

***Lepadella cristata* Rousselet, 1893**

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

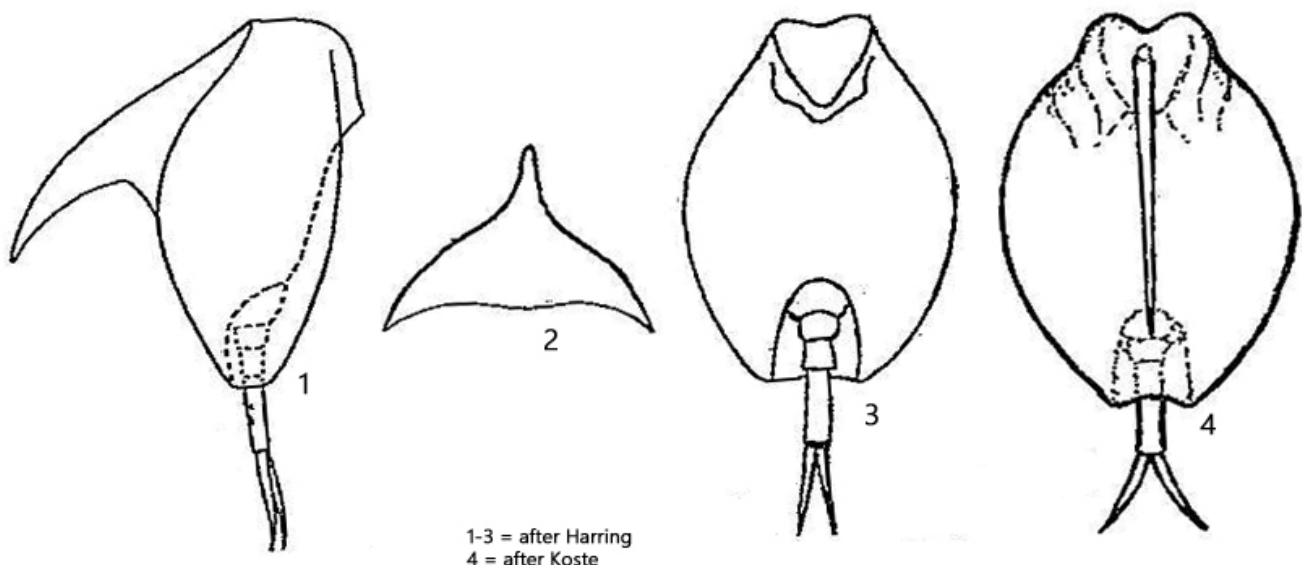
**Synonym:** n.a.

**Sampling location:** [Schwemm Moor \(Austria\)](#)

**Phylogenetic tree:** [Lepadella cristata](#)

**Diagnosis:**

- lorica oval or ovoid
- dorsal keel sickle-shaped
- ventrally flat with delicate longitudinal folds
- length 110–148  $\mu\text{m}$  (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

