

## ***Gloeothece tepidariorum***

**(A.Braun) Lagerheim, 1883**

**Most likely ID:** n.a.

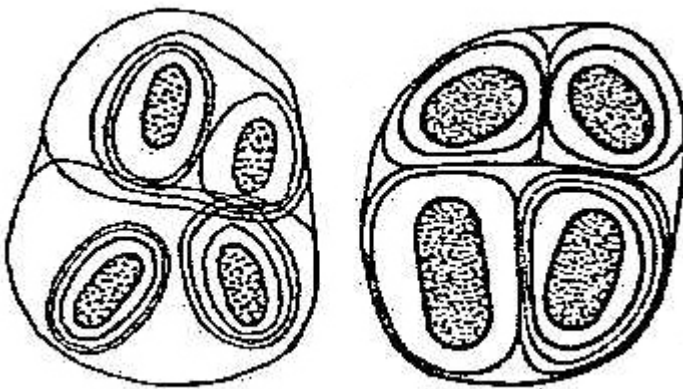
**Synonyms:** *Gloeocapsa tepidariorum*, *Gloeothece rupestris* var. *tepidariorum*

**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



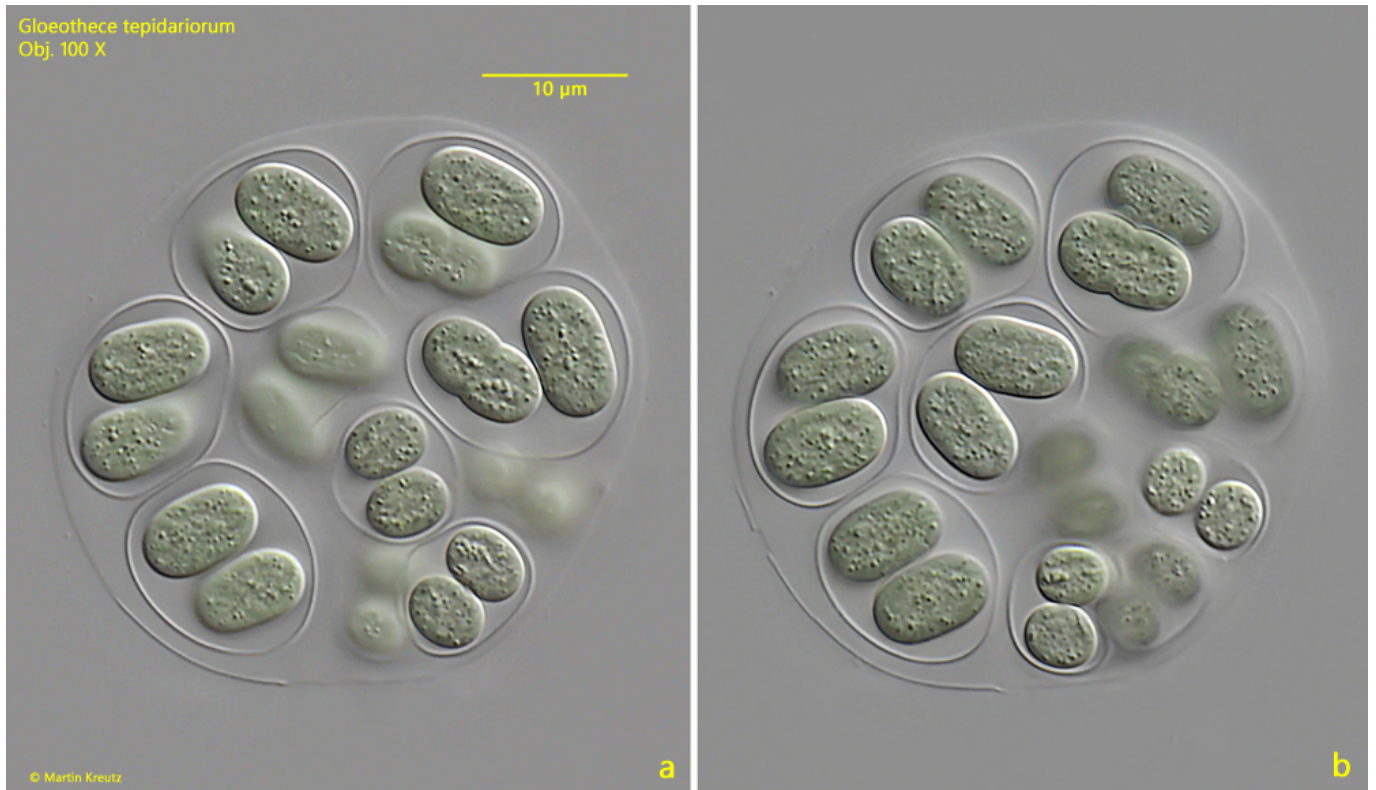
after Lemmermann

*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 *Gloethece membranacea* are smaller with a length of 7–8.8  $\mu\text{m}$  and the gelatinous sheath of *Gloethece fusco-lutea* is colored yellowish to brownish.



**Fig. 1 a-b:** *Gloethece tepidariorum*. L = 10.4–11.2  $\mu\text{m}$  (of cells). Two focal planes of an almost spherical colony. Note the sharply defined mucus envelopes of the cells. Obj. 100 X.