Blepharisma americanum Suzuki, 1954

Most likely ID: n.a.

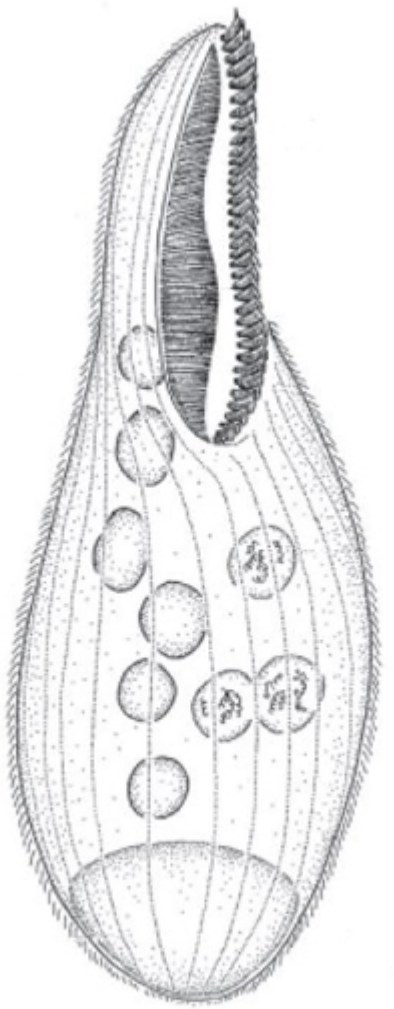
Synonym: n.a.

Sampling location: Simmelried

Phylogenetic tree: ***Blepharisma americanum***

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.

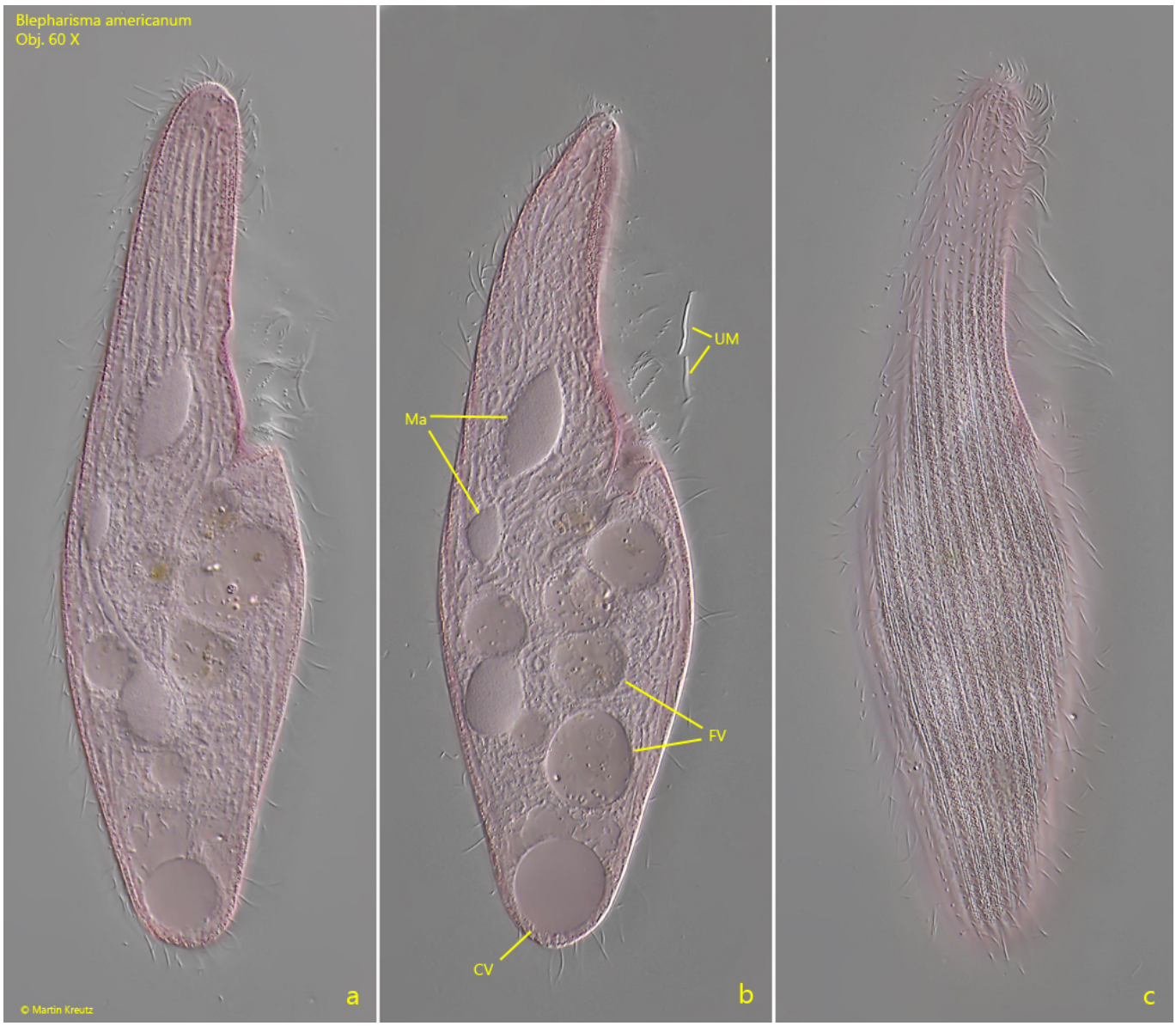


Fig. 1 a-c: *Blepharisma americanum*. L = 190 µm. Three focal planes of a freely swimming specimen. CV = contractile vacuole, FV = food vacuoles, Ma = nodules of the moniliform macronucleus, UM = undulating menbrane. Obj. 60 X.



