Lepocinclis oxyuris

(Schmarda) B. Marin & Melkonian, 2003

Most likely ID: n.a.

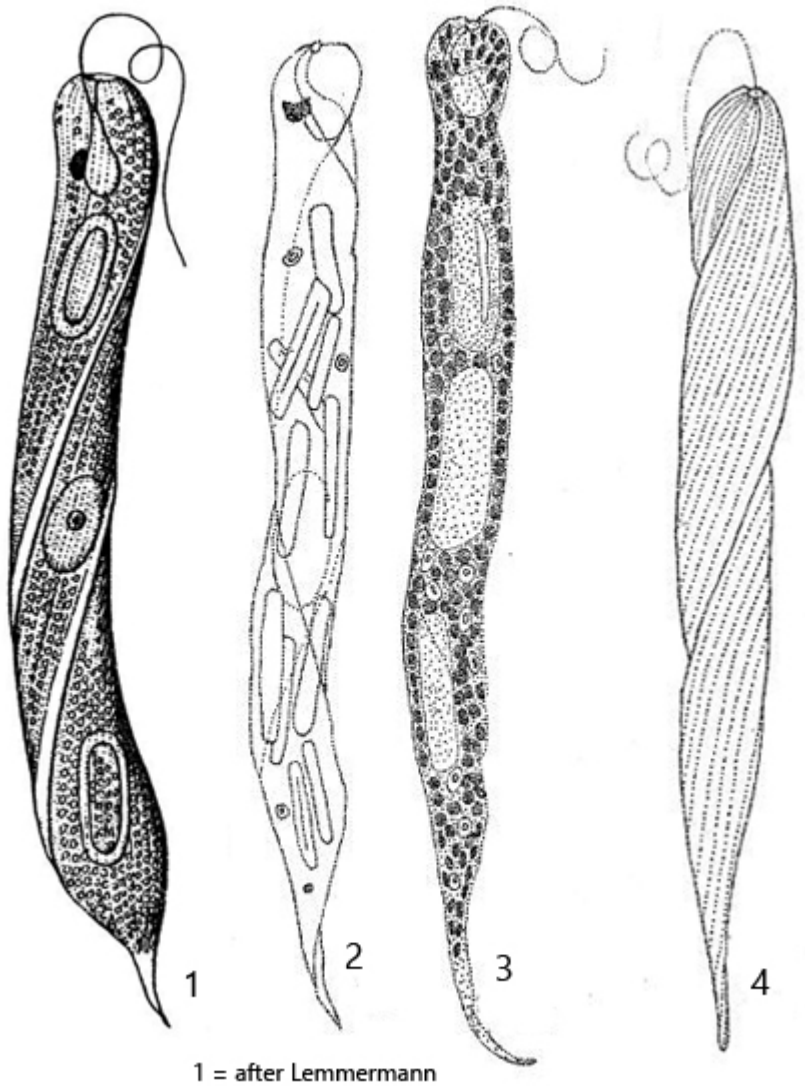
Synonym: *Euglena oxyuris*

Sampling location: Ulmisried, Simmelried, Purren pond

Phylogenetic tree: *Lepocinclis oxyuris*

Diagnosis:

- body elongated, cylindrically with parallel sides, with three twisted keels
- anterior end rounded, posterior end with tapered tailpiece
- length 136–490 µm
- flagellum one-third of body length
- striation of pellicle in double lines (alternating thin and broad lines)
- striation of pellicle twisted clockwise
- eyespot slightly granular, medium sized
- chloroplast disc-shaped
- oval or ellipsoid nucleus central
- commonly 2 large, oblong paramylon grains (sometimes up to 20)



Lepocinclis oxyuris

I regularly find *Lepocinclis oxyuris* in the uppermost mud layer of some of my sampling sites. This large species is particularly common in the Simmelried.

In the fresh samples, *Lepocinclis oxyuris* stands out even at small magnifications due to its size and the characteristic tailpiece. The cylindrical body is also twisted in a clockwise direction. At higher magnification, two large paramylon grains are usually found, which are arranged above and below the nucleus (s. fig. 3 a). Sometimes, however, specimens with more than two of these large paramylon grains are found. Depending on the degree of nutrition, these paramylon grains can also look thin and rod-shaped. An interesting and constant characteristic of *Lepocinclis oxyuris* is the striation of the pellicle. This consists of double lines. Broad and thin lines alternate here (s. fig. 3 c). In addition, the striation in *Lepocinclis oxyuris* is twisted clockwise, which is rare within the euglenids.

