

***Tribonema affine***  
**(Kützing) West, 1904**

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

**Synonym:** n.a.

**Sampling location:** [Simmelried](#)

**Phylogenetic tree:** [Tribonema affine](#)

**Diagnosis:**

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



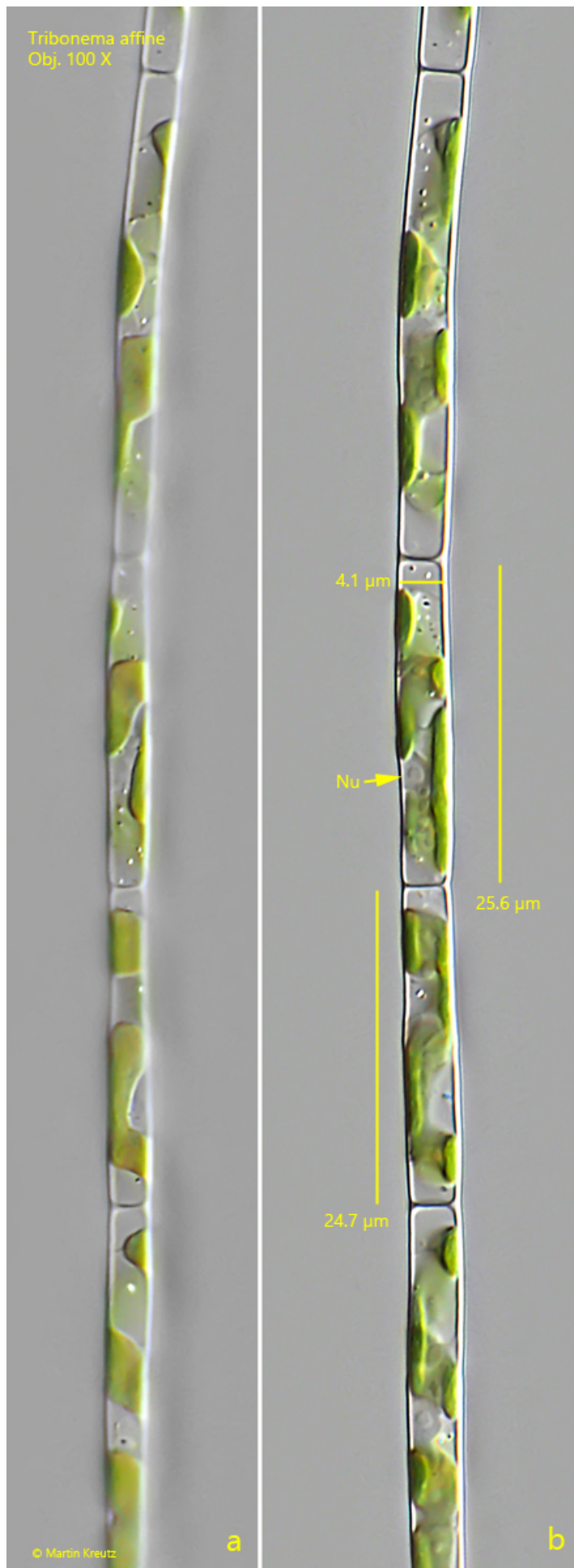
after West

## Tribonema affine

I often find *Tribonema affine* between floating plant masses from the [Simmelried](#). *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  $\mu\text{m}$  (of cells). Three focal planes of a part of a 4.7  $\mu\text{m}$  wide filament. Note the 1–2, lobed and spirally chloroplasts (Chl 1, Chl 2) per cell. Between the chloroplast the nucleus (Nu) is located. Obj. 100 X.



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