Aspidisca lynceus

(Müller, 1773) Ehrenberg, 1830

Most likely ID: n.a.

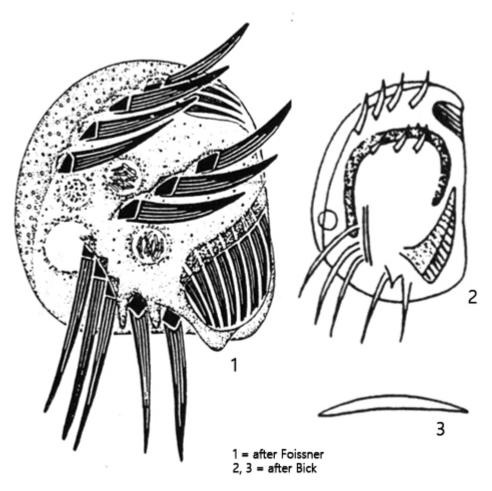
Synonym: n.a.

Sampling location: Simmelried, Purren pond, Bussenried, Bündtlisried, Ulmisried, Mainau pond, Mühlweiher Litzelstetten

Phylogenetic tree: <u>Aspidisca lynceus</u>

Diagnosis:

- body roundish-triangular. dorso-ventrally flattened
- dosally convex, smooth, without ribs
- length 30-50 μm, width 30-45 μm
- macronucleus horseshoe-shaped
- one globular micronucleus adjacent to macronucleus
- contractile vacuole on right side, posterior half
- 7 ventral cirri
- 5 transverse cirii
- 3 frontal cirri (hard to see)
- oral apparatus left, posterior half
- adoral zone of 10-13 membranelles



Aspidisca lynceus

I find Aspidisca lynceus very frequently and permanently in almost all my sampling sites. The species is not easy to find in fresh samples because of its small size, but Aspidisca *lynceus* likes to settle on the <u>floating coverslip</u>.

Aspidisca lynceus is very easy to observe on the floating coverslip, as the ciliate runs over the glass surface with the frontal and transverse cirri facing the lens. For accurate identification, however, it is important to examine the dorsal side. This is smooth and convex in *Aspidisca lynceus*. It has no ribs, like the similar species *Aspidisca cicada*.

The ciliation of *Aspidisca lynceus* is clearly reduced in comparison to other hypotrichous ciliates. There are only 7 ventral cirri and 5 transversal cirri (s. fig. 2 a-c). In addition, there is a small pit at the anterior end with a membranelle of 3 cirri, which is difficult to recognize (s. fig. 1 b). On the smooth, dorsal side, there are 5-6 rows of very short bristles, which are also difficult to recognize.

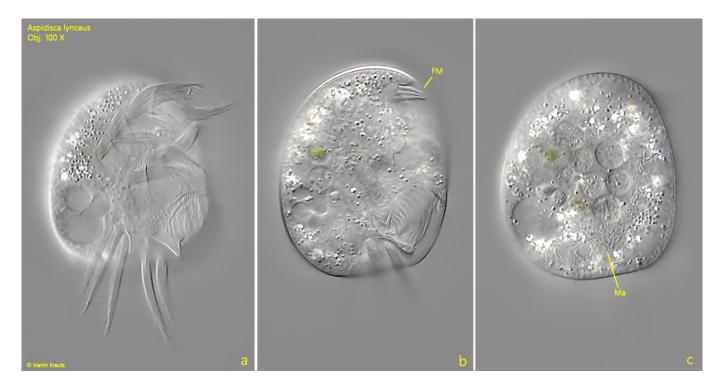


Fig. 1 a-c: Aspidisca lynceus. $L = 40 \mu m$. Different focal planes of a freely moving specimen from ventral. Note the three cirri of the frontal membranelle (FM) and a part of the horseshoe-shaped macronucleus (Ma). Obj. 100 X.

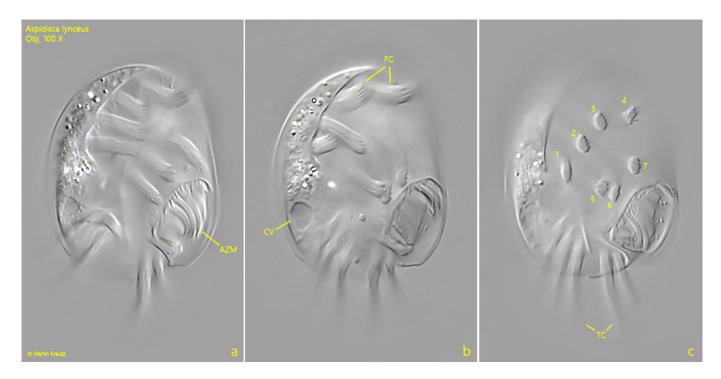


Fig. 2 a-c: Aspidisca lynceus. L = 32 μm . Different focal planes of a second freely moving specimen from ventral. Note the 7 frontal cirri (1-7, FC). AZM = adoral zone of membranelles, CV = contractile vacuole, TC = transversal cirri. Obj. 100 X.

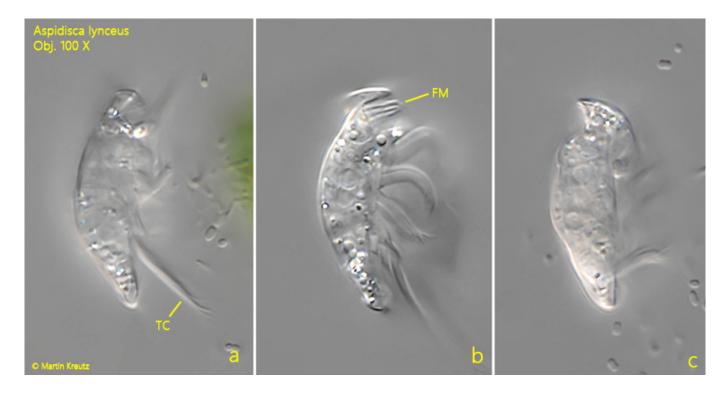


Fig. 3 a-c: Aspidisca lynceus. L = $28 \mu m$. Lateral view from right of a specimen crawling on a detritus flake. FM = frontal membranelle, TC = tranversal cirri. Obj. 100 X.

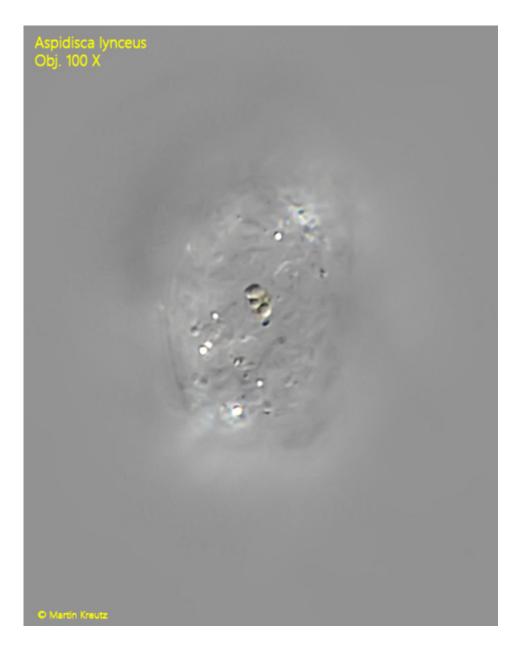


Fig. 4: Aspidisca lynceus. L = 30 μm . Focal plane on the smooth dorsal side from ventral. Obj. 100 X.