## Coleps hirtus Nitzsch, 1817

Most likely ID: n.a.

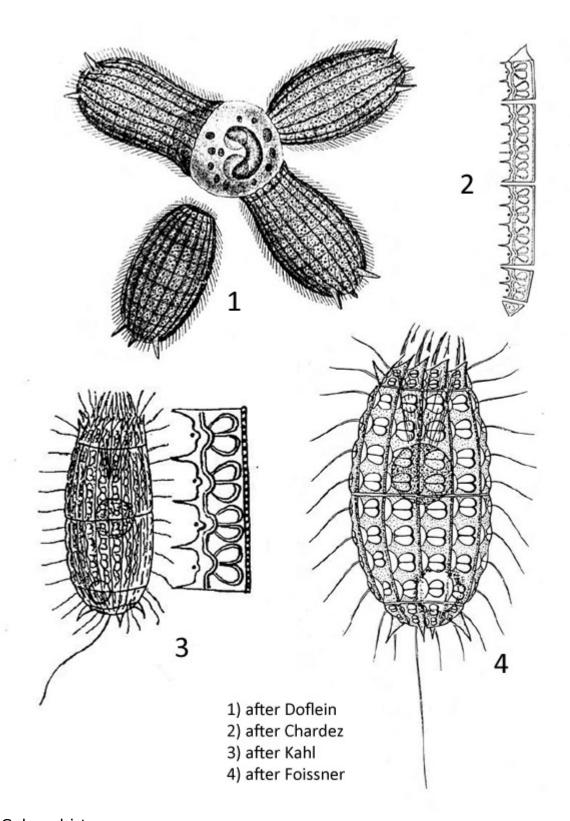
Synonym: n.a.

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

Phylogenetic tree: Coleps hirtus

## **Diagnosis:**

- length 40-65 μm
- cell barrel-shaped
- CV terminal
- uniform ciliation
- 15-20 longitudinal rows of plates
- anterior and posterior main plate with 4 "windows" each
- one caudal cilium
- macronucleus spherical
- · apical mouth opening with basket
- three spines at posterior end
- shape of the "windows" in the armour pretzel-shaped



## Coleps hirtus

Coleps hirtus is one of the most common ciliates ever. I find it throughout the year in all my localities. With low magnifications (< Obj. 40X) the identification can be difficult. Confusion with other Coleps species is then not impossible. Therefore the investigation of the plates and form of the "windows" in the armour with the 100 X lens is necessary. Coleps hirtus has clearly pretzel-shaped windows in the armour. Also, the number of caudal cilia should be checked in any case. There should be

only one caudal cilium. The "windows" of *Coleps hirtus* are pretzel-shaped, like in *Coleps elongatus*. However, *Coleps elongatus* has 5 "windows" in a row per half cell, while *Coleps hirtus* has only 4 "windows" per half cell (s. fig. 6).

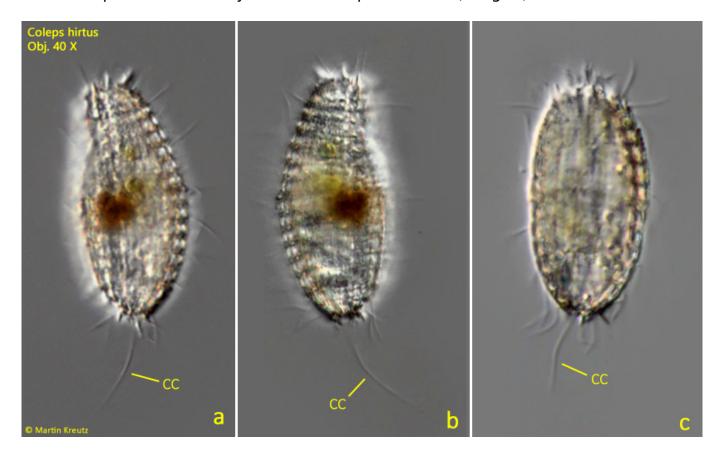


Fig. 1 a-c: Coleps hirtus.  $L=67~\mu m$ . A freely swimming specimen. CC= caudal cilium. Obj. 40 X.

