

Monomorphina pyrum

(Ehrenberg) Mereschkowsky, 1877

Most likely ID: n.a.

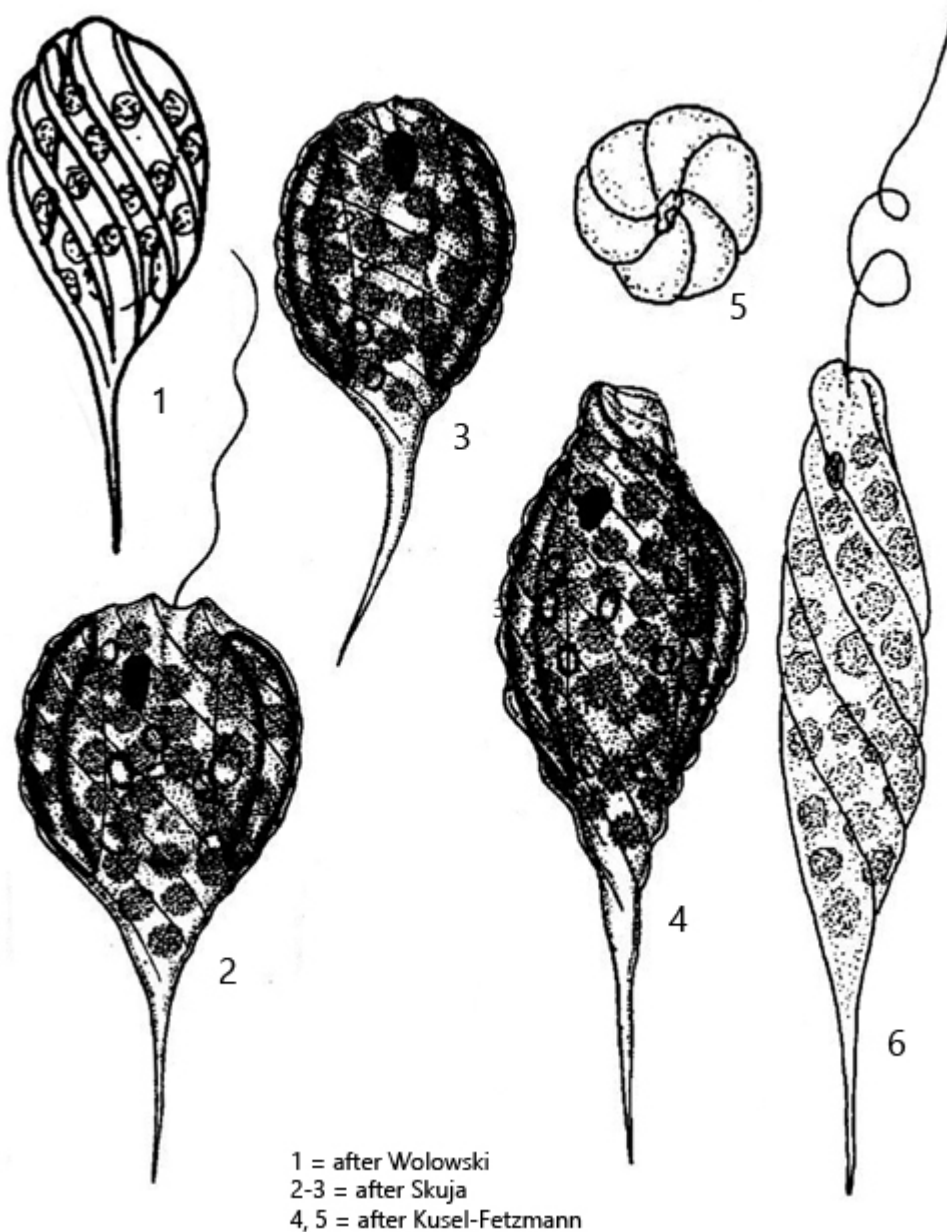
Synonym: *Phacus pyrum*

Sampling location: [Mühlhalden pond](#), [Purren pond](#), [Simmelried](#), [Ulmisried](#), [Bussenried](#), [Bündlisried](#), [Mainau pond](#), [Pond of the convent Hegne](#)

