Thecamoeba quadrilineata

(Carter, 1856) Lepşi, 1960

Most likely ID: n.a.

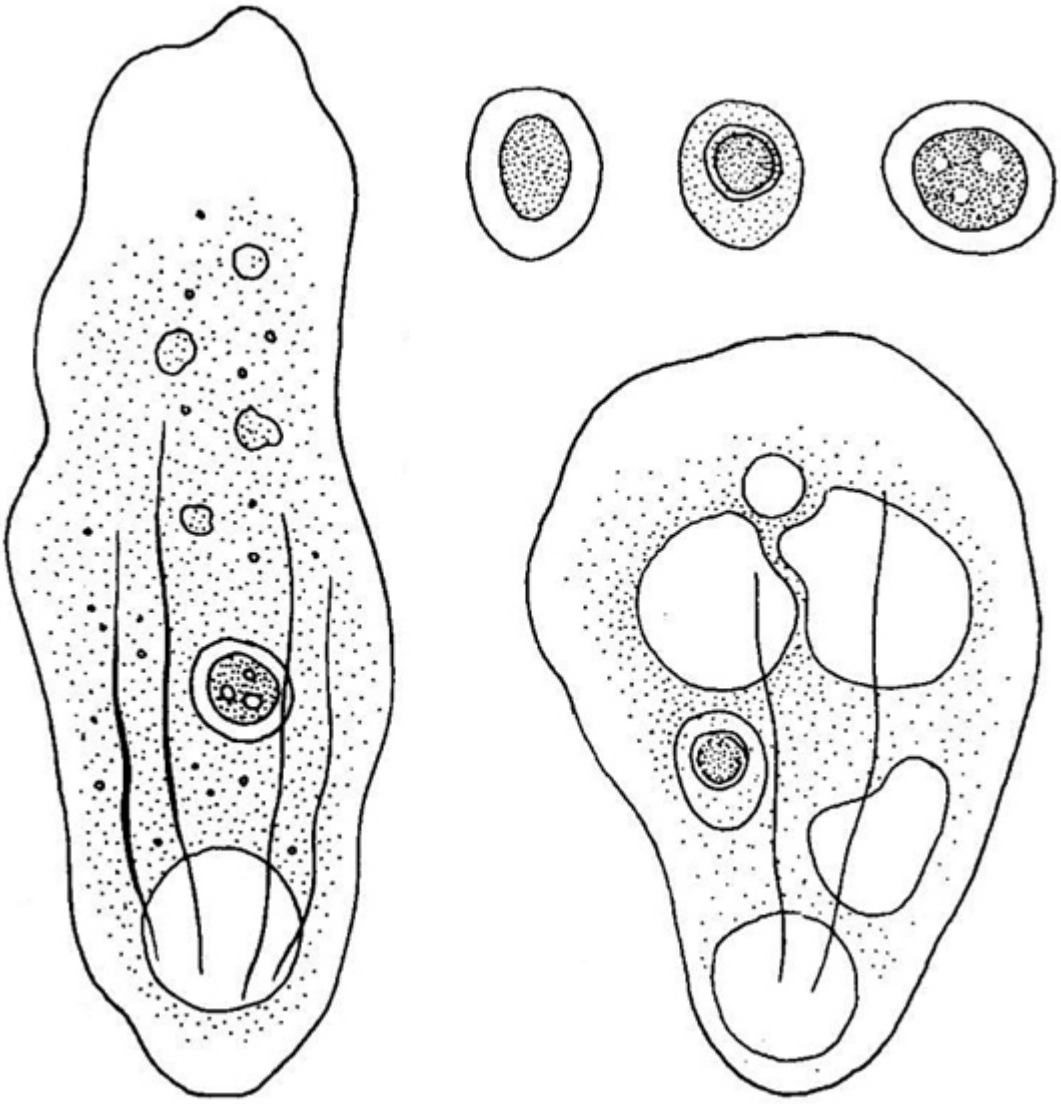
Synonym: n.a.

