 X.

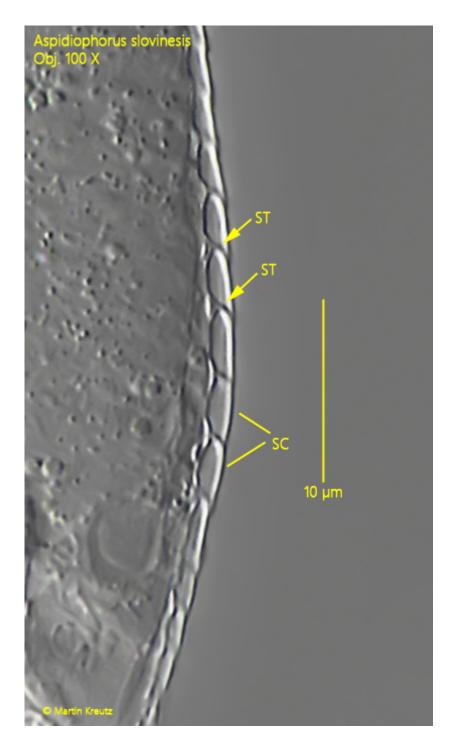


Fig. 7: Aspidiophorus slovinensis. The dorsal scales (SC) sit on a short stalk (ST), creating a gap between the body surface and the scales on the stalks. Obj. $100 \, \text{X}$.



Fig. 8: Aspidiophorus slovinensis. $L = 172 \mu m$. The scales of the ventral side are small and their contrast in DIC is weak. At the posterior end two keeled terminal scales (TS) are visible. Obj. 100 X.

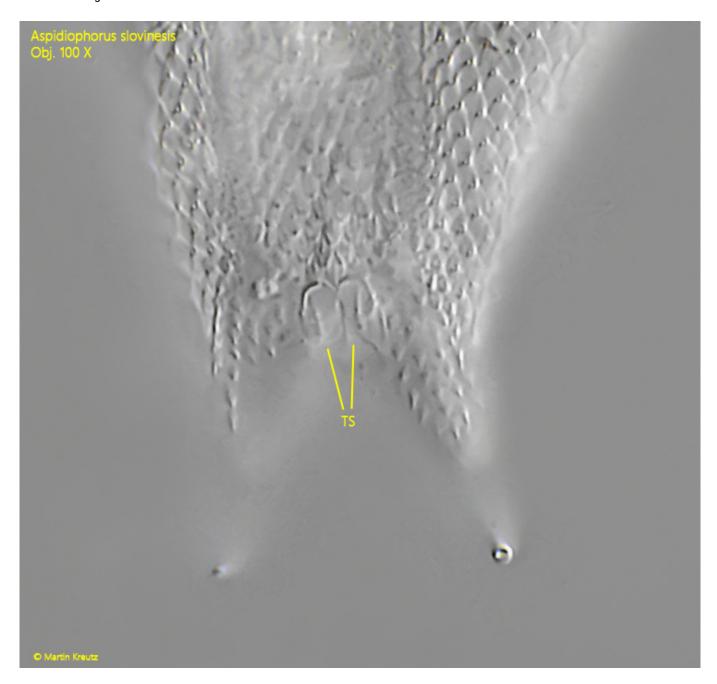


Fig. 9: Aspidiophorus slovinensis. The scales of ventral side at the posterior end in detail. The terminal scales (TS) are almost oval with a keel. Obj. 100 X.