Staurastrum margaritaceum

Meneghini ex Ralfs, 1848

Most likely ID: n.a.

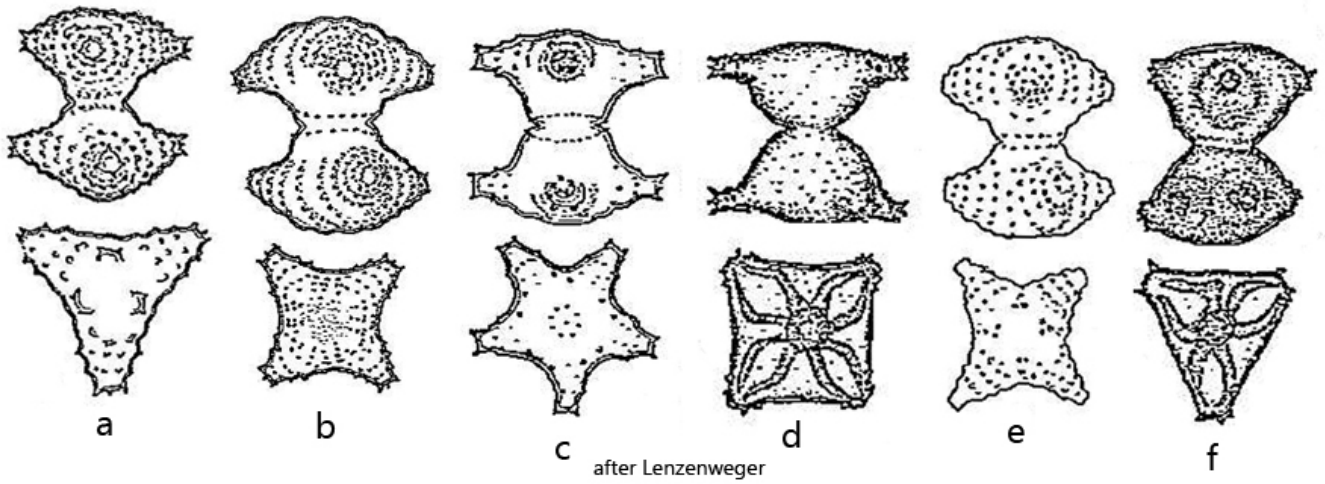
Synonym: n.a.

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

four-fold symmetry in apical view. However, there are also specimens with a five- or six-numbered 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 “**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.

