

***Ichthydium bifurcatum* (Preobrajenskaja, 1926)**

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

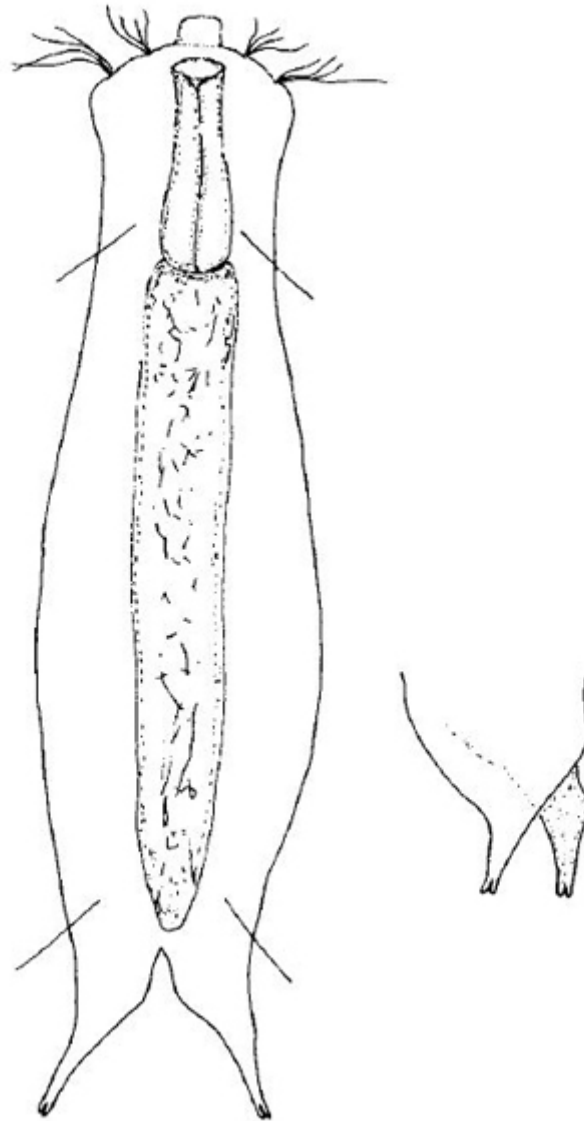
**Synonym:** n.a.

**Sampling location:** [Simmelried](#)

**Phylogenetic tree:** [Ichthydium bifurcatum](#)

**Diagnosis:**

- body stubby and stocky
- length 127-153 µm, width 38 µm
- head weakly five-lobed lateral lobes very small
- cephalon conspicuously rectangular and widely projecting anteriorly
- 4 short ciliary tufts
- 4 dorsal setolae
- cuticle smooth and soft, completely naked
- toes conspicuously pig- or buck-footed, split distally
- pharynx more or less cylindrical

