

Cephalodella 1

Most likely ID: *Cephalodella* nov. spec.

Synonym: n.a.

Sampling location: [Pond of the convent Hegne](#)

Phylogenetic tree: n.a.

Diagnosis:

- body elongated, parallel-sided, transparent
- length about 130 μm
- eyespot absent
- trophi with Y-shaped, joined pleural rods
- large cerebral ganglion (reaches the neck)
- stomach yellow or yellow greenish due to ingested algae
- toes about 35 μm long, slightly dorsally curved

No drawings from previous authors available.

In July 2024 I found a few specimens of *Cephalodella 1* in the [pond of the convent Hegne](#). At first I thought this species was *Cephalodella gibboides* (Wulfert, 1950, s. fig. 6), because in the trophi of *Cephalodella 1* I could observe Y-shaped connected pleural rods (s. figs. 4 and 5 a-b). This feature is possessed only by [Cephalodella wrighti](#) (Wulfert, 1960) and *Cephalodella gibboides*. Since [Cephalodella wrighti](#) has only very short toes, my assumption was that my specimens are *Cephalodella gibboides*. However, *Cephalodella 1* shows some essential differences from *Cephalodella gibboides*.

The specimens of *Cephalodella 1* were between 120–140 μm long and thus about 30% smaller than *Cephalodella gibboides* (184–206 μm). In addition, my specimens lacked the double frontal eye. The gastric glands of *Cephalodella gibboides* are filled with fat globules, which was also not the case in my specimens.

Since there is therefore no alternative among the previously known species with Y-shaped pleural rods, *Cephalodella* 1 could be a species not yet described.



Fig. 1 a-b: *Cephalodella* 1. L = 128 μ m. A freely swimming specimen from left. Obj. 60 X.

