Phacus longicauda

(Ehrenberg) Dujuardin, 1841

Most likely ID: n.a.

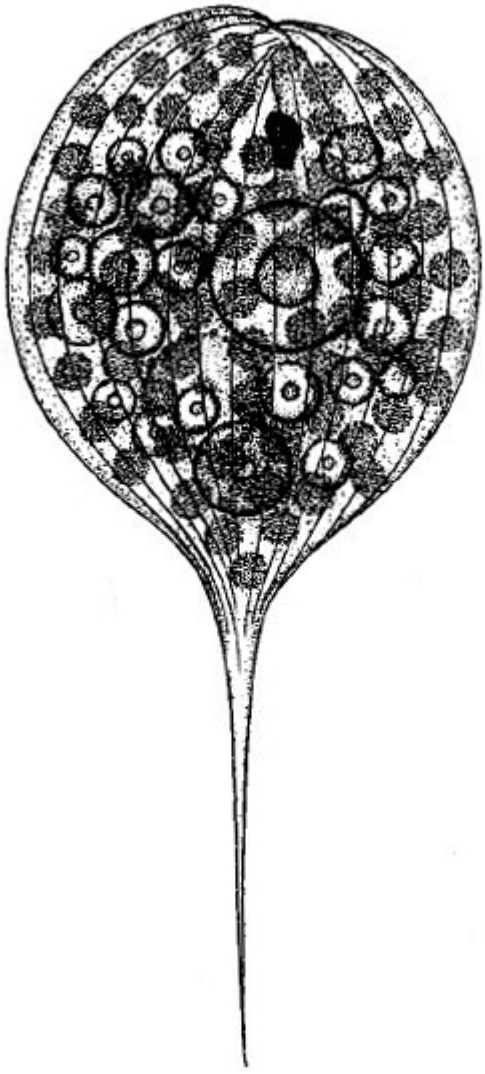
Synonym: n. a.

Sampling location: Simmelried

Phylogenetic tree: ***Phacus longicauda***

Diagnosis:

- cell obovoid or pear-shaped with a long caudal extension
- usually slightly twisted
- length 85–170 µm
- pellicle longitudinally striated
- chloroplasts disc-shaped
- flagellum half of body length
- eyespot prominent
- usually one large paramylon body, centrally located
- nucleus eccentric



after Skuja

Phacus longicauda

Phacus longicauda is one of the most common representatives of the genus *Phacus* in my sites. I find it in the upper layer of mud but also in floating plant masses. Because of the long spine the species can hardly be confused. Sometimes slightly twisted specimens occur (s. fig. 4 a-b), but they are never as twisted as *Phacus tortus*, whose cell is twisted by 360°.

