Staurastrum aculeatum

Meneghini ex Ralfs, 1848

Most likely ID: n.a.

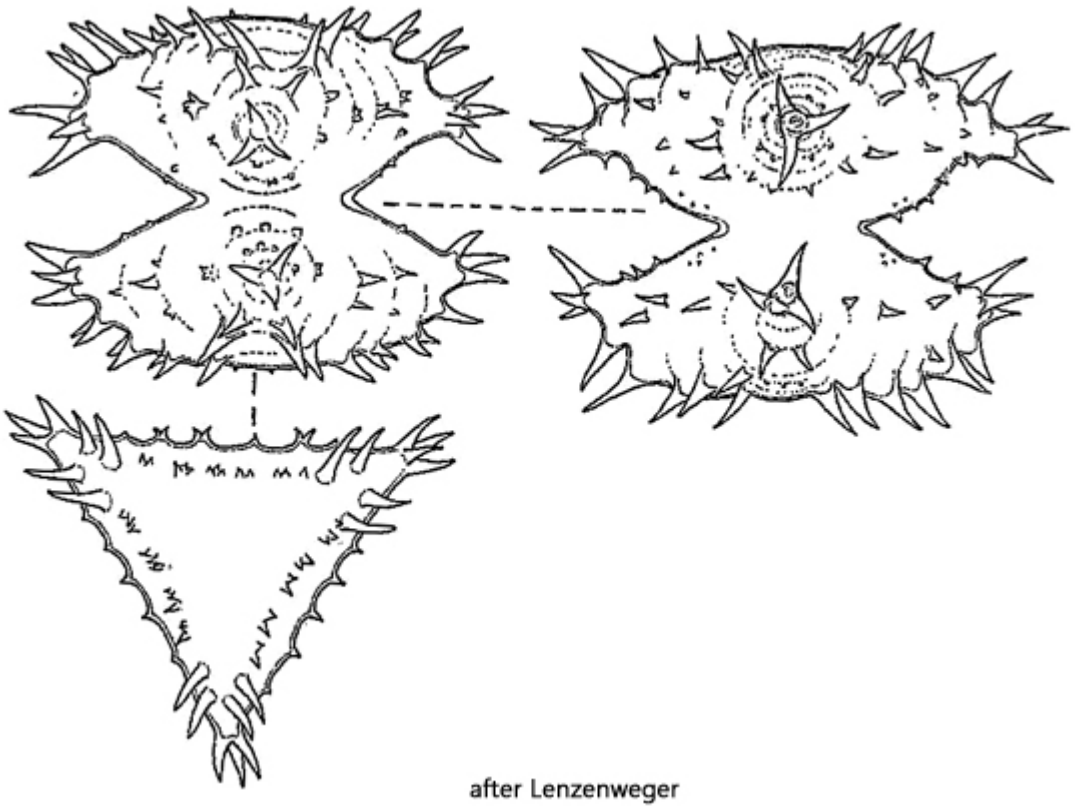
Synonym: *Staurastrum anatinum* var. *aculeatum*

Sampling location: Schwemm Moor (Austria)

Phylogenetic tree: *Staurastrum aculeatum*

Diagnosis:

- cells slightly wider than long
- 3–4 radiat
- semi-cells elongate elliptic
- apices slightly convex
- length 48–55 µm, width 50–55 µm (without spines)
- short arms with 3–4 distinct spines at fistal end
- apically 2 pairs of simple spines
- shorter, two-pointed teeth in rows intramarginal
- arms with each 2 pairs of intramarginal simple spines
- sinus tapers to a point



after Lenzenweger

Staurastrum aculeatum

So far, I have found *Staurastrum aculeatum* only once in a few specimens in samples from the Schwemm Moor. The cells stand out even at low magnifications due to their strong spines. In my population, all the spines were brownish in color, which Lenzenweger (1997) does not mention in his description. Additionally, I observed that the arrangement and length of the spines exhibit some variability, especially regarding the number and length of double-pointed spines.

Staurastrum aculeatum can be confused with *Staurastrum anatinum* f. *vestitum*. However, this species occurs only planktonically and is also smaller, with a length of 30–32 µm.

