## Chaetonotus murrayi Remane, 1929

Most likely ID: n.a.

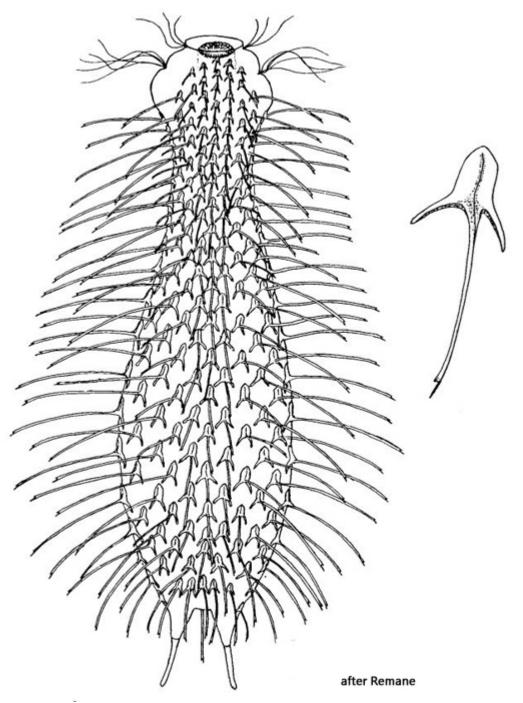
Synonym: n.a.

**Sampling location:** <u>Schwemm Moor (Austria)</u>

Phylogenetic tree: Chaetonotus murrayi

## **Diagnosis:**

- body sole-shaped
- length 159-160 µm
- head five-lobed, posterior pleurae strongly developed
- pharynx about 44 µm long, terminal slightly swollen
- neck constricted
- 4 lateral tufts of cilia
- 10-11 longitudinal dorsal rows of scales
- $\bullet$  dorsal scales three-lobed with long, two pointed spines (15–20  $\mu$ m)
- spines protrude almost vertically
- 7-8 ventral rows of small keeled scales
- 2 elliptical terminal scales on ventral side, keeled with a spine
- furca about 20 µm long



Chaetonotus murrayi

Chaetonotus murrayi is described by Schwank (1990) as a very rare species. In fact, I have only ever found one specimen in the **Schwemm Moor** in Austria.

At low magnification *Chaetonotus murrayi* stands out due to the densely arranged and widely spread dorsal spines. At higher magnification, it can be seen the spines have a double tip at the distal end (s. fig. 6). This feature is very characteristic because in other species with a secondary spine this is set further back from the end. The dorsal scales, from which the long spines arise, are three-lobed, but this is difficult to recognize (s. fig. 5). The long spines prevent their shape from being clearly recognizable.

The dorsal spines are hollow and uniformly thick from the origin to the distal end. Posteriorly there is no field of widely separated special scales, as in the similar species Chaetonotus hystrix. Instead, the spines are only shorter at the posterior end (s. fig. 6).

I was only able to examine the ventral side from the dorsal side (s. fig. 7). The ventral scales are small, elliptical and have a keel. At the posterior end there are two larger, also elliptical terminal scales, which have a keel and a thin spine that tapers to a fine point.

More images and information on Chaetonotus murrayi: Dr. Michael Müller-The small world of freshwater gastrotrichs-Chaetonotus murrayi

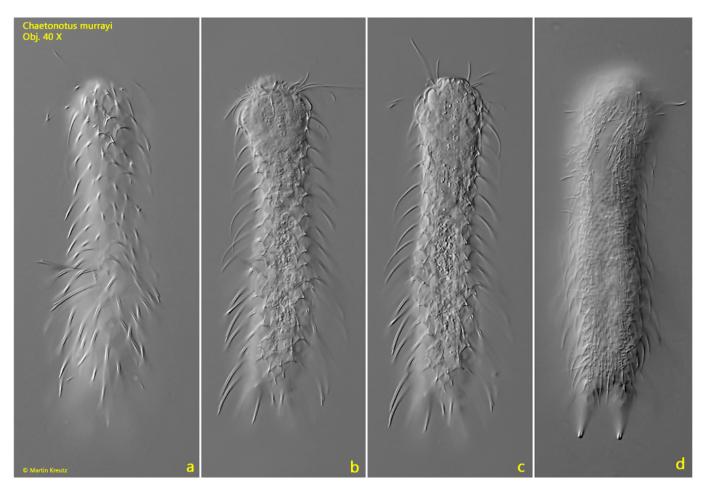


Fig. 1 a-d: Chaetonotus murrayi.  $L = 146 \mu m$ . Different focal planes of a freely swimming specimen from dorsal. Obj. 40 X.