Phylogenetic tree: [Monomorphina pyrum](#)

Diagnosis:

- cells spindle-shaped, ovoid or pyriform
- pellicle with distinct ribs, counterclockwise
- posterior half of cell tapered to a straight spine
- apical end slightly protruding
- cell in cross section round
- length 27–55 µm
- chloroplasts disc-shaped, small
- paramylon bodies ring-shaped (laterally positioned) and disc-shaped
- flagellum about 1.5 times body length



Monomorpha pyrum

I find *Monomorpha pyrum* very frequently in my sampling sites. The body shape is usually spindle-shaped, as shown in drawings 4 and 6 (s. drawings above). The cells of my population were mostly over 60 μm long, which is about 10 % larger than stated in the literature. However, it is a clear indication that *Monomorpha pyrum* is present here, as all other species of the genus *Monomorpha* are significantly smaller or the body is flattened. The body of *Monomorpha pyrum* is round in cross section (s. also drawing 5 above).

The species *Monomorpha pyrum* unites many form variantes. Important characteristics are the round body in cross section, the long and straight terminal spine and the size. In addition, the anterior end of the cell is always slightly

protruding, sometimes even snout-shaped.

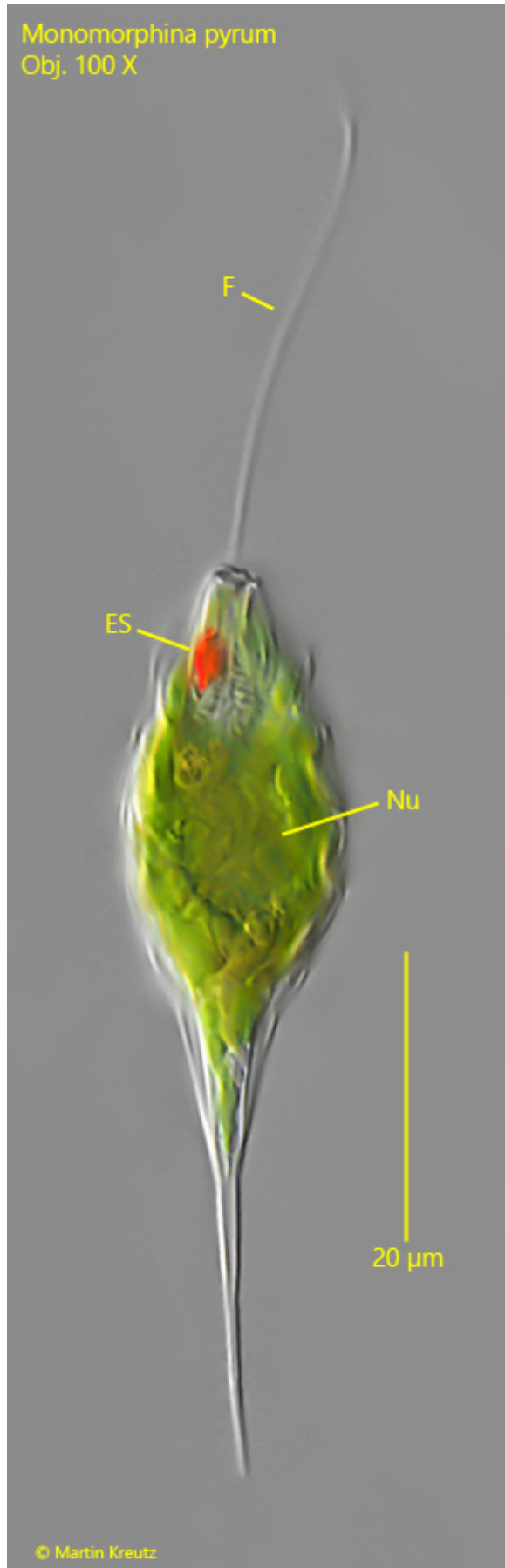


Fig. 1: *Monomorphina pyrum*. L = 64 μ m. A freely swimming specimen with a spindle-shaped body. ES = eyespot, F = flagellum, Nu = nucleus. Obj. 100 X.