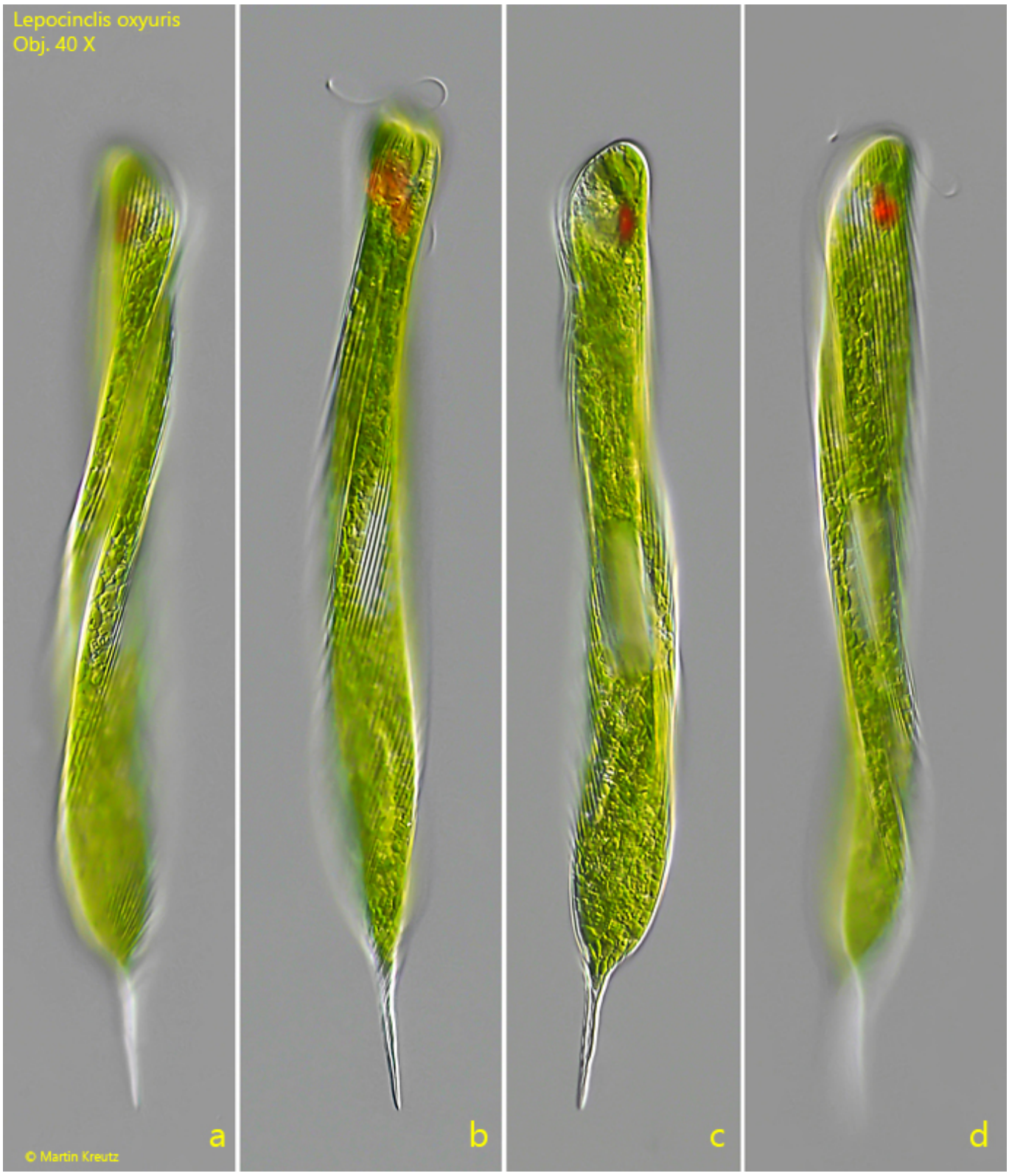


Fig. 1 a-d: *Lepocinclis oxyuris*. L = 235 µm. A freely swimming specimen. Obj. 40 X.

