Epistylis plicatilis Ehrenberg, 1831

Most likely ID: n.a.

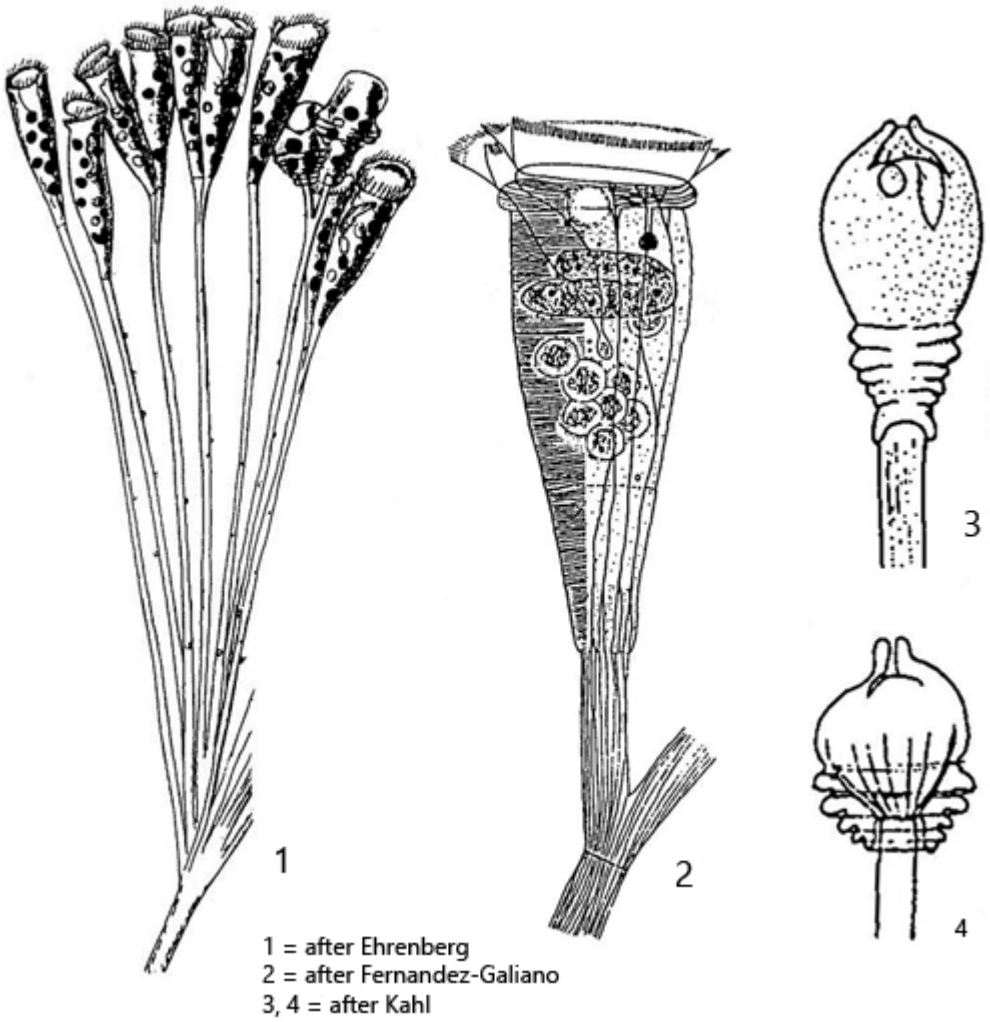
Synonym: n.a.

Sampling location: Ulmisried, Simmelried

Phylogenetic tree: *Epistylis plicatilis*

Diagnosis:

- zooids 90–120 µm long, width 25–50 µm
- extended zooids slenderly funnel-shape
- contracted zooids with snout-shaped anderior end, posterior part annullated
- macronucleus kidney-shaped to horseshoe-shaped, horizontal in anterior half
- micronucleus located between peristome and macronucleus
- one contractile vacuole near peristome
- pellicle with about 117 transverse striae
- stalk non-contractile with longitudinal striationd, width 7–18 µm, dichotomously branched
- colonies up to 4 mm long
- zooids are located in periphery of colony



Epistylis plicatilis

So far I have only found a few colonies of *Epistylis plicatilis* in Ulmisried and Simmelried. The zooids of *Epistylis plicatilis* are quite large with a length of about 100 µm and they are located in the periphery of the colony, which gives them an umbrella-shaped appearance (s. fig. 1). An important identification feature is the shape of the contracted zooids (s. fig. 3 b). The front end is snout-shaped, while the posterior half is annulated and extends over the stalk. The macronucleus can be horseshoe-shaped or kidney-shaped and lies transversely below the peristome. In my population the macronucleus was always kidney-shaped (s. fig. 4). I could not identify the spherical micronucleus. It is reported not to be attached to the macronucleus, but shifted towards the peristome. The non-contractile stalk is thick and has a longitudinal striation, which can vary in intensity (s. fig. 5).



