## Phacus caudatus Hübner, 1886

Most likely ID: n.a.

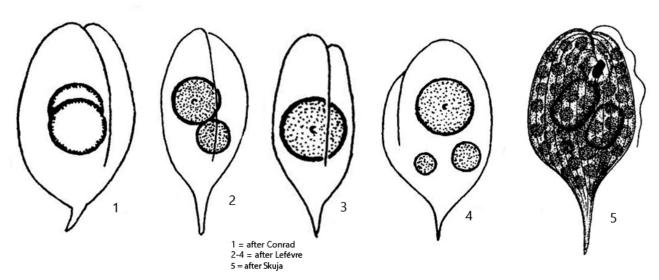
Synonym: n.a.

Sampling location: Simmelried, Ziegelhof pond

Phylogenetic tree: Phacus caudatus

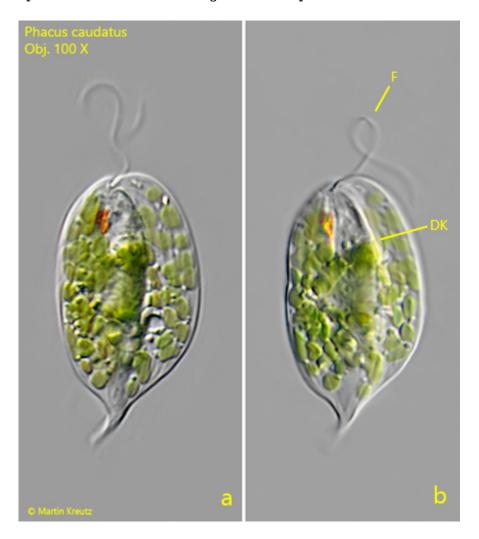
## **Diagnosis:**

- cell pear-shaped or ovoid, dorso-ventrally flattened
- dorsal keel with length of cell
- length 31-50 μm, width 15-27 μm
- 1-2 prominent paramylon bodies, oval or circular
- chloroplasts disc-shaped
- posterior end tapering continuously into a short caudal spine
- caudal spine, 5-11 µm long, straight or slightly curved
- one flagellum, about body length
- pellicle longitudinally striated
- eyespot present



Phacus caudatus

I regularly find *Phacus caudatus*, but usually only isolated cells. I recognize the species mainly by the short caudal spine, which is formed by a continuous tapering of the posterior end and which is mostly straight or only slightly bent. Also, this species has a dorsal keel that is very pronounced and runs along the entire cell (s. figs. 1 b and 2 d). The cell shape is quite variable. I have found slender, almost parallel-sided specimens. In my population the specimens were never longer than 45 µm.



**Fig. 1 a-b:** *Phacus caudatus.*  $L = 37 \mu m$ . Two focal planes of a freely swimming specimen from dorsal. Note the dorsal keel (DK) running along the whole cell. F = flagellum. Obj. 100 X.

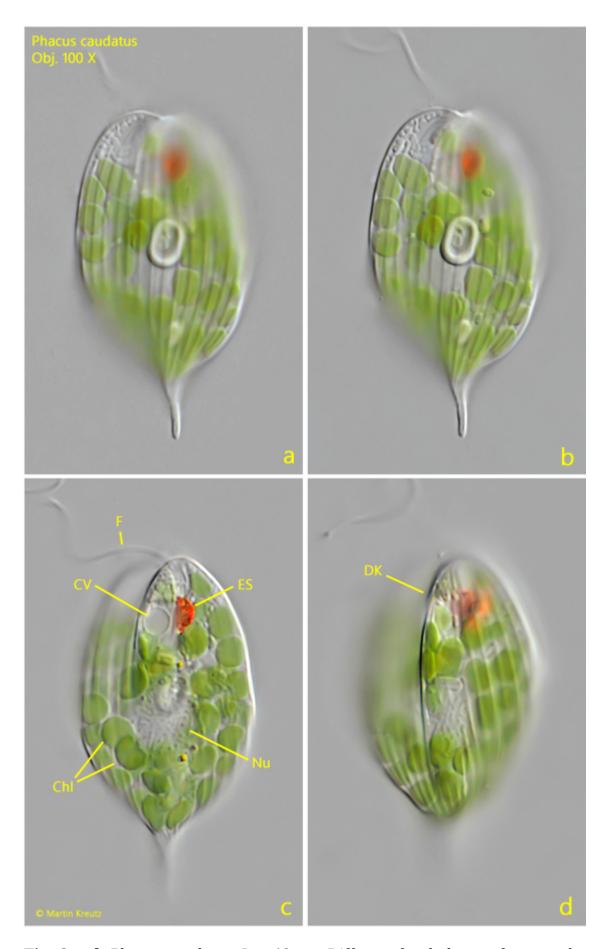


Fig. 2 a-d: Phacus caudatus.  $L=43~\mu m$ . Different focal planes of a second specimen from ventral. Chl = disc-shaped chloroplasts, CV = contractile vacuole, DK = dorsal keel, ES = contractile vacuole, DK = contractile vacuole, D

eyespot, F = flagellum, Nu = nucleus. Obj. 100 X.