Tribonema affine

(Kützing) West, 1904

Most likely ID: n.a.

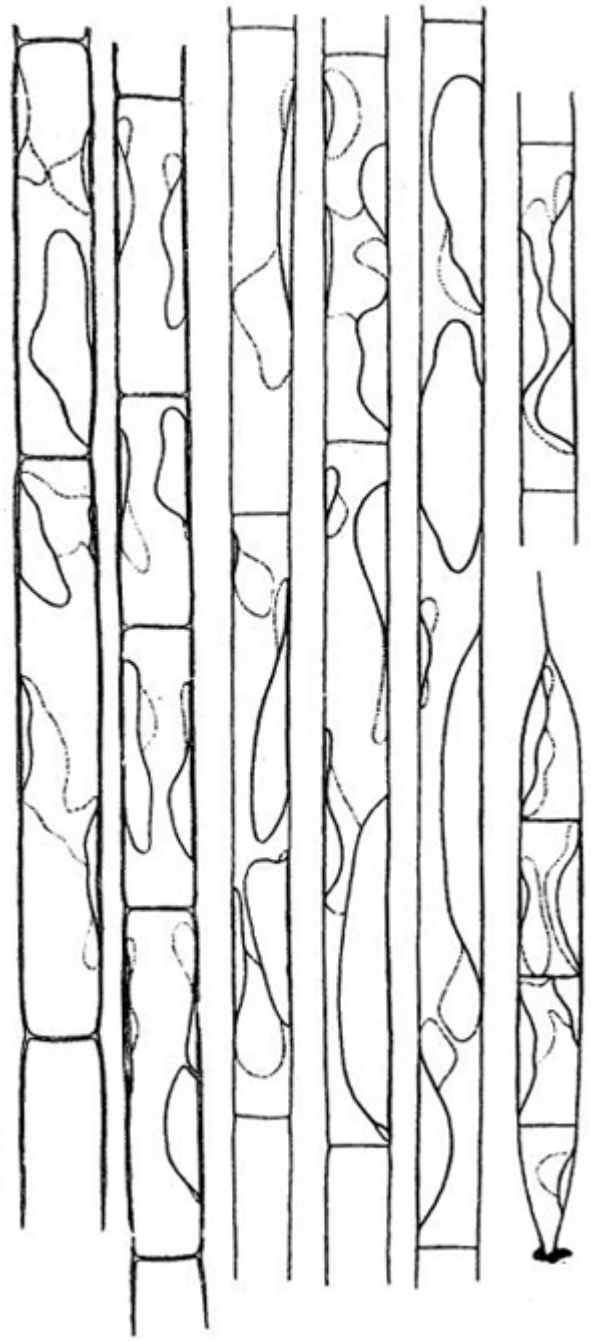
Synonym: n.a.

Sampling location: Simmelried

Phylogenetic tree: *Tribonema affine*

Diagnosis:

- filaments long, hardly contricted 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



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.