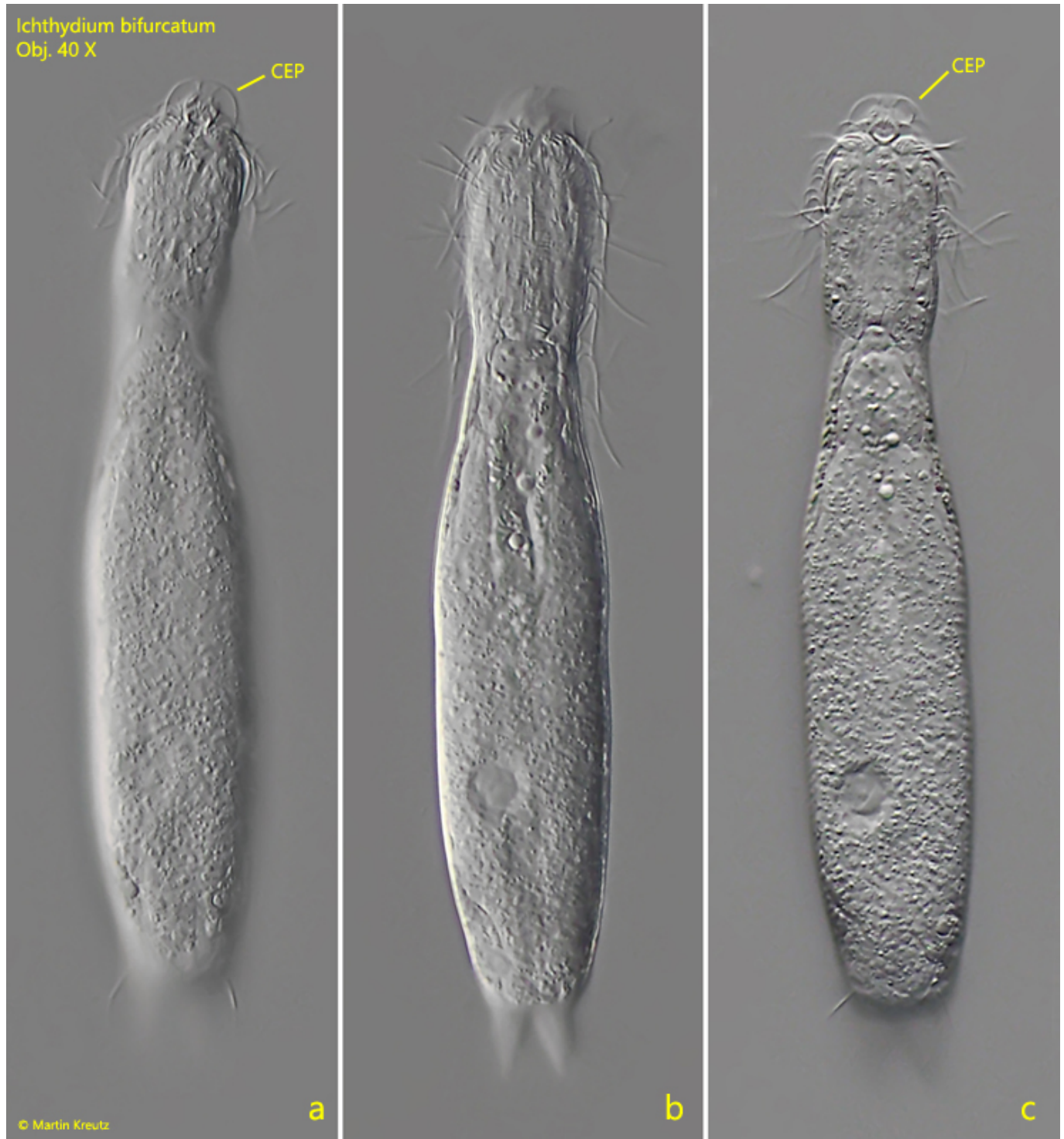


after Preobrajenskaja

### *Ichthydium bifurcatum*

I found *Ichthydium bifurcatum* in July 2020 and in October 2022 in the Simmlried. In the first finding I could document the ventral view (s. fig. 2 a-c) and in the second finding the dorsal view (s. figs. 1 a-c, 3, 4 and 5). An important feature of this species, the split toes, was clearly visible in both specimens (s. figs. 2a and 6). In other characteristics described in the literature (s. diagnosis) I could find deviations. The cephalion of my specimens was rather umbrella-shaped (s. figs. 1a, 1c and 2a) and not rectangular. The dorsal cuticle was not naked but clearly ornamented on a diamond-shaped way (s. figs. 3 and 4). On the ventral side I could not observe any ornamentation or scales. The body shape of my specimens was not stocky, but rather slender and flexible. The lateral lobes of the head were reduced, but the head shape was elongated with parallel sides and not as broad as Preobrajenskaja drew it (s. drawing above). Despite these differences, especially concerning the shape of the cephalion, I believe that the assignment *Ichthydium bifurcatum* is correct, because there is no other species in the genus *Ichthydium* with split toes. Since this species has been found and described only rarely (in Poland and Russia near Moscow) little is known about the

variability of the species.



**Fig. 1 a-c:** *Ichthyidium bifurcatum*. L = 156  $\mu$ m. Dorsal view of a freely swimming specimen. CEP = cephalon. Obj. 40 X.



**Fig. 2 a-c:** *Ichthyidium bifurcatum*. L = 182  $\mu$ m. Ventral view of a freely swimming second specimen. Note the split toes (ST). CEP = cephalion. Obj. 40 X.

