Mallomonas insignis Penard, 1919

Most likely ID: n.a.

Synonym: n. a.

Sampling location: Simmelried, Mühlhalden pond, Hagstaffel pond, Bündtlisried

Phylogenetic tree: ***Mallomonas insignis***

Diagnosis:

- cells long elliptic, spindle shaped, posterior tail-like
- length 70 – 100 µm
- body without bristles, apical and caudal spines
- scales concave and elliptical, with perforated rim, not covering each other
- nucleus anterior
- one apical flagellum
- two elongated chromophores, golden-brown, yellowish or greenish
- contractile vacuole consisting of 2-3 vesicles, anterior or basal

after Penard

Mallomonas insignis

I regularly find *Mallomonas insignis* in plankton samples and in samples from the surface between floating plants or algae. At up to 100 µm, this chrysophyte is comparatively large and easily identified by the absence of spines. Instead, this alga has a tail-like appendage of silica scales with caudal spines (s. fig. 1b). The silica scales covering the body appear diamond-shaped at low magnifications and have a perforated rim, but this can only be seen at high magnifications (s. fig. 2).

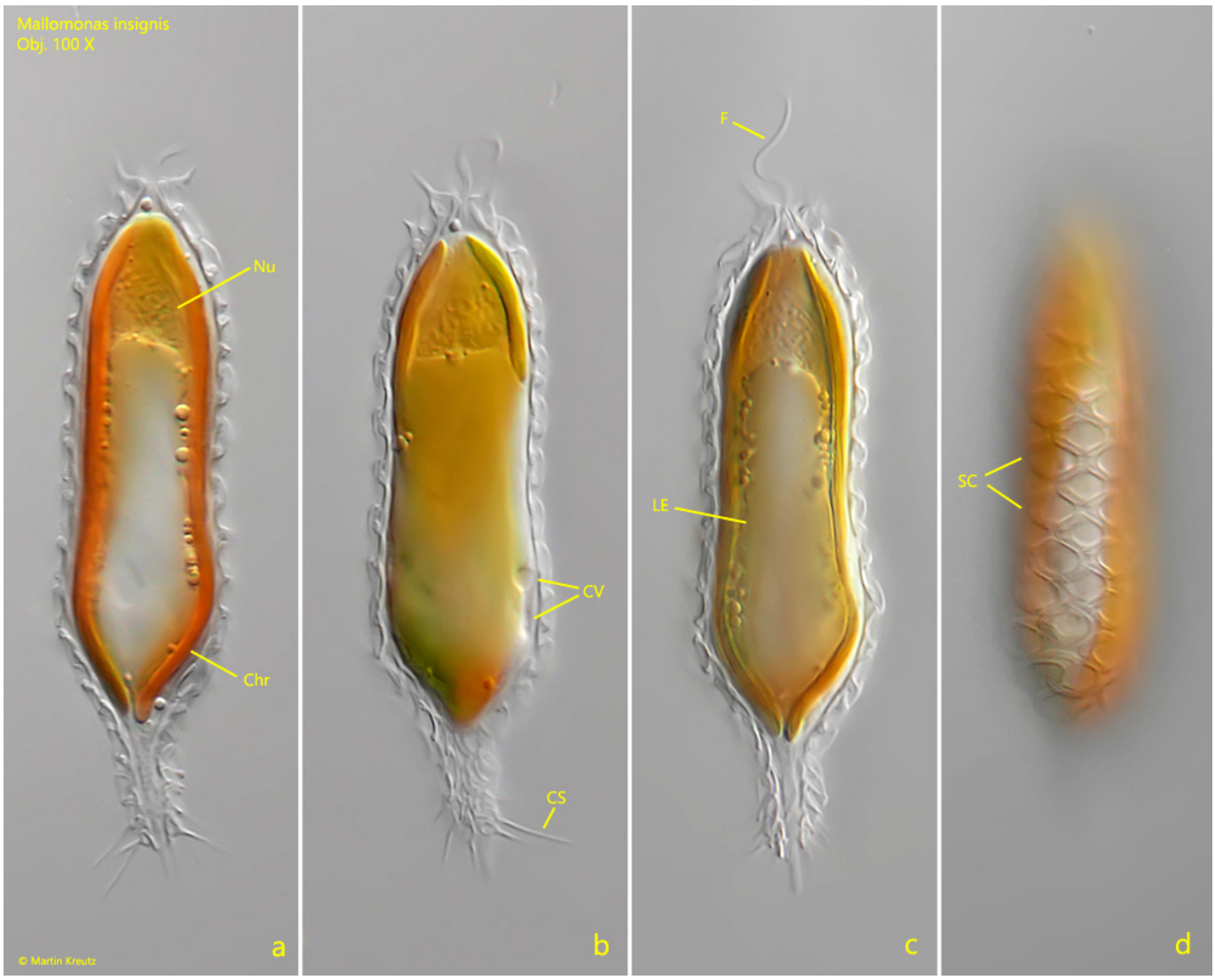

Fig. 1 a-d: *Mallomonas insignis*. L = 75 µm. A freely swimming specimen. Chr = chromatophores, CS = caudal spines, CV = contractile vacuoles, F = flagellum, Nu = nucleus, LE = leucosin body, SC = scales. Obj. 100 X.