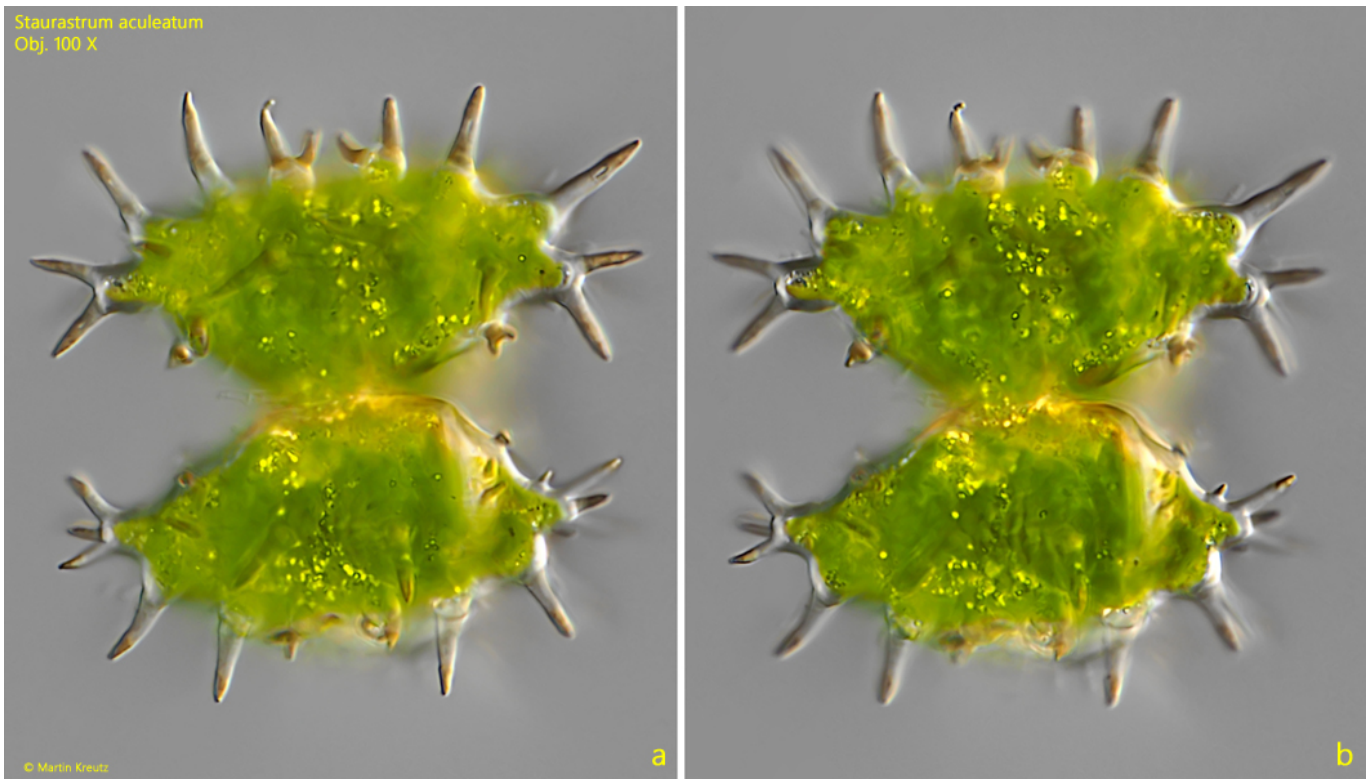


Fig. 1 a-b: *Staurastrum aculeatum*. L = 54 µm (without spines). Two focal planes of a slightly squashed specimen. Obj. 40 X.

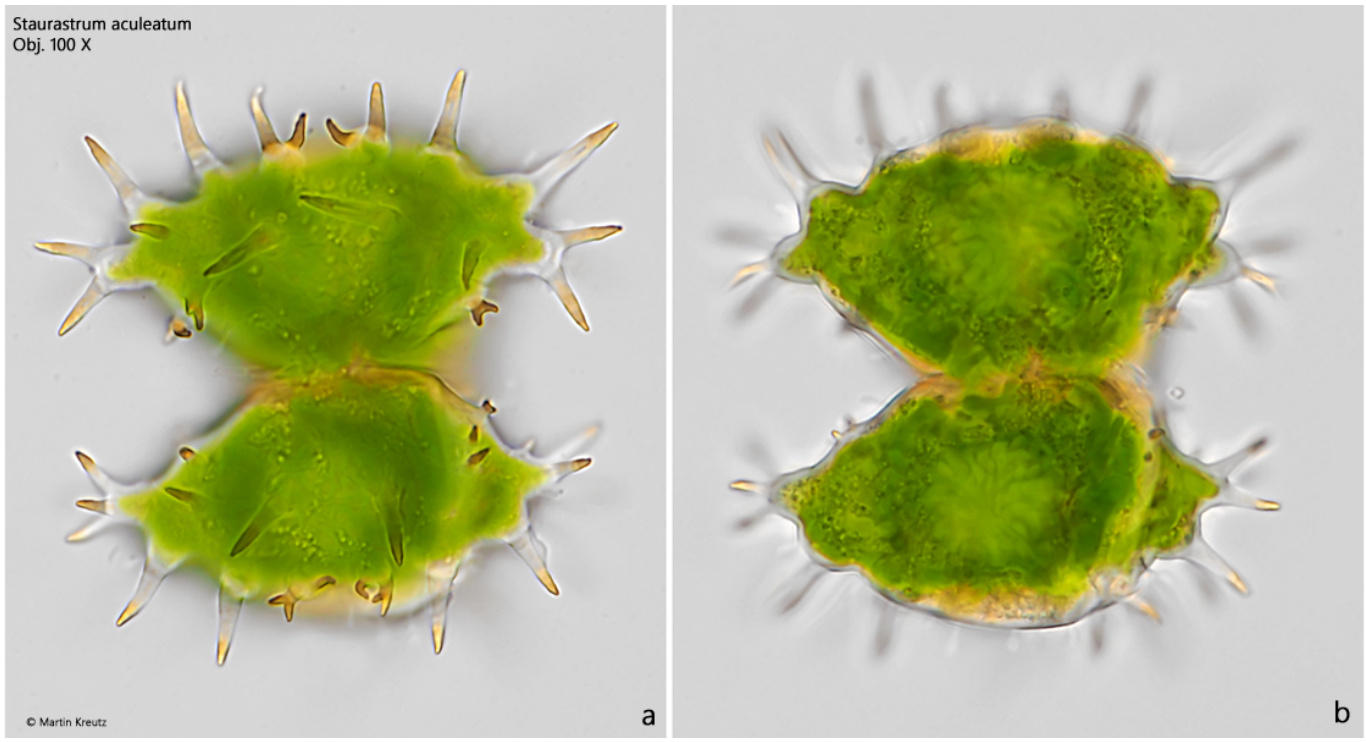


Fig. 2 a-b: *Staurastrum aculeatum*. L = 54 µm (without spines). The same specimen as shown in fig. 1 a-b in brightfield illumination. Obj. 40 X.