

## ***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:**

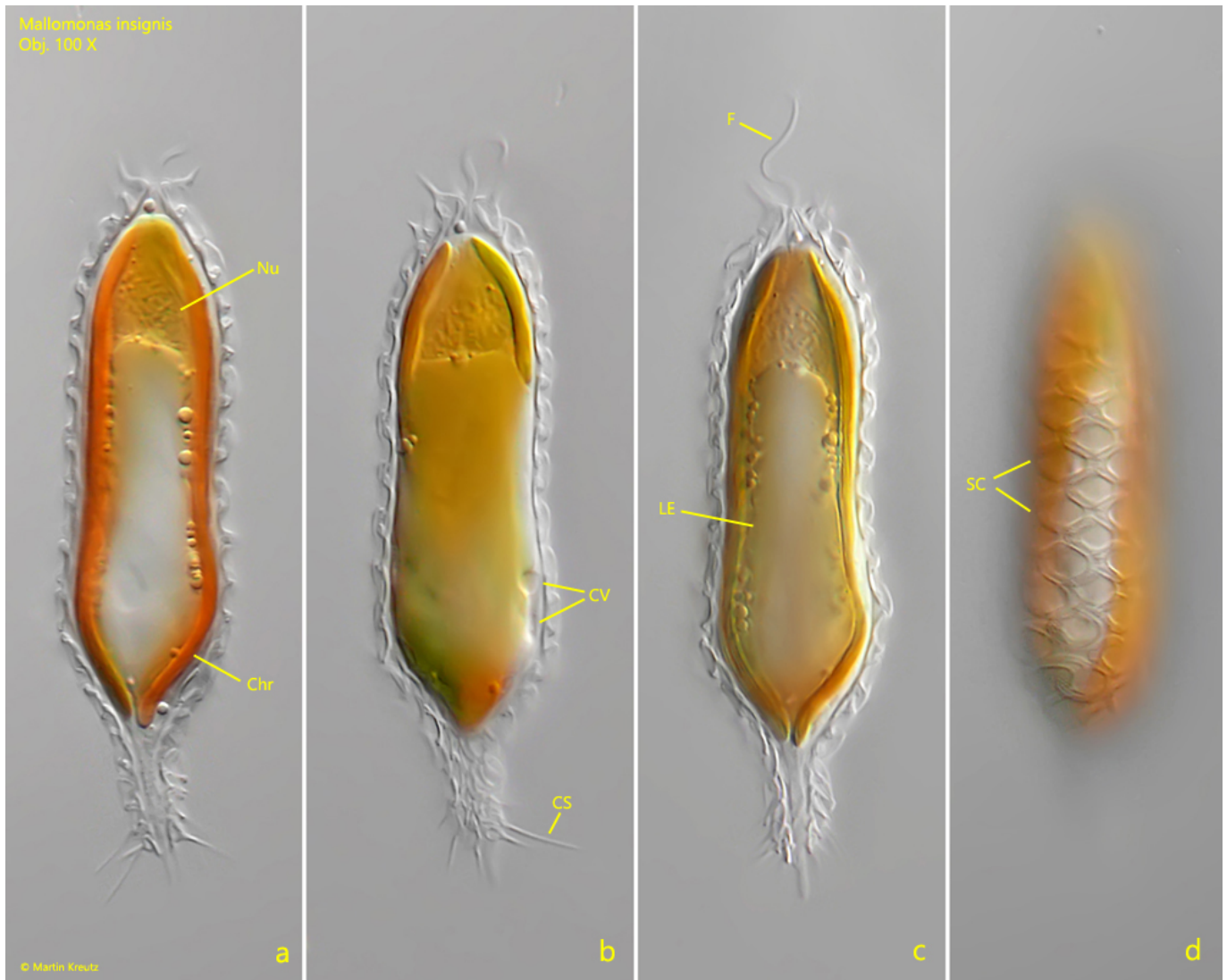
- cells long elliptic, spindle shaped, posterior tail-like
- length 70 - 100 µm
- body without bristles, apical and caudal spines
- scales concave and elliptical, with perforated rim, not covering each other
- nucleus anterior
- one apical flagellum
- two elongated chromophores, golden-brown, yellowish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



