

## ***Coleps hirtus* (Nitzsch, 1817)**

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

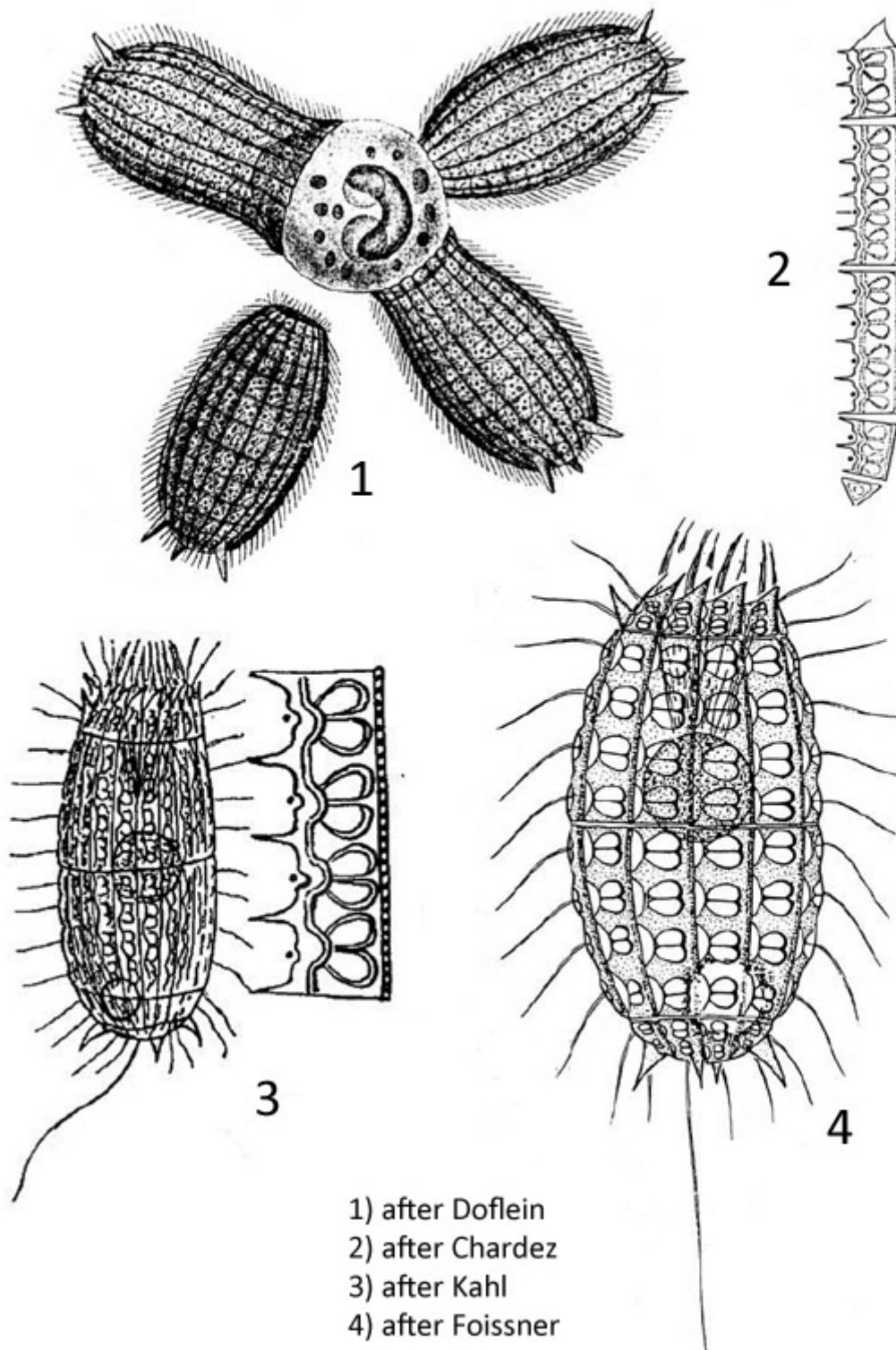
**Synonym:** n.a.

