

***Lepadella cristata* Rousselet, 1893**

Most likely ID: n.a.

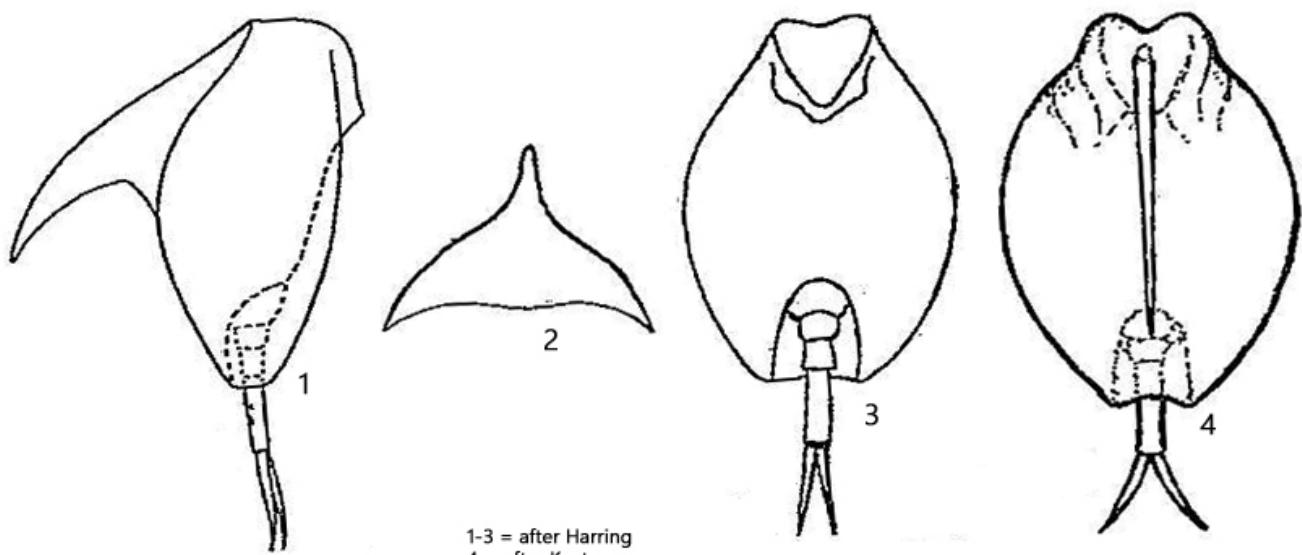
Synonym: n.a.

Sampling location: [Schwemmoor \(Austria\)](#)

Phylogenetic tree: [Lepadella cristata](#)

Diagnosis:

- lorica oval or ovoid
- dorsal keel sickle-shaped
- ventrally flat with delicate longitudinal folds
- length 110–148 µm (of lorica)
- head opening protruding in tubular shape
- ventral sinus V-shaped
- foot groove almost rectangular
- foot of three segments, terminal foot segment longer
- slender toes pointed
- two eyespots



Lepadella cristata

So far, I have only found *Lepadella cristata* in the [Schwemm Moor](#) in Austria. The samples contained numerous specimens, which are easily recognizable by their dorsal, crescent- or sickle-shaped keel (s. figs. 1 a, 2 a and 3). This keel was roughly the same shape and size in all specimens in my population. However, it is subject to a certain degree of variability and can also appear hook- or fin-shaped.

The ventral side of *Lepadella cristata* is flat, and under high magnification I was able to see faint longitudinal folds (s. fig. 5), which I have also found in other *Lepadella* species (e.g., [Lepadella biloba](#) and [Lepadella rhomboides](#)). The apical sinus on the ventral side is V-shaped and the foot groove is approximately rectangular with broadly rounded corners (s. fig. 5).

Another important identifying feature of *Lepadella cristata* is the elongated last foot segment, which is easily recognizable (s. fig. 4). The loricae of my specimens were between 130-140 μm long, which fits well with the range of 110-148 μm given by Koste (1978). According to Koste, the distribution of this species seems to be limited to acidic waters with a pH of 4.5-6.4, which is confirmed by the location [Schwemm Moor](#) where the specimens were found.