Cephalodella 1
Obj. 60 X

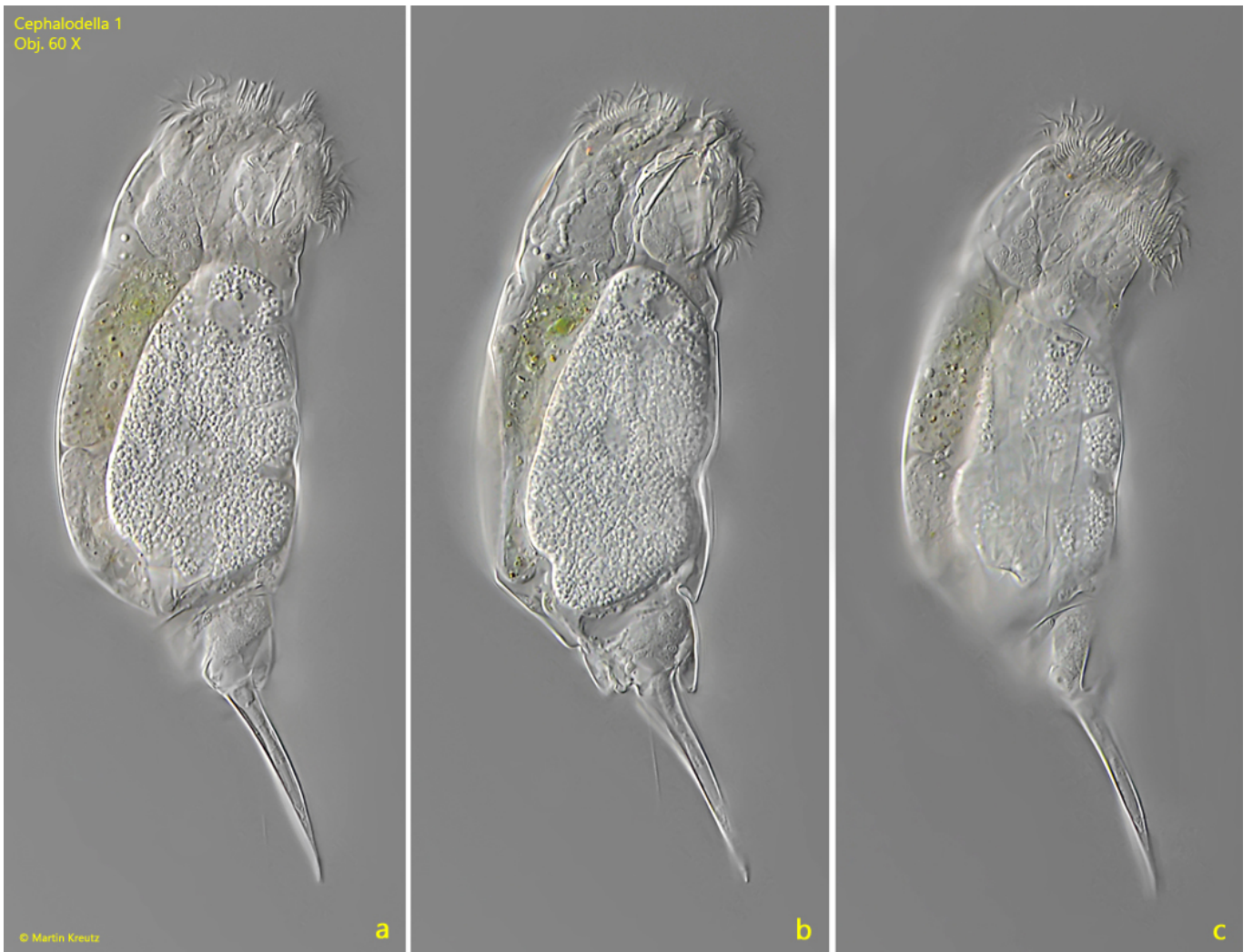


Fig. 2 a-c: *Cephalodella* 1. L = 125 μ m. A second freely swimming specimen from right. Obj. 60 X.