**Sampling location:** [Simmelried](#), [Purren pond](#), [Mainau pond](#), [Bussenried](#), [Bündtlisried](#), [Ulmisried](#), [Mühlhalden pond](#)

**Phylogenetic tree:** [Coleps hirtus](#)

### **Diagnosis:**

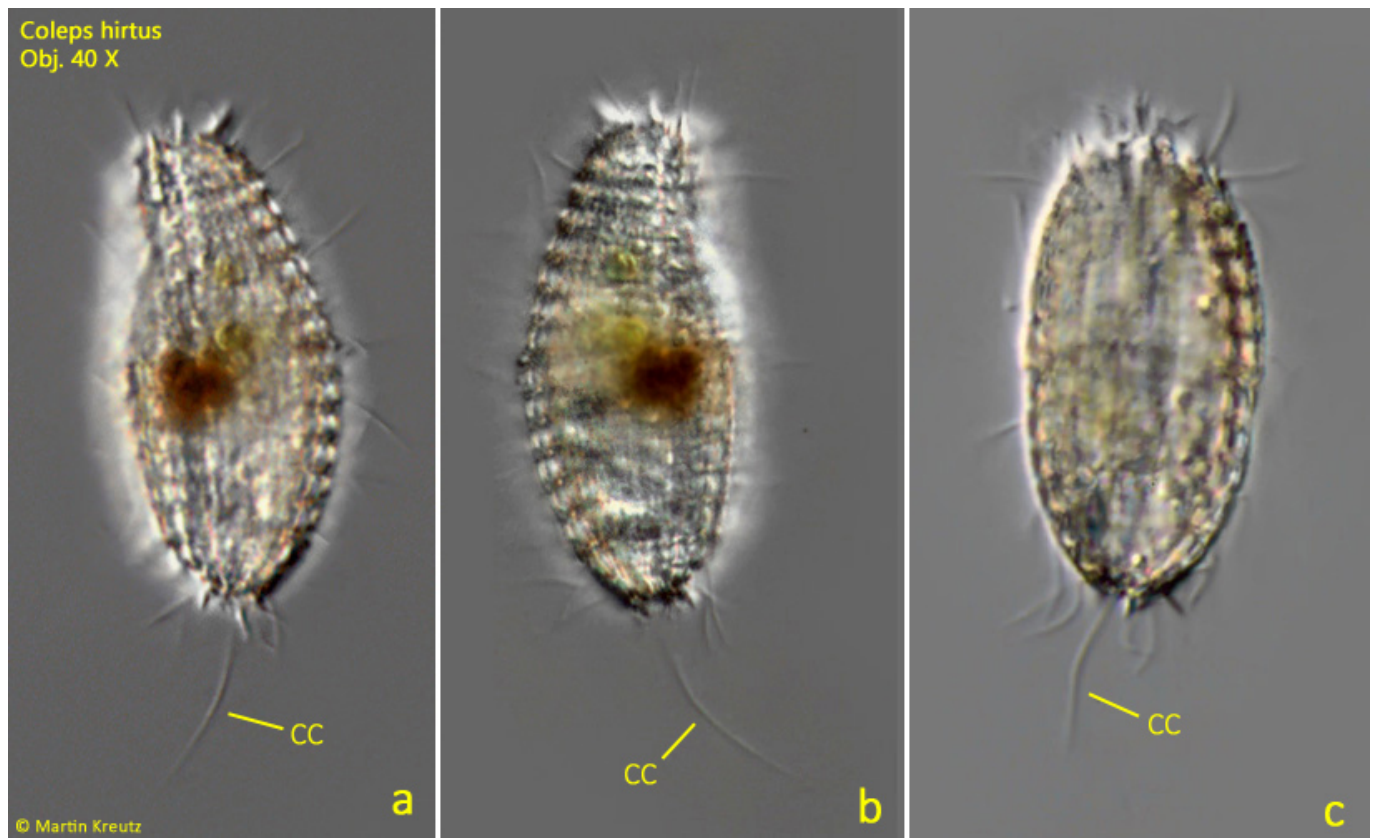
- length 40-65 µm
- cell barrel-shaped
- CV terminal
- uniform ciliation
- 15-20 longitudinal rows of plates
- anterior and posterior main plate with each 4 “windows”
- one caudal cilium
- macronucleus spherical
- apical mouth opening with basket
- three spines at posterior end
- shape of the “windows”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