Sampling location: Simmelried

Phylogenetic tree: *Thecamoeba quadrilineata*

Diagnosis:

- stationary form broadly oval, not folded
- in locomotion elongated elliptical with 2–4 dorsal folds
- length 35–80 µm (commonly 50–55 µm)
- crescent-shape seam of hyaloplasm in flow direction
- spherical nucleus (8.4–11 µm) with a central, spherical nucleolus (4.6–7.5 µm)
- one contractile vacuole, often located posterior



Thecamoeba quadrilineata

So far I have only been able to find *Thecamoeba quadrilineata* in the Simmelried between decomposing plant masses. The species is rare at the site, but occurs regularly. Due to its highly refractive cytoplasm, the transparent fringe of hyaloplasm and the typical longitudinal folds on the dorsal side, *Thecamoeba quadrilineata* is easy to recognize, but it can easily be confused with the similar species *Thecamoeba striata*. It is therefore important to examine the nucleus closely. In *Thecamoeba quadrilineata*, the spherical nucleus has a spherical central nucleolus that is homogeneous and smooth. In the nucleus of *Thecamoeba striata* there are two to three parts of the nucleolus, which are arranged peripherally in the nucleus.

More images and information on *Thecameoba quadrilineata*: Ferry Siemensma-Microworld-*Thecamoeba quadrilineata*

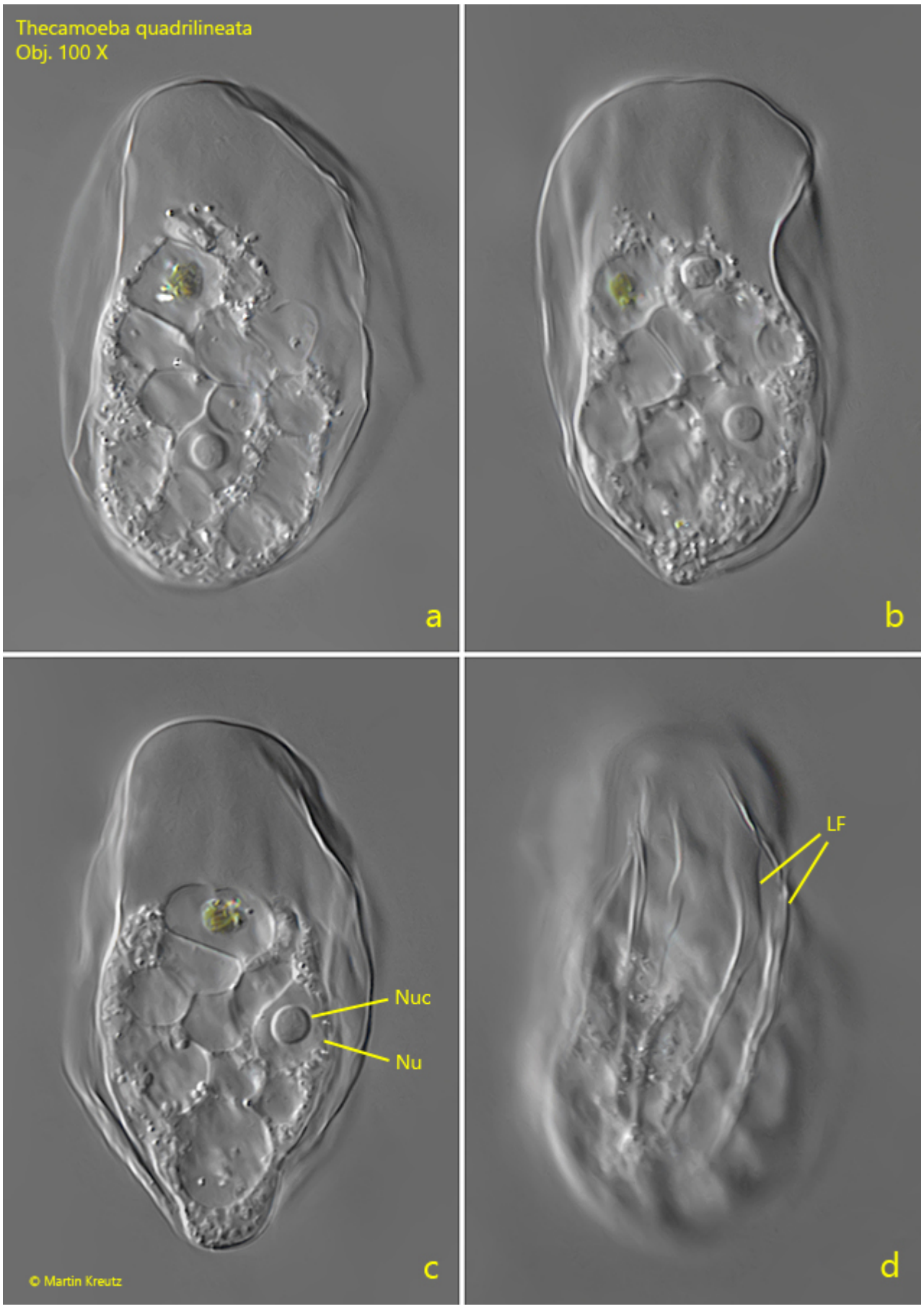


Fig. 1 a-d: *Thecamoeba quadrilineata*. L = 59 µm. A freely gliding specimen. Note the the spherical nucleolus (Nuc) in the nucleus (Nu) and the longitudinal folds (LF)

on the dorsal side. Obj. 100 X.

