Stylodinium globosum (Klebs, 1912)

Most likely ID: n.a.

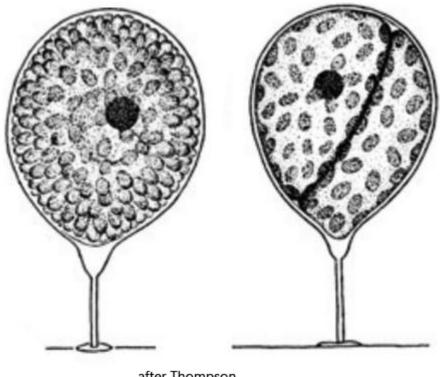
Synonym: n.a.

Sampling location: Simmelried

Phylogenetic tree: <u>Stylodinium globosum</u>

Diagnosis:

- cell globose, diameter 21-35 μm
- cell sessile on a 10-30 µm long stalk
- thickening at the junction of stalk to cell
- stalk with disk-shaped foot
- numerous, parietal chromatophores, golden brown, orange or olive
- often a red or orange spherical accumulation present
- nucleus central, often with visible chromosomes



after Thompson (right = cell division) Stylodinium globosum

Stylodinium globosum is a sessile dinoflagellate, which settles with a stalk on solid substrates. Mostly these are algal filaments. When screening samples at low magnification, Stylodinium can easily be mistaken for a cyst of other (mobile) dinoflagellates, which can also be spherical. However, the important distinguishing feature is the stalk. The species seems to be very rare. I have found it only once in June 2022 in the Simmelried. I cannot rule out the possibility that I had missed it earlier. *Stylodinium globosum* is propagated by mobile swarmers, which are released after a preceding cell division. The swarmers are supposed to have the typical shape of dinoflagellates. However, I could neither observe cell division nor the swarmers.

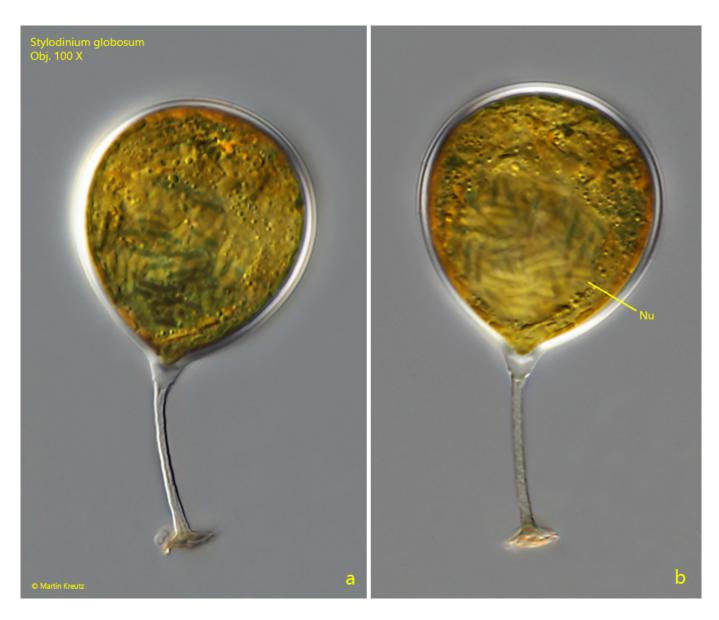


Fig. 1 a-b: Stylodinium globosum. $D = 32 \mu m$. Two focal planes of a specimen detached from the substrate. Nu = nucleus with condensed chromosomes. Obj. 100 X.

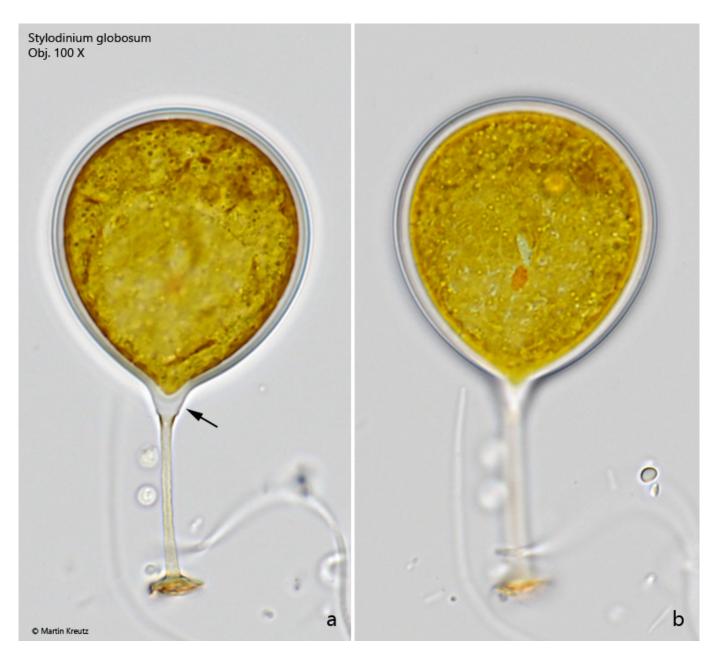


Fig. 2 a-b: Stylodinium globosum. $D = 31 \mu m$. Two focal planes of a second specimen in brightfield illumination. Note the characteristic thickening at the junction between stalk and cell (arrow). Obj. 100 X.



Fig. 3: Stylodinium globosum. $D = 35 \mu m$. In many specimens an accumulation body (AB) was present colored red or orange. Obj. $100~\mathrm{X}$.



Fig. 4: Stylodinium globosum. D = 34 μm . Focal plane on the parietal chromatophores of a slightly squashed specimen. Obj. 100 X.