Chaetonotus rotundus (Greuter, 1917)

Most likely ID: n.a.

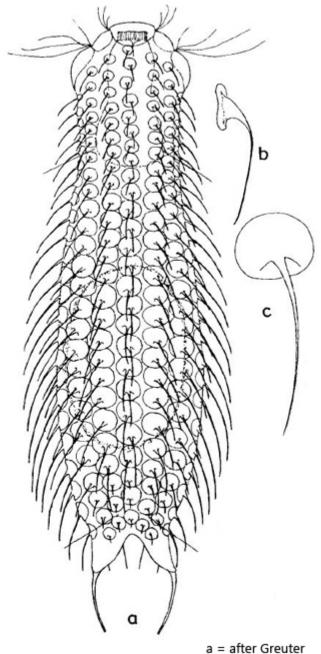
Synonym: Primochaetus rotundus

Sampling location: Purren Pond

Phylogenetic tree: <u>Chaetonotus rotundus</u>

Diagnosis:

- length 190 280 μm (274 280 μm acc. Schwank, s. <u>Literature</u>)
- head five-lobed
- posterior pleurae widest
- base of dorsal scales circular or slightly oval, sometimes with an indentation at the rear end
- dorsal scales 10 15 μm in diameter (16 X 18.5 μm acc. Schwank, s. <u>Literature</u>)
- scales with simple spines
- dorsal scales do not overlap, 6 7 longitudinal rows
- ventral scales 3-5 µm long, shovel-shaped, with a small keel
- posteriorly two large terminal scales with a V-shaped incision
- oral opening with a tooth-shaped organ
- adhesive tubes distally pointed



b, c= after Roszczak

Chaetonotus rotundus

I found several specimens of *Chaetonotus rotundus* among rotting leaves in Purren Pond. The specimens of my population were smaller with about 200 µm length than the 274 - 280 µm given by Schwank (s. Literature). The species can be recognized very well by the almost circular dorsal scales, which do not, or only slightly, overlap. In the investigated population from <u>Purren pond</u> the base of the scales was not 16 x 18.5 µm in size (acc. Schwank, s. Literature), but only 10 - 15 µm in diameter. Furthermore, the oval scales showed a round indentation at the rear edge, so that they appeared almost heart-shaped (s. fig. 5).

The species is considered rare and there are only few descriptions available. I could examine the dorsal as well as the ventral side in detail and was able to document the previously unknown structure of the dorsal and ventral side (s. figs. 5 -7). In the oral

opending I could detect a tooth-shaped organ, what was also not described yet (s. fig. 8).

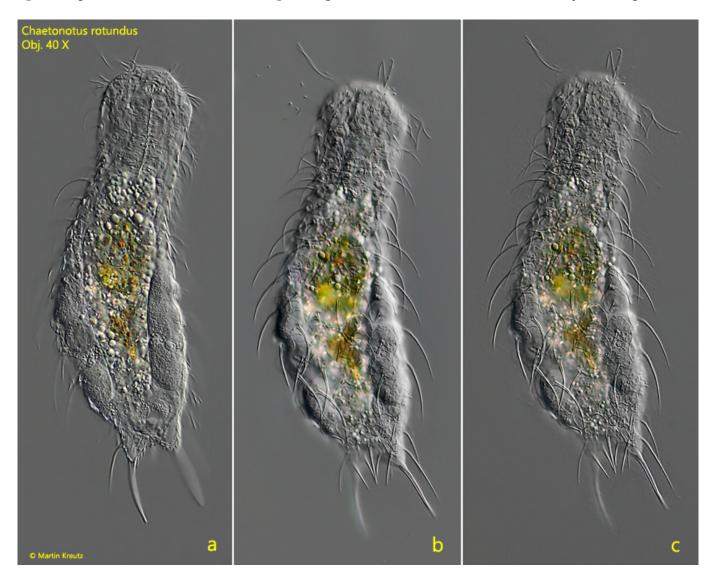


Fig. 1 a-c: Chaetonotus rotundus. $L = 196 \mu m$. Dorsal view of a freely swimming specimen. Obj. 40 X.



Fig. 2 a-b: Chaetonotus rotundus. $L=206~\mu m$. Ventral view (a) and lateral view from right (b) of a freely swimming specimen. Obj. $40\ X$.

