

Gloeothece tepidariorum

(A.Braun) Lagerheim, 1883

Most likely ID: n.a.

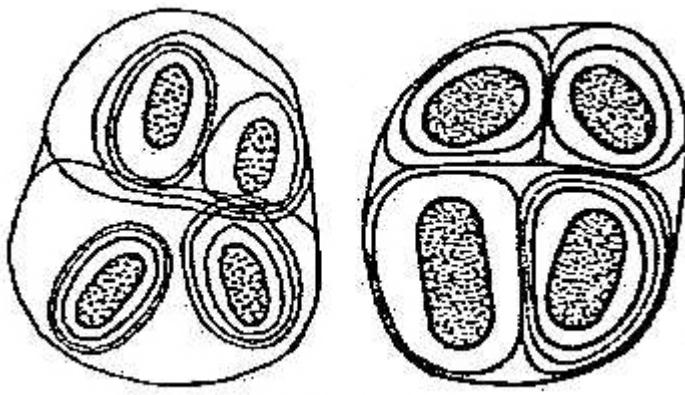
Synonyms: *Gloeocapsa tepidariorum*, *Gloeothece rupestris* var. *tepidariorum*

Sampling location: [Pond of the convent Hegne](#)

Phylogenetic tree: [Gloeothece tepidariorum](#)

Diagnosis:

- colony spherical, irregular or rectangular
- colony surrounded by common mucilage, colorless or slightly pink
- cells surrounded by sharply defined mucus envelopes, concentrically layered
- cells ellipsoid or elongated oval, 8-15 μm long, 5-6.2 μm wide
- cells colored pale blue-green, grey-green or olive-green



after Lemmermann

Gloeothece tepidariorum

In October 2023, I found only very few colonies of *Gloeothece tepidariorum* in the mud of the [pond of the convent Hegne](#). The colonies are easily recognizable even at low magnifications due to the highly refractive gelatinous sheath. The cells of *Gloeothece tepidariorum* are quite large for a cyanobacteria at around 10 μm in length. Another striking feature is the sharply defined mucus envelope of the individual cells in the colony. This can also be multi-layered. In my population, the

cells had a rather pale olive-green color.

The cells of the similar species *Gloethce membranacea* are smaller with a length of 7-8.8 μm and the gelatinous sheath of *Gloethce fusco-lutea* is colored yellowish to brownish.

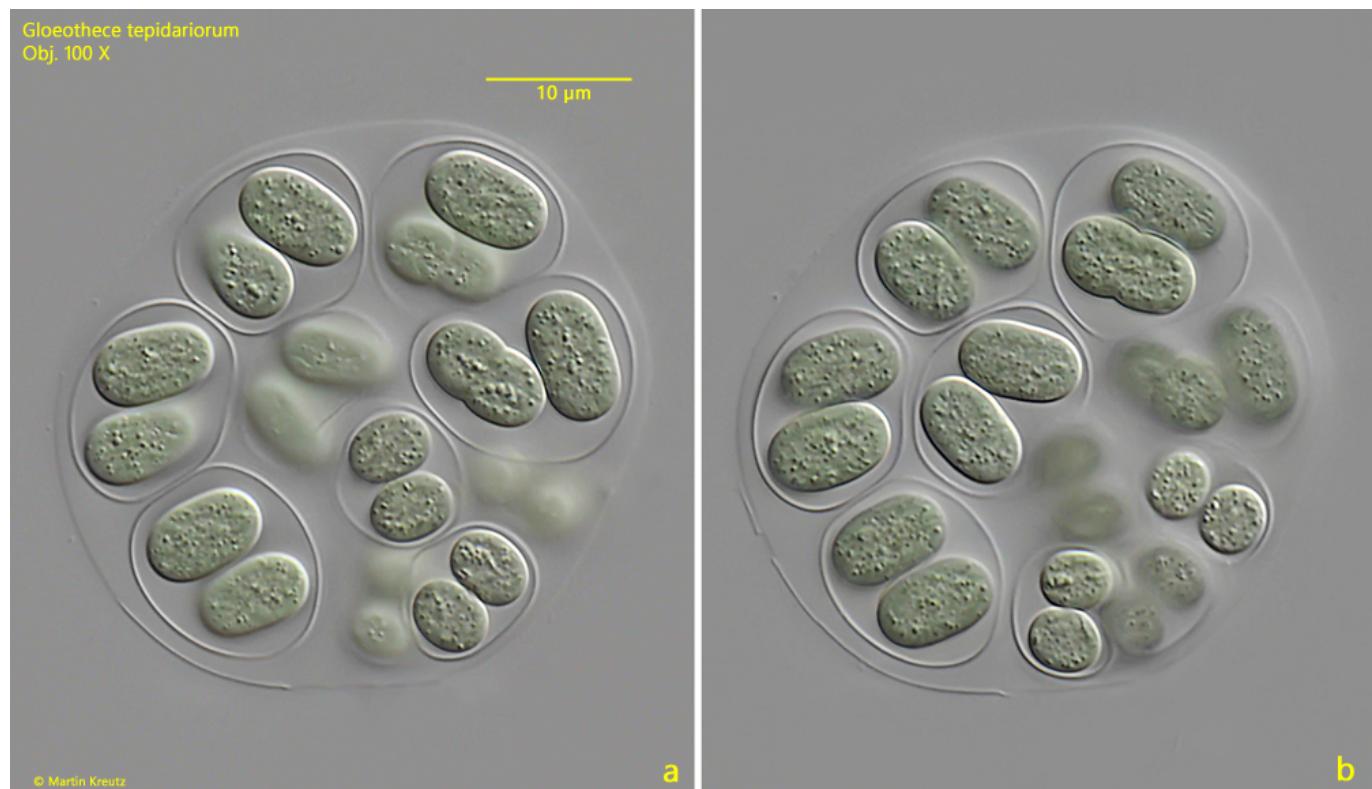


Fig. 1 a-b: *Gloethce tepidariorum*. L = 10.4-11.2 μm (of cells). Two focal planes of an almost spherical colony. Note the sharply defined mucus envelopes of the cells. Obj. 100 X.