

***Phacus caudatus* Hübner, 1886**

**Most likely ID:** n.a.

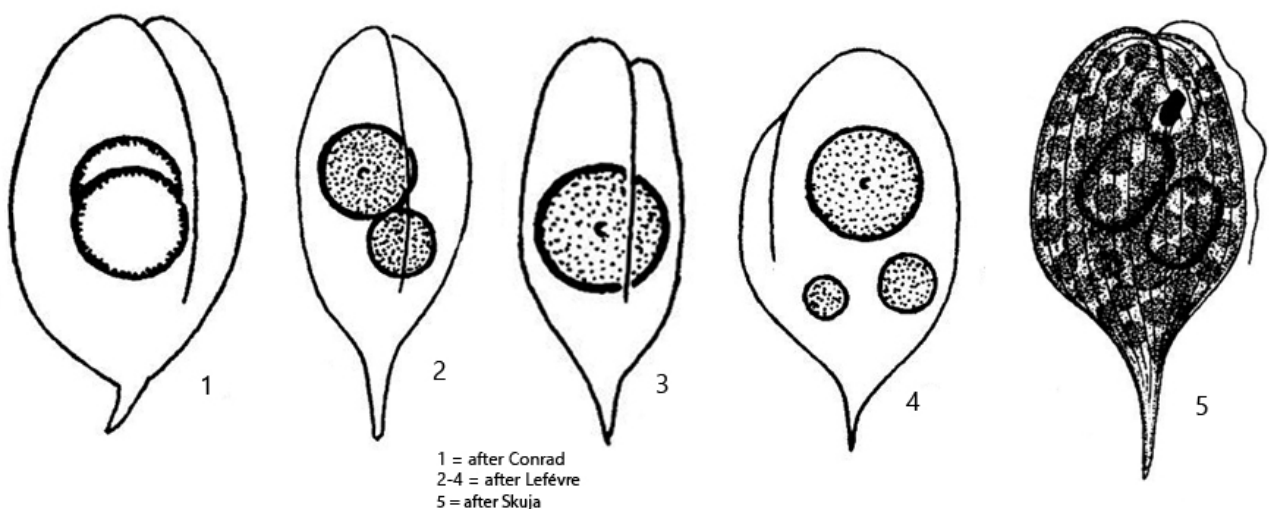
**Synonym:** n.a.

