# ***Polymerurus nodicaudus* Voigt, 1901**

**Most likely ID:** n.a.

**Synonyms:** *Chaetonotus macracanthus*, *Polymerurus macracanthus*, *Polymerurus nodicaudus var. comatus*

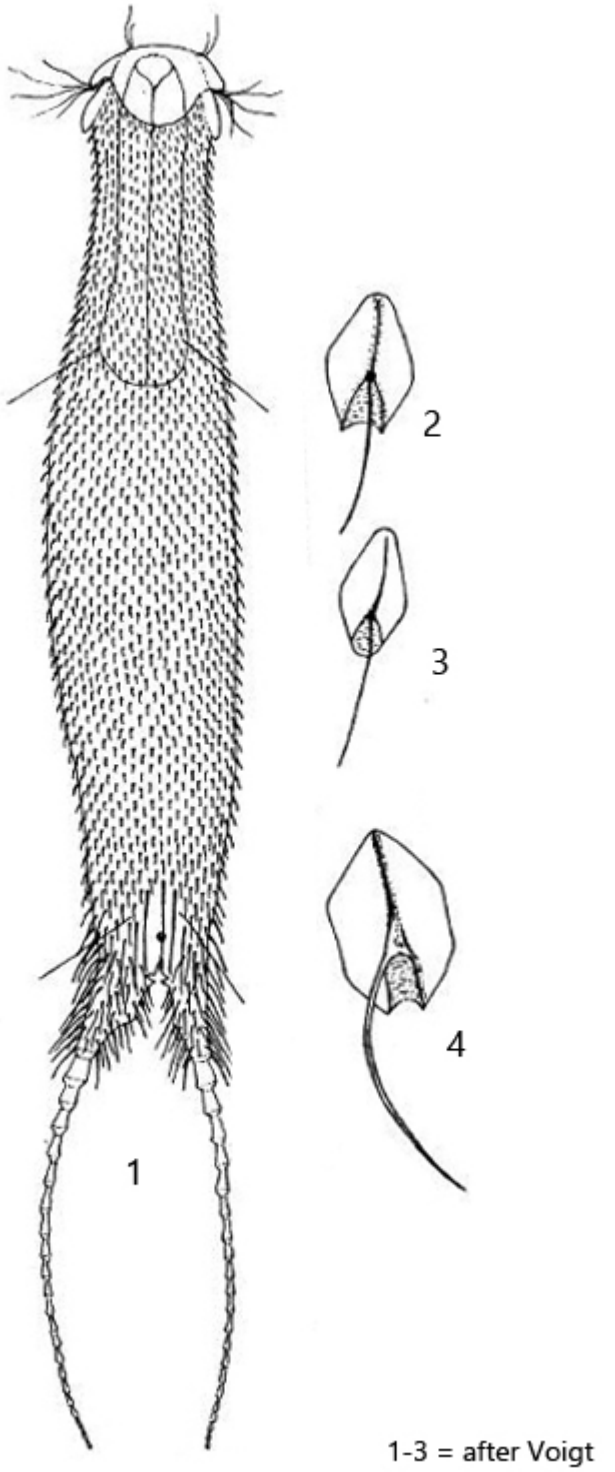
**Sampling location:** Simmelried

**Phylogenetic tree:** ***Polymerurus nodicaudus***

**Diagnosis:**

- body slender and narrow, elongated
- length 300–550 µm, width 45–95 µm
- head trilobed, distinct cephalion
- pharynx cylindrical
- distinct hypostomium
- up to three pairs of ciliary tufts
- dorsally about 13–25 longitudinal rows of transparent scales with a pentagonal or hexagonal shape
- scales with a distal V-shaped incision and a short spine arising from the center
- dorsal scales at posterior end smaller, but same shape as in mid-body

- toes about 60–110 µm long, divided in 15–22 hollow rings
- toes often shortly spined laterally on ring furrows
- base of toes with thickened, strongly spined base
- posterior invagination between toes strongly deepened




Polymerurus nodicaudus

I found *Polymerurus nodicaudus* in August 2020 and November 2021 in the mud from Simmelried. This species is slender and very flexible (s. fig. 2 a-b). It can be easily distinguished from *Polymerurus rhomboides* because the scales bear spines. The toes consist of single rings with short bristles arising at their junctions (s. fig. 6b). The dorsal scales in my population were only faintly hexagonal (s. fig. 5) with a V-shaped incision at the distal end. It was by no means as distinct as drawn by Voigt

and Balsamo (s. drawings above). However, this species is said to show a high degree of variability. All other characteristics agree with the description of this species.

