Cosmarium granatum

(Brébisson ex Ralfs, 1848)

Most likely ID: n.a.

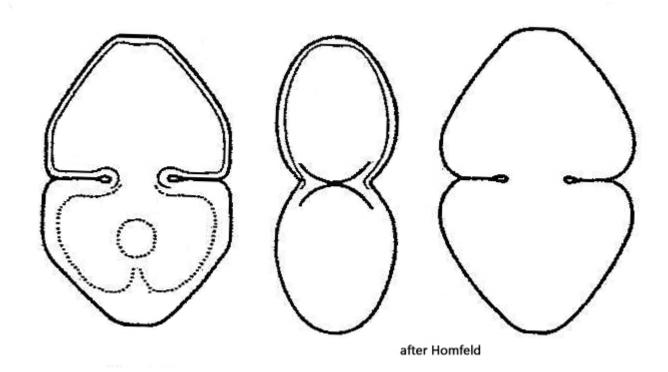
Synonym: Ursinella granata, Euastrum granatum, Cosmarium granatum f. pentagonum

Sampling location: Wollmatinger Ried, Tettermoor (Austria)

Phylogenetic tree: Cosmarium granatum

Diagnosis:

- semi-cells trapezoidal or triangular with broadly rounded corners
- basal part of the half cells sometimes with parallel sides
- length 20-48 μm, width 13-31 μm
- sinus narrow, slightly dilated to the istmus
- cell wall finely granulated, thickened at apices
- one pyrenoid per semi-cell



Cosmarium granatum

I first found *Cosmarium granatum* in December 1994 in a shallow pond in the Wollmatinger Ried. In May 1996 I found further specimens in samples from the Tettermoor (Austria). After that I have no evidence of further finds.

I recognize *Cosmarium granatum* by the almost triangular shape of the half-cells, whereby the corners are always broadly rounded. Sometimes the sides are angled again just above the sinus (s. fig. 2). The cell wall of *Cosmarium granatum* is quite thick in relation to the cell size. It is finely granulated, without warts or tubercles.

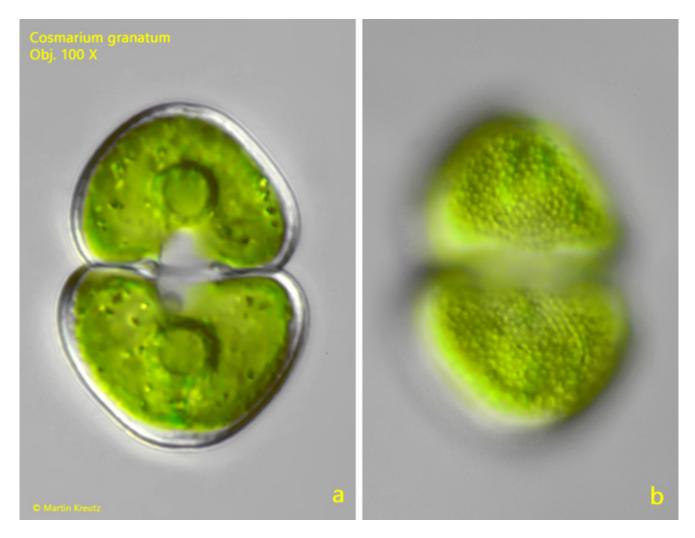


Fig. 1 a-b: Cosmarium granatum. $L = 39 \mu m$. Two focal planes of a specimen found in December 1994 in the Wollmatinger Ried. Obj. 100 X.



Fig. 2: Cosmarium granatum. $L=43~\mu m$. A second specimen found in May 1996 in the Tettermoor (Austria). Obj. 100 X.