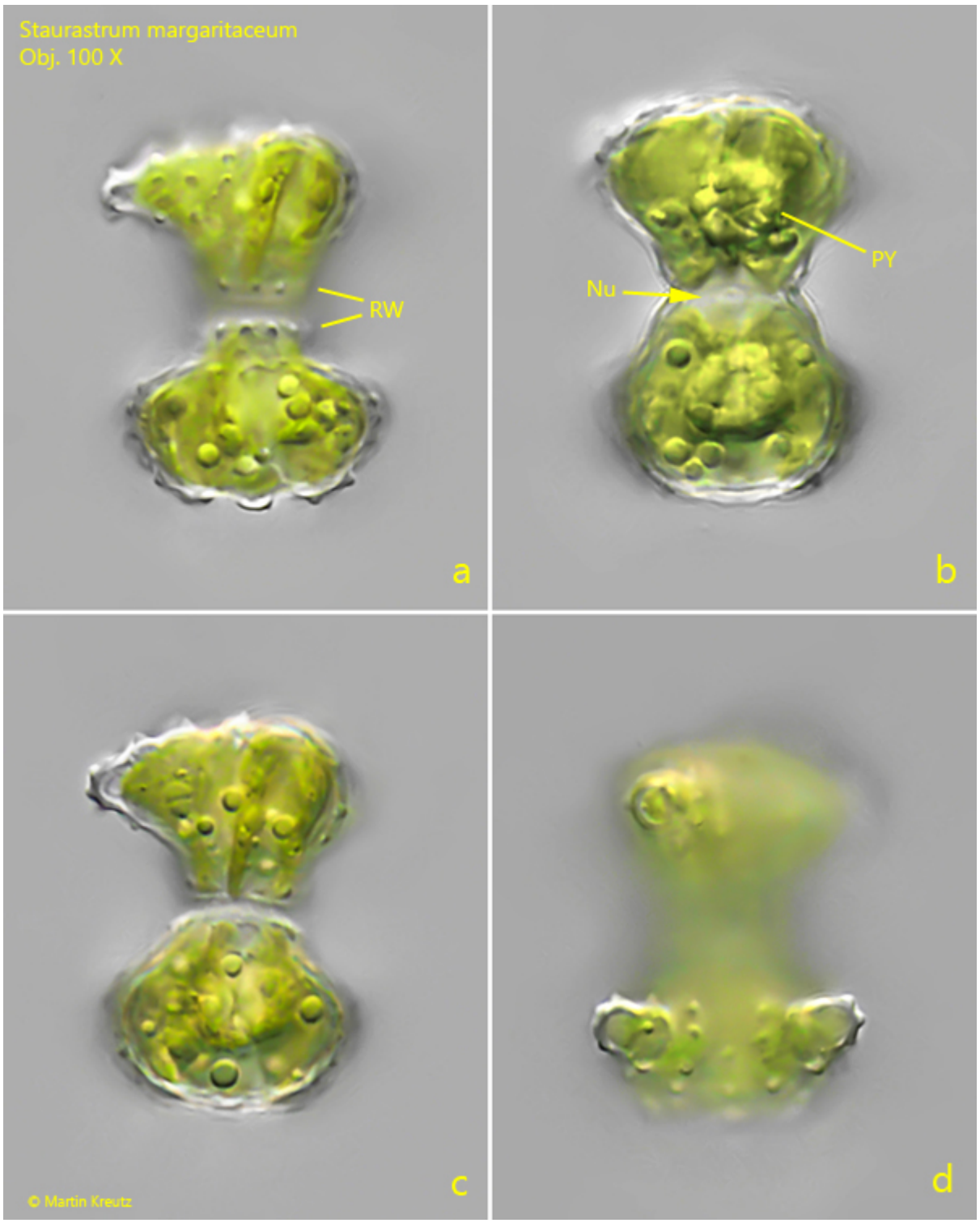


Fig. 1 a-d: *Staurastrum margaritaceum*. L =28 µm. Four focal planes in lateral view. Note the ring of warts (RW) on both sides of the isthmus. Nu = nucleus, PY = pyrenoid. Obj. 100 X.

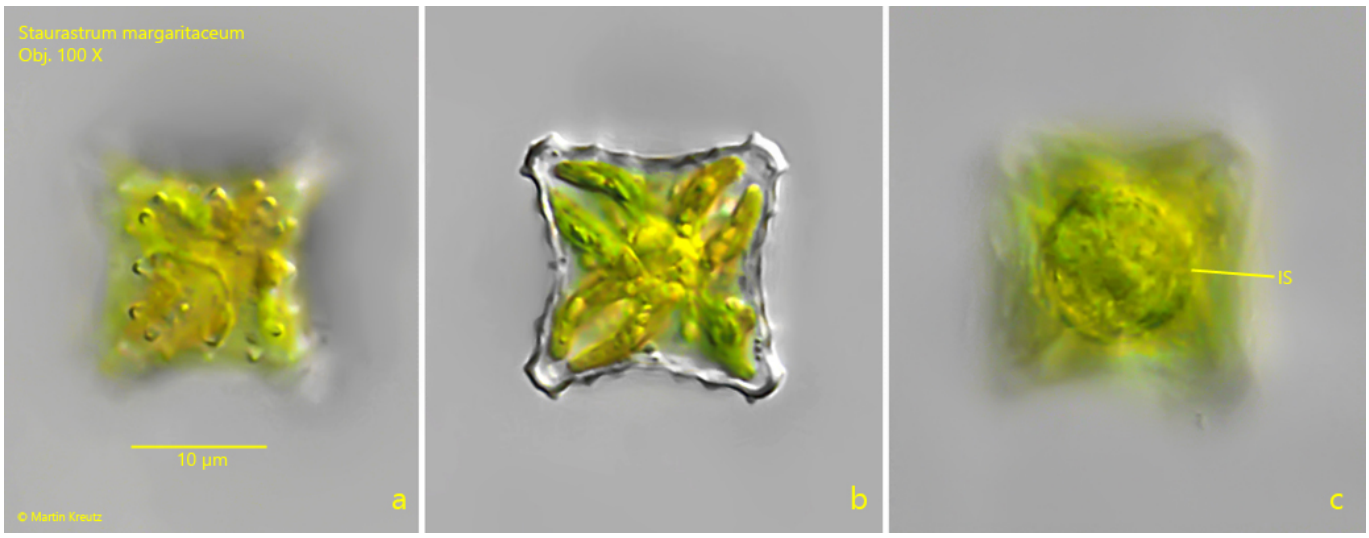


Fig. 2 a-b: *Staurastrum margaritaceum*. The specimen as shown in fig. 1 a-d in apical view. The warts on the apices as well as at the distal ends of the four arms are small and inconspicuous. Obj. 100 X.