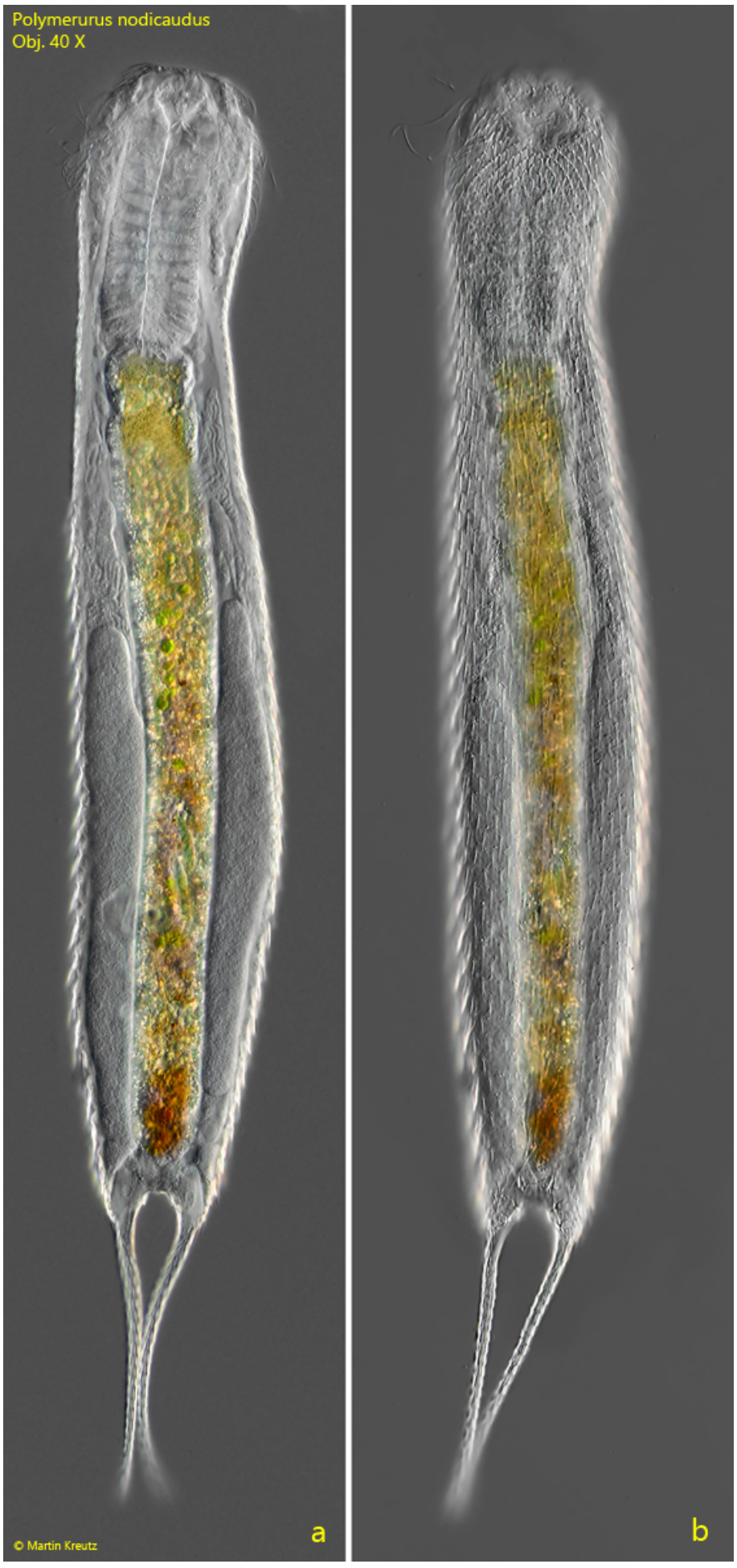

Polymerurus nodicaudus
Obj. 40 X
© Martin Kreutz
a
b

**Fig. 1 a-b:** *Polymerurus nodicaudus*. L = 546 µm. A slightly squashed specimen from dorsal. Obj. 40 X.




**Fig. 2 a-b:** *Polymerurus nodicaudus*. L = 508 µm. A second, freely swimming specimen specimen from dorsal. Note the elongated spines (ES) at the base of the

toes. Obj. 40 X.




