Euglena tripteris

(Dujardin) Diesing, 1850

Most likely ID: n.a.

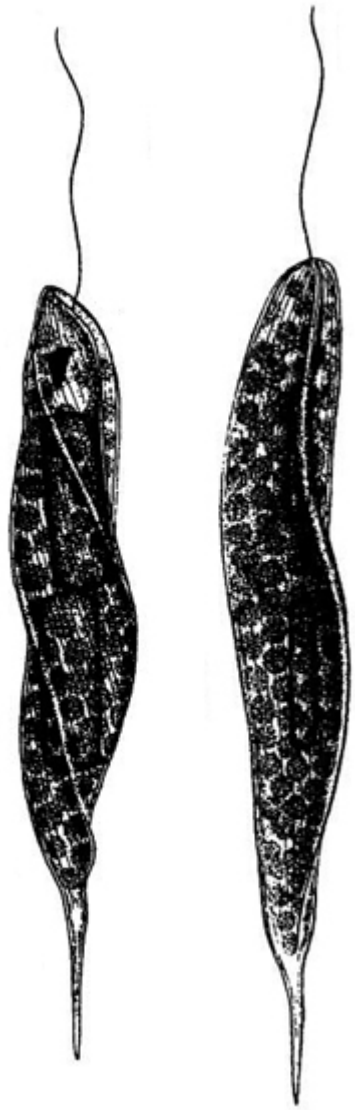
Synonym: n.a.

Sampling location: Simmelried

Phylogenetic tree: *Euglena tripteris*

Diagnosis:

- body flattened with 3 distinct keels, spirally twisted
- posterior a long tailpiece
- length 62–80 µm
- two large, rod shaped paramylon grains anterior and posterior to nucleus
- eyespot bright red, not granulated
- numerous disc-shaped chloroplasts, light green
- pyrenoids absent
- striation of pellicle almost parallel to longitudinal body axis
- flagellum about one half of body length



Euglena tripteris

I find *Euglena tripteris* rarely but regularly between floating plants in the Simmelried. I have not yet found this species in my other sampling sites.

Euglena tripteris is only slightly metabolic and usually only bends its body in a C-shape (s. fig. 2 d). When swimming, it usually adopts the elongated body shape. Due to the three keels, the cell looks trigonal in apical view. There are always two large, oblong-shaped paramylon grains in front of and behind the central nucleus (s. fig. 3 c). In addition, there are many smaller paramylon grains, which are approximately rectangular or sometimes irregularly shaped (s. fig. 4 a). The numerous chloroplasts are disc-shaped and usually light green (s. fig. 4 a). I have only rarely found more intensely colored specimens. The striation of the pellicle runs approximately parallel to the longitudinal body axis and is not spirally twisted (s. fig. 4 b).

