Spirotaenia condensata Brebisson, 1848

Most likely ID: n.a.

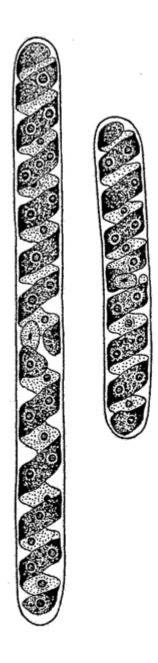
Synonym: n.a.

Sampling location: Ibmer Moor (Austria)

Phylogenetic tree: Spirotaenia condensata

Diagnosis:

- cell cylindroid or spindle-shaped with rounded apices
- length 120 270 μm
- often enveloped in mucilaginous sheath
- two chloroplasts ribbon-shaped, helicoidal twisted
- between the ends of the chloroplasts a gap is visible
- irregularly spaced pyrenoids in the chloroplasts scattered



after Förster

Spirotaenia condensata

I have found Spirotaenia condensata only once before in June 1995 in specimens from the Ibmer Moor in Austria. This desmid algae is easy to recognize by the spiralized chloroplast. The nucleus is located in the middle of the cell, attached to the cell wall in a plasma pocket (see fig. 1b). Some descriptions state that only one chloroplast is present. However, this is not the case. In order for a gap to form between the ends of the chloroplasts in the middle of the cell (s. fig. 1a), there must be two chloroplasts, as Förster has drawn it (s. drawing above).

More pictures and information about *Spirotaenia condensata*: Michael Plewka - Freshwater

<u>life - Spirotaenia condensata</u>



Fig. 1 a-c: Spirotaenia condensata. $L=202~\mu m$. Three focal planes of a specimen. $Nu=nucleus,\,PY=pyrenoids.\,Obj.\,60~X.$

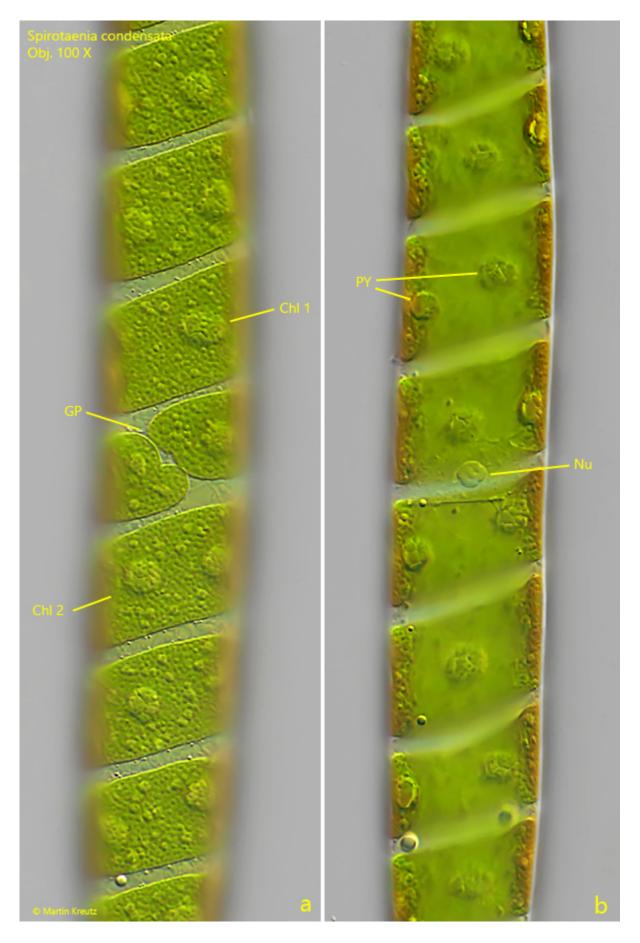


Fig. 2 a-b: Spirotaenia condensata. $L=202~\mu m$. The specimen as shown in fig. 1 a-c in detail. Note the gap (GP) between the ends of the two twisted chloroplasts (Chl 1, Chl 2). Nu

= nucleus, PY = pyrenoids. Obj. 100 X.

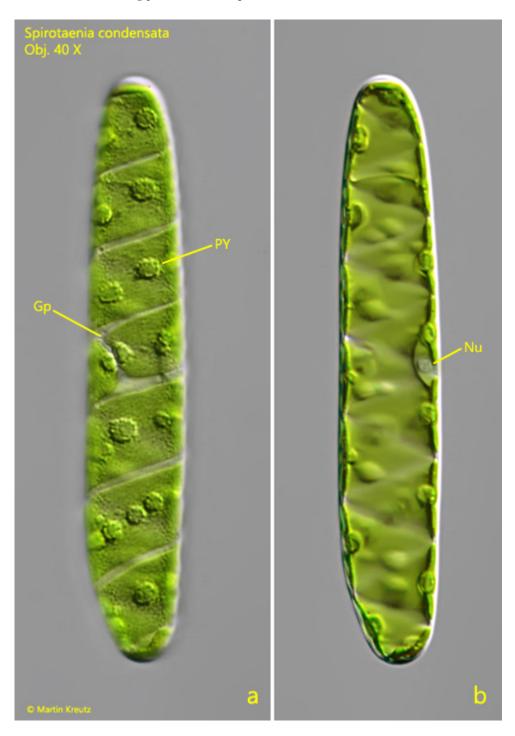


Fig. 3 a-b: $Spirotaenia\ condensata$. L = 158 μm . Two focal planes of a second, medium sized specimen. Gp = gap between the two chloroplasts, Nu = nucleus, PY = pyrenoid. Obj. 40 X.