Trachelomonas superba (Svirenko, 1914)

Most likely ID: n.a.

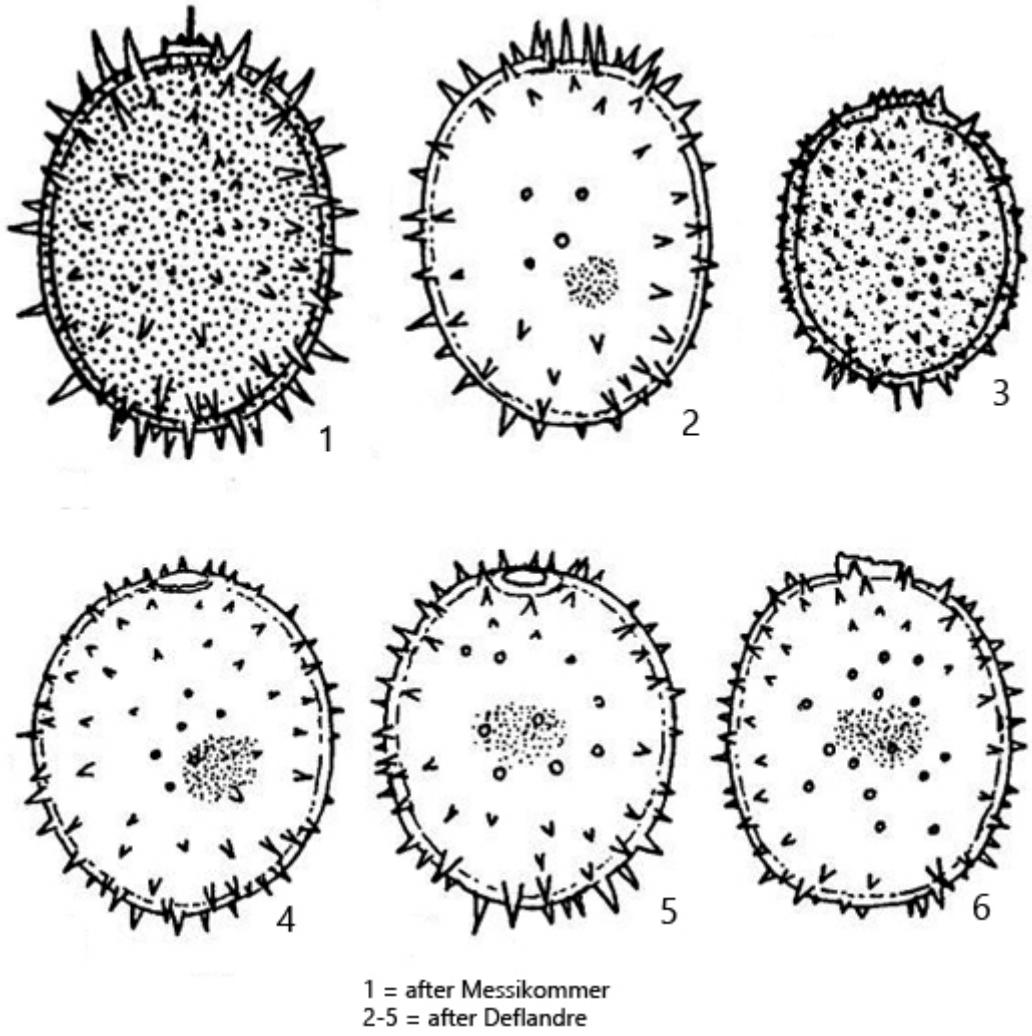
Synonym: n.a.

Sampling location: Simmelried

Phylogenetic tree: *Trachelomonas superba*

Diagnosis:

- lorica broadly ellipsoidal to ovoid, rounded apices
- apical pore without collar, sometimes with a thickened bulge
- lorica punctuated and completely covered with conical spines
- spines somtimes longer around apices
- length 38–55 µm, width 30–39 µm
- lorica brownish or orange
- eyespot large
- chloroplasts disc-shaped
- flagellum about body length



Trachelomonas superba

Trachelomonas superba is one of the most common representatives of the genus in the Simmelried. I have not yet been able to find this species in my other sampling sites.