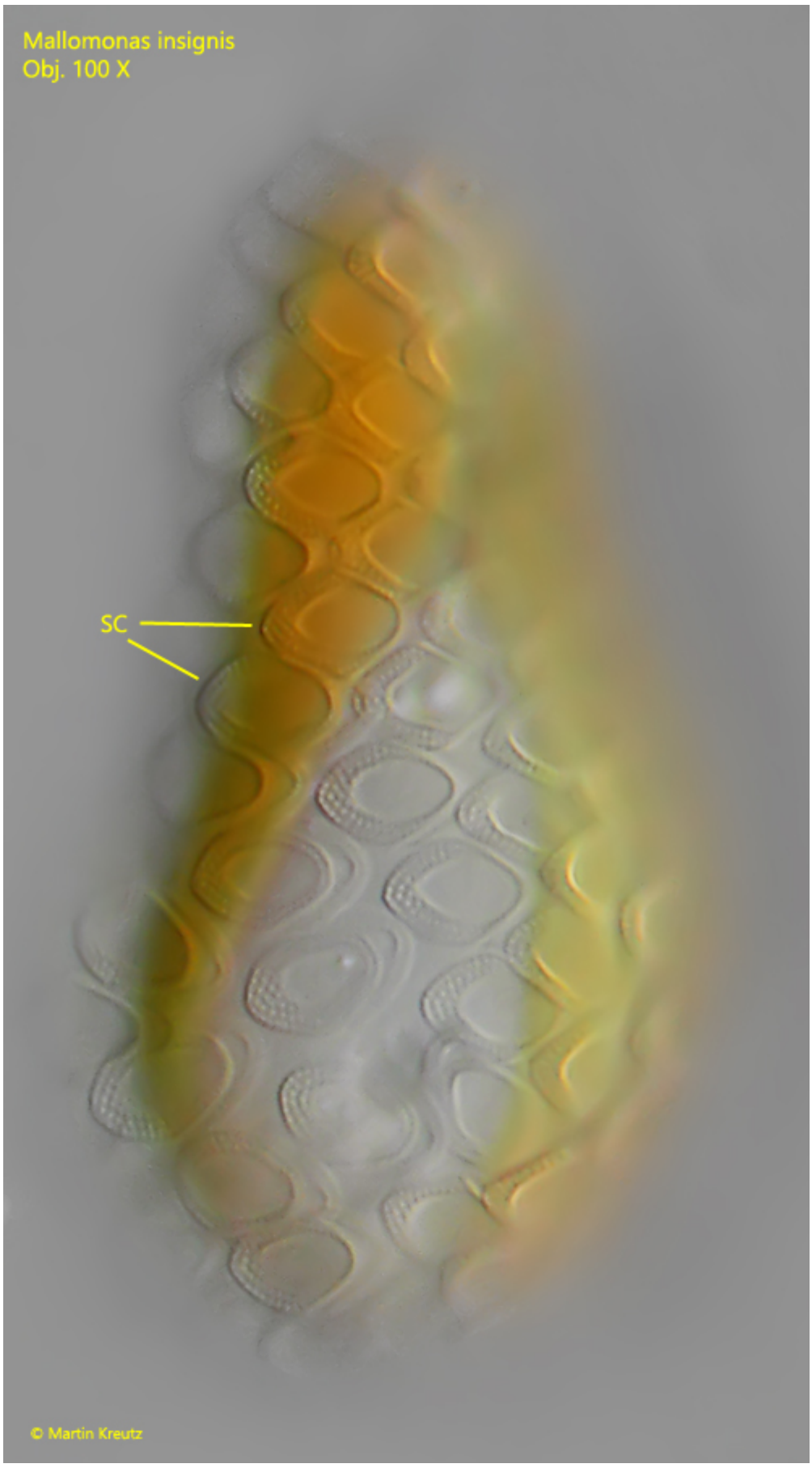

Fig. 2: *Mallomonas insignis*. The silica scales (SC) covering the cell in detail. Note the perforated rim of the scales. Obj. 100 X.