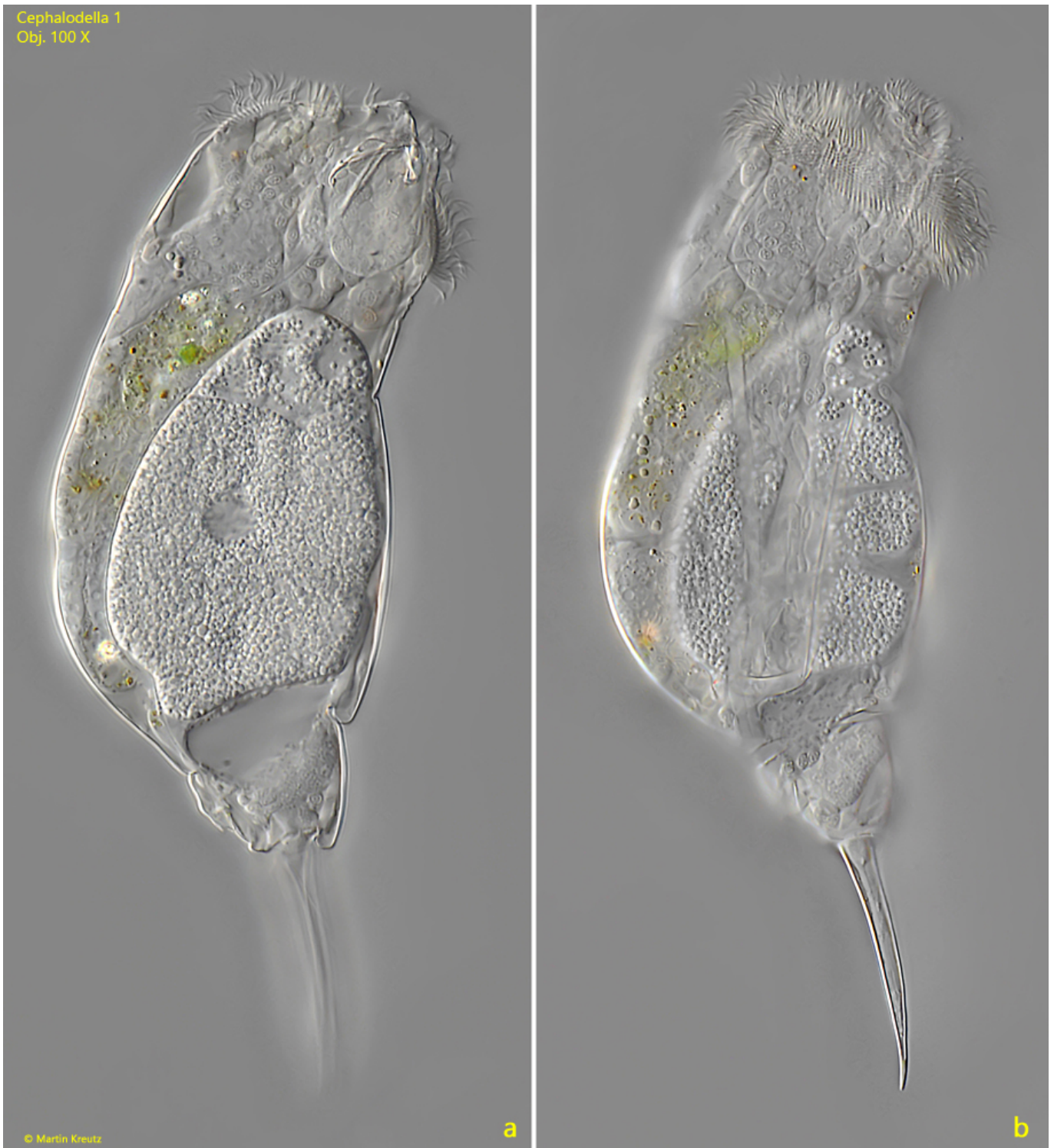


Fig. 3 a-b: *Cephalodella* 1. L = 125 μ m. The same specimen as shown in fig. 2 a-c slightly squashed. Obj. 100 X.

Cephalodella 1
Obj. 100 X



Fig. 4: *Cephalodella* 1. The head of the specimen as shown in fig. 3 a-b with focal plane on the trophi. Note the Y-shaped, joined pleural rods. Obj. 100 X.