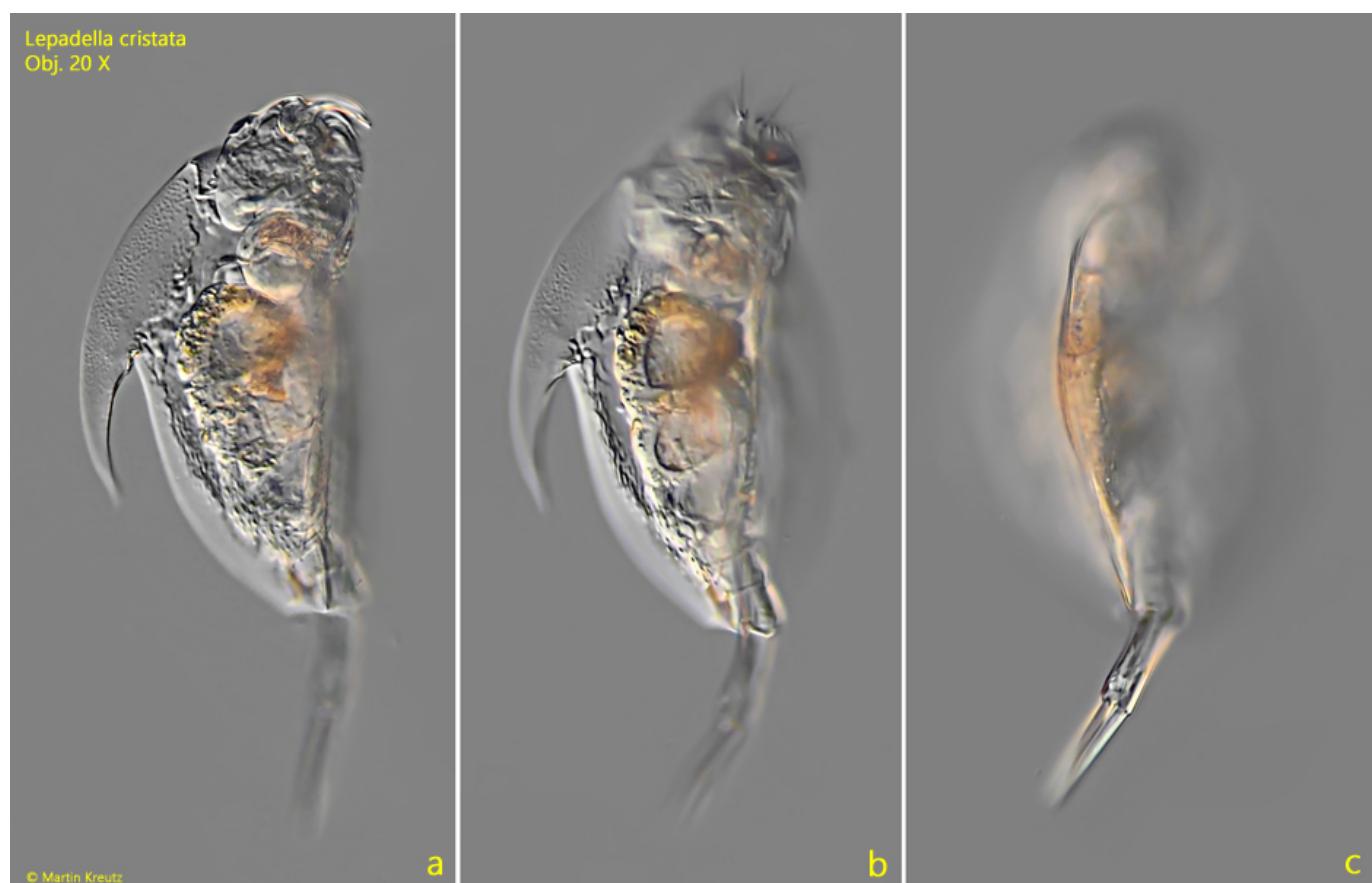


Fig. 1 a-c: *Lepadella cristata*. L = 129 μm (of lorica). A freely swimming specimen from right (a, b) and from dorsal (c). Obj. 20 X.

Lepadella cristata
Obj. 20 X



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a



b

Fig. 2 a-b: *Lepadella cristata*. L = 134 μ m (of lorica). A second freely swimming specimen from left (a) and in apical view (b). KE = sickle-shaped keel. Obj. 20 X.

Lepadella cristata
Obj. 60 X



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Fig. 3: *Lepadella cristata*. L = 141 μm (of lorica). A squashed specimen from dorsal with focal plane on the sickle-shaped keel. Obj. 60 X.

Lepadella cristata
Obj. 60 X



Fig. 4: *Lepadella cristata*. L = 130 μm (of lorica). A slightly squashed specimen from ventral. From the foot segments (F 1-F 3) the last one (F 3) is elongated. TO = toes. Obj. 60 X.

Lepadella cristata
Obj. 100 X



Fig. 5: *Lepadella cristata*. L = 136 μ m (of lorica). A squashed specimen from ventral with focal plane on the surface of the lorica with delicate, longitudinal folds.

The ventral sinus (VS) is V-shaped and the foot groove (FG) is almost rectangular.
Obj. 100 X.



Fig. 6: *Lepadella cristata*. The trophi in a strongly squashed specimen. Obj. 100 X.