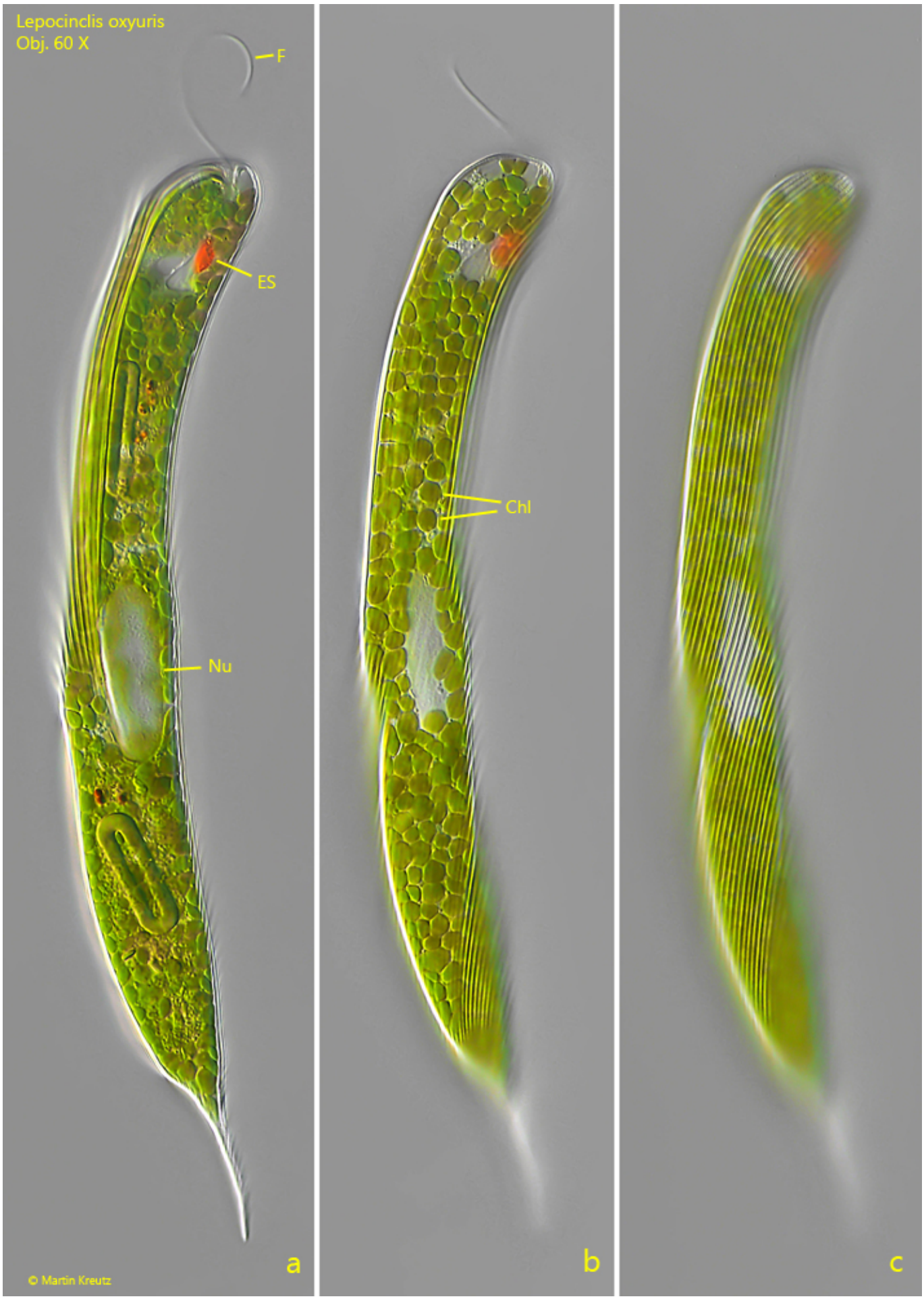

Lepocinclis oxyuris
Obj. 60 X
F
ES
Nu
Chl
a
b
c
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Fig. 2 a-c: *Lepocinclis oxyuris*. L = 216 µm. Different focal planes of a slightly squashed specimen. Chl = disc-shaped chloroplasts, ES = eyespot, F = flagellum, Nu = nucleus. Obj. 60 X.

