Trichocerca pusilla Lauterborn, 1898

Most likely ID: n.a.

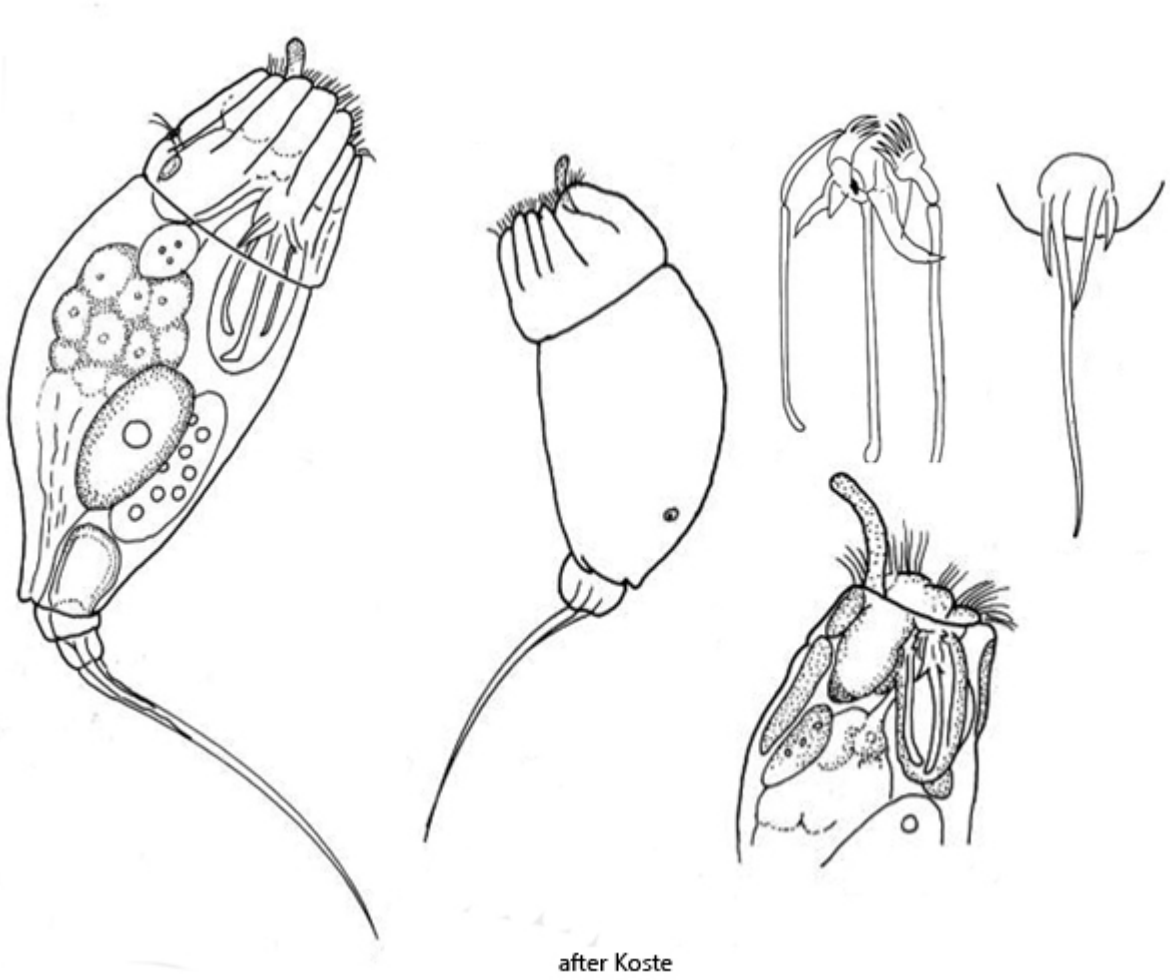
Synonym: n.a.

Sampling location: Pond of the waste disposal company constance

Phylogenetic tree: *Trichocerca pusilla*

Diagnosis:

- body irregularly oval
- corona with a curved palp organ
- length 110–175 µm (with toes)
- apical margin folded in contracted specimens
- left toe one half of body length, ventrally curved
- three secondary toes
- toes bend ventrally in contracted specimens
- lateral antennae short, near foot
- eyespot in at dorsal end of cerebral ganglion



Trichocerca pusilla

So far, I have found *Trichocerca pusilla* exclusively in the pond of the waste disposal company Constance. All specimens shown below come from plankton samples taken between May and September 2020.

