## Chilodonella caudata (Stokes, 1885)

Most likely ID: n.a.

Synonym: n.a.

Sampling location: Mainau pond, Simmelried

Phylogenetic tree: Chilodonella caudata

## **Diagnosis**:

- body oval with anterior left-hand rostrum
- rostrum protrudes at a right angle
- dorso-ventrally flattened
- length about 42  $\mu m$
- a distinct caudal spine on dorsal side
- a curved dorsal brush in the center of the anterior fourth
- ventral ciliation of *Chilodonella* type
- several contractile vacuoles
- oval macronucleus in posterior half
- one spherical micronucleus adjacent to macronucleus



Chilodonella caudata

I regularly find *Chilodonella caudata* in samples with decomposing plant masses and on the <u>floating coverslip</u>. The species can be easily recognized by two features. Firstly, the rostrum on the left protrudes at an almost right angle (s. fig. 1 a-d) and there is a conspicuous spine located on the posterior end of the dorsal side (s. figs. 4 and 5 a-c).

*Chilodonella caudata* has only rarely been described so far. Kahl reports that the ventral side has not yet been examined. I therefore assume that Kahl did not find *Chilodonella caudata* himself, but took over the description from Stokes. I was able to examine the ventral side in detail in a squashed specimen (s.e figs. 2 a-b and 3 a). It is characteristic of the genus *Chilodonella* with a continuous pre-oral kinety, three circumoral kineties and a left and right field of cilia framing a naked midfield. The specimens in my population were between 36–50  $\mu$ m long. There are several contractile vacuoles present (at least 5, s. fig. 8 a-c) as described by Kahl.

More images and information on *Chilodonella caudata*: <u>Michael Plewka-Freshwater life-</u> <u>*Chilodonella caudata*</u>



Fig. 1 a-d: Chilodonella caudata. L = 47  $\mu$ m. A freely gliding specimen from ventral. RO = rostrum. Obj. 60 X.



**Fig. 2 a-b:** *Chilodonella caudata*.  $L = 49 \mu m$ . Two focal planes from the ventral side. Note the pre-oral kinety (POK) and the circumoral kineties (COK). CP = cytopharynx. Obj. 100 X.



**Fig. 3 a-b:** *Chilodonella caudata*. Two focal planes from the ventral side of a squashed specimen. The ciliation of the ventral side is divided in a left field of cilia (LFC) and a right field of cilia (RFC) while the middle is naked. BT = basket of trichites, Ma = macronucleus, Mi = micronucleus, POK = pre-oral kinety. Obj. 100 X.



**Fig. 4:** *Chilodonella caudata*. Lateral view from the right side. Note the distinct caudal spine (CS) on the dorsal side. Obj. 100 X.



**Fig. 5 a-c:** *Chilodonella caudata*.  $L = 37 \mu m$ . Dorsal view of a freely gliding specimen with the distinct caudal spine (CS). DB = dorsal brush. Obj. 100 X.



**Fig. 6 a-c:** Chilodonella caudata.  $L = 37 \mu m$ . The slightly squashes specimen as shown in fig. 5 a-c with focal plane on the dorsal brush (DB). The dorsal brush is located in a depression of the pellicle. Obj. 100 X.



**Fig. 7 a-b:** Chilodonella caudata.  $L = 49 \mu m$ . Focal plane on the dorsal brush (DB) from the ventral side. Obj. 100 X.



**Fig. 8 a-c:** Chilodonella caudata.  $L = 44 \mu m$ . Ventral view with focal plane on the contractile vacuoles. In this specimen five contractile vacuole (arrows) are visible. Obj. 100 X.