Collotheca libera Zacharias, 1894

Most likely ID: n.a.

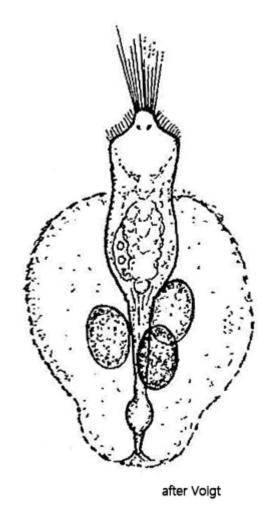
Synonym: n.a.

Sampling location: Lake Constance

Phylogenetic tree: Collotheca libera

Diagnosis:

- body slender, cylindrical
- corona with 2 lobes, not wider than body
- dorsal lobe with brush of elongated cilia
- foot slender and long with thickened distal end
- length 120-170 μm
- in a gelatinuous case (broad oval or bell-shaped)
- 2 eyespots in dorsal lobe, with lenses
- free-swimming, planktonic lifestyle



Collotheca libera

I have only found a single specimen of *Collotheca libera* in the plankton of <u>Lake Constance</u> in August 1998. After that I have not recorded any further finds.

The specimen of *Collotheca libera* that I found has a bell-shaped gelatinuous case that protrudes far from the body (s. fig. 2). This variety was named Collotheca libera var. campanulata by Linder in 1904. The nominal form has a broadly oval shell (s. drawing above) with a tapered posterior end.

Among the pelagic *Collotheca* species, *Collotheca libera* is the smallest form. In addition to the bulbous or bell-shaped casel, a tuft of elongated cilia on the dorsal lobe is a characteristic feature of this species. There are also two eyespots with lenses in the dorsal lobe. The unfertilized, amictic eggs are also laid in the case. The corona is typical and consists of only two lobes, which are not wider than the body. The base is always thickened in an onion-shape at the distal end.

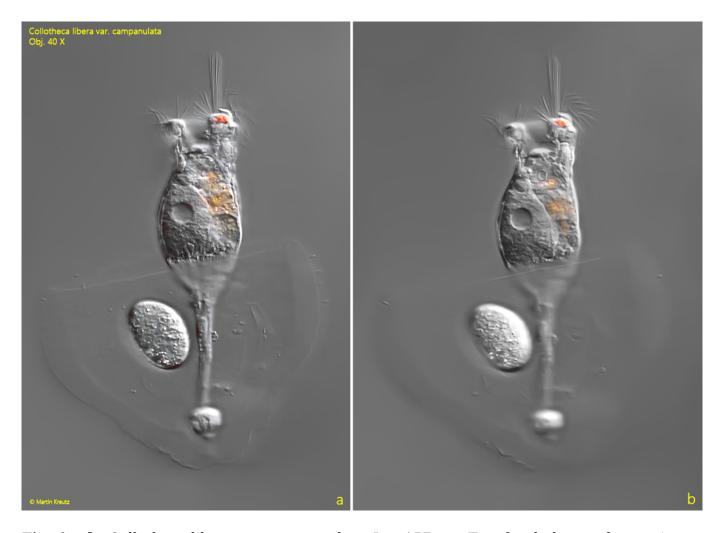


Fig. 1 a-b: Collotheca libera var. campanulata. $L=157~\mu m$. Two focal planes of a specimen found in August 1998 in Lake Constance. Obj. 40 X.

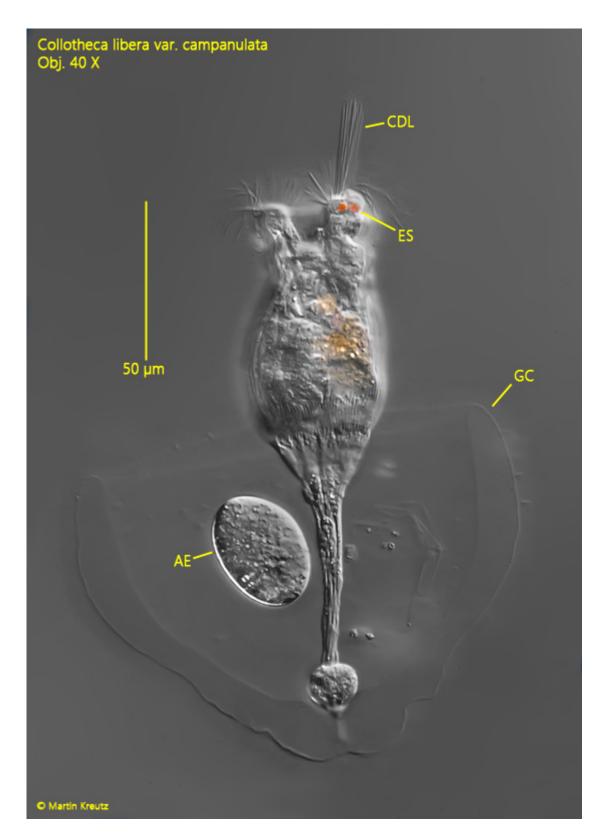


Fig. 2: Collotheca libera var. campanulata. $L=157~\mu m$. The same specimen as shown in fig. 1 a-b with focal plane on the amictic egg (AE) deposited in the bell-shaped gelatinuous case (GC). CDL = brush of elongated cilia of the dorsal lobe, ES = pair of eye spots. Obj. 40 X.