In the fresh samples, the specimens of *Trichocerca pusilla* stand out due to their delicate shape. This is also due to the long, left main toe, which takes up about half of the body length. It is thin and evenly curved backward. Only in squashed specimens can one see that three additional secondary toes are present (s. fig. 7).

A key characteristic of *Trichocerca pusilla* is the position of the eyespot on the cerebral ganglion. It is located almost at the end of the cerebral ganglion on the dorsal side (s. fig. 6). Additionally, the apical margin of the cuticle shows a characteristic longitudinal folding when the specimens contract (s. fig. 4). In extended specimens, a curved palp organ as part of the corona can be clearly seen (s. fig. 2 b).

The similar species *Trichocerca stylata* is stouter with shorter toes, which make up only a quarter or a fifth of the body length. Furthermore, the eyespot in *Trichocerca stylata* is located in the middle of the cerebral ganglion and not at the end.

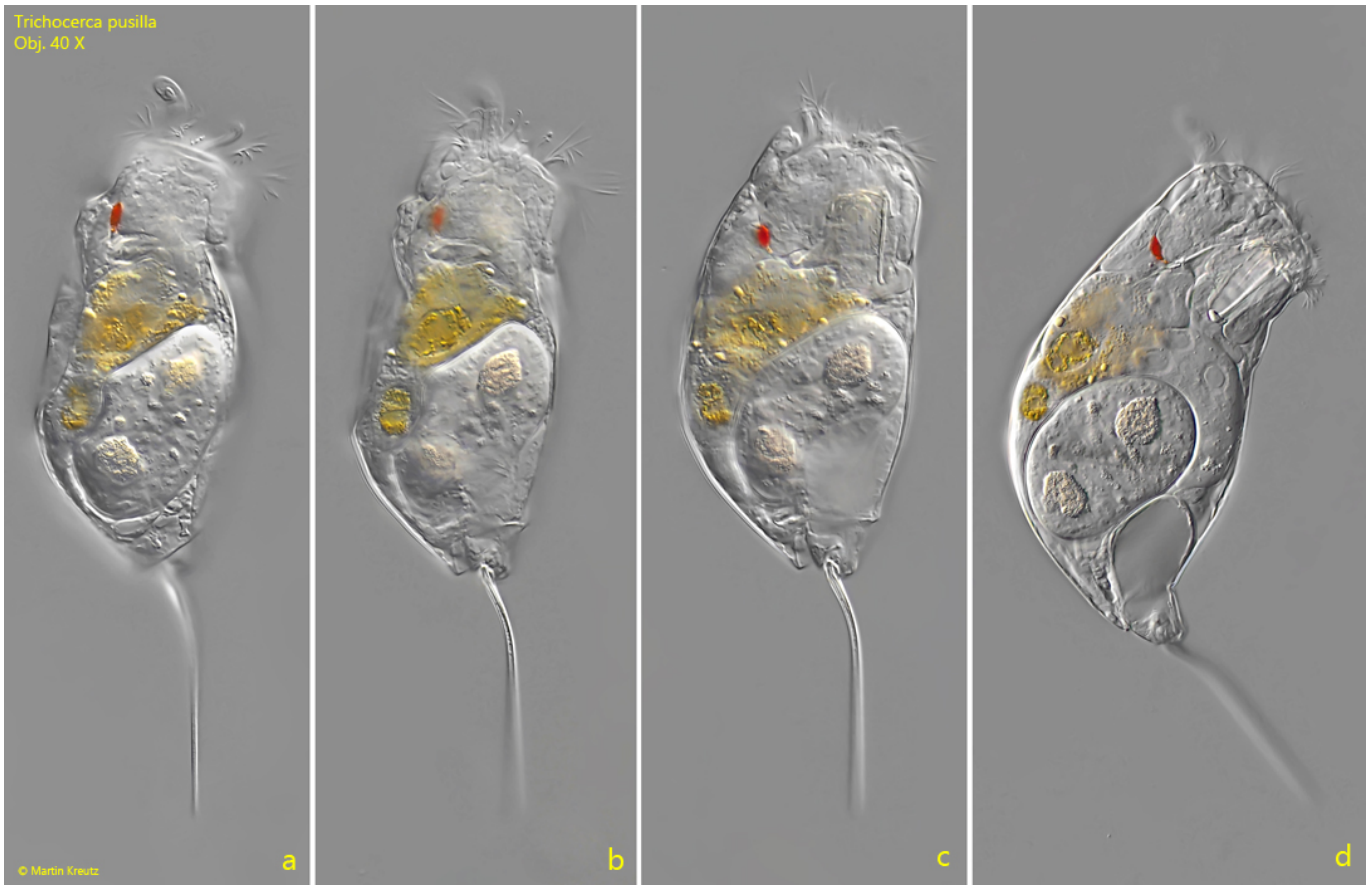


Fig. 1 a-d: *Trichocerca pusilla.* L = 168 µm (with toes). A specimen found in May 2020 in the pond of the waste disposal company Constance from right. Obj. 40 X.