Fig. 2 a-c: Chaetonotus murrayi. L = 146  $\mu m$ . The slightly squashed specimen as shown in fig. 1 a-d from dorsal. Obj. 60 X.

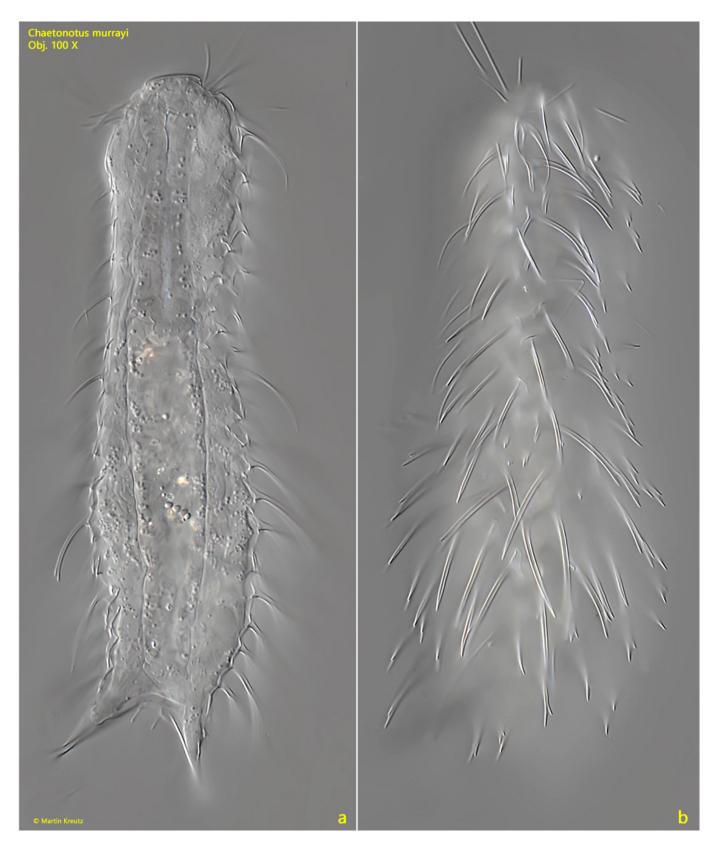


Fig. 3 a-b: Chaetonotus murrayi. L = 146  $\mu m$ . The slightly squashed specimen in detail. Obj. 100 X.



Fig. 4: Chaetonotus murrayi. The dorsal and lateral scales with two-pointed spines in the head region. Obj. 100 X.

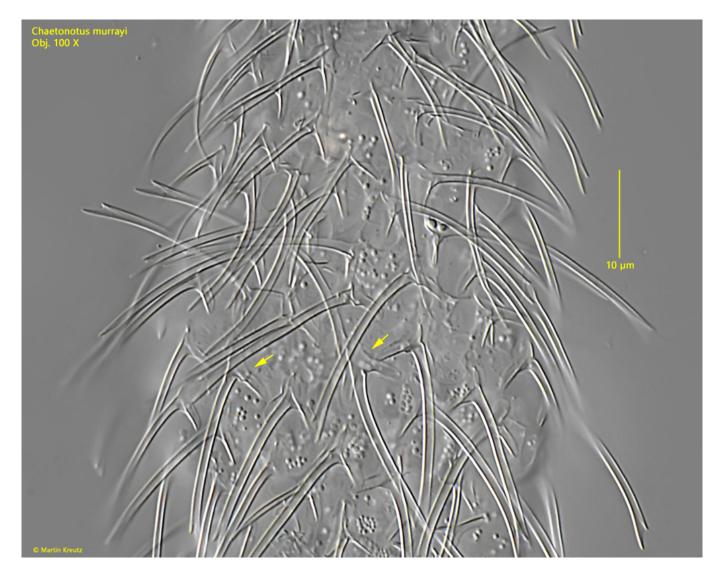


Fig. 5: Chaetonotus murrayi. The dorsal scales of the mid-body. The shape of the threelobed scales is hard to see (arrows). The slightly curved spines are evenly thick and hollow up to the distal end with the double tip. Obj. 100 X.