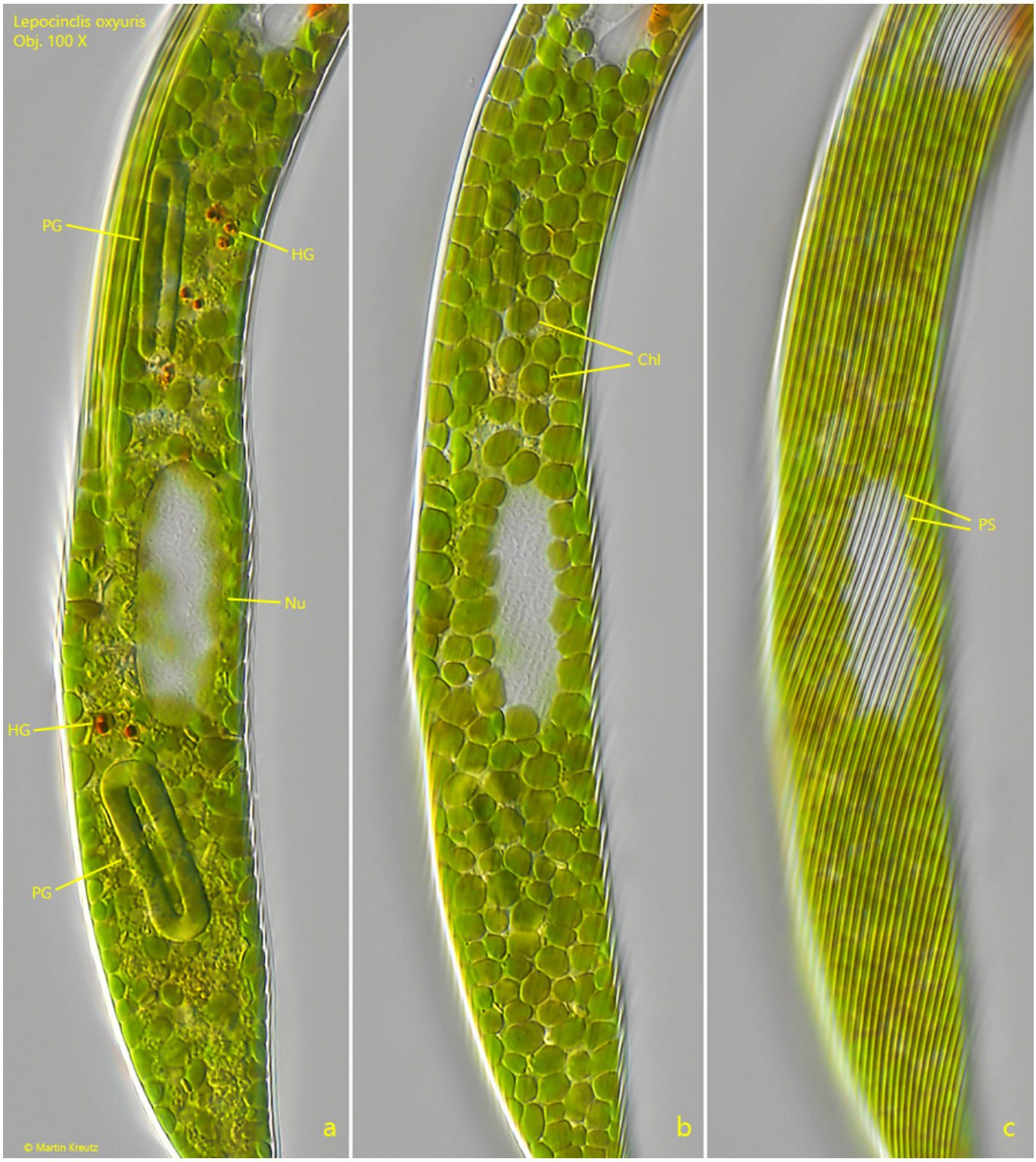


Fig. 3 a-c: *Lepocinclis oxyuris*. Different focal planes of the squashed specimen as shown in fig. 2 a-c. Note the two oblong shaped paramylon grains (PG) above and below the nucleus (Nu). In the cytoplasm some haematochrome granules (HG) are present. The numerous chloroplasts (Chl) are disc-shaped. The striation of the pellicle (PS) consists of alternating broad and thin lines and is twisted clockwise.

