## Chaetonotus macrochaetus (Zelinka, 1889)

Most likely ID: n.a.

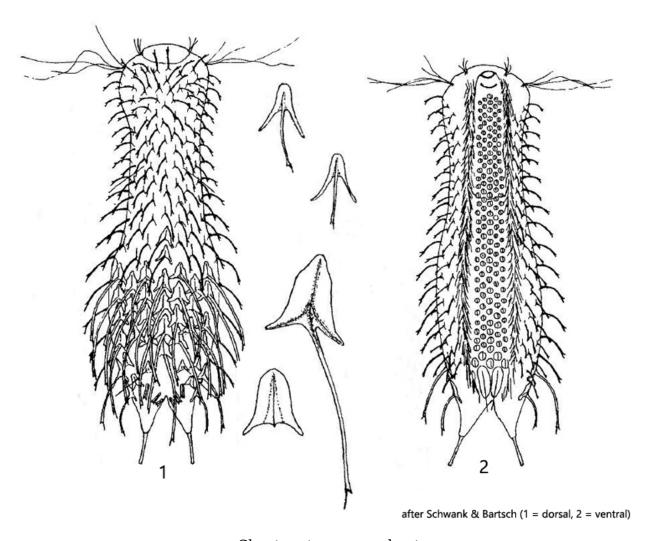
**Synonym:** Hystricochaetonotus macrochaetus

Sampling location: Purren pond, Simmelried

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

## **Diagnosis:**

- body stubby and squat
- length 70-120 μm, width 17-24 μm
- head rounded, cephalion and pleurae weakly developed
- posterior tufts of cilia very long, anterior tufts of cilia very short
- hypostomium present
- furca short, tubes reaching half toe length
- dorsal scales trilobed bearing spines with a secondary tip
- dorsally 9 longitudinal and 13-17 transverse rows of scales
- dorsal spines in posterior half rigid and long
- · dorsal scales of head and neck with long wings
- dorsal scales at posterior end smaller and keeled
- ventrally 5 rows of disc-shaped, keeled scales, two elongated terminal scales with keel



Chaetonotus macrochaetus

I find *Chaetonotus macrochaetus* frequently and regularly in the <u>Purren pond</u> and the Simmelried. Mainly in the mud layer, but also in decaying plant masses. The species is quite characteristic with its long and thick spines, which have a small, distal secondary tip (s. fig. 6). The scales are trilobed and about 10 µm long in the middle of the body (s. fig. 5). All dorsal scales bear a spine, except for a field of small, keeled scales at the posterior end (s. fig. 7). On the ventral side there are small keeled scales and two elongate terminal scales that are also keeled (s. fig. 8). The ventral scales are supposed to be disc-shaped according to Schwank and Bartsch, 1990 (s. Literature). In my specimens they were rather oval and also oblong shaped, with a length of  $3-4 \mu m$  (s. fig. 8).

A very similar species to Chaetonotus macrochaetus is Chaetonotus persetosus. The distinguishing features from Chaetonotus macrochaetus seem to be only minor. For example, the spines of the trunk are shorter and the ventral scales are slightly hexagonal in shape and lack a keel. My specimens had clearly keeled ventral scales, so *Chaetonotus* macrochaetus must be present here.



Fig. 1 a-b: Chaetonotus macrochaetus.  $L=124~\mu m$ . Two focal planes from dorsal of a freely swimming specimen. Obj. 60 X.



Fig. 2 a-b: Chaetonotus macrochaetus. L = 130  $\mu m$ . Two focal planes of a slightly squashed specimen from dorsal. Obj. 100 X.



Fig. 3: Chaetonotus macrochaetus. Dorsal view of a strongly squashed specimen. Obj. 100 X.



Fig. 4: Chaetonotus macrochaetus. Detail of the dorsal scales in the head region. Obj. 100 X.