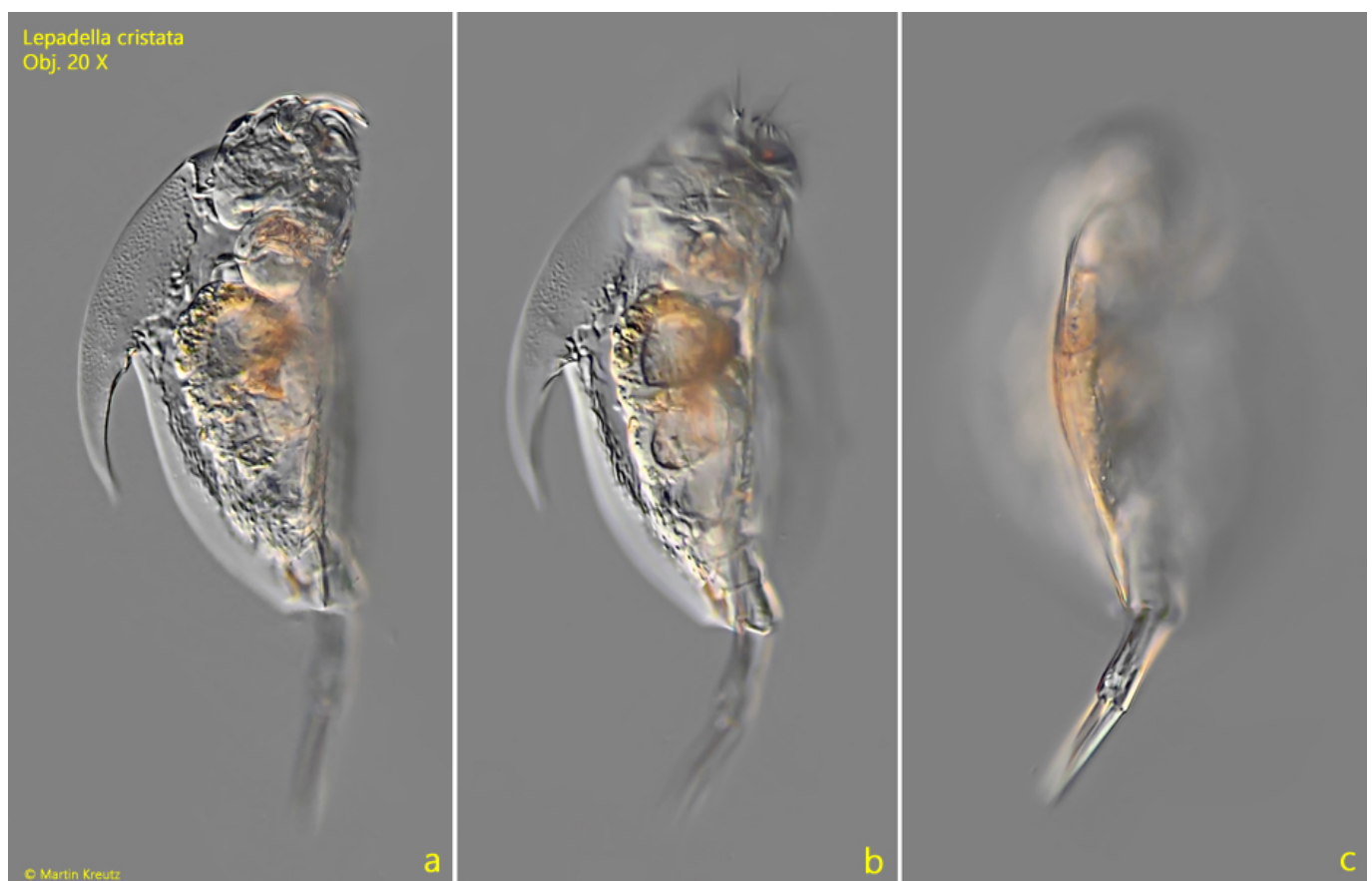


*Lepadella cristata*

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 *Lepdaella 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



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

*Lepadella cristata*  
Obj. 60 X



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**Fig. 3:** *Lepadella cristata*. L = 141  $\mu\text{m}$  (of lorica). A squashed specimen from dorsal with focal plane on the sickl-shaped keel. Obj. 60 X.

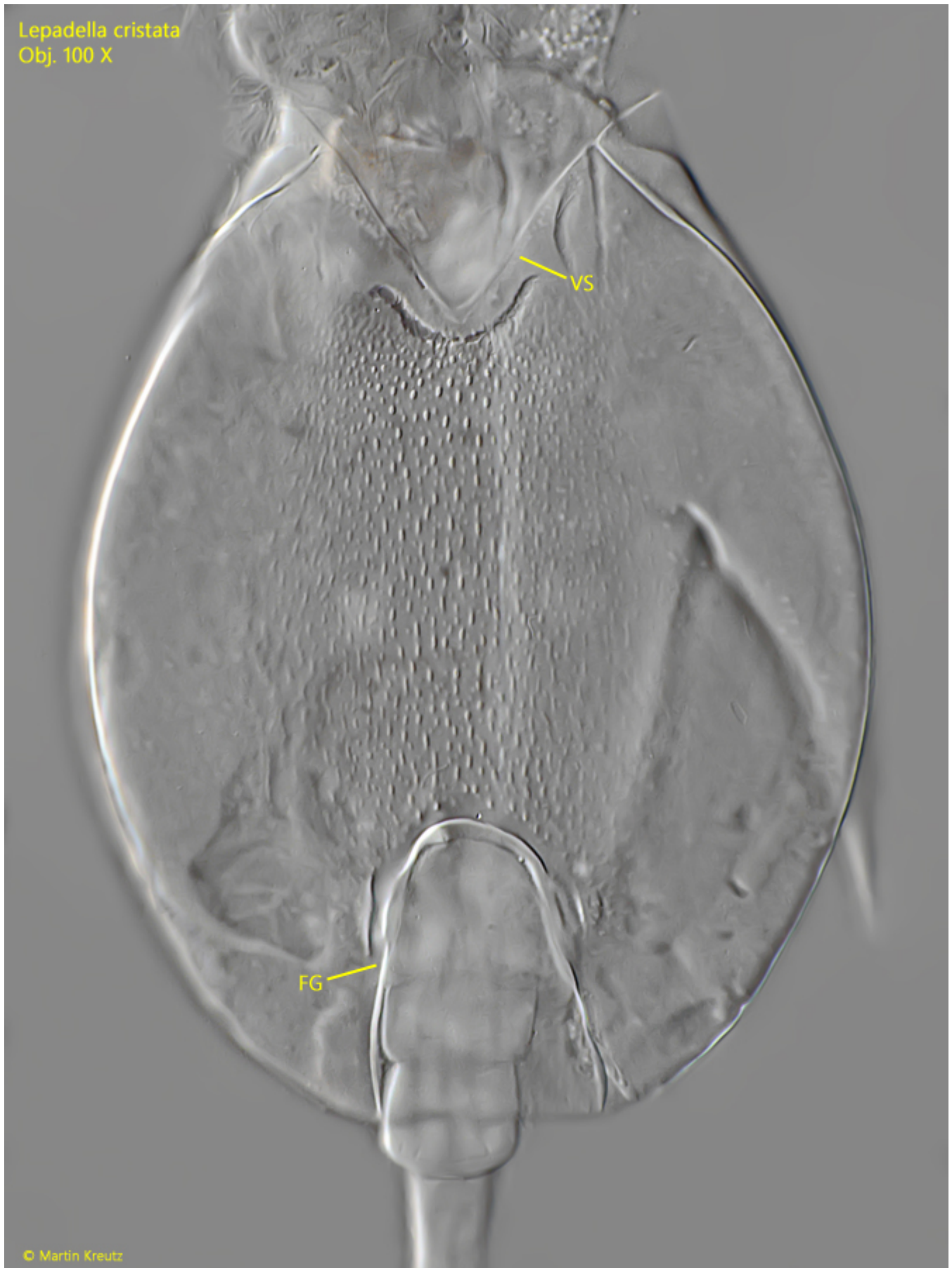


*Lepadella cristata*  
Obj. 60 X



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**Fig. 4:** *Lepadella cristata*. L = 130  $\mu\text{m}$  (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.



**Fig. 5:** *Lepadella cristata*. L = 136  $\mu\text{m}$  (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.