## Chaetonotus acanthodes (Stokes, 1887)

Most likely ID: n.a.

Synonym: n.a.

Sampling location: Simmelried

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

## **Diagnosis**:

- body very stout, stumpy form, shoe-shaped
- head weakly five-lobed
- length 125-145 µm
- hypostomium developed as rectangular plate
- dosal scales keeled with simples spines, oval to circular with an upturned margin
- dorsal girdle of 7–11 straight spines below mid-body, spines 10–25  $\mu m$  long
- dorsal scales behind the girdle region without spines
- ventral interciliary field with round or oval scales with a short spine
- ventrally at posterior end 4 elongated terminal scales with spines
- two large spines located laterally on either side at the posterior end



after Stokes (left = dorsal, right = ventral) Chaetonotus acanthodes

So far I have found only one specimen of *Chaetonotus acanthodes* in the <u>Simmelried</u>, but I cannot exclude that I missed this species earlier. The dorsal scales were still drawn with a distal incision by Stokes, but this turned out to be incorrect. A redescription of *Chaetonotus acanthodes* was made by Kånneby (2013) based on 12 investigated specimens. He recognized the round shape of the scales, as I also observed (s. fig. 2 b). A characteristic feature of *Chaetonotus acanthodes* is also that the girdle of elongated spines is below the middle of the body and that these spines are not arranged on a line. In front of this girdle the dorsal scales bear short spines and behind it they do not (s. fig. 2 a-b). Caudal to the girdle, there are also two scales with a double keel (s. fig. 3). The scales on the ventral side are small, round and bear short spines (s. fig. 4). At the posterior end four elongated terminal scales with spines are located in parallel to each other (s. fig. 5).



Fig. 1 a-d: Chaetonotus acanthodes. L = 140  $\mu$ m. Different focal planes from dorsal of a freely swimming specimen. Obj. 40 X.



**Fig. 2 a-b:** Chaetonotus acanthodes.  $L = 140 \mu m$ . Two focal planes from dorsal of a squashed specimen. Note that the dorsal scales behind the girdle of spines do not bear spines, but are merely keeled. GS = girdle of spines, PS = posterior spines. Obj. 100 X.



**Fig. 3:** *Chaetonotus acanthodes.* The dorsal scales in the region of the girdle of spines in detail. Note the double-keeled scales (DKS) near the posterior end. These are probably specialised scales from which the sensory setolae arise. Obj. 100 X.



**Fig. 4:** *Chaetonotus acanthodes.* Focal plane on the interciliary field of the ventral side with small, circular scales and the elongated terminal scales (TS) at the posterior end. Obj. 100 X.



**Fig. 5:** *Chaetonotus acanthodes.* The four terminal scales (1–4) at the posterior end on the ventral side in detail. Obj. 100 X.