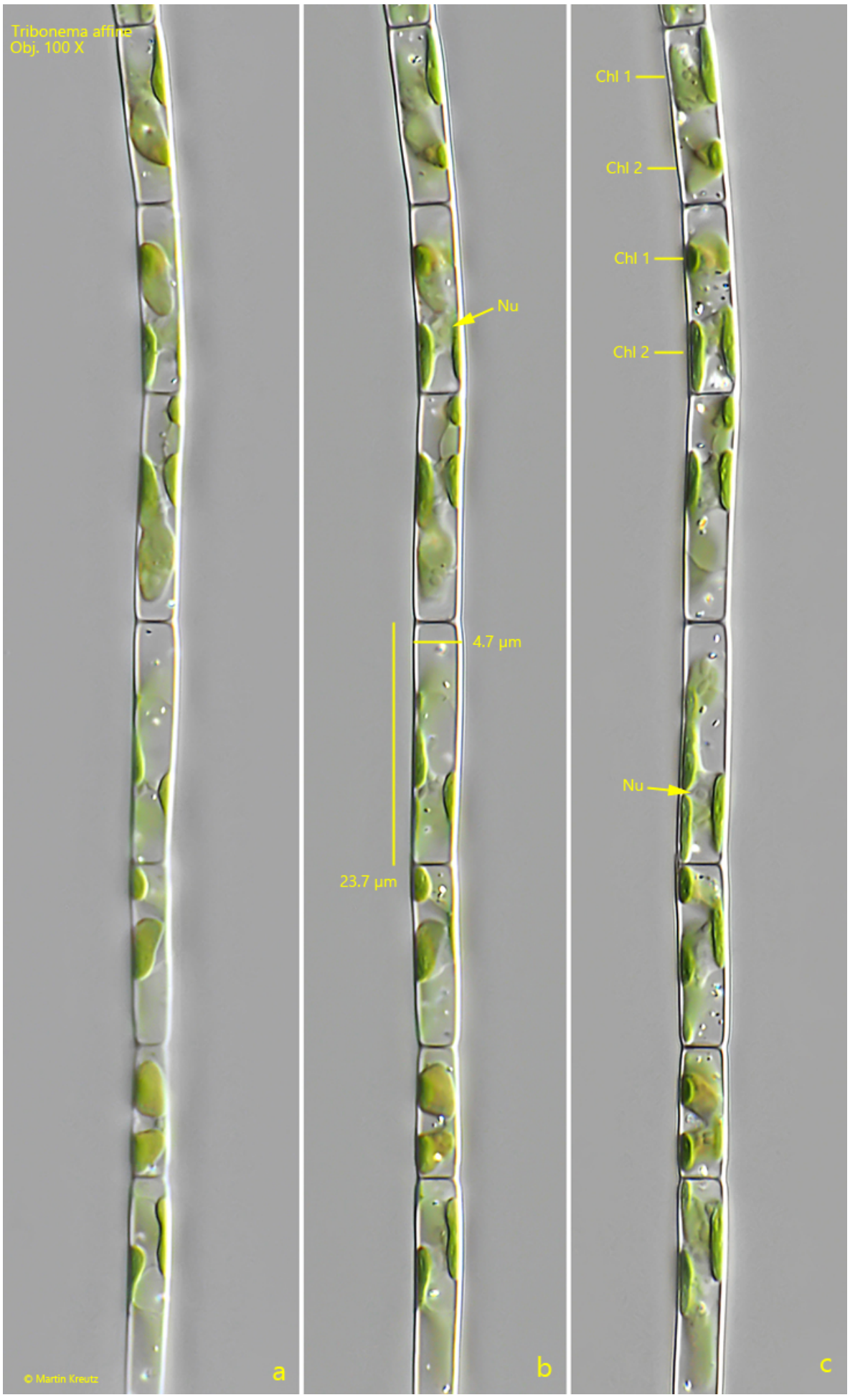

Tribonema affine
Obj. 100 X
a
b
c
Chl 1
Chl 2
Chl 1
Chl 2
Nu
Nu
4.7 µm
23.7 µm
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Fig. 1 a-c: *Tribonema affine*. L = 15–24 µm (of cells). Three focal planes of a part of a 4.7 µm wide filament. Note the 1–2, lobed and spirally chloroplasts (Chl 1, Chl 2) per cell. Between the chloroplast the nucleus (Nu) is located. Obj. 100 X.

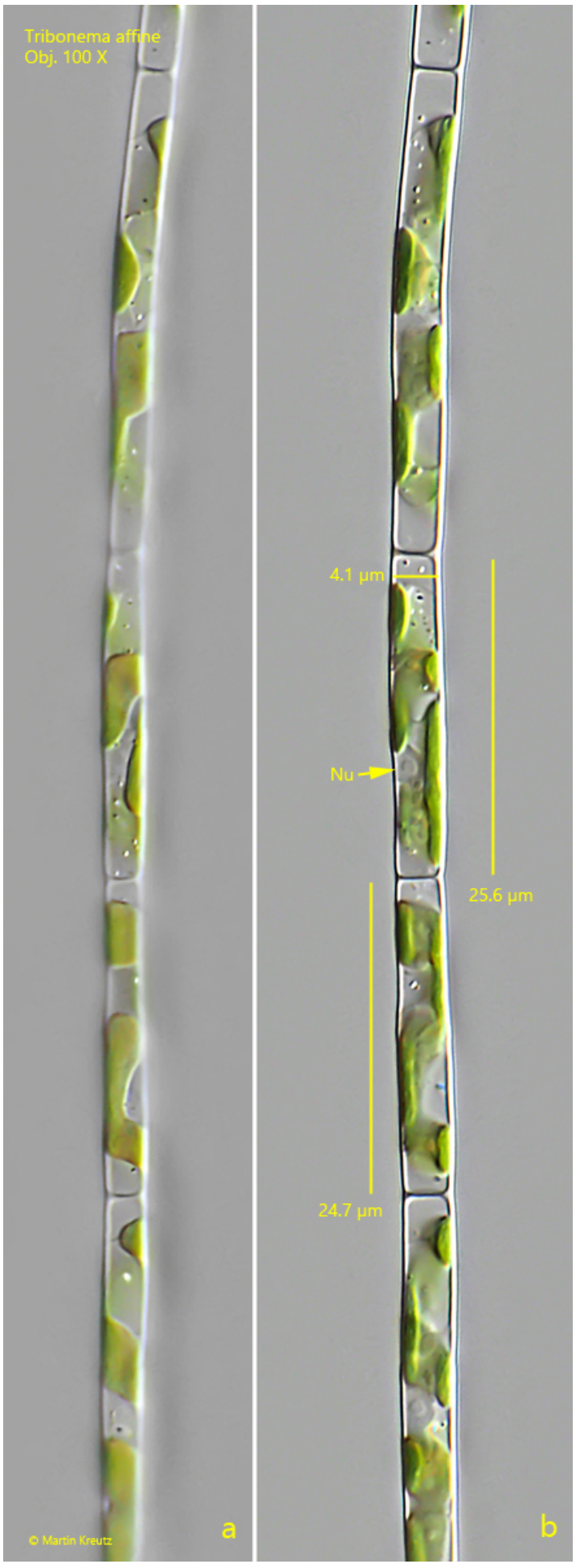
Tribonema affine
Obj. 100 X
4.1 µm
Nu
25.6 µm
24.7 µm
© Martin Kreutz
a
b

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