Cosmarium reniforme (Ralfs) Archer, 1874

Most likely ID: n.a.

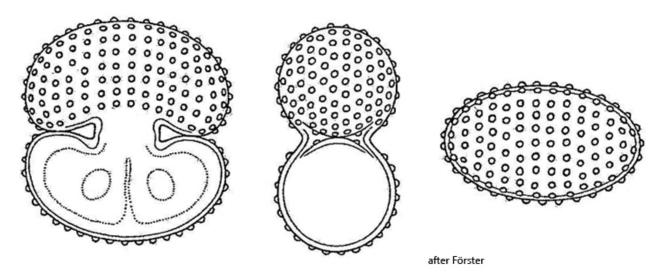
Synonym: n.a.

Sampling location: Schwemm (Austria), Pond of the convent Hegne

Phylogenetic tree: Cosmarium reniforme

Diagnosis:

- semi-cell kidney-shaped, slight flattened
- cell ellipsoid in apical view
- length 43-74 µm, width 35-62
- cell wall covered with round granules, about 30-33 per semi-cell
- two pyrenoids per semi-cell
- one branched chloroplast per semi-cell
- sinus wide, closed in middle with a hole-like extension in the center



Cosmarium reniforme

Although Cosmarium reniforme is described as a very common desmid, I have only found it twice so far. First in June 2004 in the Schwemm moorland in Austria. It was only 20 years later that I found Cosmarium reniforme in large numbers in April 2024 in the pond of the

convent Hegne. The photos shown below are from this population.

The species is very characteristic due to its kidney-shaped semi-cells (s. fig. $1\ d$) and the regularly arranged, round granules of the cell wall (s. fig. 1 a). These can be arranged in slightly diagonal rows or in vertical rows.

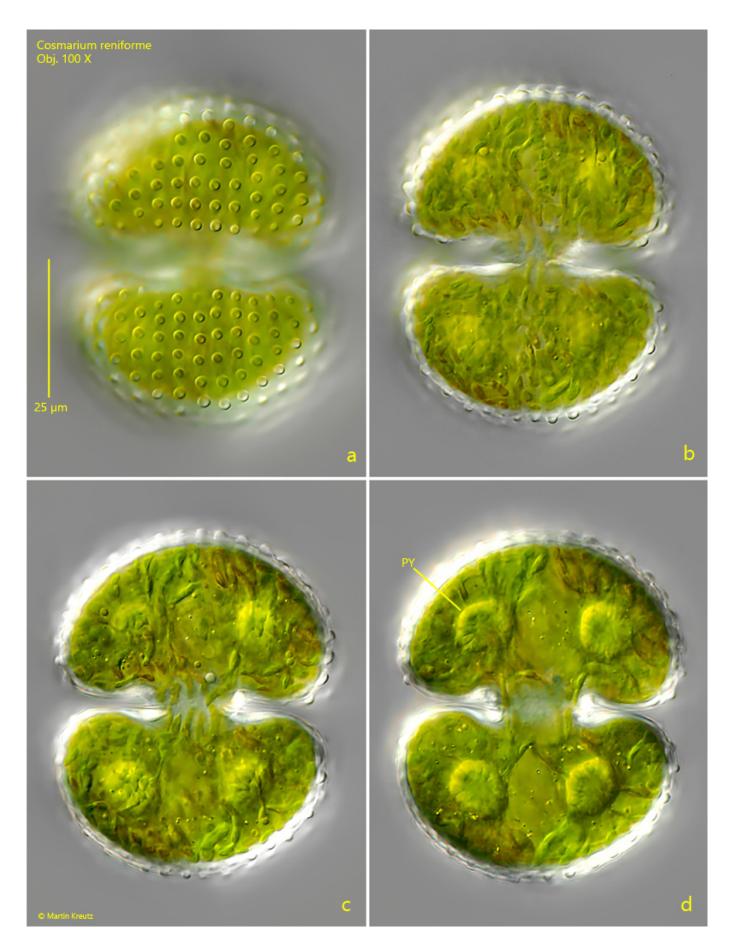


Fig. 1 a-d: Cosmarium reniforme. L = 63 μm . Four focal planes of a slightly squashed specimen. PY = pyrenoid. Obj. 100 X.