Ploeotia pusilla

(Stokes) Kubín & Jurán, 2024

Most likely ID: n.a.

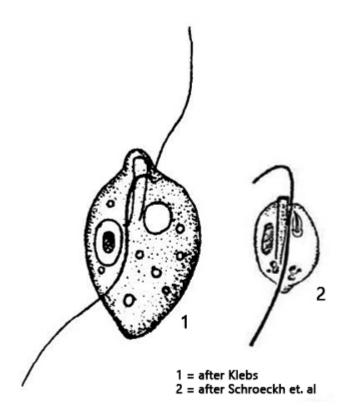
Synonym: Entosiphon obliquus, Entosiphon obliquum, Ploeotia obliqua

Sampling location: Simmelried

Phylogenetic tree: Ploeotia pusilla

Diagnosis:

- cells obovate or lemon-shaped, apically obliquely truncated
- ventral side with short apical incision
- length about 15 μm, width about 7.5 μm
- ingestion apparatus a conical tube, reach mid-body
- two flagella of unequal length
- nucleus mid-body, shiftet laterally
- contractile vacuole anterior third
- pellicle with a wide, longitudial striation



Ploeotia pusilla

So far I have only found *Ploeotia pusilla* in the <u>Simmelried</u>. In fresh samples, *Ploeotia pusilla* is hard to recognize due to its small size, but the species likes to settle on the <u>floating</u> coverslip and is then easy to observe.

The species Entosiphon obliquus (syn. Entosiphon obliquum) was transferred to the genus Ploeotia as Ploeotia obliqua by Schroeckh et al. in 2003. It was then renamed to Ploeotia pusilla by Kubín & Jurán in 2024.

The genus *Ploeotia* differs from the genus *Entosiphon* in the ultrastructural structure of the tube-shaped ingestion apparatus and the structure of the pellicle. Under the light microscope, only the structure of the pellicle can be recognized, which in *Ploeotia pusilla* consists of a wide longitudinal striation (s. figs. 1 c and 4 c).

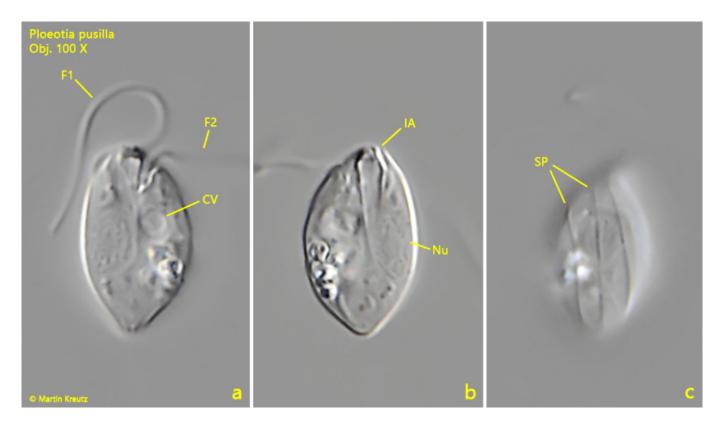


Fig. 1 a-c: Ploeotia pusilla. $L = 12.5 \mu m$. A freely swimming specimen from ventral (a) and dorsal (b, c). Note the wide striation of the pellicle (SP). F1, F2 = flagella, CV = contractile vacuole, IA = tube shaped ingestion apparatus, Nu = nucleus. Obj. 100 X.

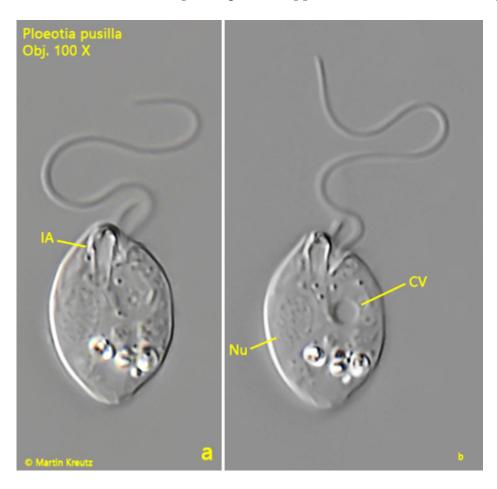


Fig. 2 a-b: *Ploeotia pusilla.* $L = 12.5 \mu m$. The slightly squashed specimen as shown in fig. 1 a-c. CV = contractile vacuole, IA = tube shaped ingestion apparatus, Nu = nucleus. Obj. 100 X.

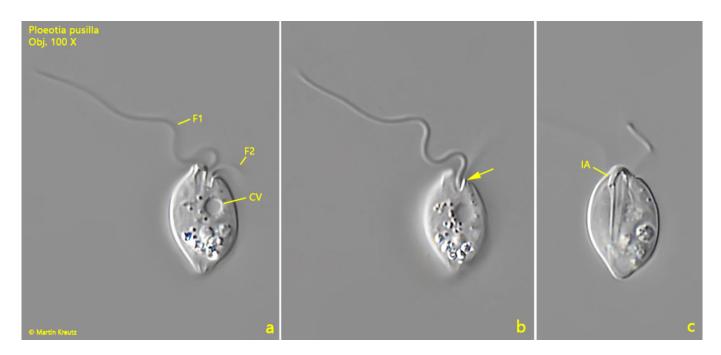


Fig. 3 a-c: *Ploeotia pusilla*. L = 13 μm. A second freely swimming specimen. Not the short, ventral incision (arrow). F1, F2 = flagella, CV = contractile vacuole, IA = tube shaped ingestion apparatus. Obj. 100 X.

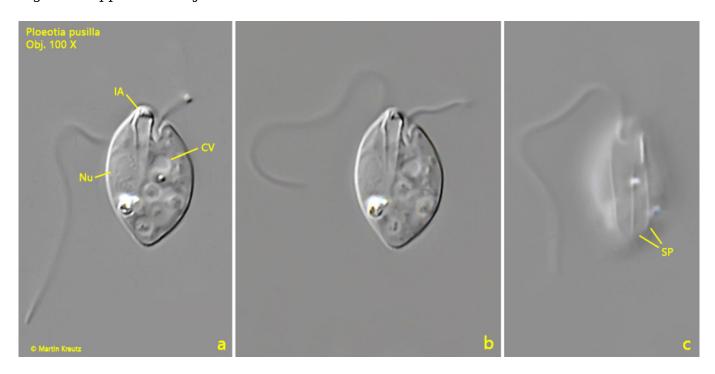


Fig. 4 a-c: *Ploeotia pusilla.* $L = 13 \mu m$. A third, freely swimming specimen from ventral. CV = contractile vacuole, IA = tube shaped ingestion apparatus, Nu = nucleus, SP = striation of the pellicle. Obj. 100 X.