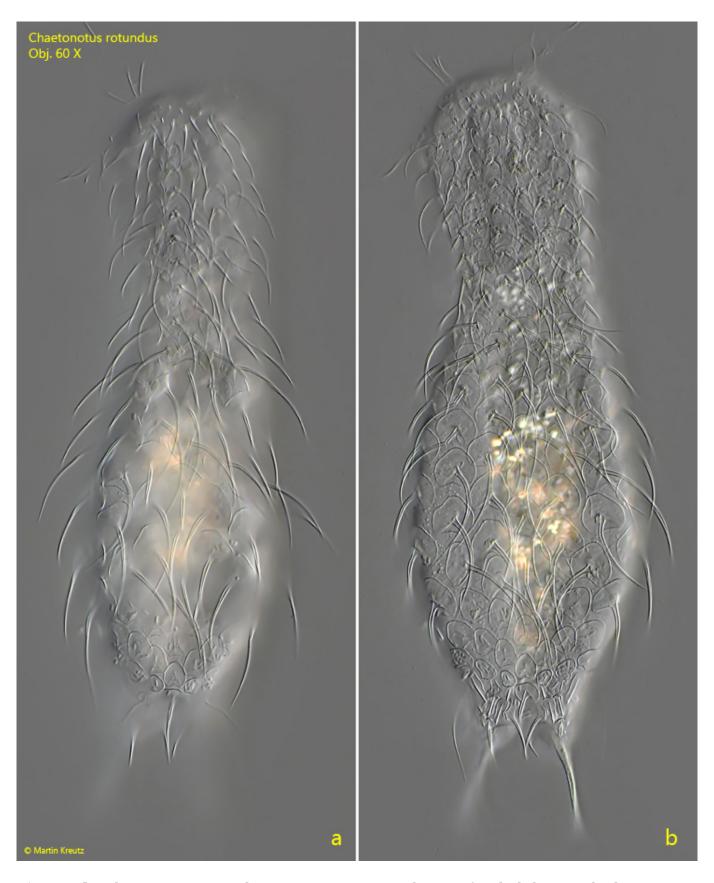


Fig. 3 a-b: Chaetonotus rotundus. L = 216 μm . Dorsal view of a slightly squashed specimen in two focal planes. Obj. 60 X.

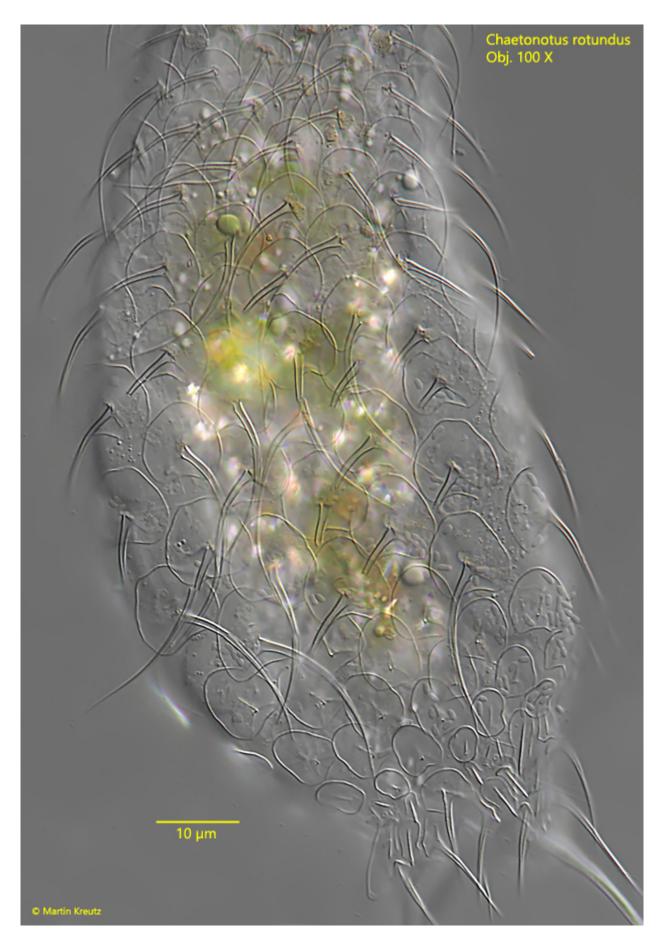
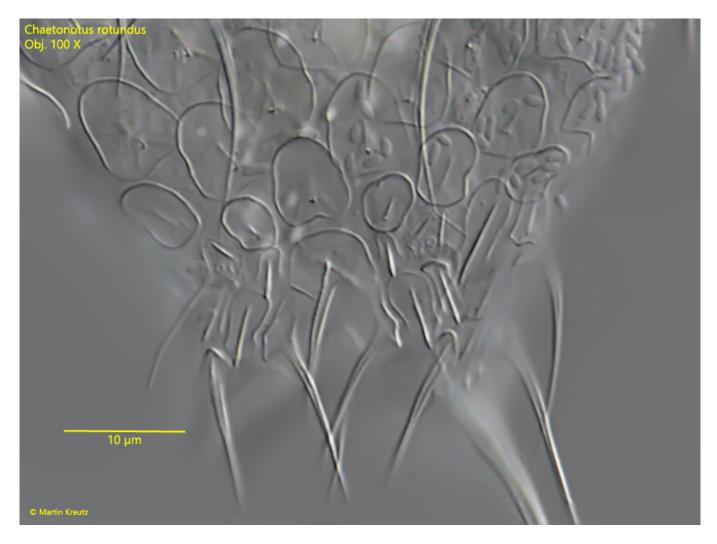


Fig. 4: Chaetonotus rotundus. The dorsal scales in detail. Obj. $100~\mathrm{X}$.