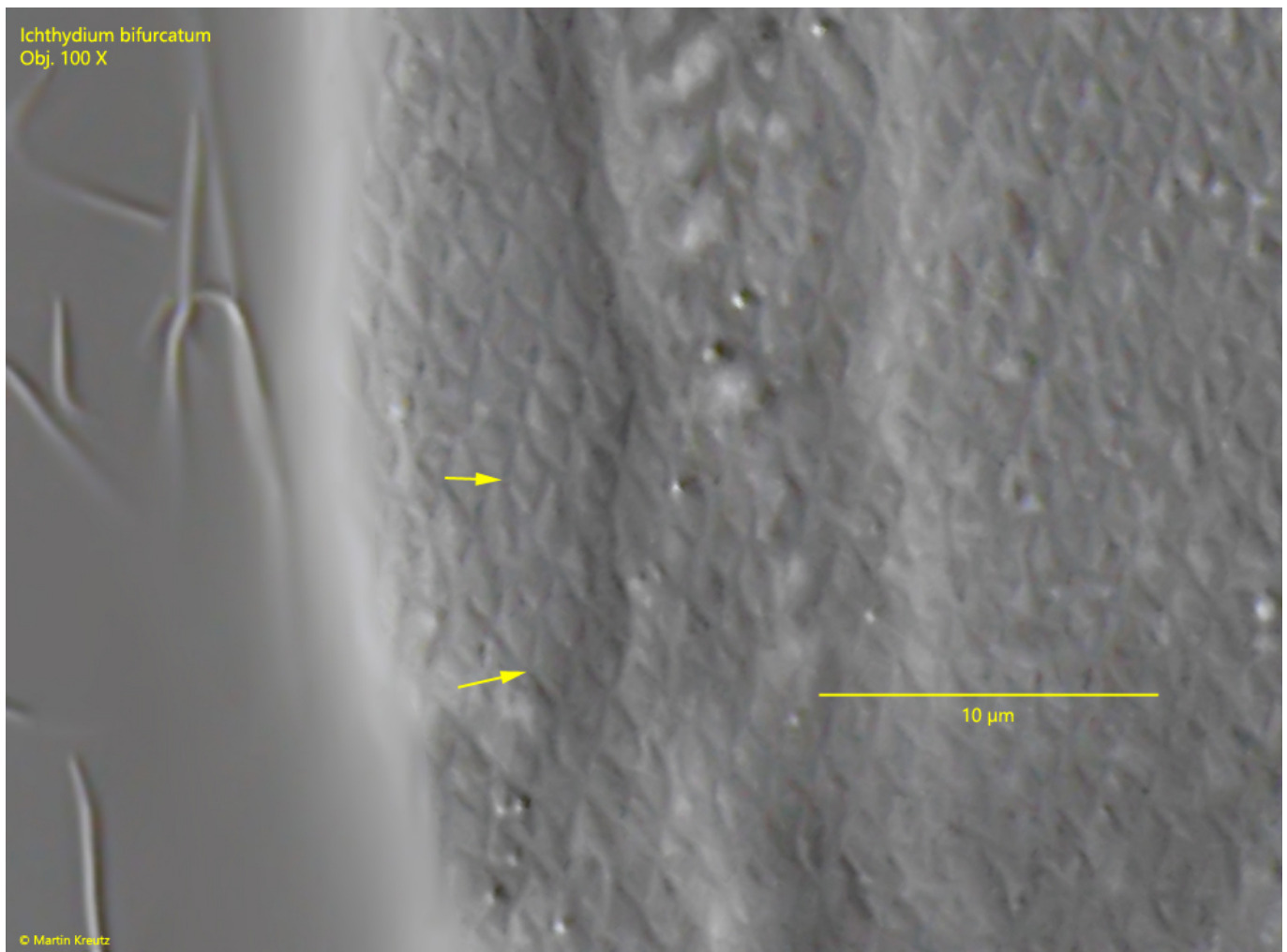


*Ichthyidium bifurcatum*  
Obj. 100 X



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**Fig. 3:** *Ichthyidium bifurcatum*. L = 156  $\mu\text{m}$ . Dorsal view of the cuticle. A diamond-shaped pattern or ornamentation is discernible. Obj. 100 X.



**Fig. 4:** *Ichthyidium bifurcatum*. L = 156  $\mu\text{m}$ . A detail enlargement from fig. 3. The arrows mark the clearly visible diamond-shaped ornaments of the cuticle with a length of 2 - 2.5  $\mu\text{m}$ . Obj. 100 X.

*Ichthyidium bifurcatum*  
Obj. 100 X



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**Fig. 5:** *Ichthyidium bifurcatum*. L = 156  $\mu$ m. Dorsal view of a squashed specimen with the focal plane on the pharynx and mouth opening. Obj. 100 X.



**Fig. 6:** *Ichthyidium bifurcatum*. L = 156  $\mu$ m. Lateral view of the split toes (ST). Obj. 100 X.