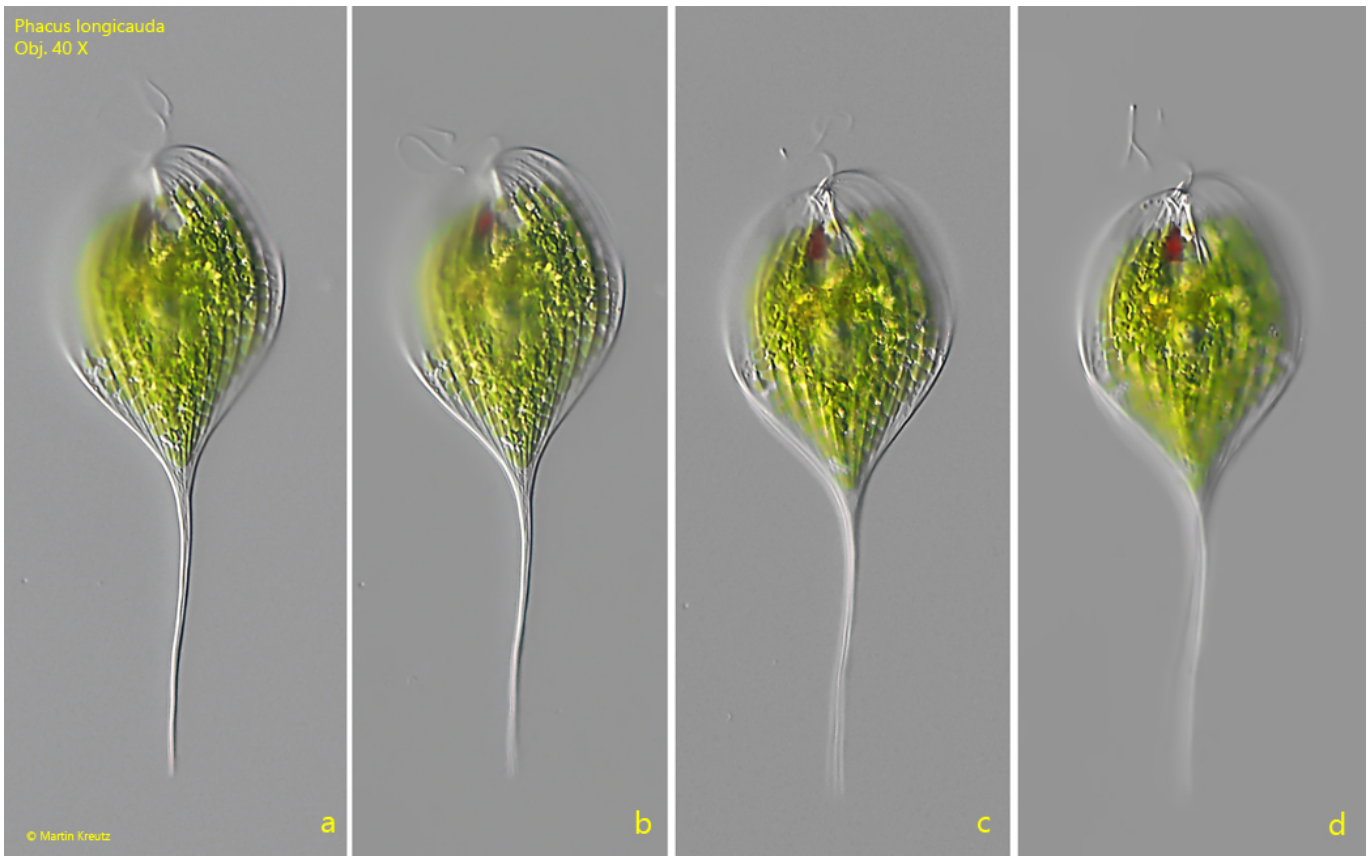


Fig. 1 a-d: *Phacus longicauda*. L = 138 µm. Different focal planes of a freely swimming specimen. Obj. 40 X.

