Loxocephalus lucidus Smith, 1897

Most likely ID: n.a.

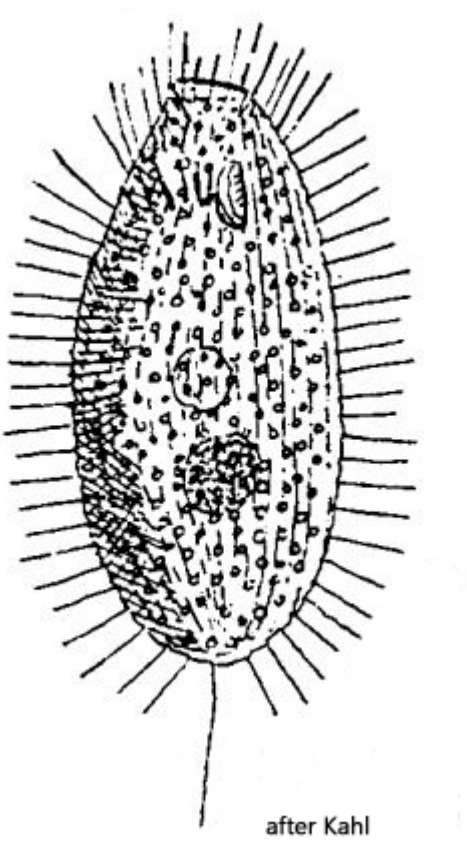
Synonym: n.a.

Sampling location: Bussenried

Phylogenetic tree: *Loxocephalus lucidus*

Diagnosis:

- body elongated ovoid
- front plate present
- length 50–60 µm
- oral aperture small, in anterior fourth
- contractile vacuole mid-body
- globular macronucleus, mid-body
- spherical micronucleus, small
- one caudal cilium, about body length
- cytoplasm with scattered, ring-shaped granules



Loxocephalus lucidus

So far, I have found *Loxocephalus lucidus* only once, in October 2018 at Bussenried. I have no other records of this species.

The specimens of my population were all smaller than 40 µm, which does not match the descriptions by Kahl (1935), who indicates a length of 50–60 µm. However, all other characteristics corresponded with his description. Particularly important is the position of the contractile vacuole in the center of the body and the ring-shaped granula, which is scattered in the cytoplasm.

The similar species *Dexiotricha tranquilla* also has also a contractile vacuole in the center of the body and the same size. However, it does not have ring-shaped granula. Another similar species to consider is *Dexiotricha granulosa*, which also has a contractile vacuole in the center of the body and ring-shaped granules. However, this species is significantly larger, measuring 40–80 µm. Since my specimens were under 40 µm in size, identity with *Loxocephalus lucidus* is more likely.

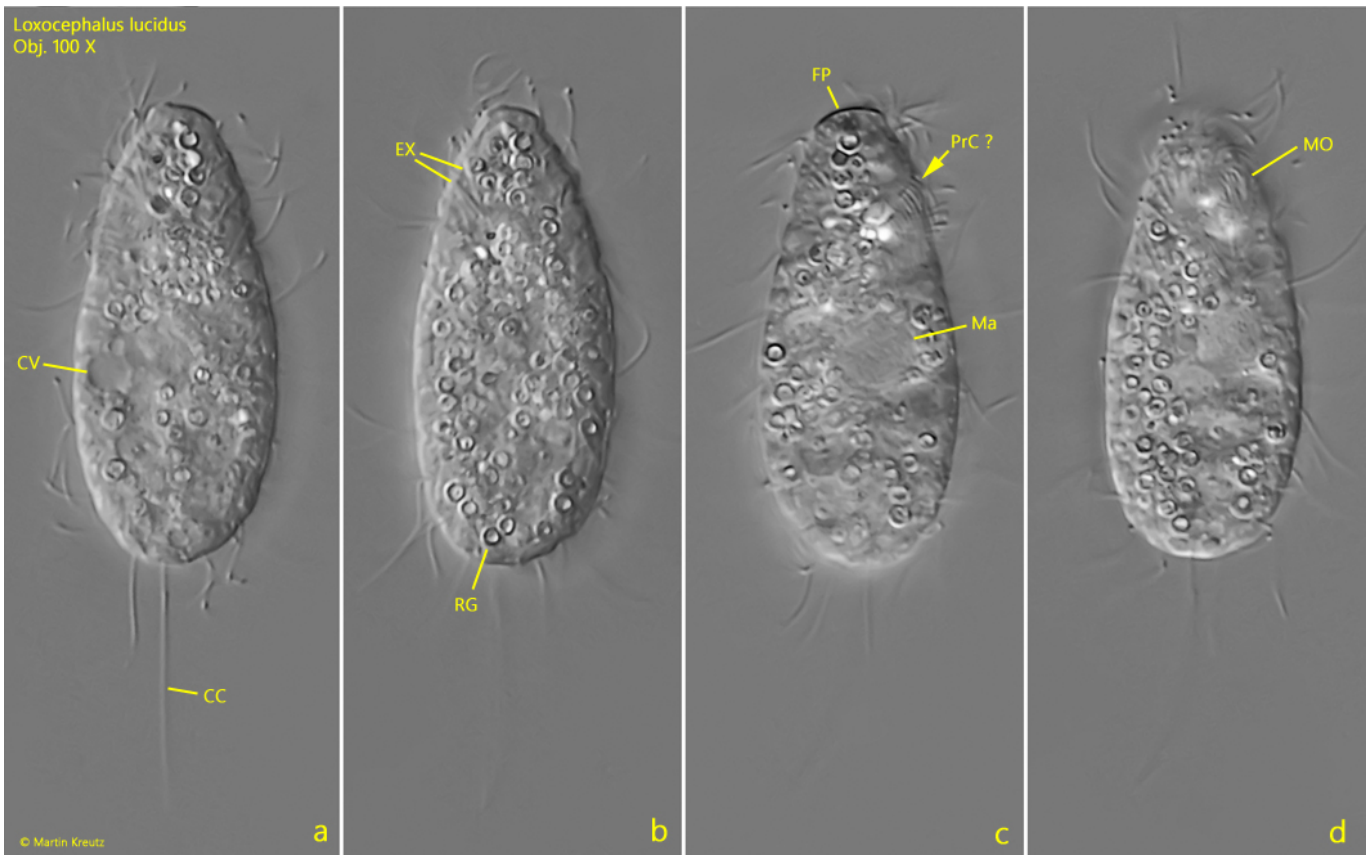


Fig. 1 a-d: *Loxocephalus lucidus*. L = 37 µm. Different focal planes of a freely swimming specimen. CC = caudal cilium, CV = contractile vacuole, EX = extrusomes, FP = front plate, Ma = macronucleus, MO = mouth opening, PrC = probably pre-oral row of cilia, RG = ring-shaped granula. Obj. 100 X.