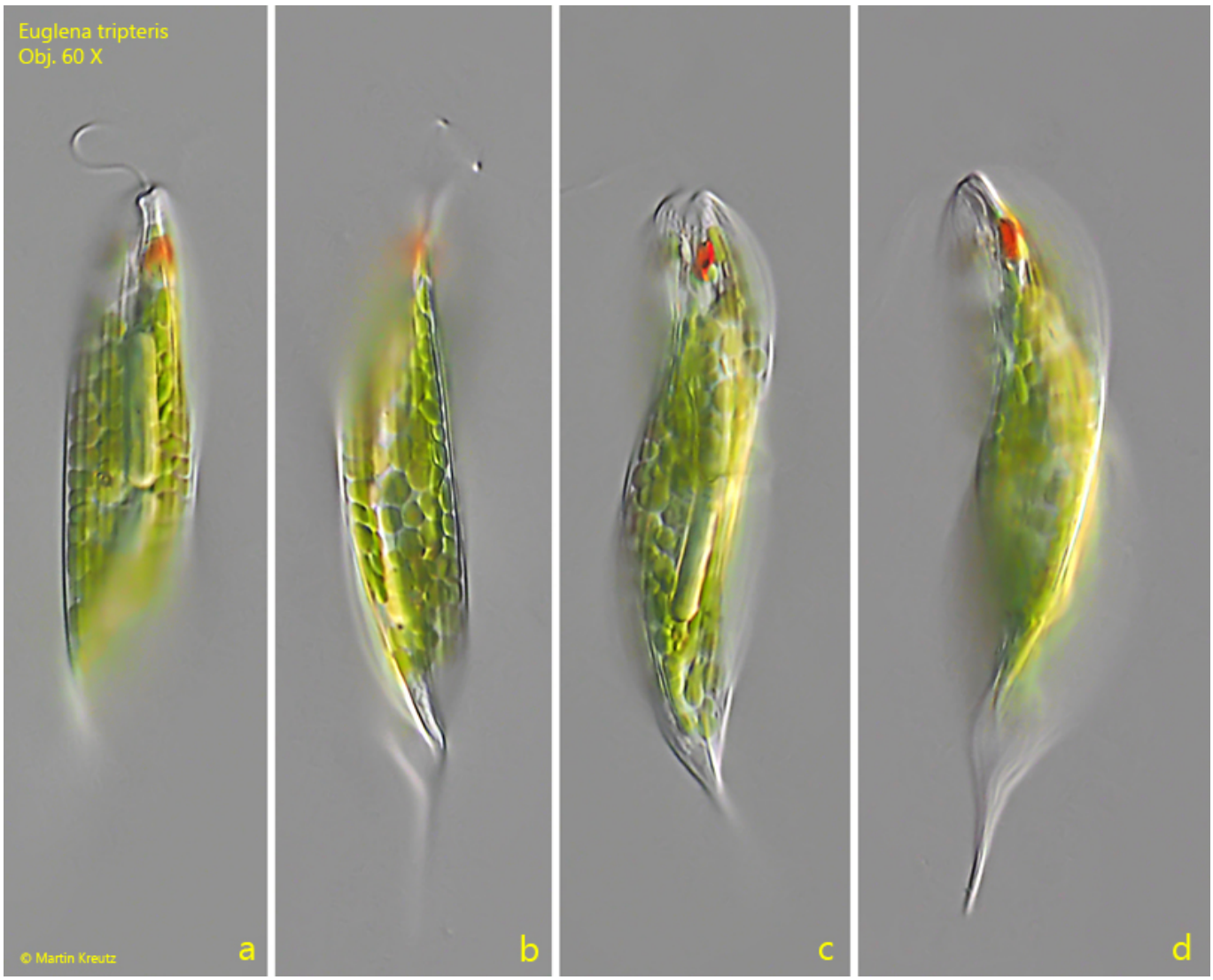


Fig. 1 a-d: *Euglena tripteris*. L = 73 µm. A freely swimming specimen. Note the distinct longitudinals keels of the body. Obj. 60 X.

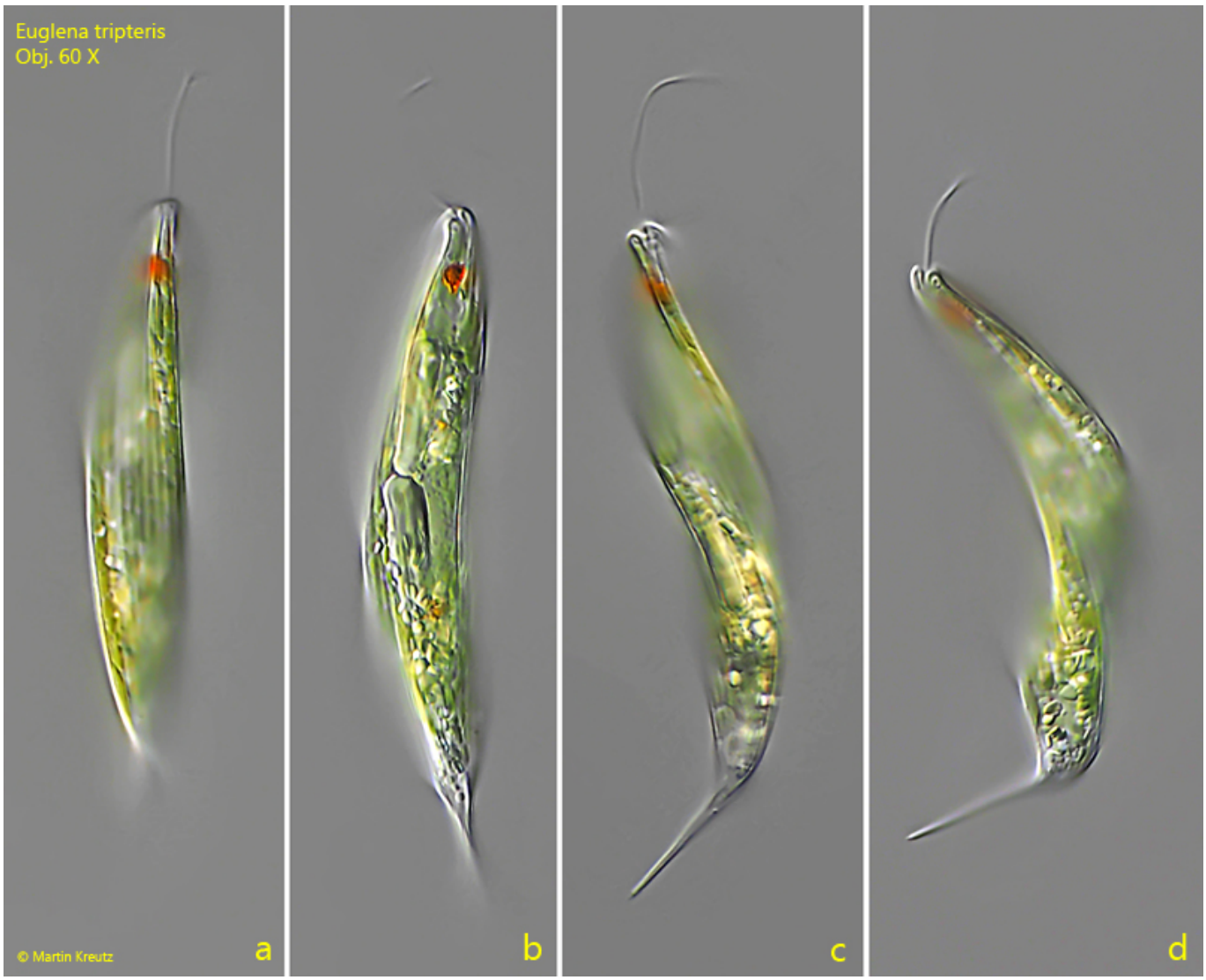


Fig. 2 a-d: *Euglena tripteris*. L = 79 µm. A second freely swimming specimen. Obj. 60 X.