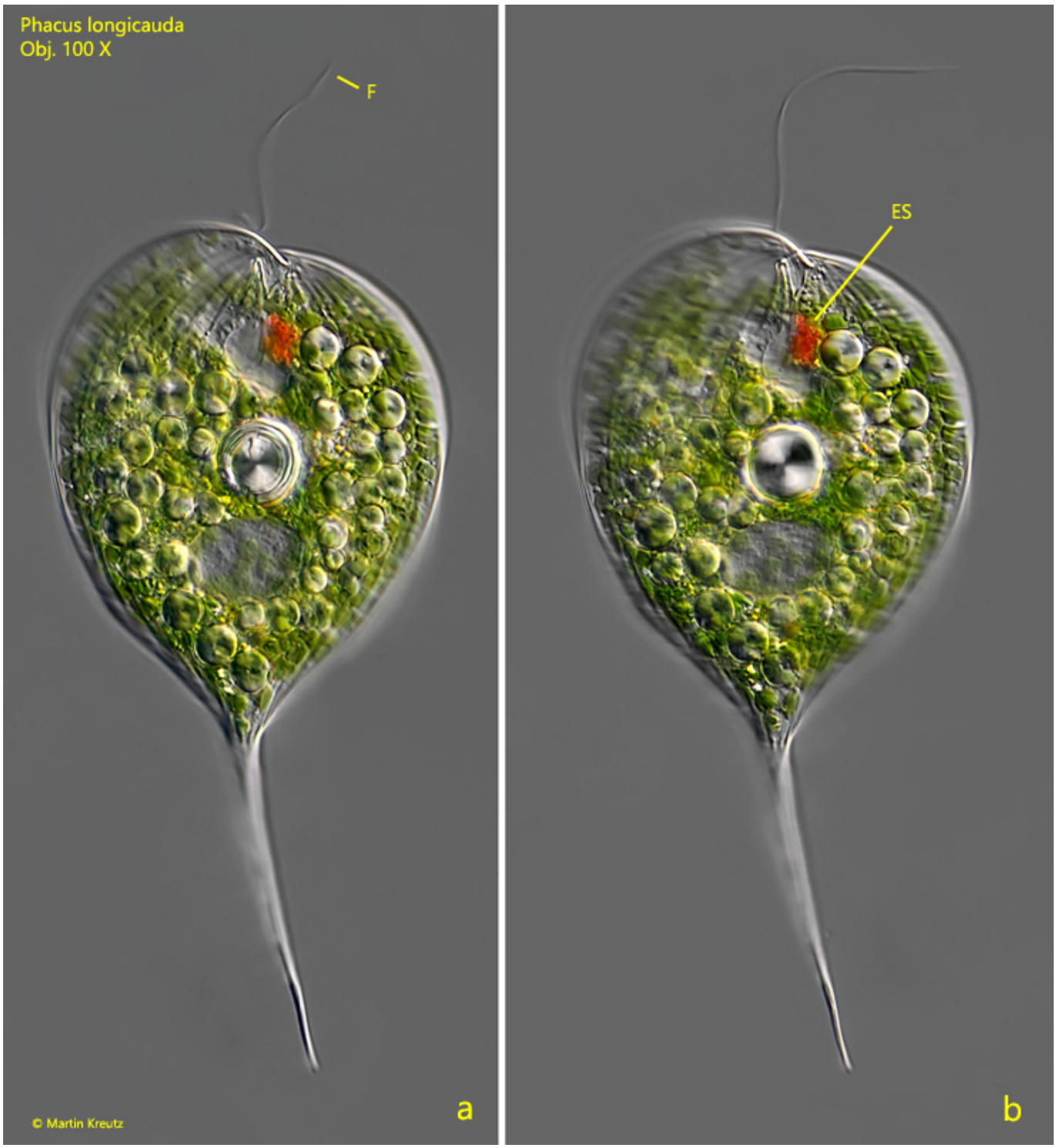


Fig. 2 a-b: *Phacus longicauda*. L = 147 µm. Two focal planes of a slightly squashed specimen. ES = eyespot, F = flagellum. Obj. 100 X.

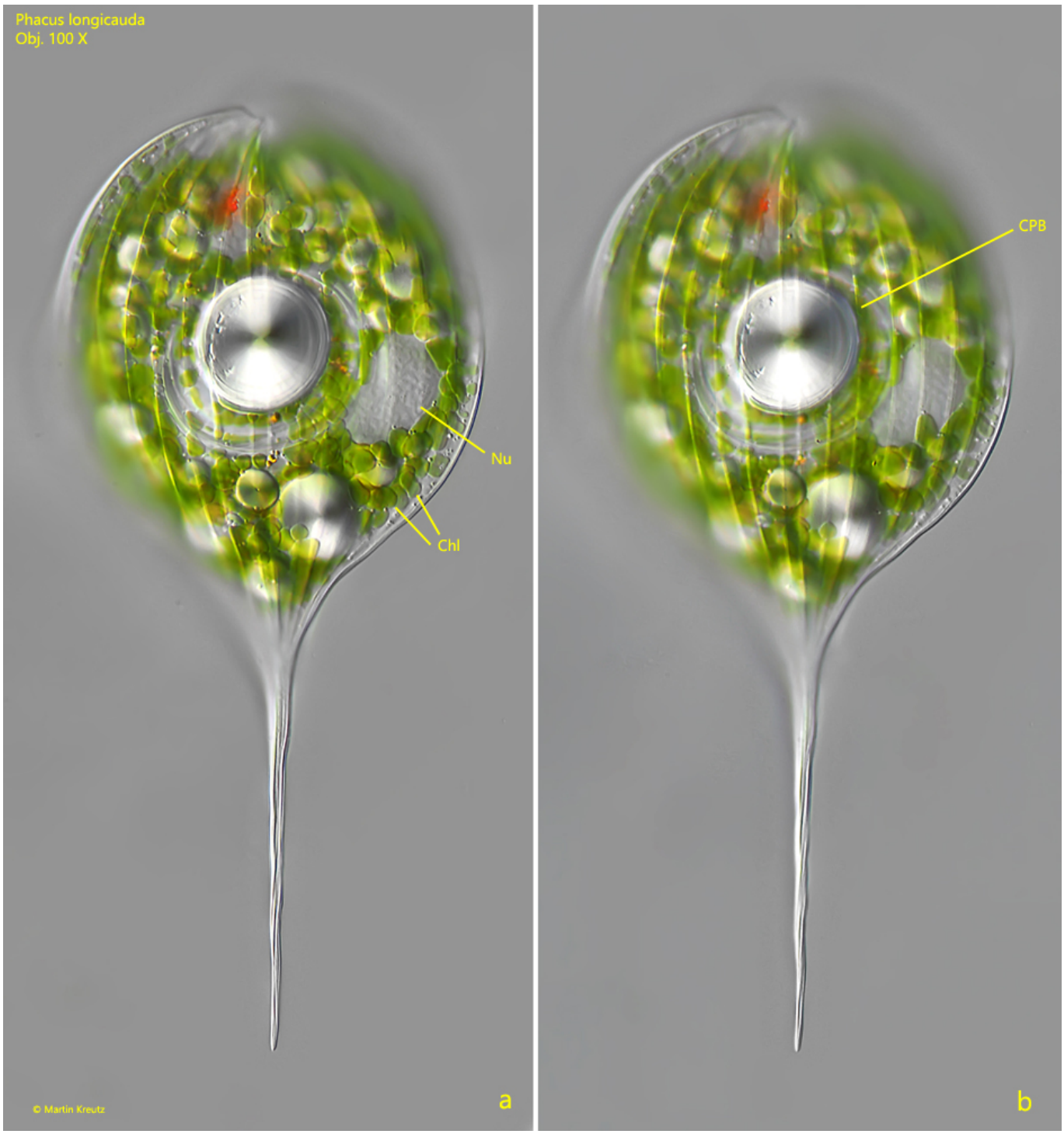


Fig. 3 a-b: *Phacus longicauda*. L = 151 µm. Two focal planes of a second, slightly squashed specimen. Chl = disc-shaped chloroplasts, CPB = central paramylon body, Nu = nucleus. Obj. 100 X.