**Fig. 3:** *Polymerurus nodicaudus*. The head in detail with focal plane on the hypostomium (HY). Note the characteristic gap in the hypostomium (arrow). Obj. 100 X.

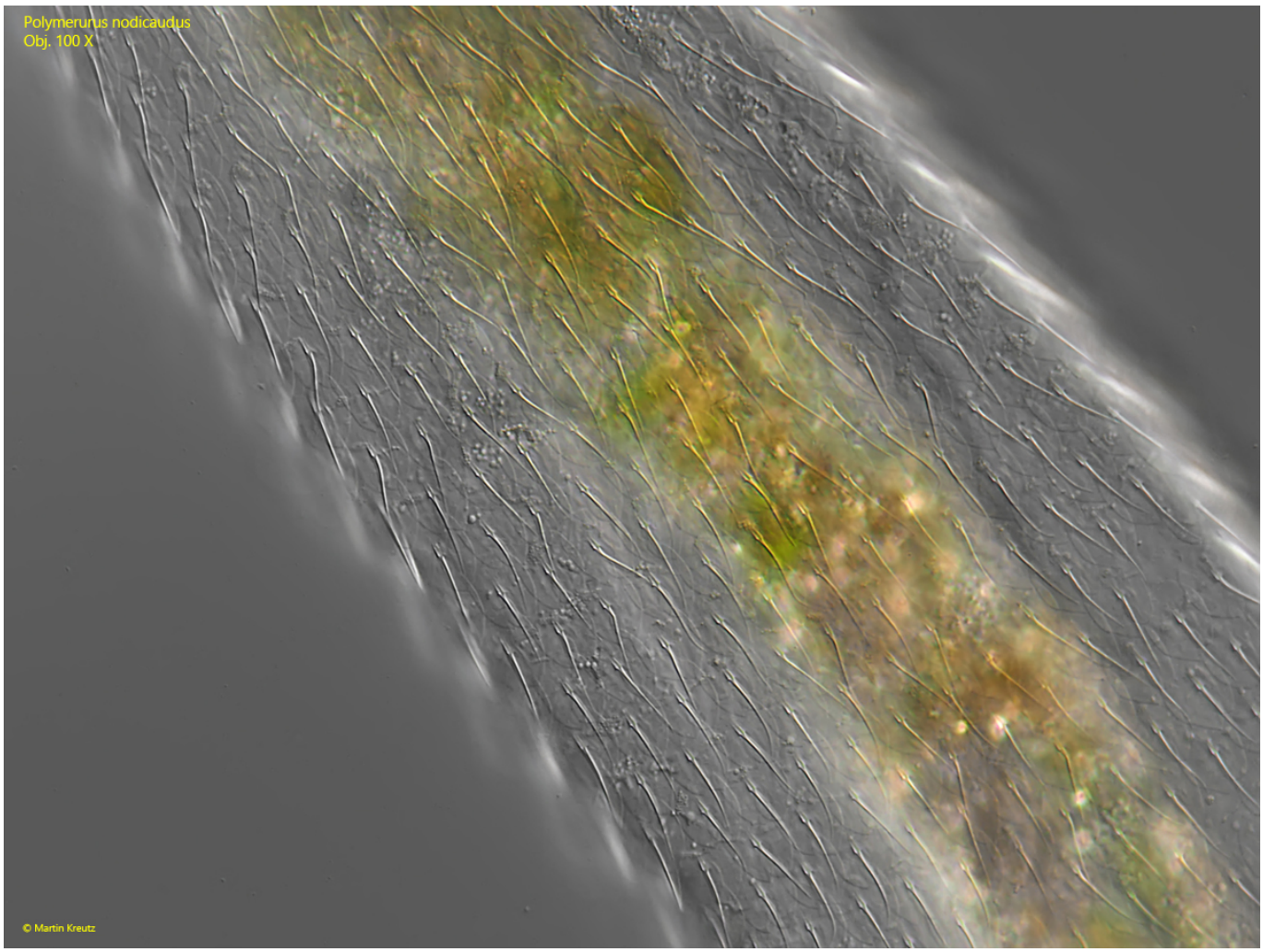



**Fig. 4:** *Polymerurus nodicaudus*. The dosal scales in mid-body each with a short spine arising from the center. Obj. 100 X.