**Sampling location:** [Simmelried](#), [Ziegelhof pond](#)

**Phylogenetic tree:** [Phacus caudatus](#)

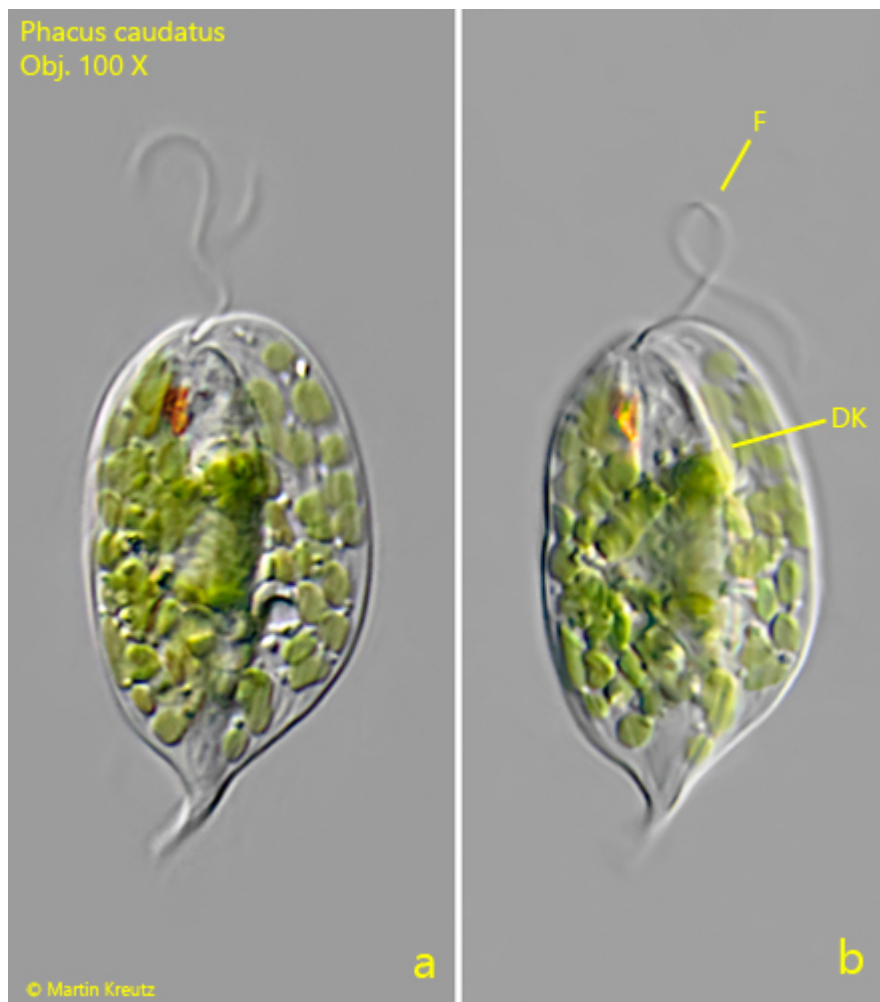
**Diagnosis:**

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

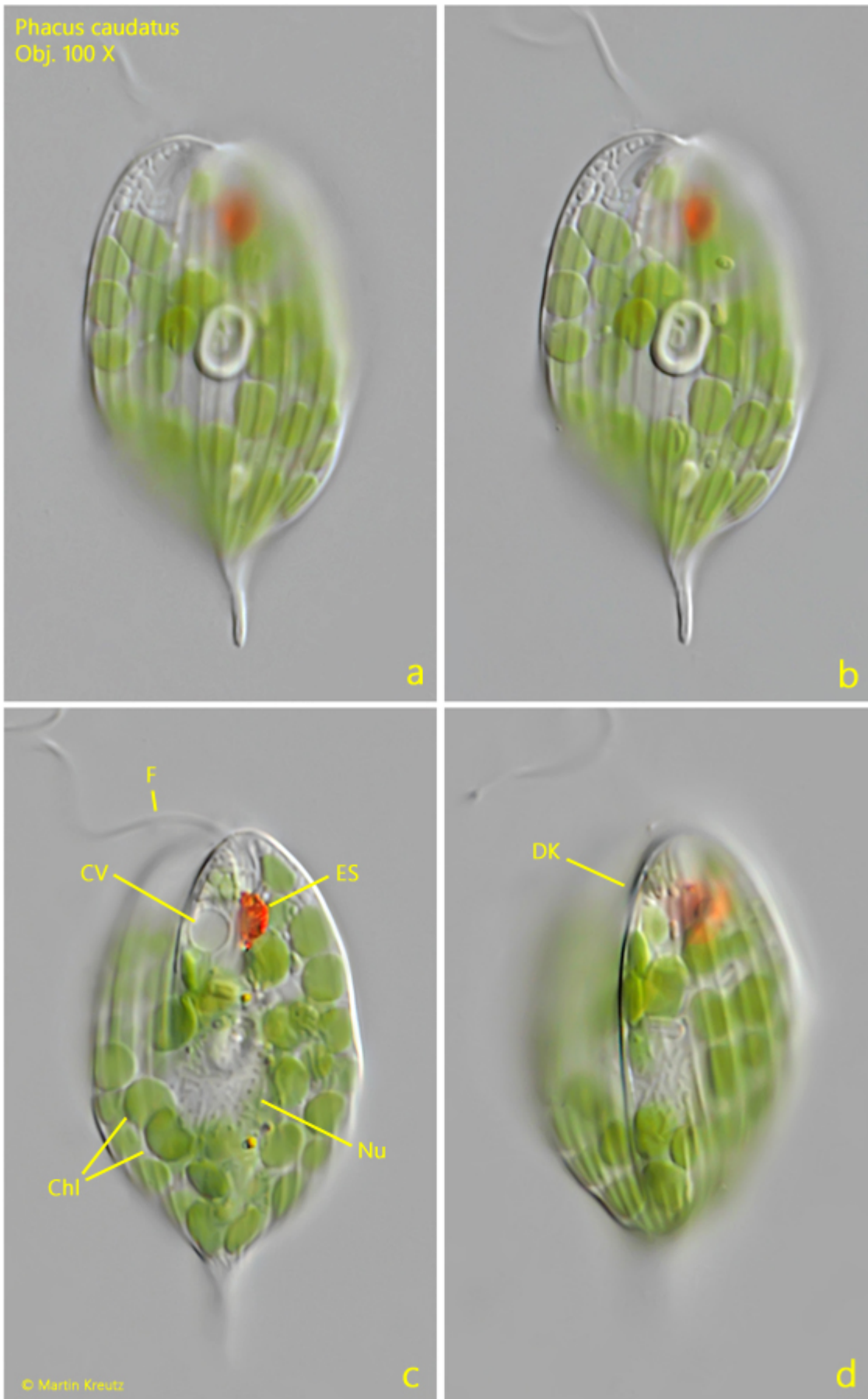


*Phacus caudatus*

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  $\mu\text{m}$ .



**Fig. 1 a-b:** *Phacus caudatus*. L = 37  $\mu\text{m}$ . 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. In figs. c and d is the focal plane on the dorsal side. Chl =

disc-shaped chloroplasts, CV = contractile vacuole, DK = dorsal keel, ES = eyespot, F = flagellum, Nu = nucleus. Obj. 100 X.