Fig. 3 a-c: *Euglena tripteris*. L = 80 µm. Different focal planes of a slightly squashed specimen. Note the two large paramylon grains (LPG). CV = contractile vacuole, HG = haematochrome granules. Obj. 100 X.

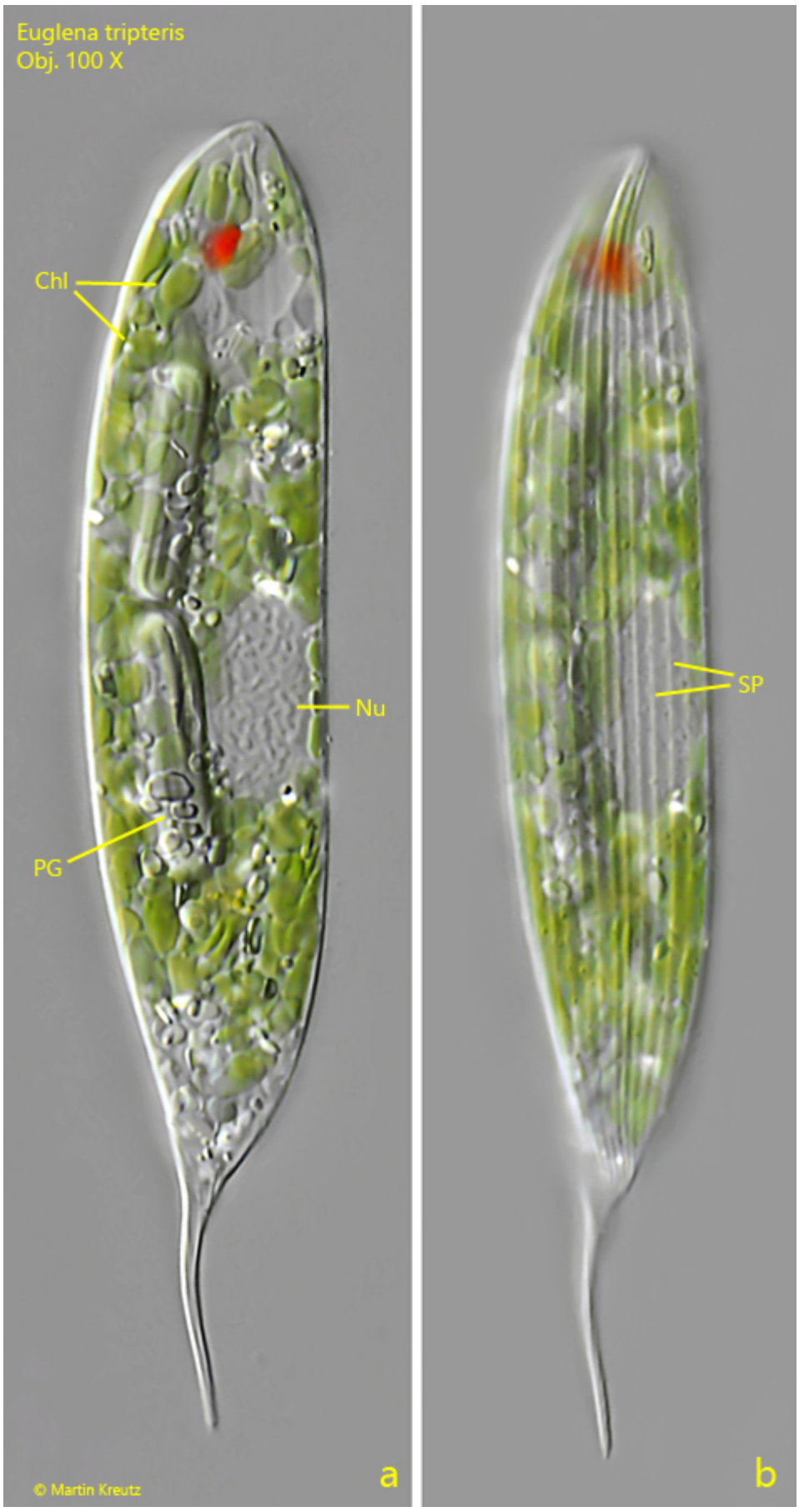


Fig. 4 a-b: *Euglena tripteris*. L = 80 µm. Two focal planes of the squashed specimen as shown in fig. 3 a-c. Chl = disc-shaped chloroplasts, Nu = nucleus, PG = small paramylon

grains, SP = striation of the pellicle. Obj. 100 X.