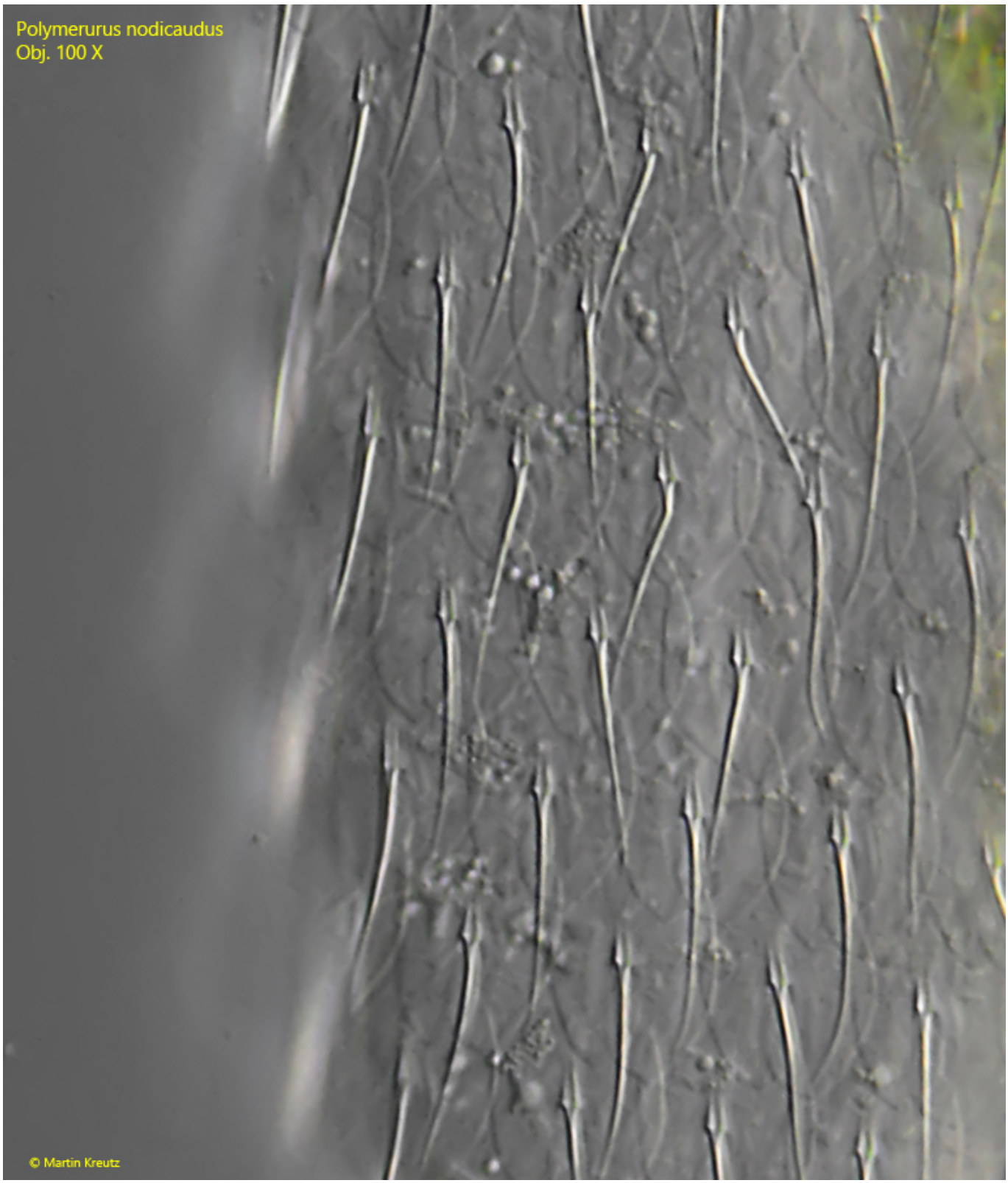



**Fig. 5:** *Polymerurus nodicaudus*. The dosal scales in detail. The transparent scales are 10–12 µm long with a roughly hexagonal shape and a V-shaped incision at the distal end. Obj. 100 X.




**Fig. 6 a-b:** *Polymerurus nodicaudus*. Two focal planes of the posterior end with a deep invagination. Note the delicate bristles (Br) arsing from ring furrows of the toes. Obj. 100 X.