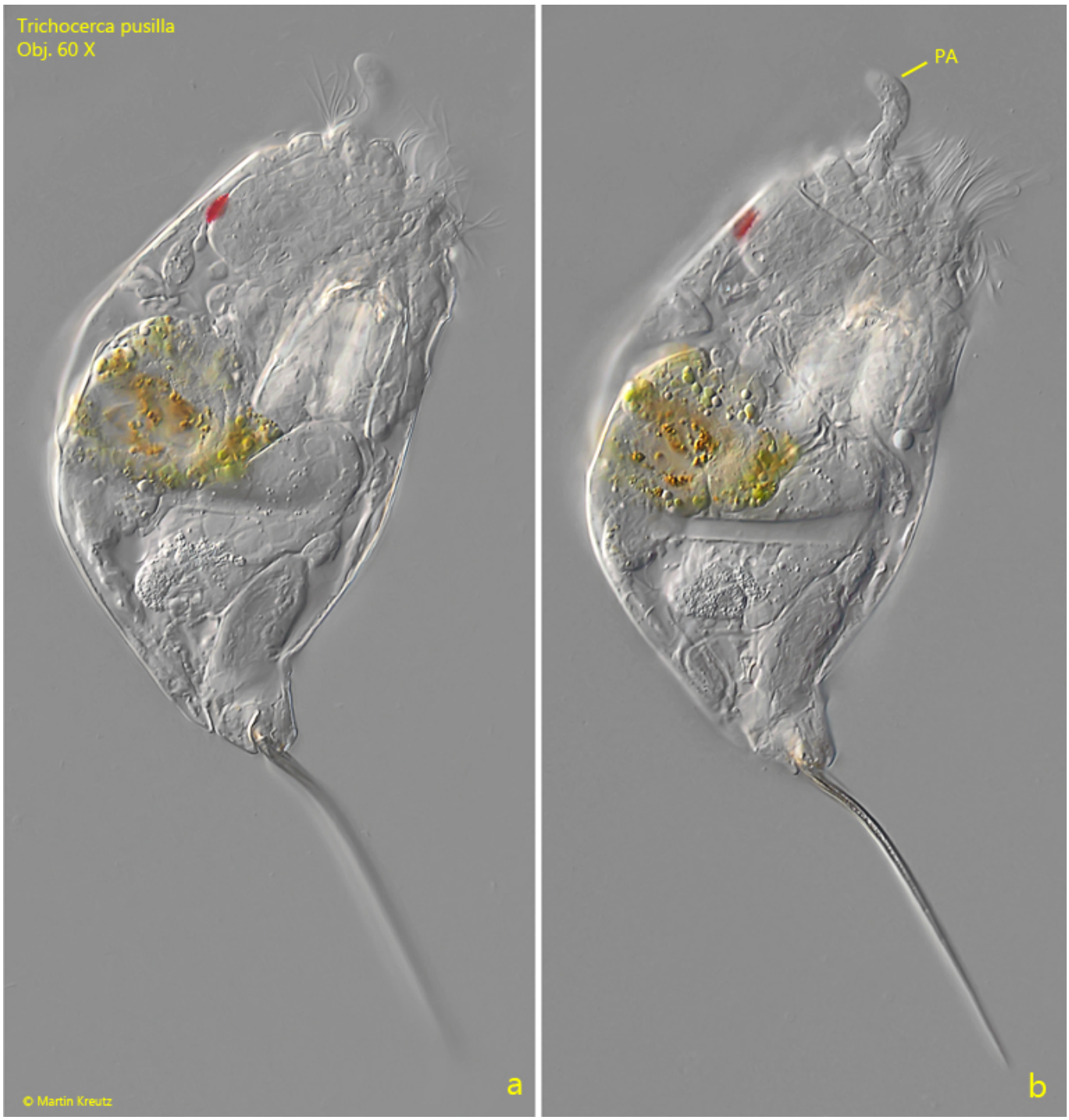


Fig. 2 a-b: *Trichocerca pusilla.* L = 172 µm (with toes). A slightly squashed second specimen from right. Note the ventrally bent over toes