Fig. 2 a-b: *Blepharisma americanum*. L = 240 µm. A second freely swimming specimen from right (a) and from ventral (b). AZM = adorale zone of membranelles, CV = contractile vacuole. Obj. 60 X.


Blepharisma americanum
Obj. 60 X
© Martin Kreutz
a
Ma
MO
CV
b

Fig. 3 a-b: *Blepharisma americanum*. L = 262 µm. 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.

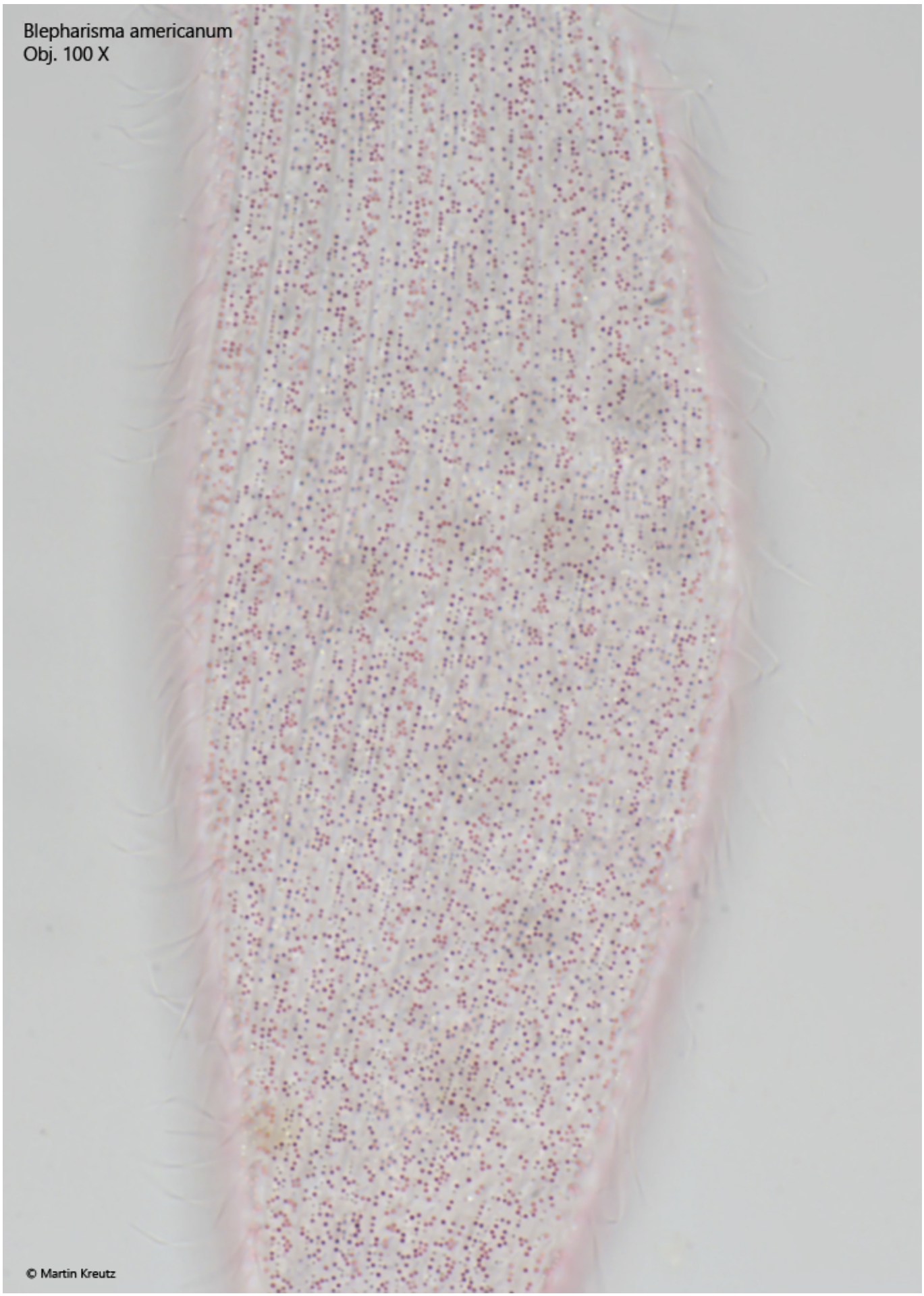

Blepharisma americanum
Obj. 100 X
© Martin Kreutz

Fig. 5: *Blepharisma americanum*. The pink colored granules arranged in the pellicle in brightfield illumination. Obj. 100 X.