***Cosmarium regnesi* Reinsch, 1866**

Most likely ID: n.a.

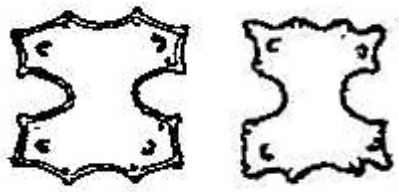
Synonym: *Cosmarium regnesii*

Sampling location: Simmelried

Phylogenetic tree: *Cosmarium regnesi*

Diagnosis:

- cell as wide as long
- semi-cells almost rectangular
- apices slightly concave
- each 6 warts per semi-cell
- warts often colored brown-orange (iron inclusions)
- length 6–11 µm
- sinus widely open, U-shaped
- one chloroplast with one pyrenoid per semi-cell



Cosmarium regnesi

So far I have only found *Cosmarium regnesi* once in 2005 in the Simmelried. After that I have no more evidence.

Cosmarium regnesi is one of the smallest members of the genus and is easy to overlook in fresh samples. The main characteristics are the U-shaped, wide-open sinus and the few but conspicuous warts on the half-cells. In my population, these

warts were colored brown-orange due to iron inclusions. The cell is about as long as it is wide and therefore somewhat square in outline.

The species *Cosmarium regnesi* shows a certain variability but the square cell outline and the U-shaped sinus are always preserved.

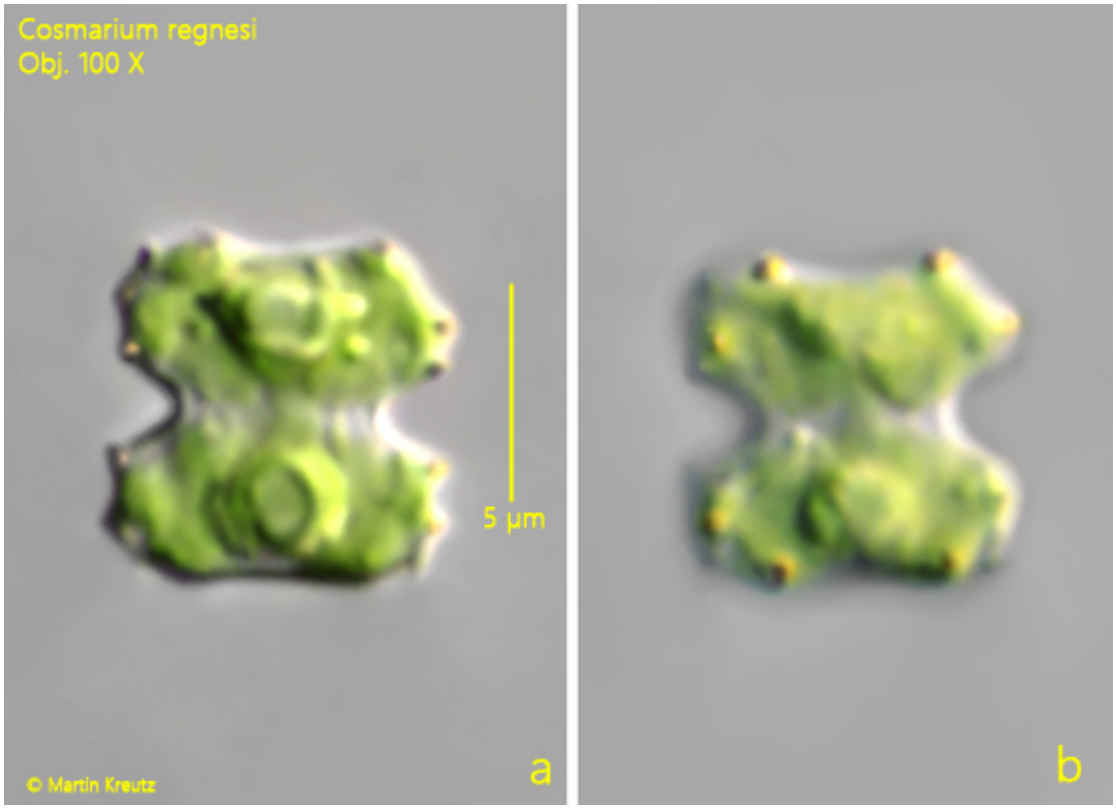


Fig. 1 a-b: *Cosmarium regnesi.* L = 8.4 µm. Two focal planes of a specimen found 2005 in the Simmelried. Obj. 100 X.