Coleps amphacanthus (Ehrernberg, 1834)

Most likely ID: n.a.

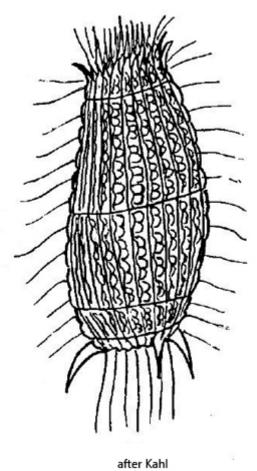
Synonym: n.a.

Sampling location: Simmelried, Purren pond, Mainau pond, Bussenried, Bündtlisried, Ulmisried, Mühlhalden pond

Phylogenetic tree: Coleps amphacanthus

Diagnosis:

- body asymmetrical sac-shaped, sometimes barrel-shaped
- length 70-90 μm
- 3 posterior spines
- 4 anterior spines
- uniform ciliation
- 24-28 longitudinal rows of plates
- "windows" in armour pretzel-shaped
- anterior main plate with 5 "windows"
- posterior main plate with 4 "windows"
- 4-8 caudal cilia
- · macronucleus spherical in mid-body
- apical mouth opening with basket of pharyngeal trichites
- contractile vacuole subterminal



Coleps amphacanthus

I find Coleps amphacanthus very common in almost all of my sampling locations. This member of Coleps is slightly larger than the other Coleps species and is conspicuous by its sac-shape, even at small magnifications. Furthermore, this species has 4-8 caudal cilia (s. figs. 1 a and 2 b). The windows in the armour are pretzel-shaped as in *Coleps hirtus*. However, Coleps amphacanthus has 5 windows in the anterior main plate and only 4 windows in the posterior main plate (s. fig. 4 a) while *Coleps hirtus* has only 4 windows in each of the two main plates.

Coleps amphacanthus is a scavenger that quickly gathers on dead or injured protozoans or metazoans. This process is probably controlled by chemotaxis, with *Coleps amphacanthus* following the concentration gradient to the prey.

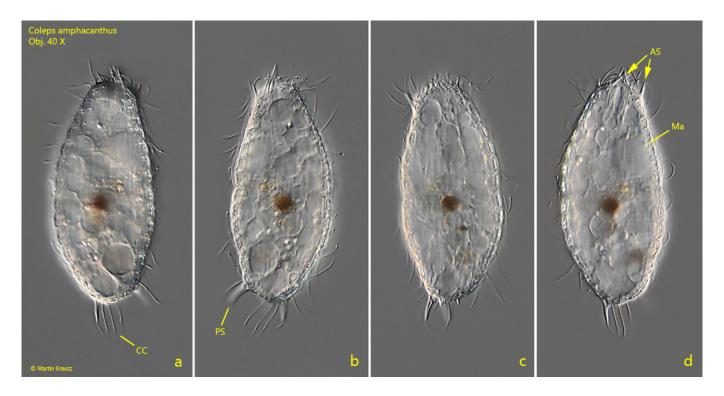


Fig. 1 a-d: Coleps amphacanthus. $L = 85 \mu m$. A freely swimming specimen. AS = anterior spiones, CC = caudal cilia, Ma = macronucleus. PS = posterior spines. Obj. 40 X.

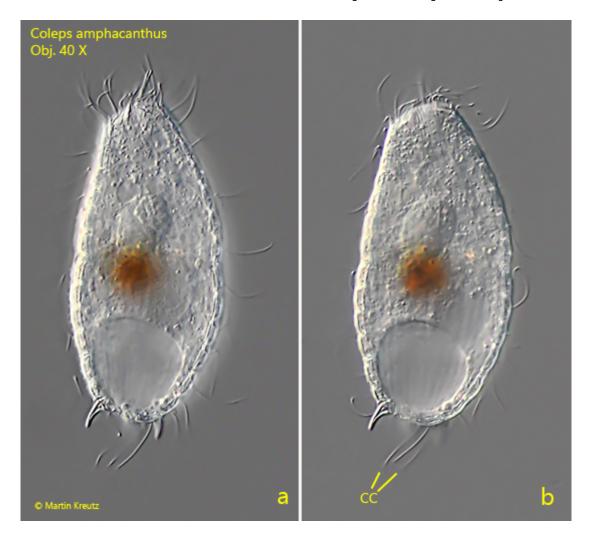


Fig. 2 a-b: Coleps amphacanthus. $L = 83 \mu m$. A second freely swimming specimen. CC =caudal cilia. Obj. 40 X.

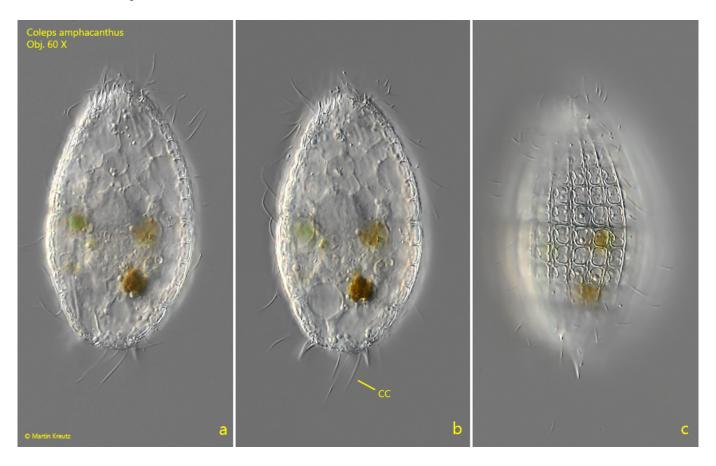


Fig. 3 a-c: Coleps amphacanthus. $L=80~\mu m$. Different focal planes of a slightly squashed specimen. CC = caudal cilia. Obj. 60 X.

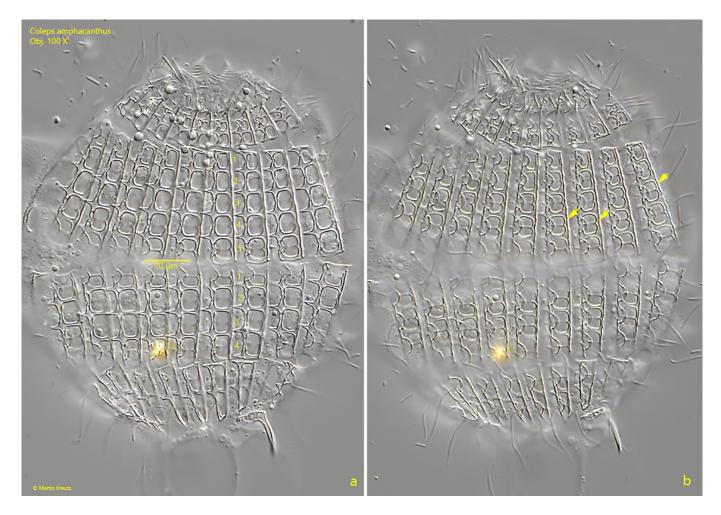


Fig. 4 a-b: Coleps amphacanthus. Two focal planes of the armour in a strongly squashed specimen. The anterior main plate has 5 "windows" (1-5) while the posterior main plate has only 4 "windows" (1-4). The windows are pretzel-shaped (arrows). Obj. $100~\mathrm{X}$.