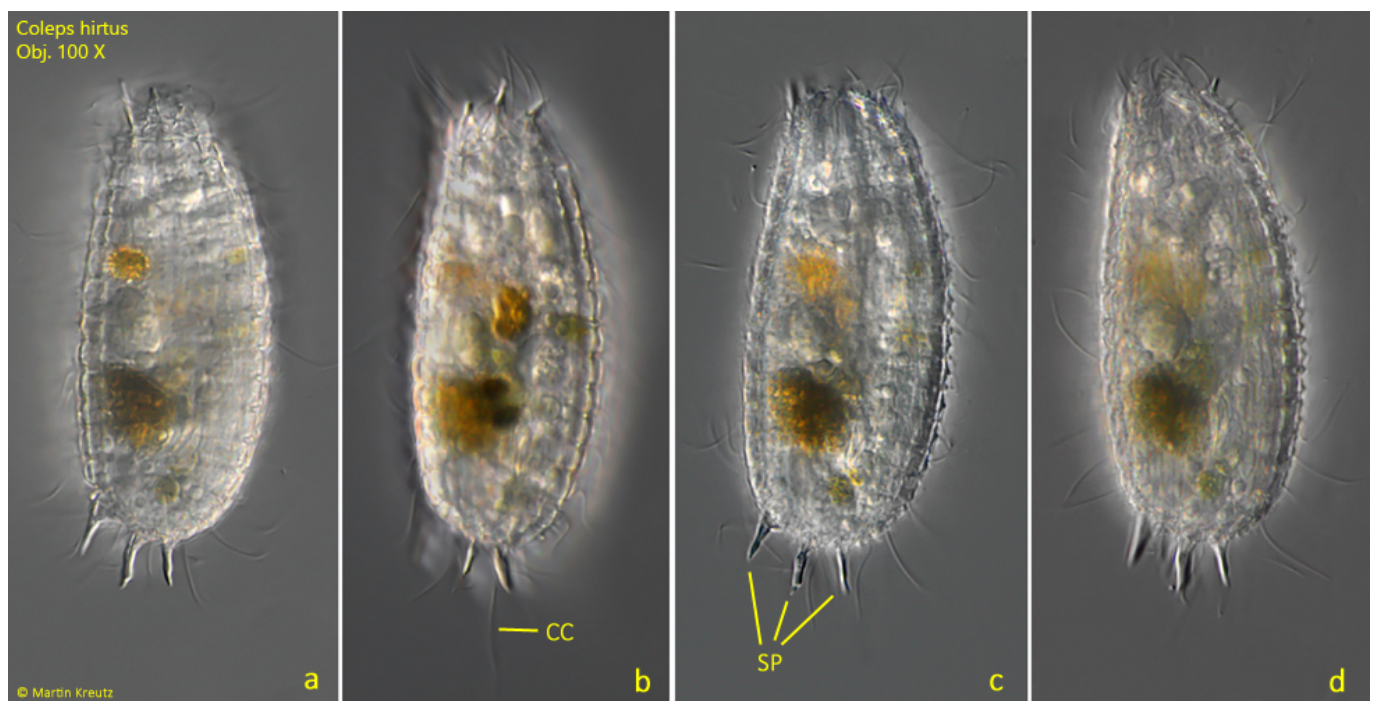
### Coleps hirtus

*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).