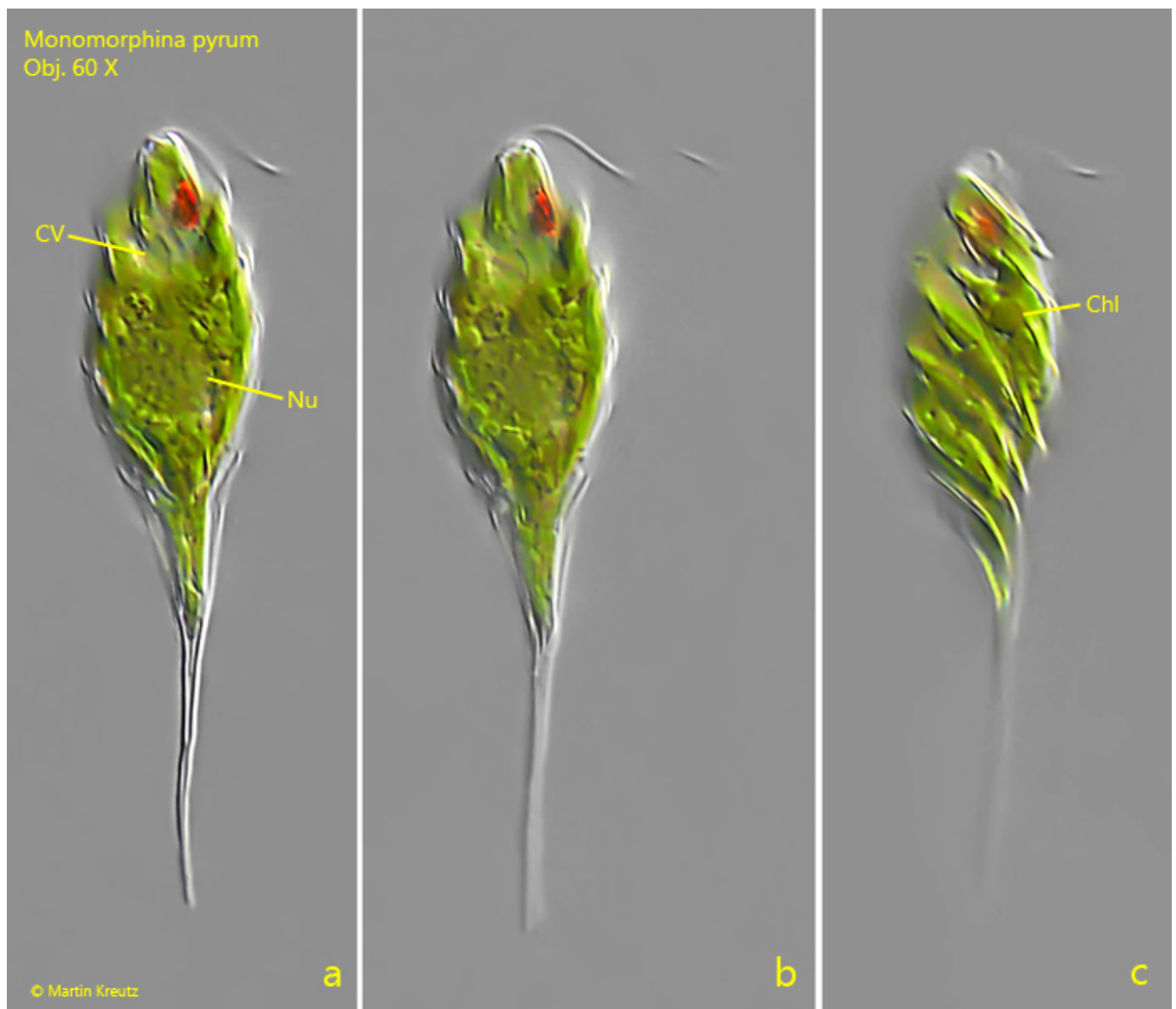


Fig. 2 a-c: *Monomorphina pyrum*. L = 65 μ m. Three focal planes of a slightly squashed specimen. Chl = disc-shaped chloroplasts, CV = contractile vacuole, Nu = nucleus. Obj. 60 X.