and the curved palp organ (PA). Obj. 60 X.

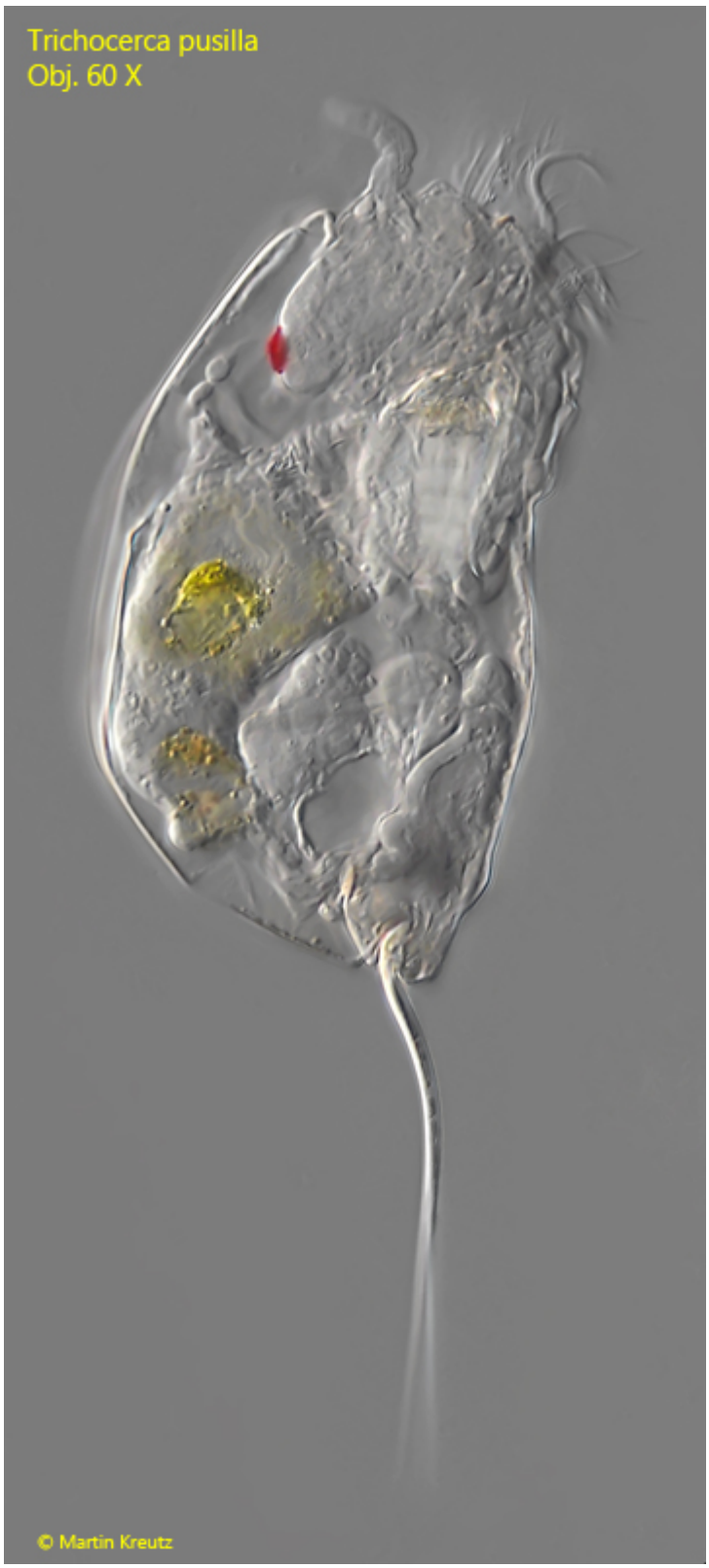


Fig. 3: *Trichocerca pusilla.* L = 160 µm (with toes). A third specimen from right. Obj. 60 X.