Obj. 100 X.

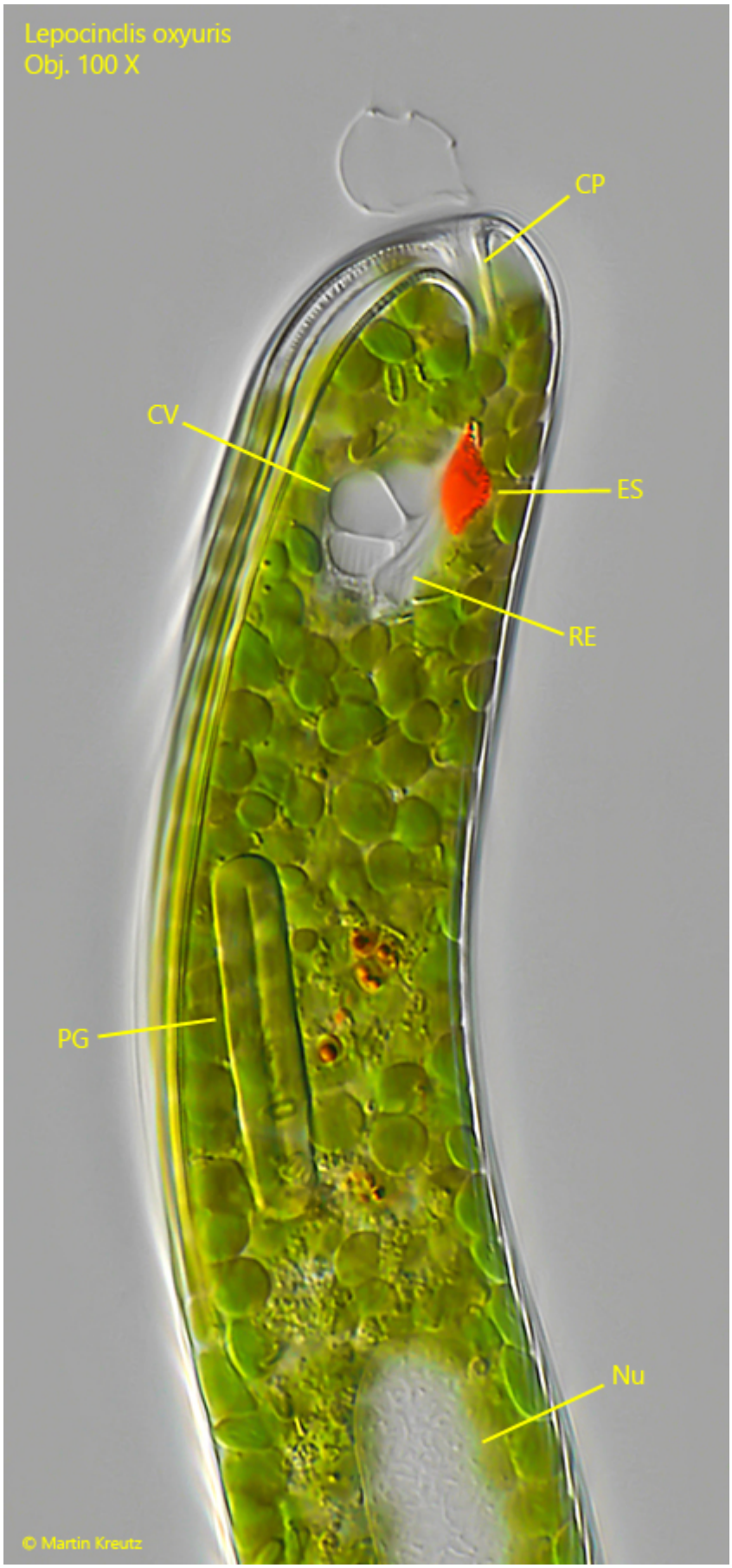


Fig. 4: *Lepocinclis oxyuris*. The rounded anterior end in detail. Note the contractile vacuole (CV) adjacent to the reservoir (RE). CP = cytopharynx, ES = eyespot, Nu = nucleus, PG = paramylon grain. Obj. 100 X.