Fig. 1: *Epistylis plicatilis*. L = 105–126 µm (of zooids). A small colony of 10 zooids. Obj. 20 X.


Epistylis plicatilis
Obj. 40 X
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Fig. 2: *Epistylis plicatilis*. L = 488 µm (zooids with stalk). A small colony settled on a detritus flake. Obj. 40 X.


Epistylis plicatilis
Obj. 60 X
50 µm
a


SA
AP
© Martin Kreutz
b

Fig. 3 a-b: *Epistylis plicatilis*. L = 93–99 µm (of zooids). Fully elongated (a) and contracted zooids (b) in the colony as shown in fig. 2. The contracted zooids are 51–66 µm long, have a snout-shaped anterior end (SA) and an annulated posterior end (AP). Obj. 60 X.

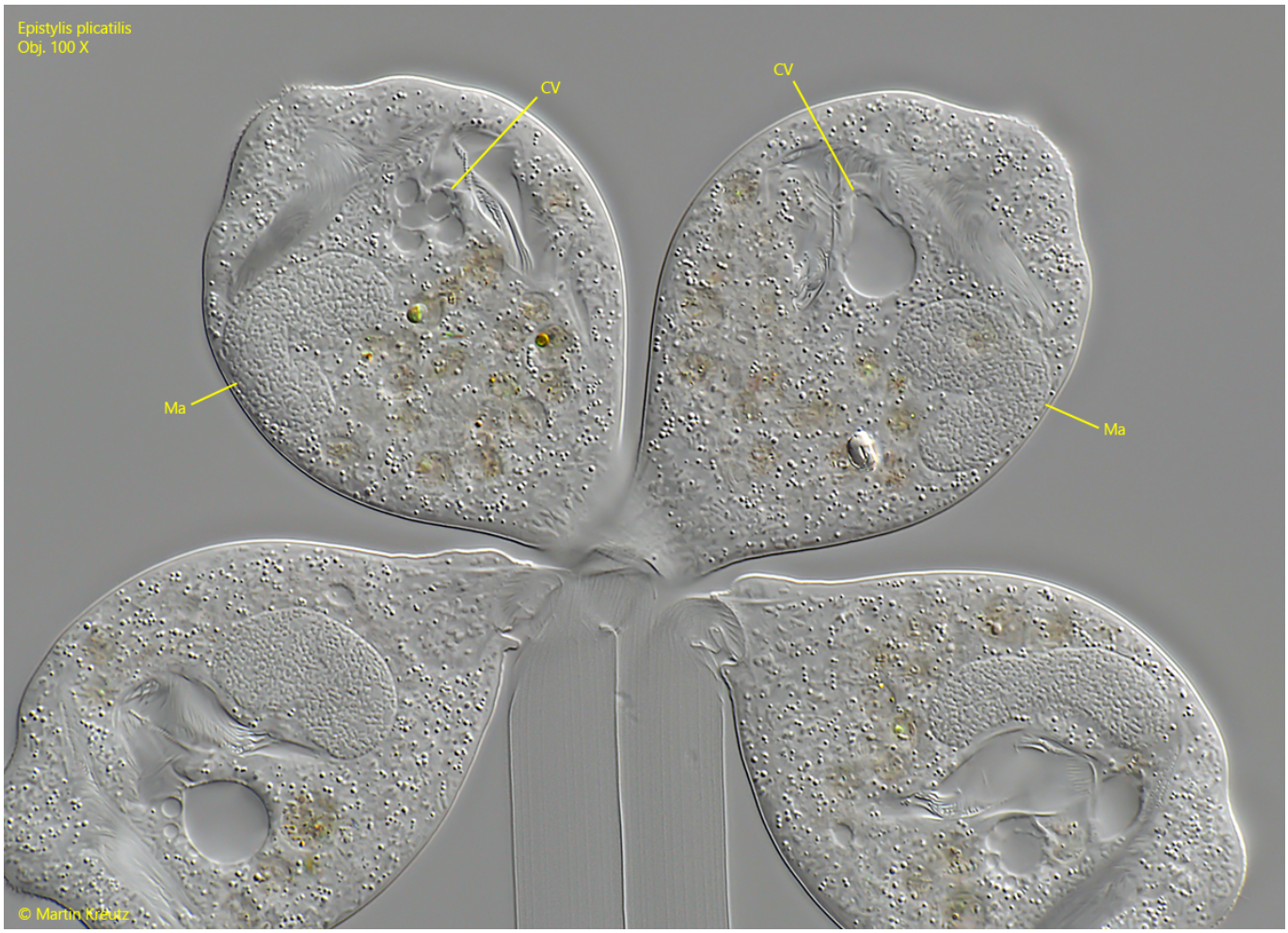


Fig. 4: *Epistylis plicatilis*. In the strongly squashed zooids the kidney-shaped macronuclei (Ma) and the contractile vacuoles (CV) are visible. Obj. 100 X.