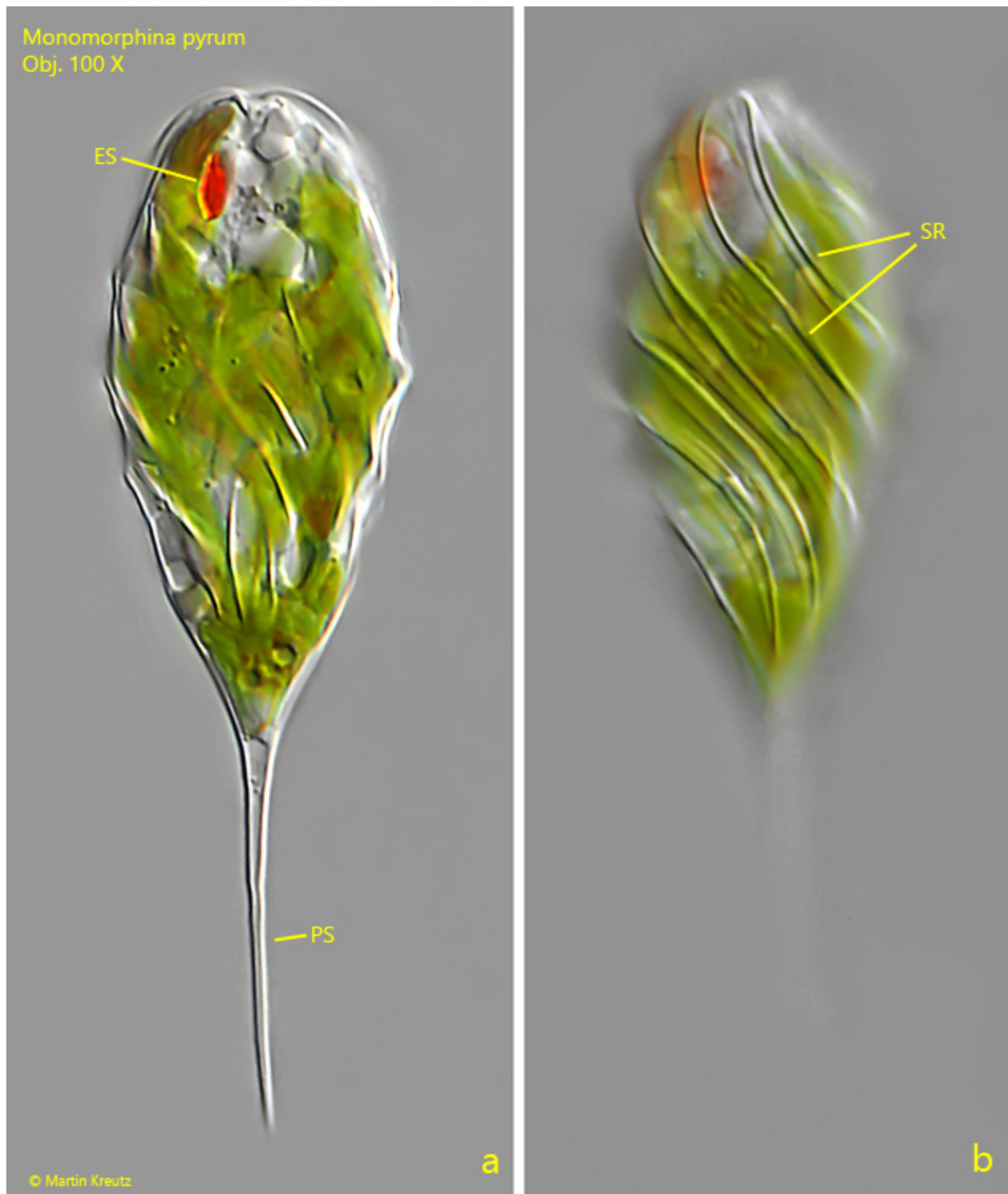


Fig. 3 a-b: *Monomorphina pyrum*. L = 65 μ m. Two focal planes of a squashed specimen. PS = posterior spine, SR = spiral ribs running counterclockwise. Obj. 100 X.