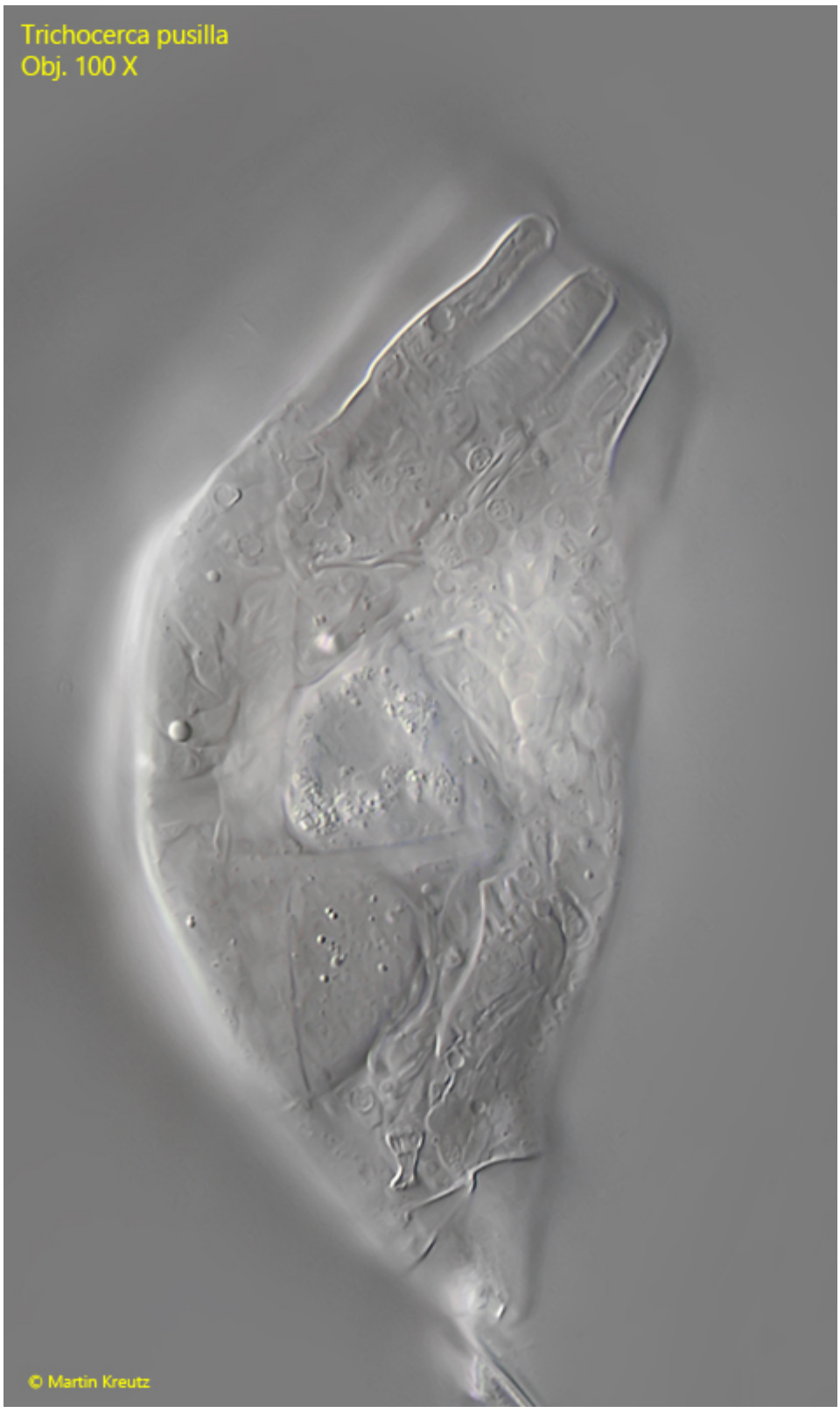


Fig. 4: *Trichocerca pusilla.* The folded apical margin of a contracted specimen. Obj. 100 X.



