Paraquadrula irregularis Wallich, 1863

Most likely ID: n.a.

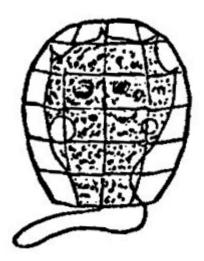
Synonym: n.a.

Sampling location: Moss

Phylogenetic tree: <u>Paraquadrula irregularis</u>

Diagnosis:

- shell broad oval, slightly compressed
- composed of quadratic calcite plates
- length 25-48 μm
- nucleus posterior with central nucleolus
- several contractile vacuoles
- only few pseudopodia, about body length



after Grospietsch

Paraquadrula irregularis

So far I have found Paraquadrula irregularis in Sphagnum moss from the Simmelried and in a moss sample from a tree trunk. As this testate amoeba is quite small, it is easily overlooked in the samples. However, as the square plates covering the shell are made of

calcite (calcium carbonate), the specimens shine brightly in the DIK.

In nature, right angles are very rare and the square plates of Paraquadrula irregularis are an example of this, even if not all plates are right-angled. According to my measurements, the plates have an edge length of $6-6.5 \mu m$. They are somewhat irregularly attached to the transparent shell of the amoeba.

More images and information on Paraquadrula irregularis:

Ferry Siemensma-Microworld-Paraquadrula irregularis

and

Wolfgang Bettighofer-Protisten.de-Paraguadrula irregularis

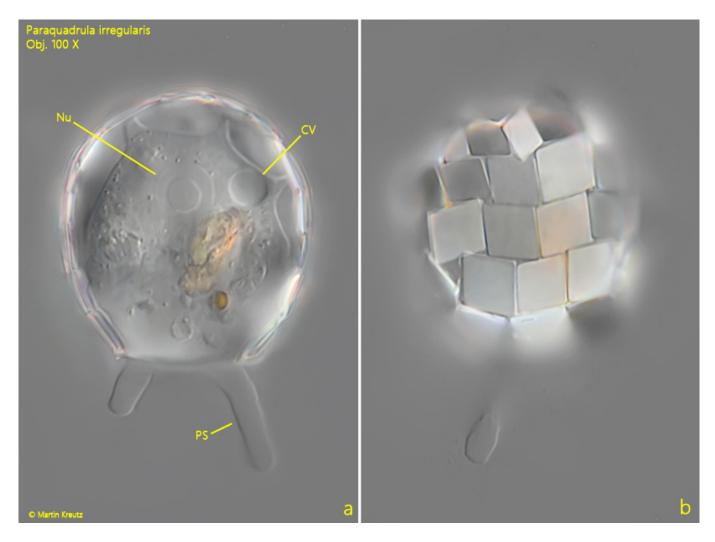


Fig. 1 a-b: Paraquadrula irregularis. $L = 32 \mu m$. Two focal planes of a slightly squashed specimen. The square calcite plates have an edge length of 6.4 μm . CV = contractile vacuole, Nu = nucleus, PS = pseudopodia. Obj. 100 X.

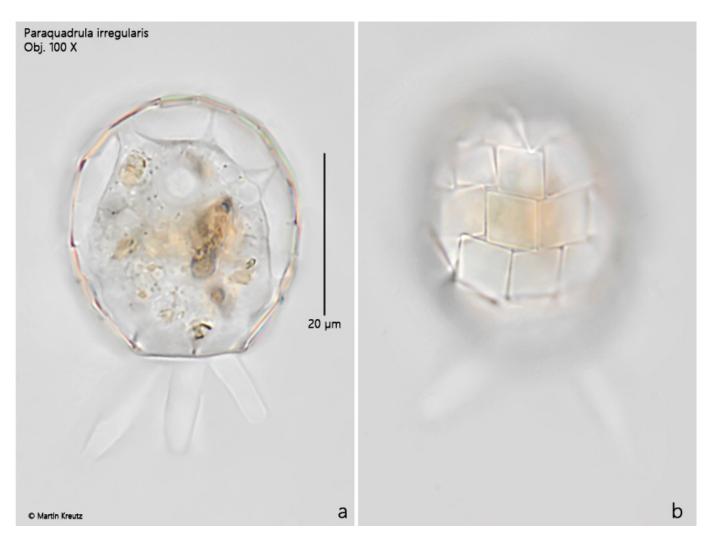


Fig. 2 a-b: Paraquadrula irregularis. L = 32 μm . The same specimen as shown in fig. 1 a-b in brightfield illumination. Obj. 100 X.

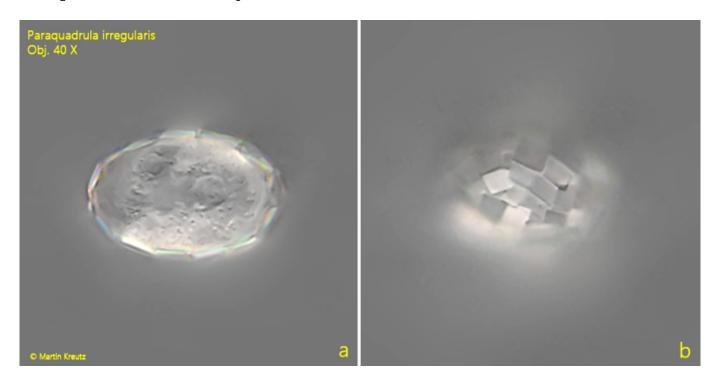


Fig. 3 a-b: Paraquadrula irregularis. L = 32 μm . A specimen in apical view. The shell is

slightly compressed. Obj. 40 $\rm X.$