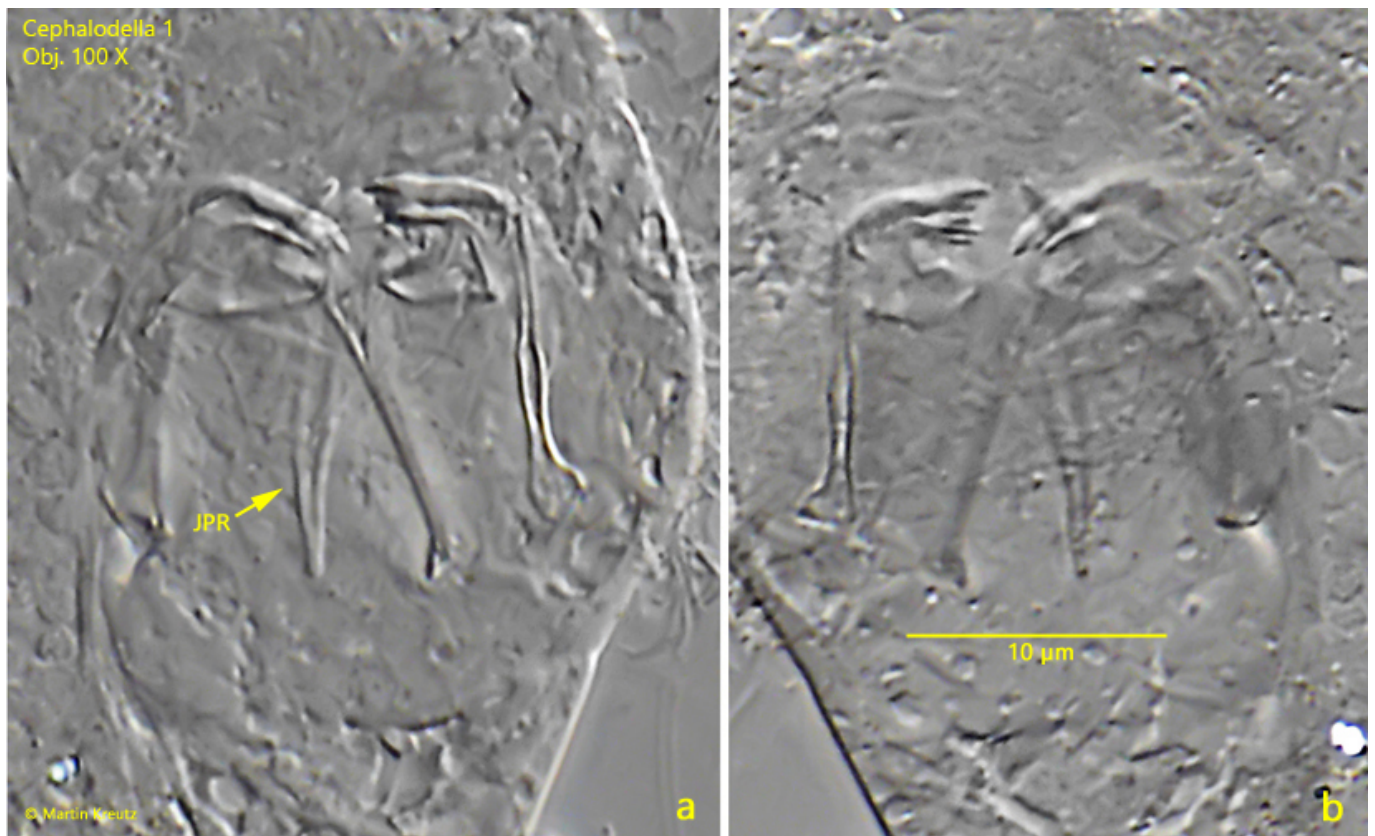


Fig. 5 a-b: *Cephalodella* 1. Two focal planes of the trophi in a squashed specimen. JPR = joined pleural rods. Obj. 100 X.

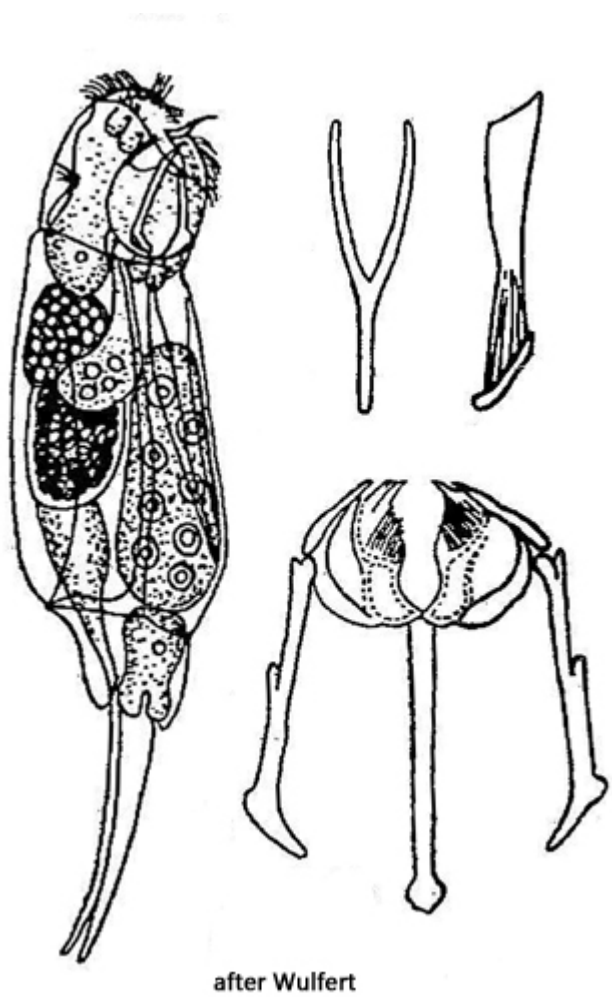


Fig. 6: Drawing of the similar species *Cephalodella gibboides* after Wulfert.