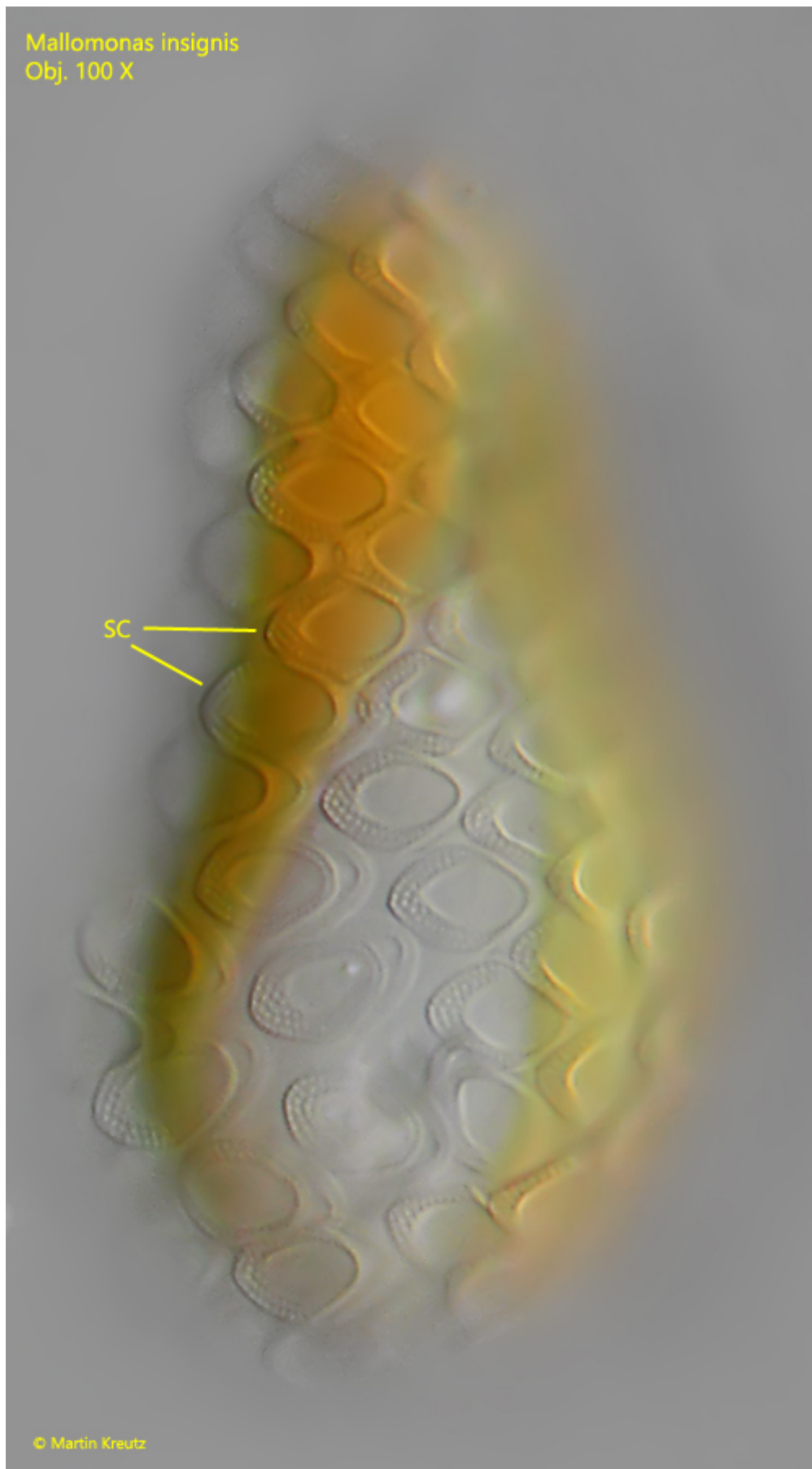
after Penard

*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  $\mu\text{m}$ , 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  $\mu$ m. 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.