 $\textbf{Fig. 5:} \ \textit{Chaetonotus rotundus}. \ \textbf{Detail of the dorsal scales at the posterior end. Obj. 100 X}.$

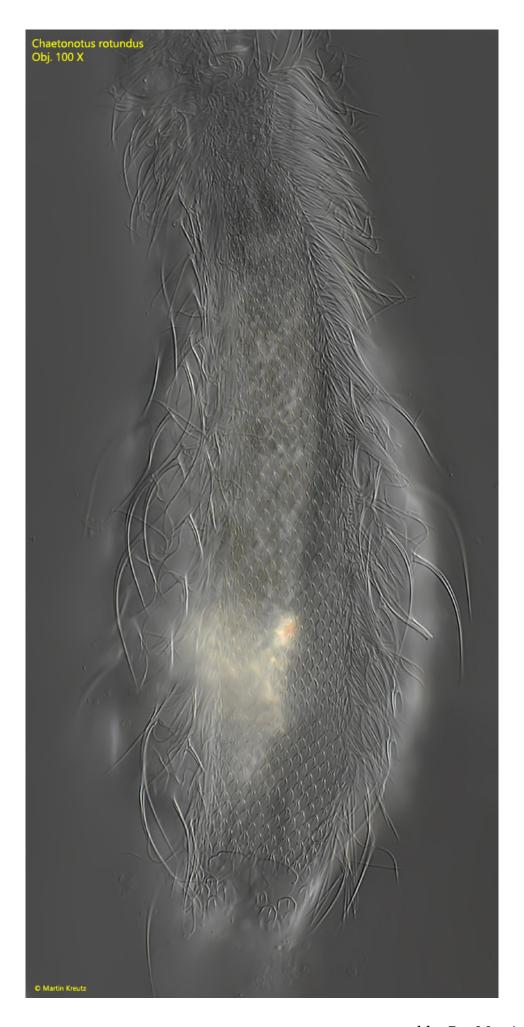


Fig. 6: Chaetonotus rotundus. $L = 206 \mu m$. Ventral view of a squashed specimen. Obj. 100 X.

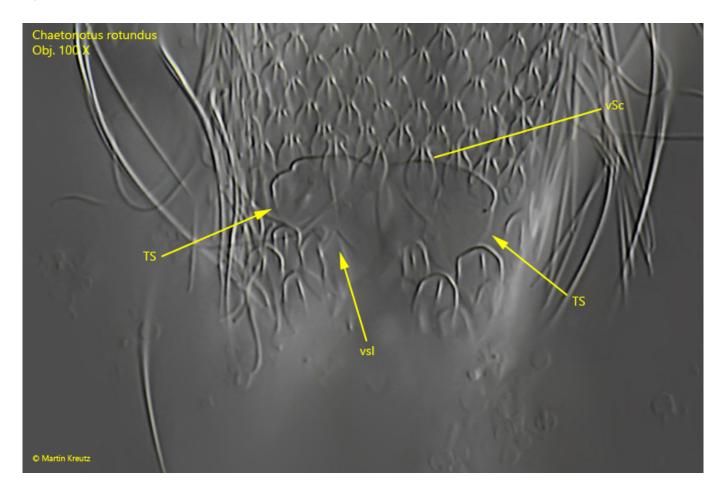


Fig. 7: Chaetonotus rotundus. $L = 206 \mu m$. Detailed view of the ventral scales at the posterior end. vSc = shovel-shaped ventral scales, TS = large terminal scales, vsI = Vshaped incision of the terminal scales. Obj. $100\ X$.

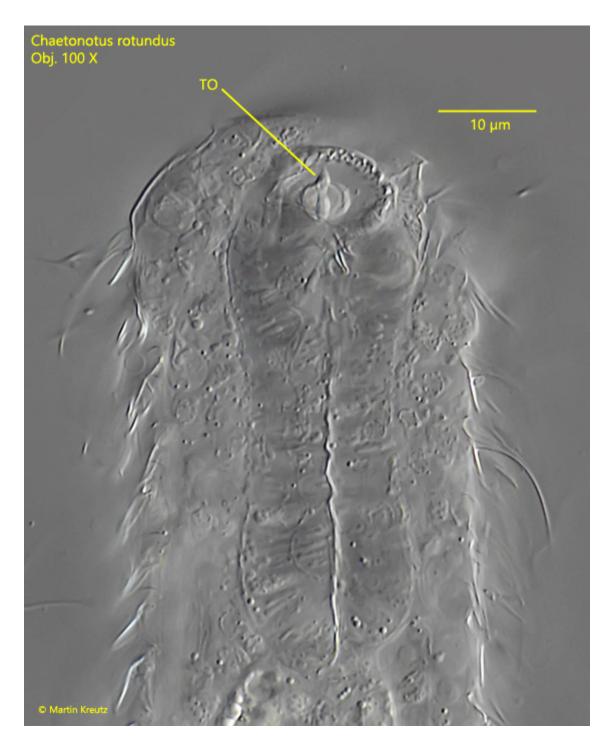


Fig. 8: Chaetonotus rotundus. A ventral view of the oral opening reveals a tooth-like organ (TO) of unknown function. Obj. 100 X.