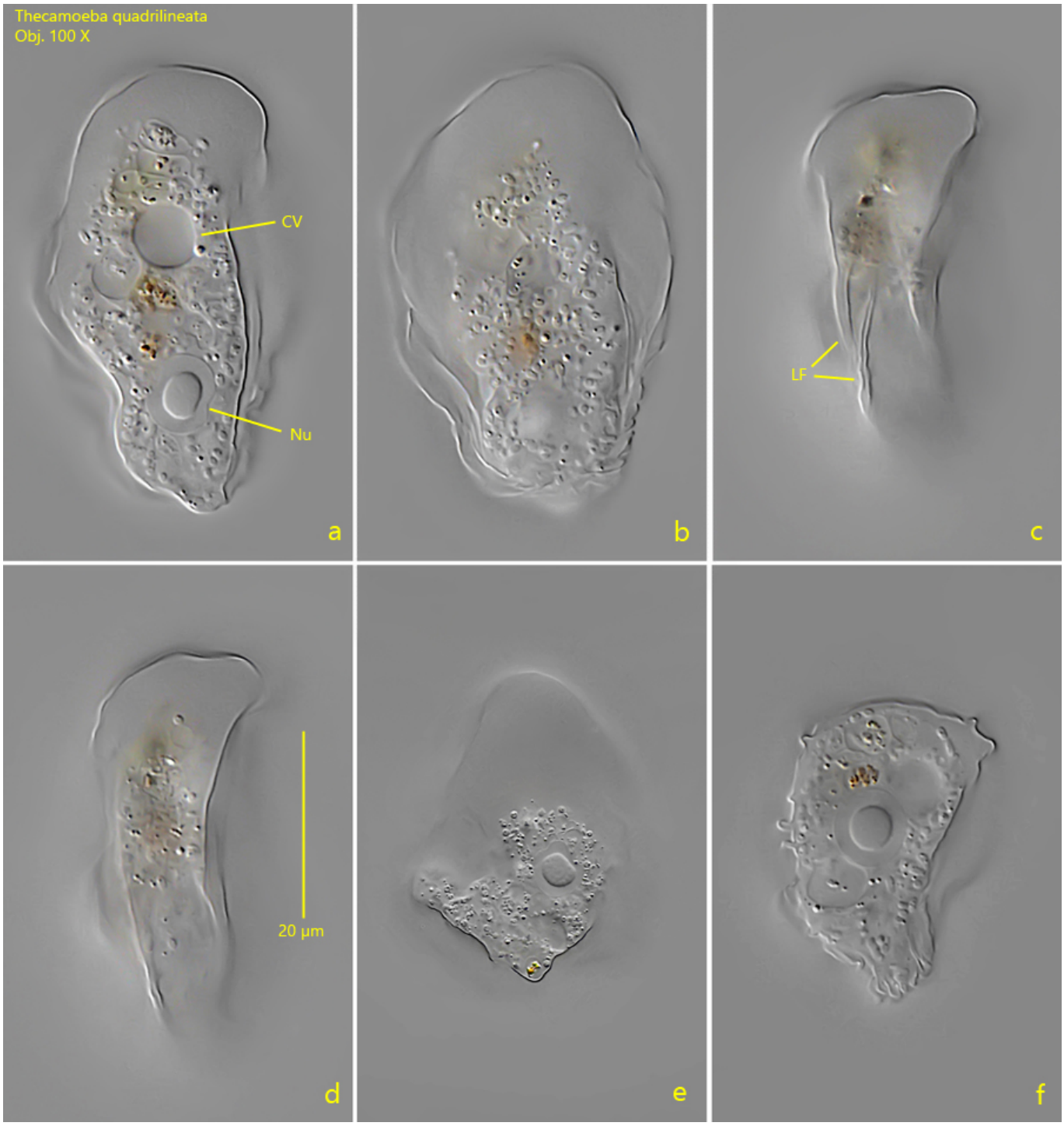


Fig. 2 a-f: *Thecamoeba quadrilineata*. L =48 µm. A second specimen during locomotion (a-d) and resting (e-f). The nucleus (Nu) has a diameter of 7.8 µm. CV = contractile vacuole, LF = longitudinal folds. Obj. 100 X.