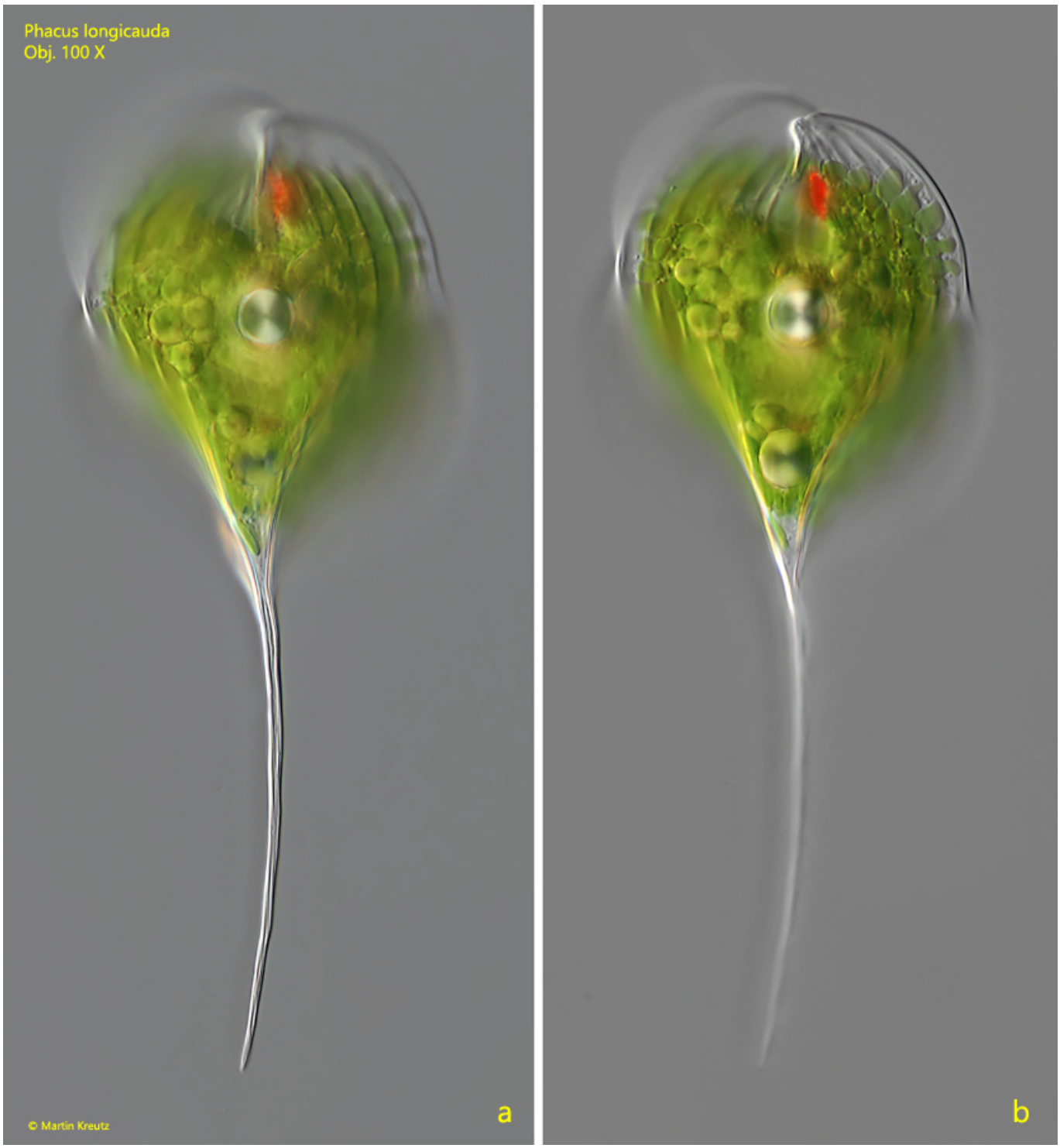


Fig. 4 a-b: *Phacus longicauda*. L = 135 µm. Two focal planes of a slightly twisted specimen. Obj. 100 X.