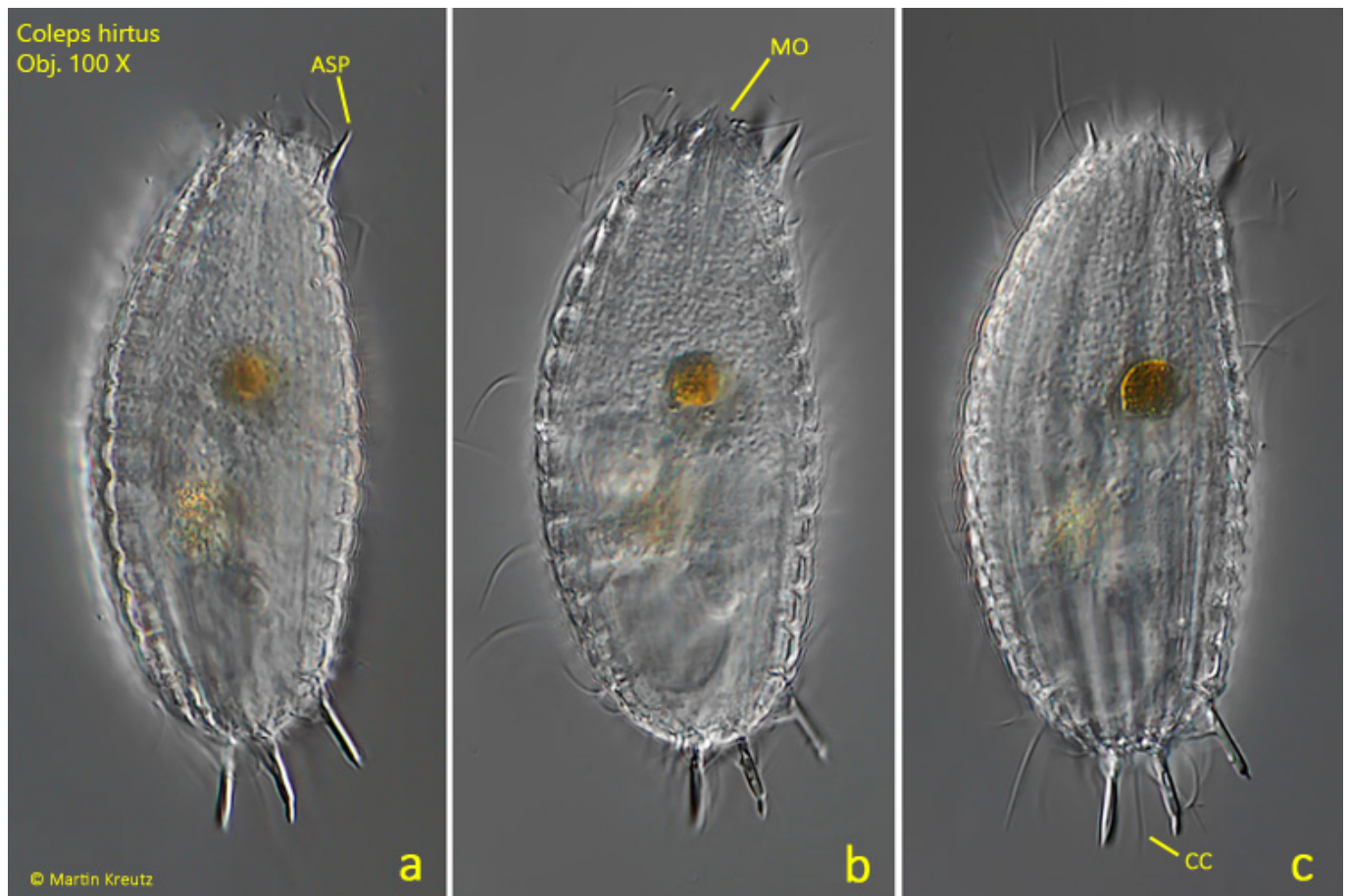


**Fig. 1 a-c:** *Coleps hirtus*. L = 67  $\mu$ m. A freely swimming specimen. CC = caudal cilium. Obj. 40 X.



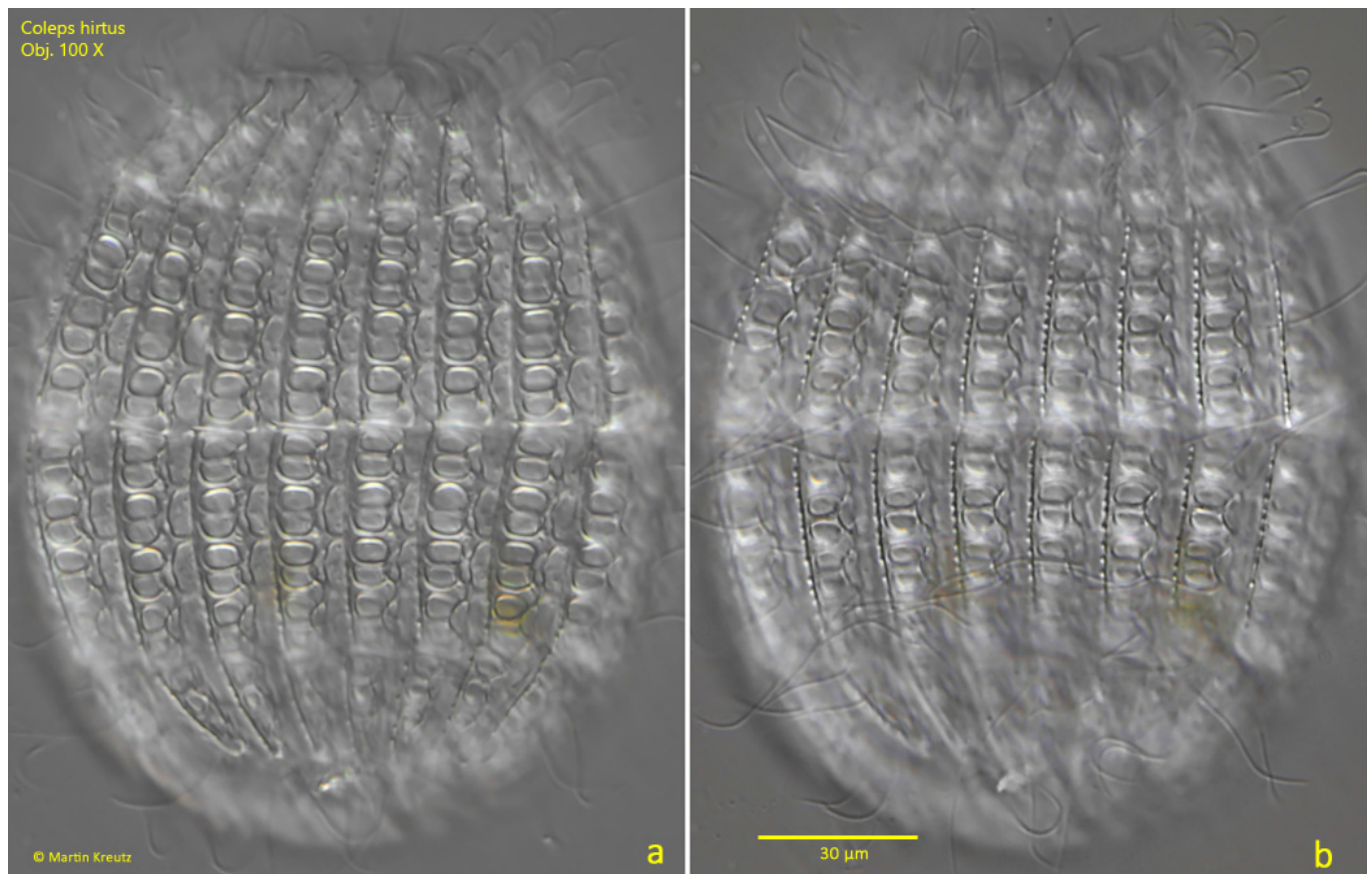
**Fig. 2 a-d:** *Coleps hirtus*. L = 62  $\mu$ m. A second freely swimming