Blepharisma americanum Suzuki, 1954

Most likely ID: n.a.

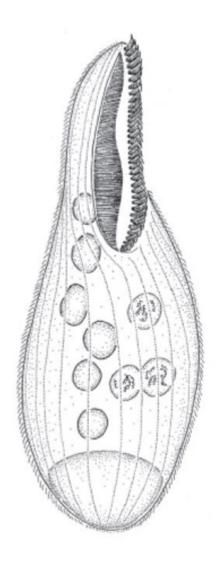
Synonym: n.a.

Sampling location: Simmelried

Phylogenetic tree: <u>Blepharisma americanum</u>

Diagnosis:

- body long oval, laterally flattened, non-contractile
- length 180-280 µm
- pigmentation pink
- pigmentation granules in longitudinal bands
- mouth opening at two fifths of the body length or mid-body
- moniliform macronucleus with 3-8 nodules
- 6-20 small micronuclei adjacent to the nodules of the macronucleus
- contractile vacuole terminal



after Hirshfield, Isquith & Bhandary

Blepharisma americanum

Blepharisma americanum can be distinguished from the similar species Blepharisma undulans by the nuclear apparatus. While Blepharisma americanum has a moniliform macronucleus with 3-8 nuclear nodules, Blepharisma undulans has a binodal macronucleus, which consists of two nuclear parts connected by a filament. Since I was able to detect more than 2 nuclear nodules, Blepharisma americanum must be present here. I find Blepharisma americanum rarely in the Simmelried, mostly between decomposing plant masses. The intense purple color makes this large ciliate very photogenic.

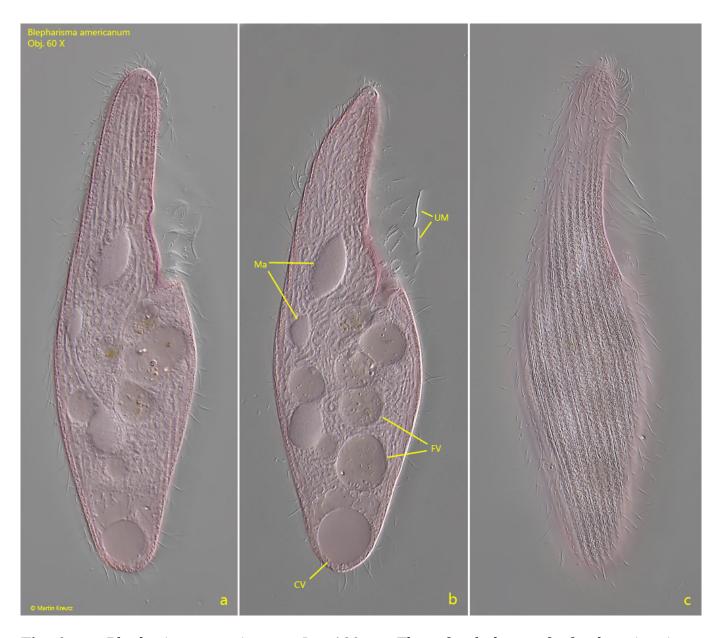


Fig. 1 a-c: Blepharisma americanum. $L=190~\mu m$. Three focal planes of a freely swimming specimen. CV = contractile vacuole, FV = food vacuoles, Ma = nodules of the moniliform macronucleus, UM = undulating menbrane. Obj. 60 X.



Fig. 2 a-b: Blepharisma americanum. $L=240~\mu m$. A second freely swimming specimen from right (a) and from ventral (b). AZM = adorale zone of membranelles, CV = contractilevacuole. Obj. 60 X.



Fig. 3 a-b: Blepharisma americanum. $L = 262 \mu m$. A third, slightly squashed specimen. Ma = nodules of the moniliform macronucleus, MO = mouth opening. Obj. 100 X.



Fig. 4: Blepharisma americanum. The micronuclei (Mi 1-3) are adjacent to the nodules of the moniliform macronucleus (Ma 1-3). Obj. 100 X.