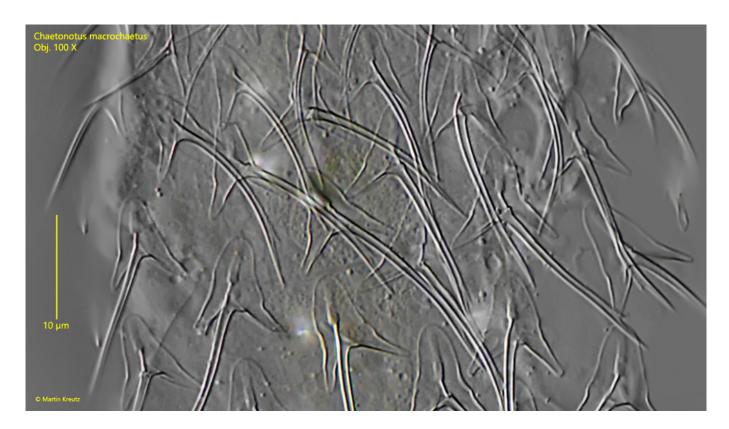


Fig. 5: Chaetonotus macrochaetus. Detail of the trilobed dorsal scales in mid-body. Obj. 100 X.



Fig. 6: Chaetonotus macrochaetus. Detail of the dorsal spines in mid-body with a distal secondary spine (arrows). Obj. 100 X.

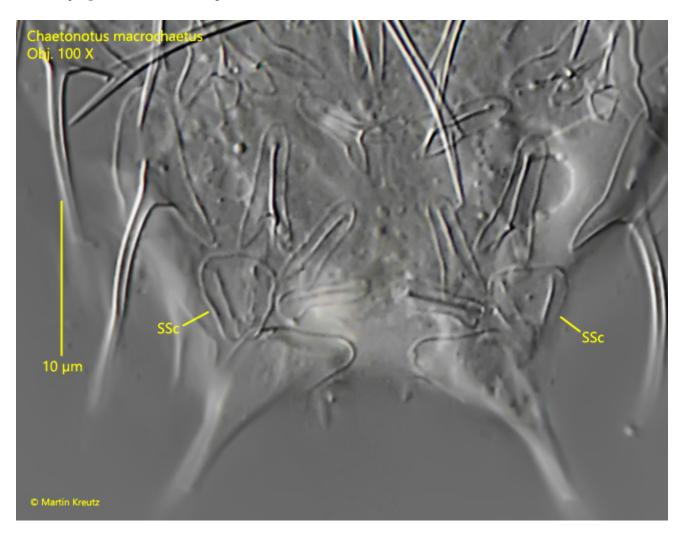


Fig. 7: Chaetonotus macrochaetus. Detail of the dorsal scales at the posterior end. The two special scales (SSC) bearing the setolae are visible. Obj.  $100~\mathrm{X}$ .

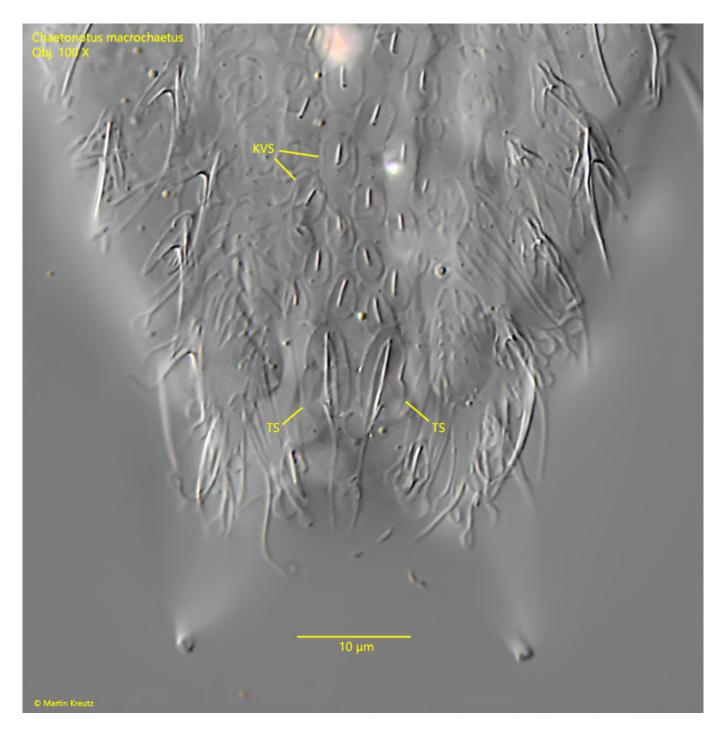


Fig. 8: Chaetonotus macrochaetus. Detail of the ventral scales at the posterior end. The two elongated terminal scales (TS) are visible. The other keeled ventral scales (KVS) are oval shaped and oblong with a length of 3-4  $\mu m.$  Obj. 100 X.