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 $100 \mu m$, 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.