Trachelomonas superba can be easily recognized by the conical spines, which are evenly distributed with larger distances on the lorica. These loosely spaced, conical spines distinguish *Trachelomonas suberba* from the similar species *Trachelomonas hispida*, which has much shorter spines that are much closer together. In addition, *Trachelomonas hispida* rarely grows longer than 30 µm.

In my population, the specimens of *Trachelomonas superba* reached a length of over 40 µm without exception. In contrast to the descriptions of earlier authors, the flagellum of my specimens was significantly longer than the body, up to twice the body length. Many specimens had a distinct mucus layer (s. figs. 4 a-b and 5 a-b), which is not mentioned in the literature.

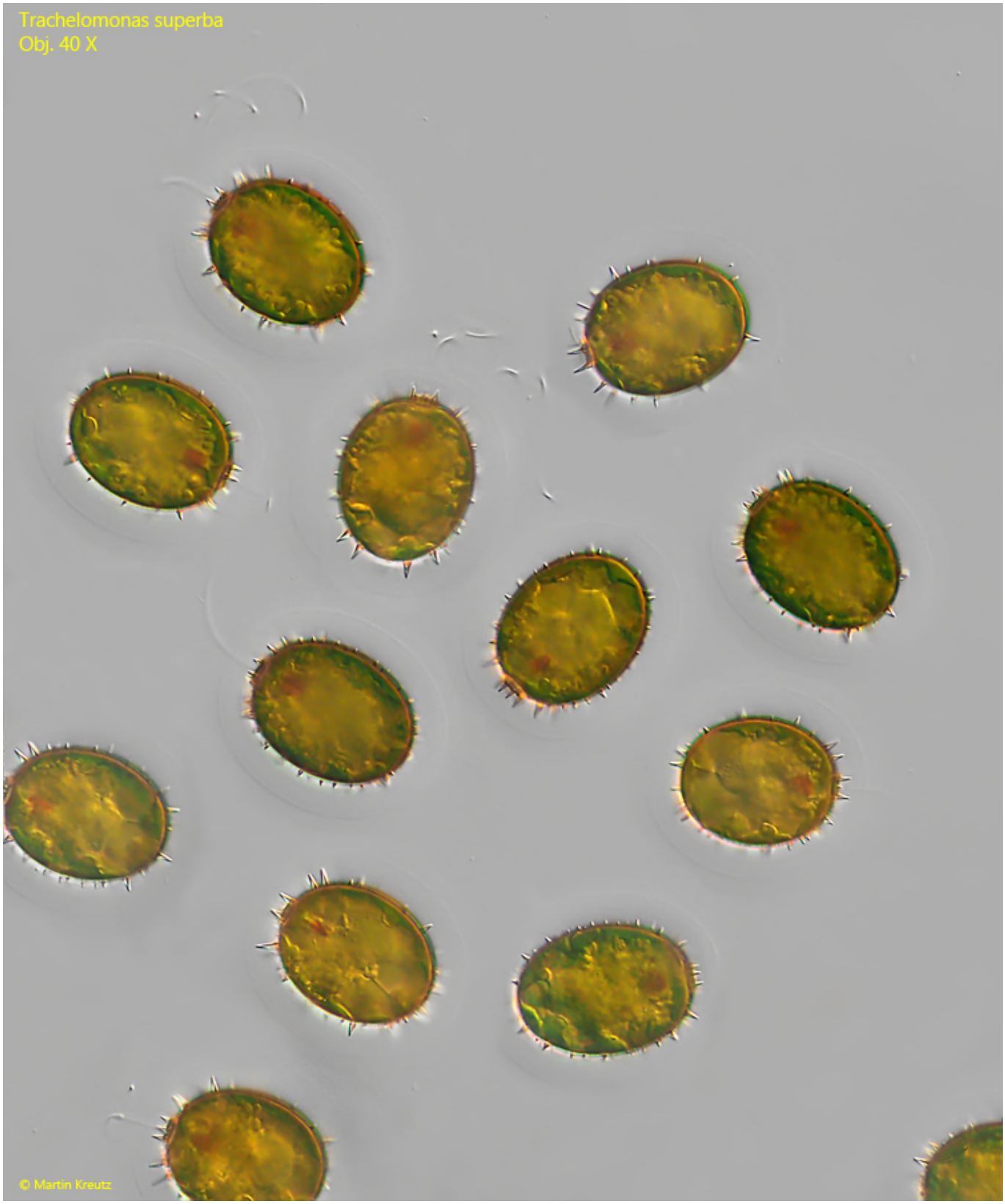


Fig. 1: *Trachelomonas suberba*. An accumulation of freely swimming specimens. Obj. 40 X.

