## Tribonema affine

## (Kützing) West, 1904

Most likely ID: n.a.

Synonym: n.a.

**Sampling location:** <u>Simmelried</u>

Phylogenetic tree: *Tribonema affine* 

## **Diagnosis**:

- filaments long, hardly contricted at septa
- cells elongated cylindrical, width 4–6  $\mu m,$  up to 14–20 time longer than broad
- 1-3 chloroplasts per cell, trough- or ribbon-shaped, lobed, slightly spirally
- no pyrenoids
- cell wall smooth



I often find *Tribonema affine* between floating plant masses from the <u>Simmelried</u>. *Tribonema affine* can be recognize by the slender, smooth cells and the fact that the septa are not or only very slightly constricted. The cells contain 1–3 yellow-green chloroplasts without pyrenoids, which are often somewhat spiral and lobed. This distinguishes *Tribonema affine* from the similar species *Tribonema minus*, whose chloroplasts are not lobed and whose cells are much more compact and barrel-shaped. The other described species of the genus *Tribonema* either have a different number or shape of chloroplasts, or the cell filaments are thicker or thinner.



**Fig. 1 a-c:** Tribonema affine.  $L = 15-24 \mu m$  (of cells). Three focal planes of a part of a 4.7  $\mu m$  broad filament. Note the 1-2, lobed and spirally chloroplasts (Chl 1, Chl 2) per cell. Bteween the chloroplast the nucleus (Nu) is located. Obj. 100 X.



**Fig. 2 a-b:** Tribonema affine.  $L = 24-39 \mu m$  (of cells). Two focal planes of a second, 4.1  $\mu m$  broad filament. Nu = nucleus. Obj. 100 X.