specimen. CC = caudal

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

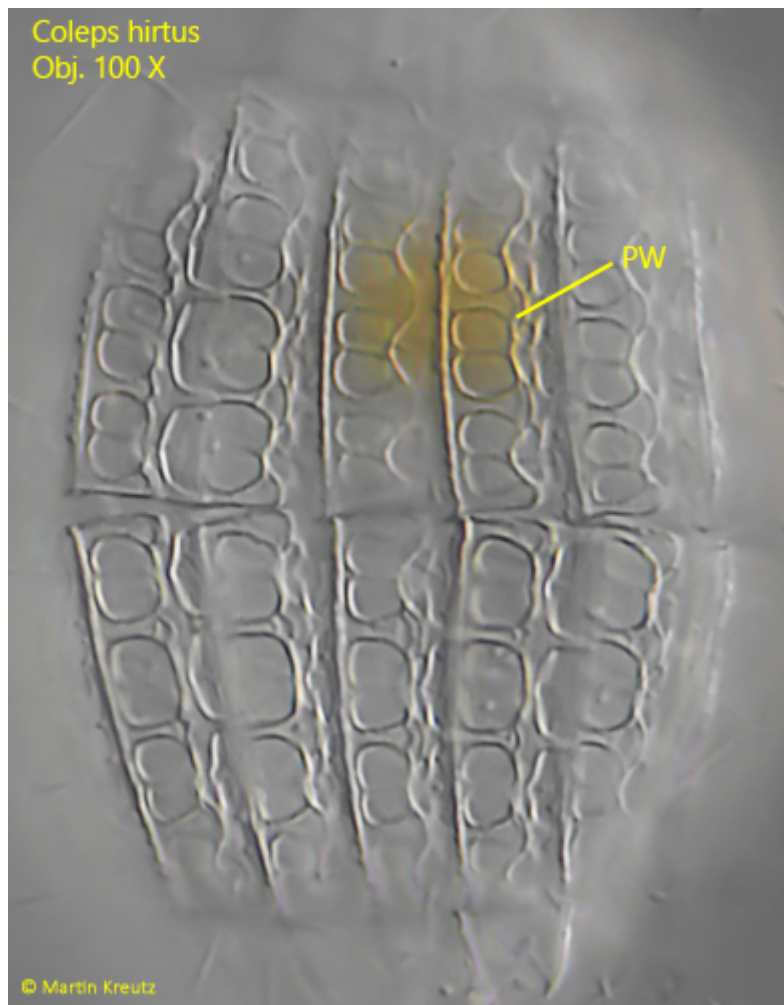


**Fig. 3 a-c:** *Coleps hirtus*. L = 71  $\mu$ m. A third freely swimming specimen. ASP = apical spines, CC = caudal cilium, MO = mouth opening. Obj. 100 X.