Fig. 5: *Trichocerca pusilla.* L = 175 µm (with toes). Total view of the specimen as shown in fig. 2 a-b at hight magnification. Obj. 100 X.

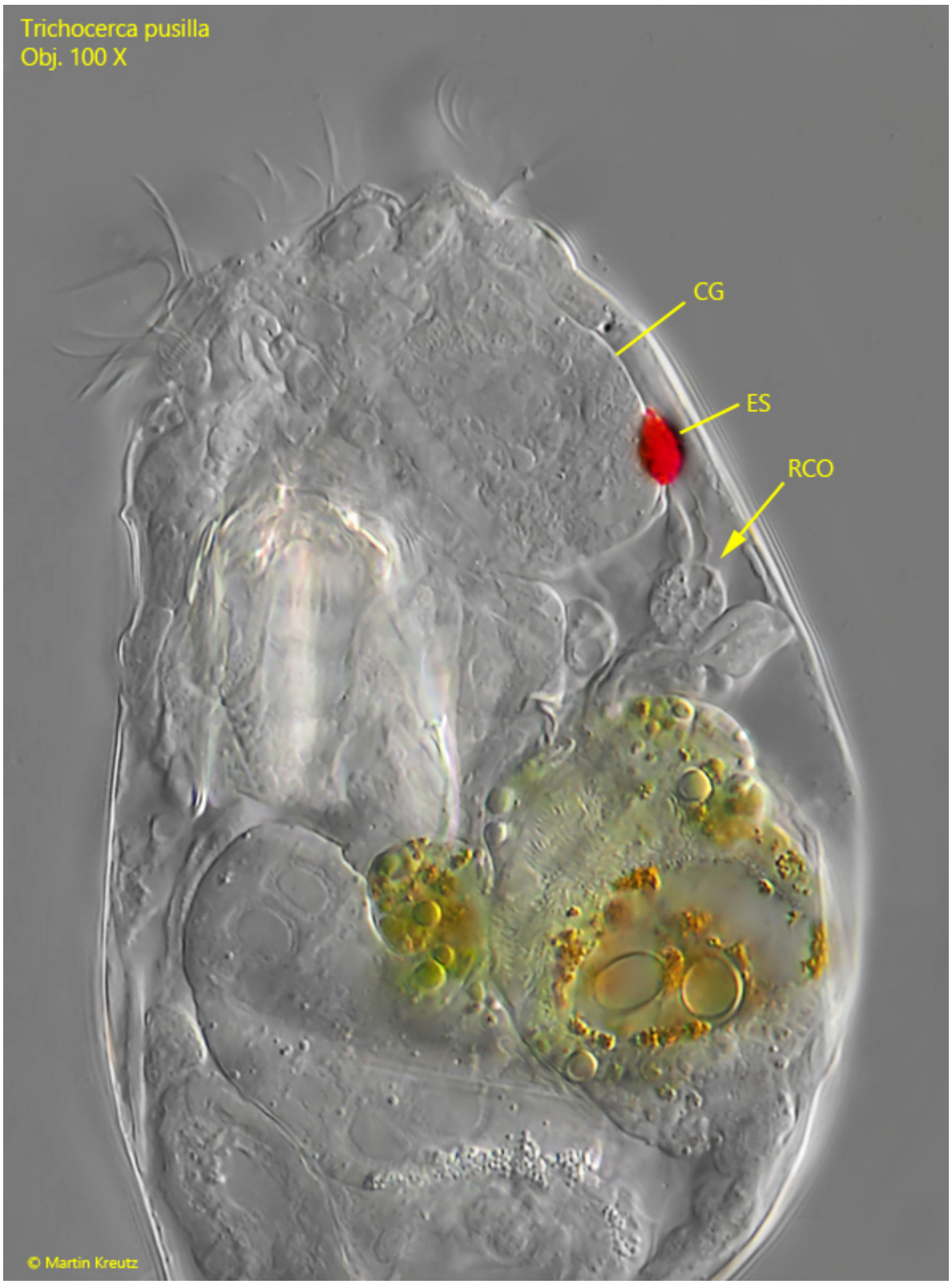


Fig. 6: *Trichocerca pusilla.* The head region in detail. The eyespot (ES) is attached to the end of the cerebral ganglion on the dorsal side. Below the almost spherical retrocerebral organ(RCO) is visible. Obj. 100 X.