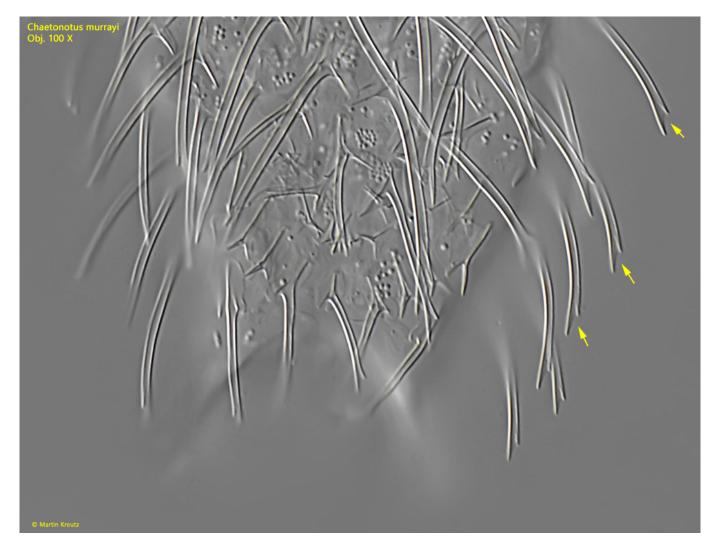


Fig. 6: Chaetonotus murrayi. The arrangement of dorsal scales at the posterior end. Note the two pointed distal ends of the dorsal scales (arrows). Obj. 100 X.

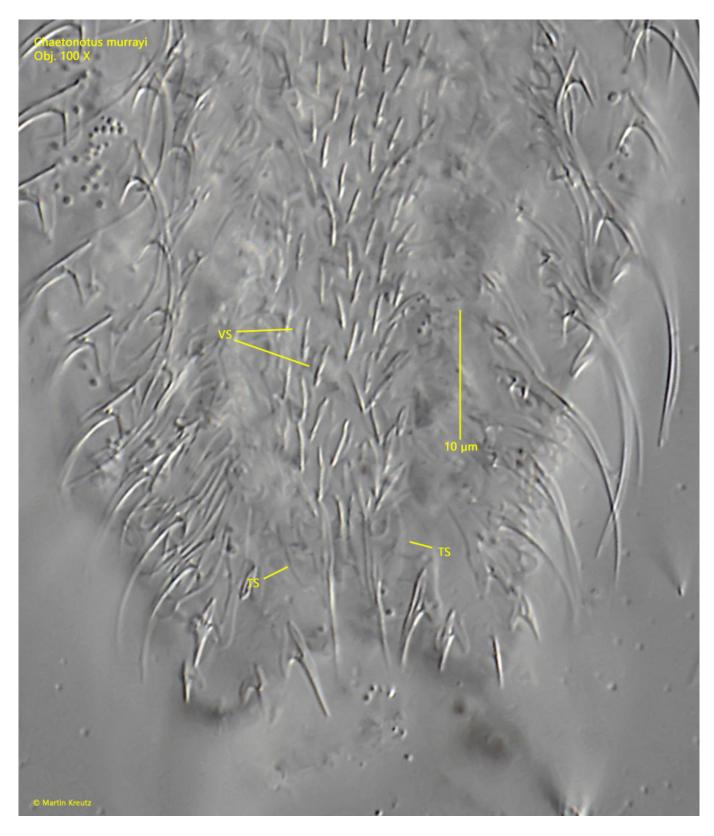


Fig. 7: Chaetonotus murrayi. Focal plane on the ventral scales from dorsal. The ventral scales (VS) are small and elliptical with a keel. At the posterior end the two elliptical terminal scales (TS) are visible with a keel and a thin, pointed spine. Obj. 100 X.