Fig. 2 a-d: *Trachelomonas suberba*. L = 46 µm (without spines). Different focal planes of a freely swimming specimens. CP = conical spines, F = flagellum, PL = punctuated lorica. Obj. 60 X.

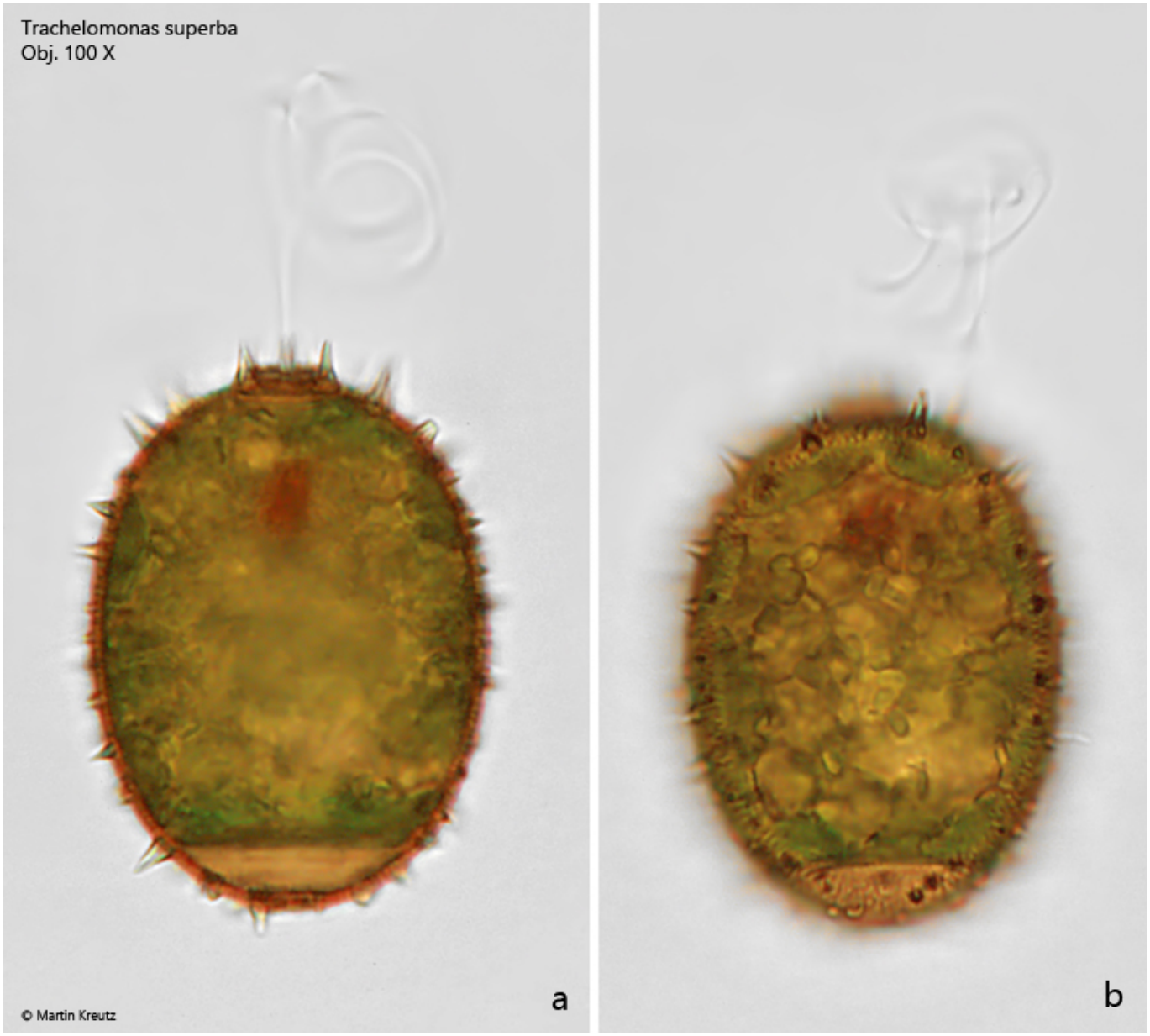


Fig. 3 a-b: *Trachelomonas suberba*. L = 48 µm (without spines). Two focal planes of a freely swimming specimen in brightfield illumination. Obj. 100 X.

