

***Ichthydium bifurcatum* Preobrajenskaja, 1926**

Most likely ID: n.a.

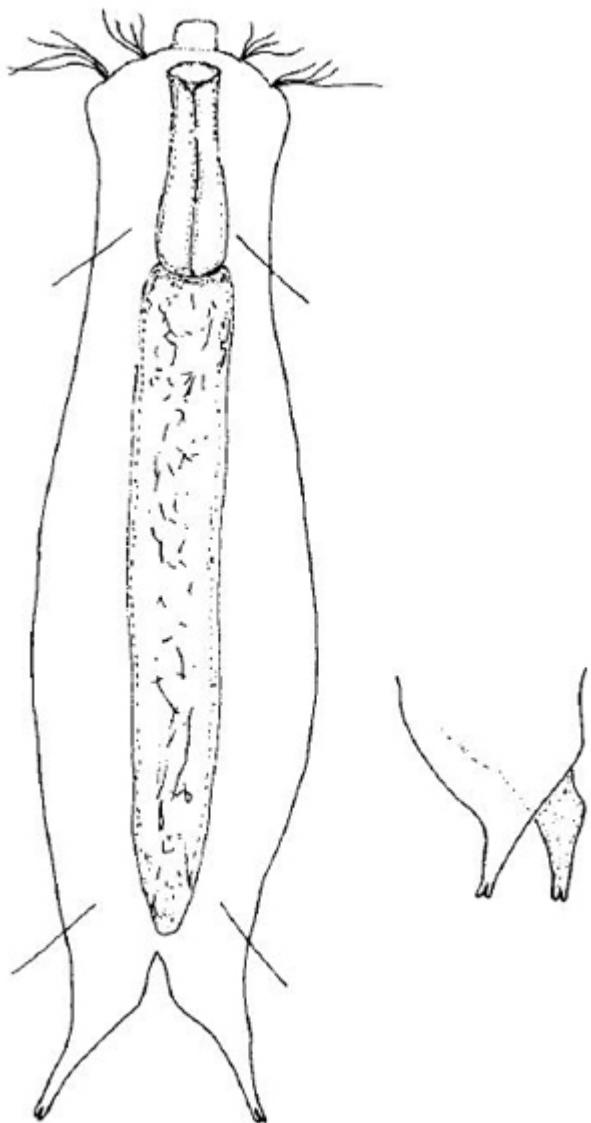
Synonym: n.a.

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
- cephalion 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 Preobrajenskaya 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: *Ichthydium bifurcatum*. L = 156 μ m. Dorsal view of a freely swimming specimen. CEP = cephalion. Obj. 40 X.



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

Ichthydium bifurcatum
Obj. 100 X



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Fig. 3: *Ichthydium bifurcatum*. L = 156 μm . Dorsal view of the cuticle. A diamond-shaped pattern or ornamentation is discernible. Obj. 100 X.

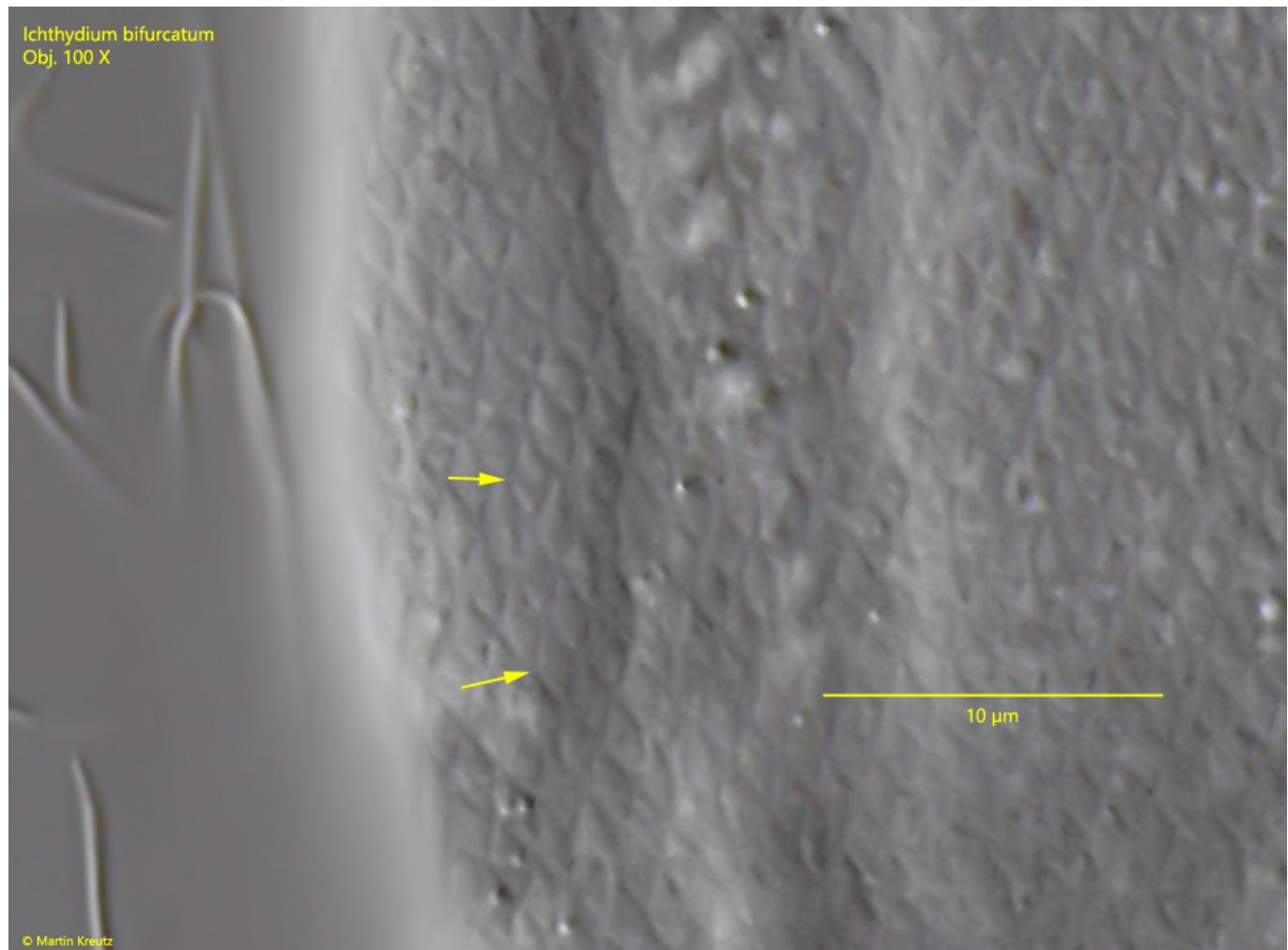


Fig. 4: *Ichthydium bifurcatum*. L = 156 μm . A detail enlargement from fig. 3. The arrows mark the clearly visible diamond-shaped ornaments of the cuticle with a length of 2 – 2.5 μm . Obj. 100 X.

Ichthydium bifurcatum
Obj. 100 X



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



Fig. 6: *Ichthydium bifurcatum*. L = 156 μ m. Lateral view of the split toes (ST). Obj. 100 X.