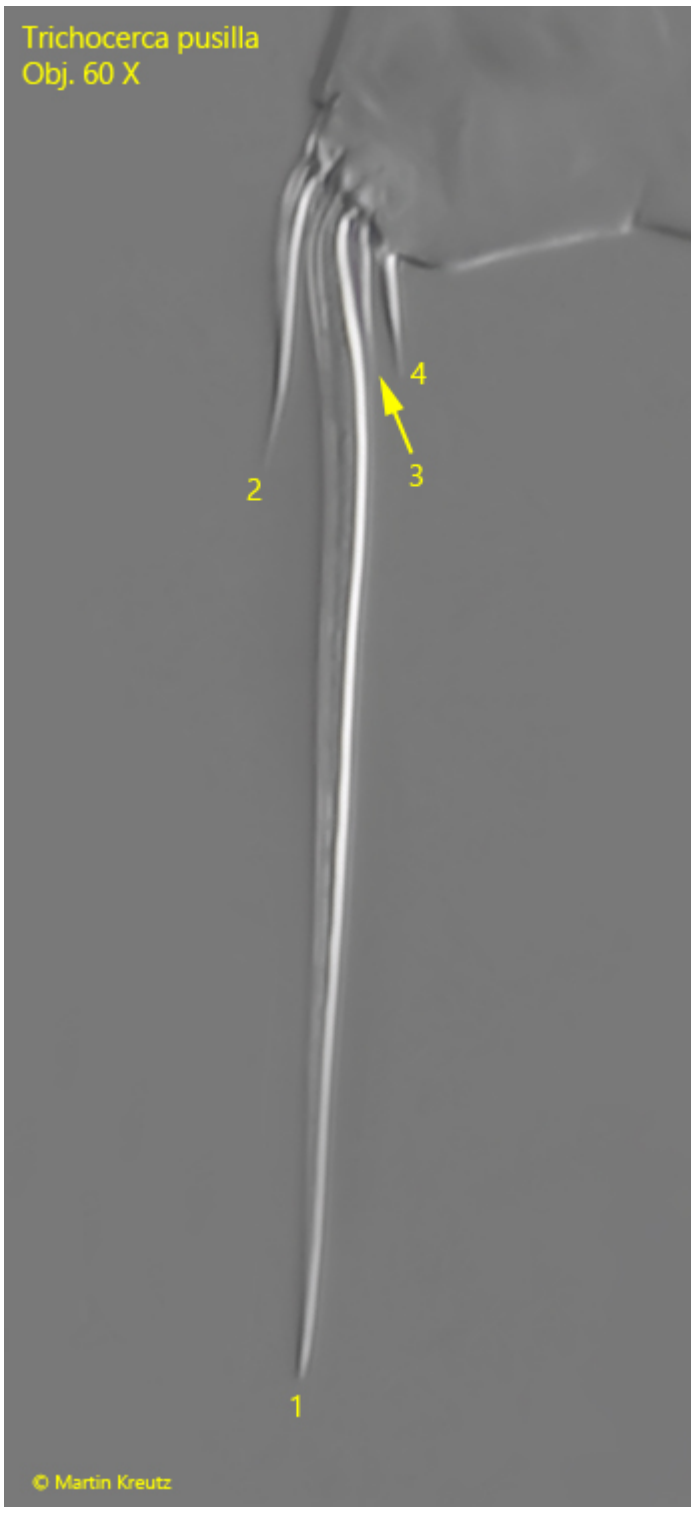


Fig. 7: *Trichocerca pusilla.* The main toe (1) and the three secondary toes (2-3) in a squashed specimen. Obj. 60 X.



Fig. 8 a-c: *Trichocerca pusilla.* Three focal planes of the trophi in a strongly squashed specimen. Obj. 100 X.



Fig. 9 a-c: *Trichocerca pusilla.* The trophi of a second specimen. Obj. 100 X.