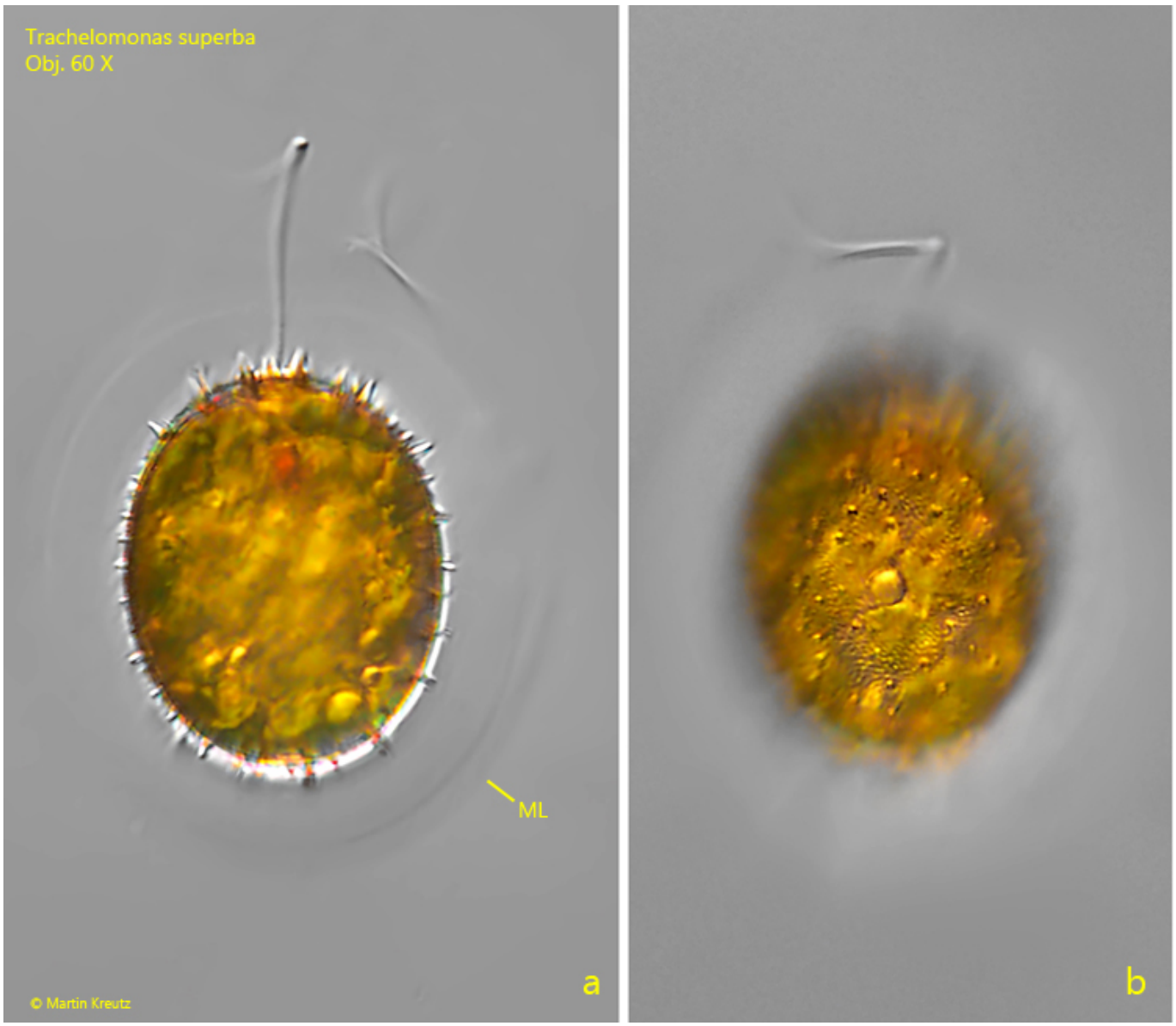


Fig. 4 a-b: *Trachelomonas suberba*. L = 44 µm (without spines). Two focal planes of a freely swimming specimen with a clearly visible mucus layer (ML). Obj. 100 X.