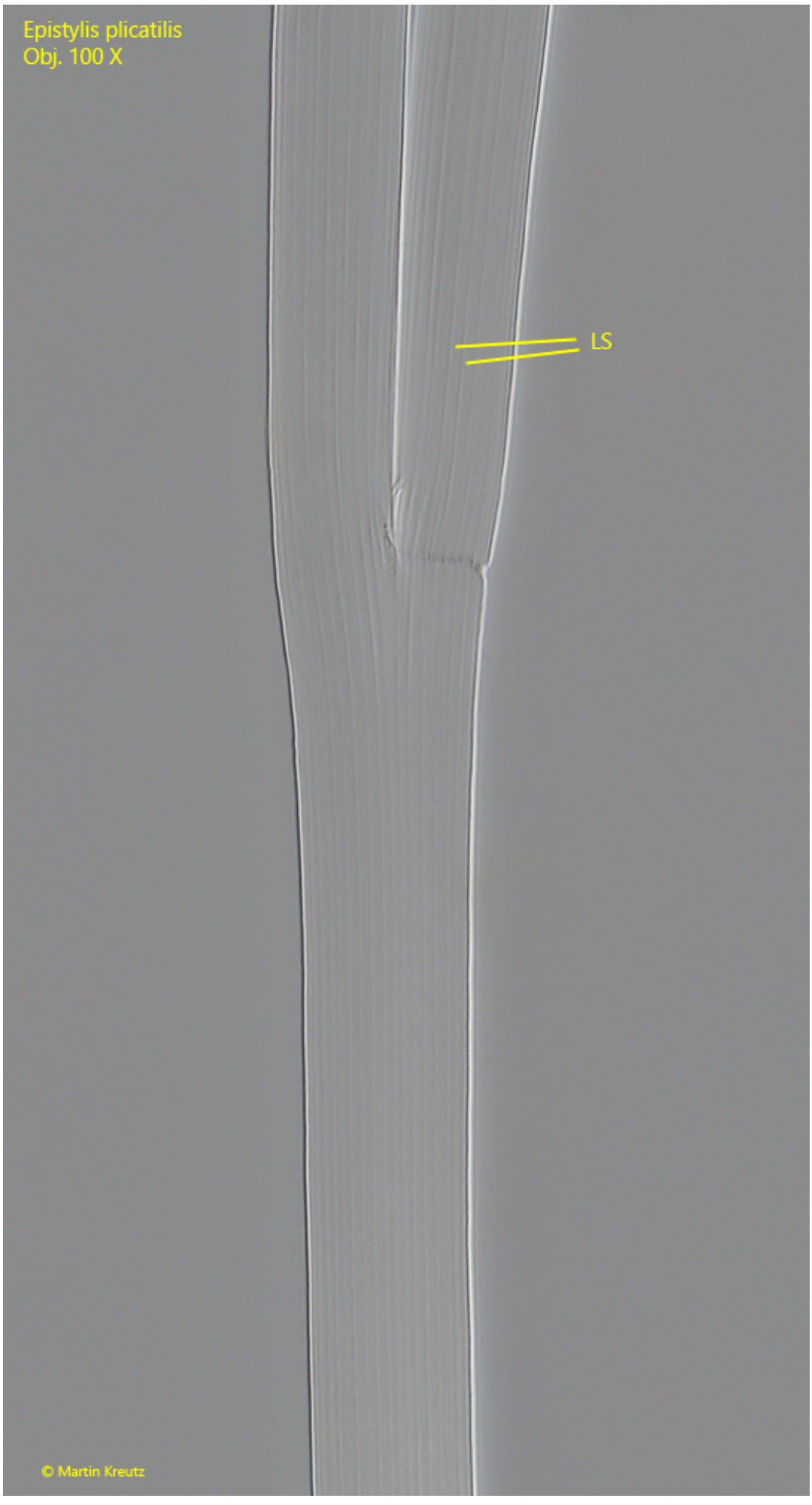

Epistylis plicatilis
Obj. 100 X
LS
© Martin Kreutz

Fig. 5: *Epistylis plicatilis*. The non-contractile stalk in detail. The diameter in the lower part is 18 µm. Note the delicate, longitudinal striation (LS). Obj. 100 X.