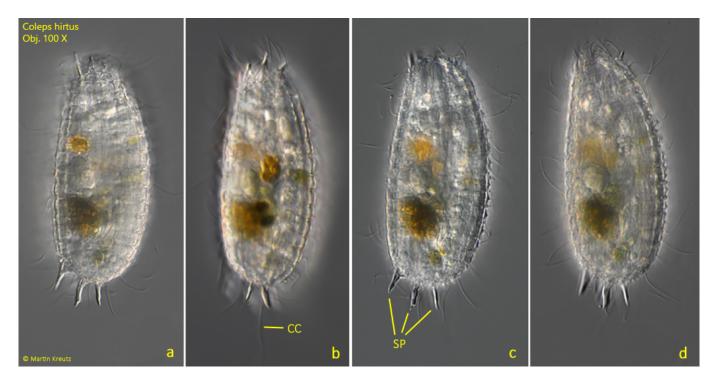


Fig. 2 a-d: Coleps hirtus.  $L=62~\mu m$ . A second freely swimming specimen. CC=

caudal cilium, SP = posterior spines. Obj. 100 X.

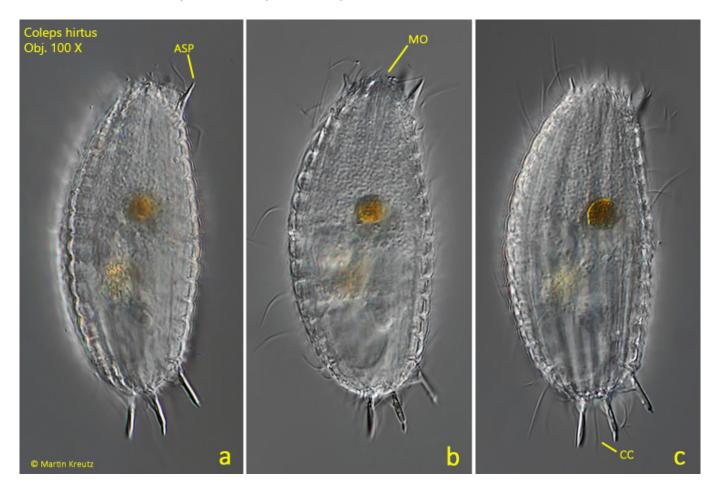


Fig. 3 a-c: Coleps hirtus. L = 71  $\mu m$ . A third freely swimming specimen. ASP = apical spines, CC = caudal cilium, MO = mouth opening. Obj. 100 X.

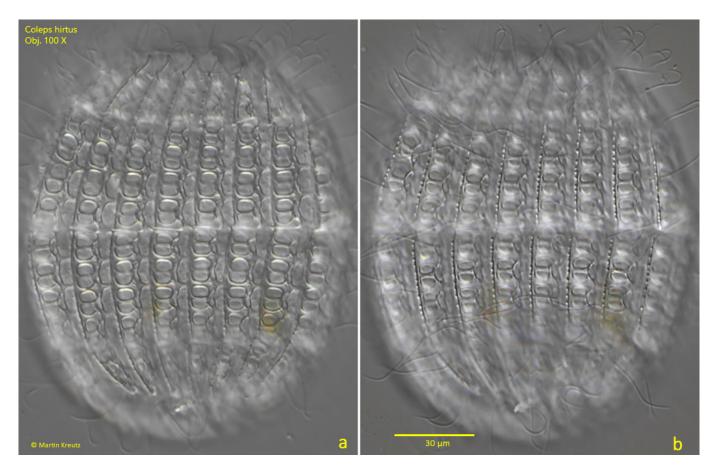


Fig. 4: Coleps hirtus. Two focal planes on the plates of the armour of a squashed specimen. Obj. 100 X.

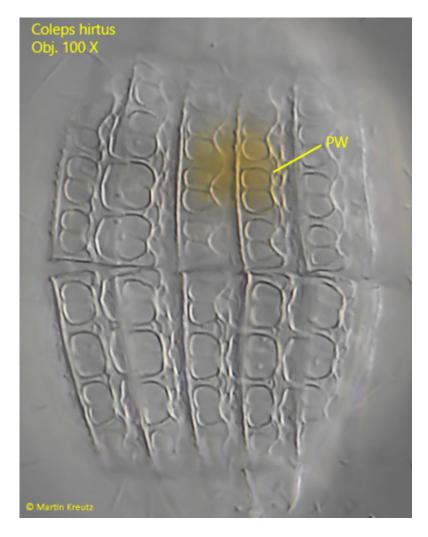


Fig. 5: Coleps hirtus. The pretzel-shaped "windows"(PW) in the armour of a squashed specimen. Obj. 100 X.



Fig. 6: Coleps hirtus. In the anterior main plate as well as in the posterior main plate are 4 "windows" (1-4) each. Obj. 100 X.