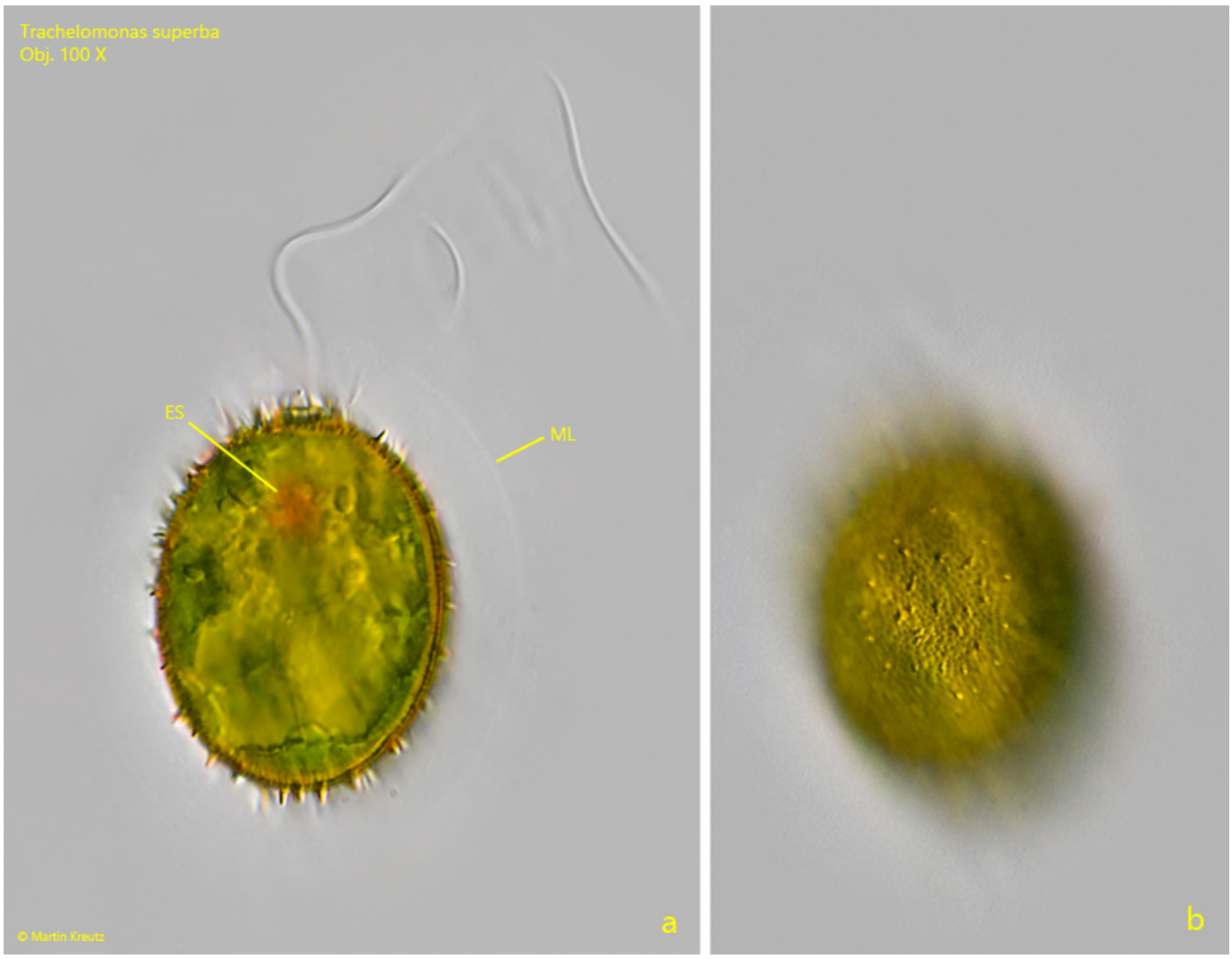


Fig. 5 a-b: *Trachelomonas suberba*. L = 43 µm (without spines). A second specimen with a mucus layer (ML). Obj. 100 X.