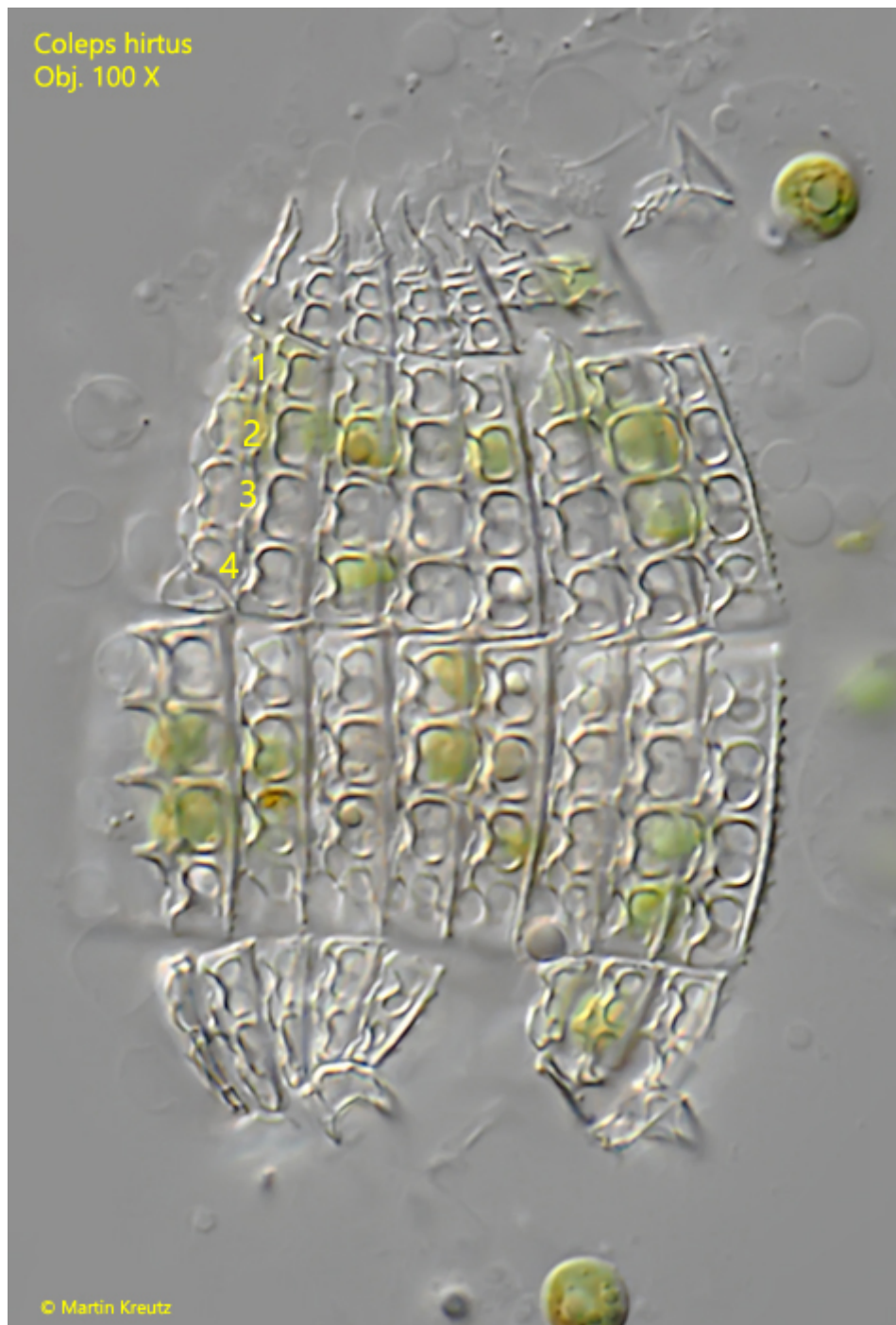




**Fig. 4:** *Coleps hirtus*. Two focal planes on the plates of the armour of a squashed specimen. Obj. 100 X.



**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.