Korotnevella bulla

(Schaeffer, 1926) Goodkov, 1988 (Smirnov, 2009)

Most likely ID: n.a.

Synonym: n.a.

Sampling location: Simmelried

Phylogenetic tree: <u>Korotnevella bulla</u>

Diagnosis:

- body shape variable, hyaline dactylopodia finger-shaped or long conical
- uroid absent
- length 70 100 μm
- one spherical nucleus with central nucleolus
- one contractile vacuole
- no crystals in cytoplasm
- cell covered with a coat of scales (visible in electron microscope)



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Korotnevella bulla was originally described as *Mayorella bulla* by Schaeffer in 1926. In 1982, Page transferred *Mayorella bulla* to the genus *Dactylamoeba*. At the suggestion of Goodkov, the genus *Dactylamoeba* was renamed *Korotnevella* in 1988 (Korotneff created the genus *Dactylamoeba* in 1880). Therefore, the current name of this amoeba is *Korotnevella bulla*.

I find *Korotnevella bulla* frequently and regularly in the <u>Simmelried</u>. All specimens were larger than 80 μ m and thus larger than the similar *Korotnevella stella* (31-60 μ m). Therefore, I do not believe that this is a large form of *Korotnevella stella*.

Korotnevella bulla flows forward with finger-shaped psudopodia (= dactylopodia). The cytoplasm is very transparent and contains no inclusions apart from some food vacuoles. A contractile vacuole is present and the broadly oval nucleus with a central nucleolus (s. fig. 3). An uroid is not formed during locomotion.

The species of the genus *Korotnevella* are covered with a layer of scales, the so-called cell coat. The shape of the scales can only be seen under an electron microscope and were studied thouroughly by <u>Voelker & Clauss</u>. Under the light microscope, however, this cell coat can be seen as a thin film and, under favorable conditions, a structuring of this layer at the limit of the possible resolution can also be seen (s. fig. 4).



Fig. 1 a-c: Korotnevella bulla. L = 102 μ m. A freely floating specimen. CV = contractile vacuole. Obj. 40 X.



Fig. 2 a-b: Korotnevella bulla. L = 84 μ m. A second specimen. Nu = nucleus. Obj. 60 X.



Fig. 3: *Korotnevella bulla*. The squashed specimen as shown in fig. 2 a-b. Note the thin cell coat (CC) covering the specimen. This coat contains $< 0.1 \mu m$ scales, only visible in the electron microscope. Nu = nucleus, Nuc = central nucleoli. Obj. 100 X.



Fig. 4: *Korotnevella bulla*. A strongly enlarged and contrasted section of the cell coat. At the limit of possible resolution, a structure of the cell coat can be recognized, which is caused by the scales (SC) embedded in it. The cell coat is 0.5–0.6 µm thick. Obj. 100 X.