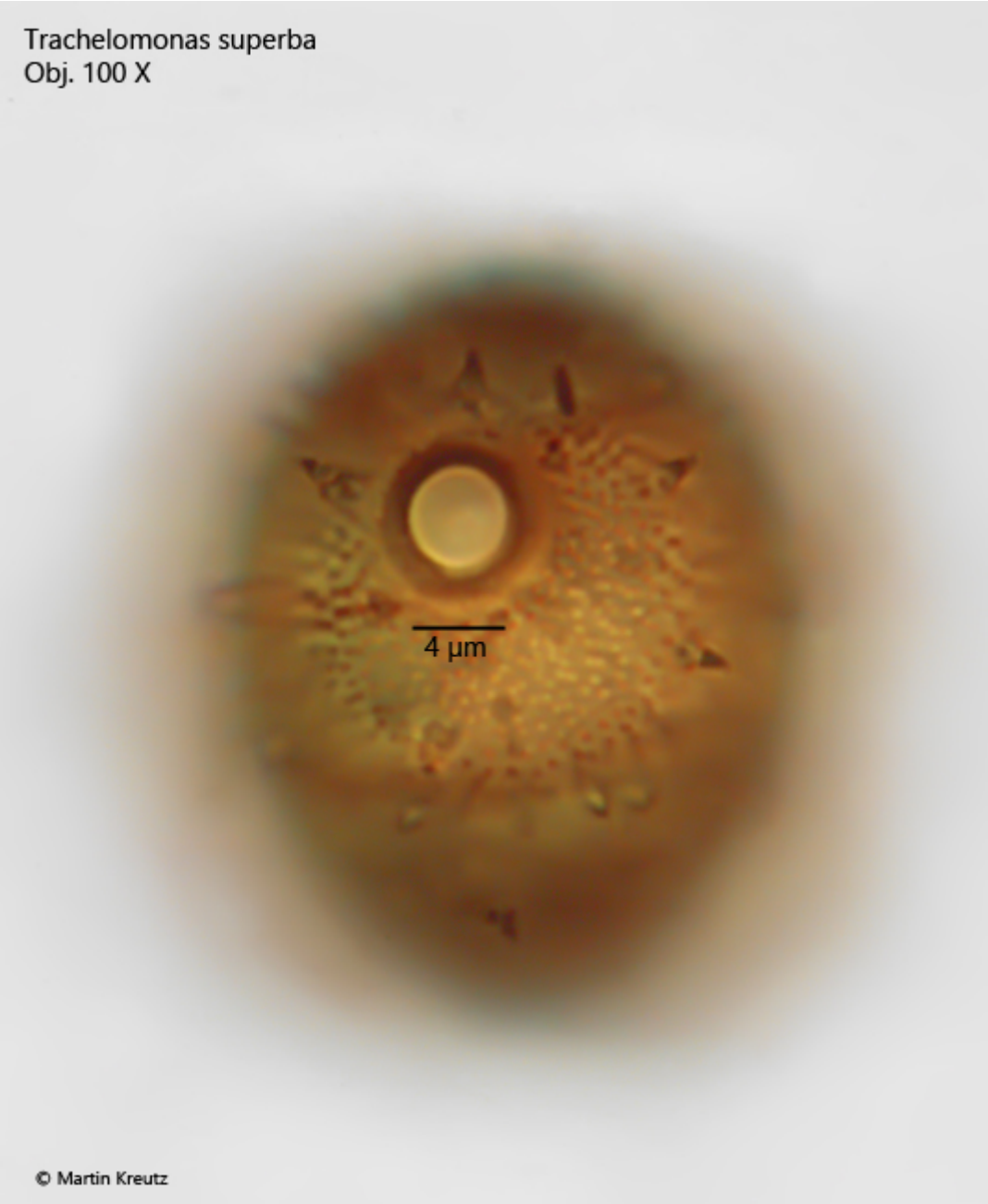


Fig. 6: *Trachelomonas suberba*. Apikal view on the circular pore with a diameter of 4 µm. The pore is surrounded by a thickened bulge. Obj. 100 X.