Staurastrum margaritaceum

Meneghini ex Ralfs, 1848

Most likely ID: n.a.

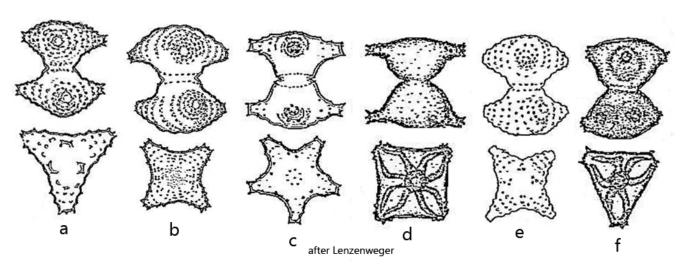
Synonym: n.a.

Sampling location: Sima Moor (Austria)

Phylogenetic tree: Staurastrum margaritaceum

Diagnosis:

- cells about as wide as long, semi-cells bell-shaped
- length 24-30 μm, width 24-28 μm
- shape highly variable with 3-6 arms
- arms projecting horizontal
- two rings of warts on each side of isthmus
- distal ends of arms with inconspicuous spines
- apices convex with concentric rings of small warts
- each semicell with one axial chloroplast, each with one pyrenoid
- spherical nucleus positiones in the isthmus



Staurastrum margaritaceum

Staurastrum margaritaceum is a very variable species, which usually has a three- or fourfold symmetry in apical view. However, there are also specimens with a five- or sixnumbered symmetry (s. drawings above). Common to all varieties, however, are short or absent spines and convexly curved apices. In addition, there is a ring of small warts on both sides of the isthmus.

Of all the described substspecies, the specimen shown below is most similar to form $\mathbf{"e}$ " (s. drawing above). The four arms have no spines at the distal end, but only inconspicuous warts.

I found Staurastrum margaritaceum in large numbers in the Sima Moor (Austria) in June 2024. All specimens had a four-armed symmetry and had no spines, only warts.

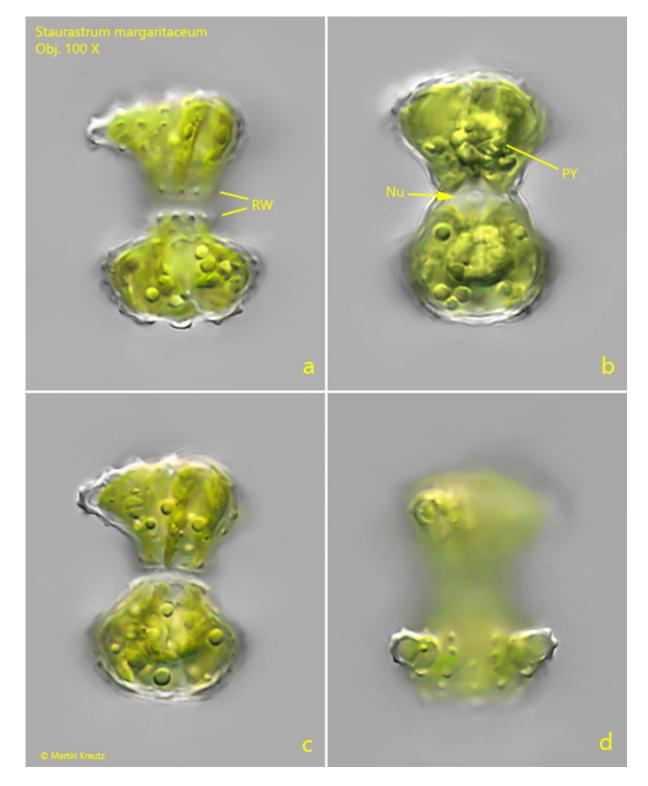


Fig. 1 a-d: $Staurastrum\ margaritaceum$. L =28 μm . Four focal planes in lateral view. Note the ring of warts (RW) on both sides of the isthmus. Nu = nucleus, PY = pyrenoid. Obj. 100 X.

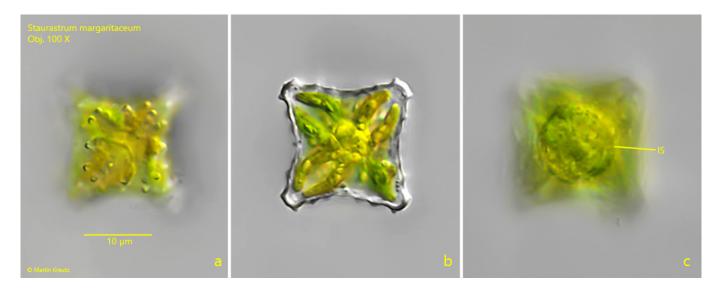


Fig. 2 a-b: Staurastrum margaritaceum. The specimen as shown in fig. 1 a-d in apical view. The warts on the apices as well as at the distal ends of the four arms are small and inconspicuous. Obj. 100 X.