

# ***Spirotaenia erythrocephala* Itzigsohn, 1856**

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

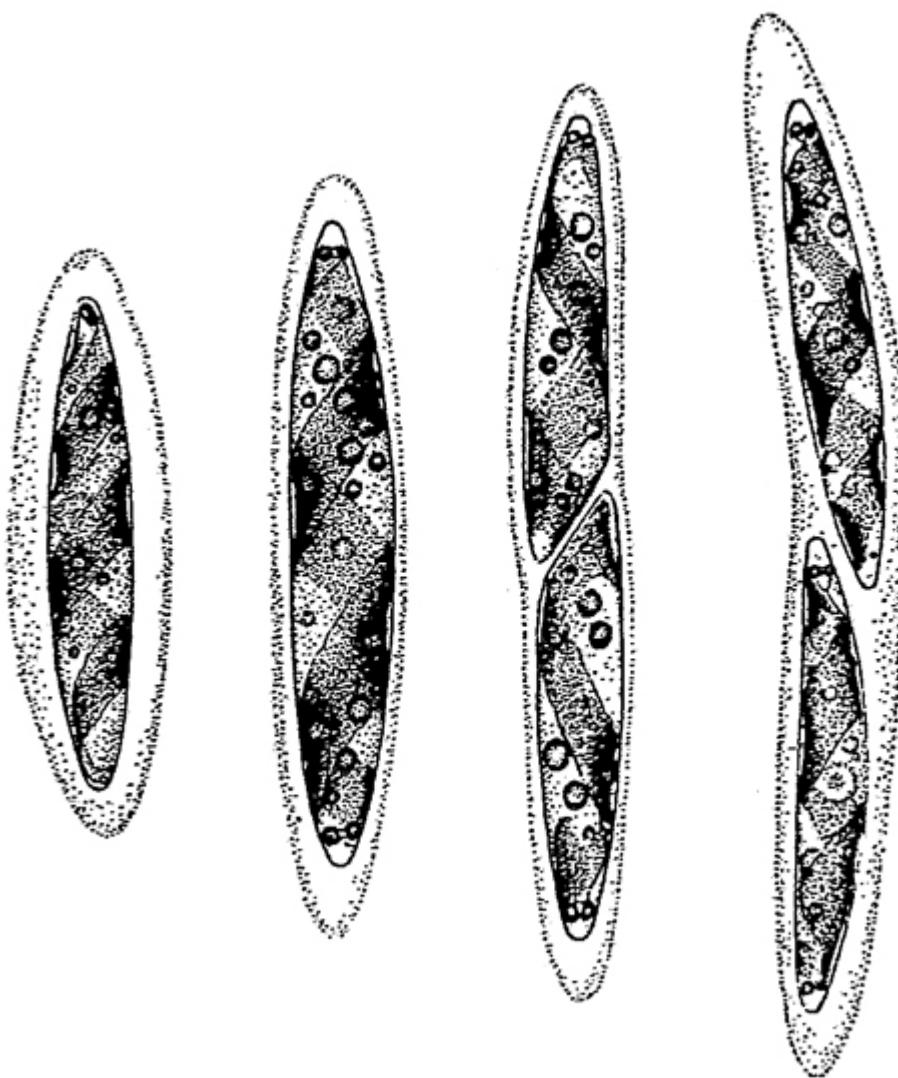
**Synonym:** n.a.

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

**Phylogenetic tree:** [\*Spirotaenia erythrocephala\*](#)

**Diagnosis:**

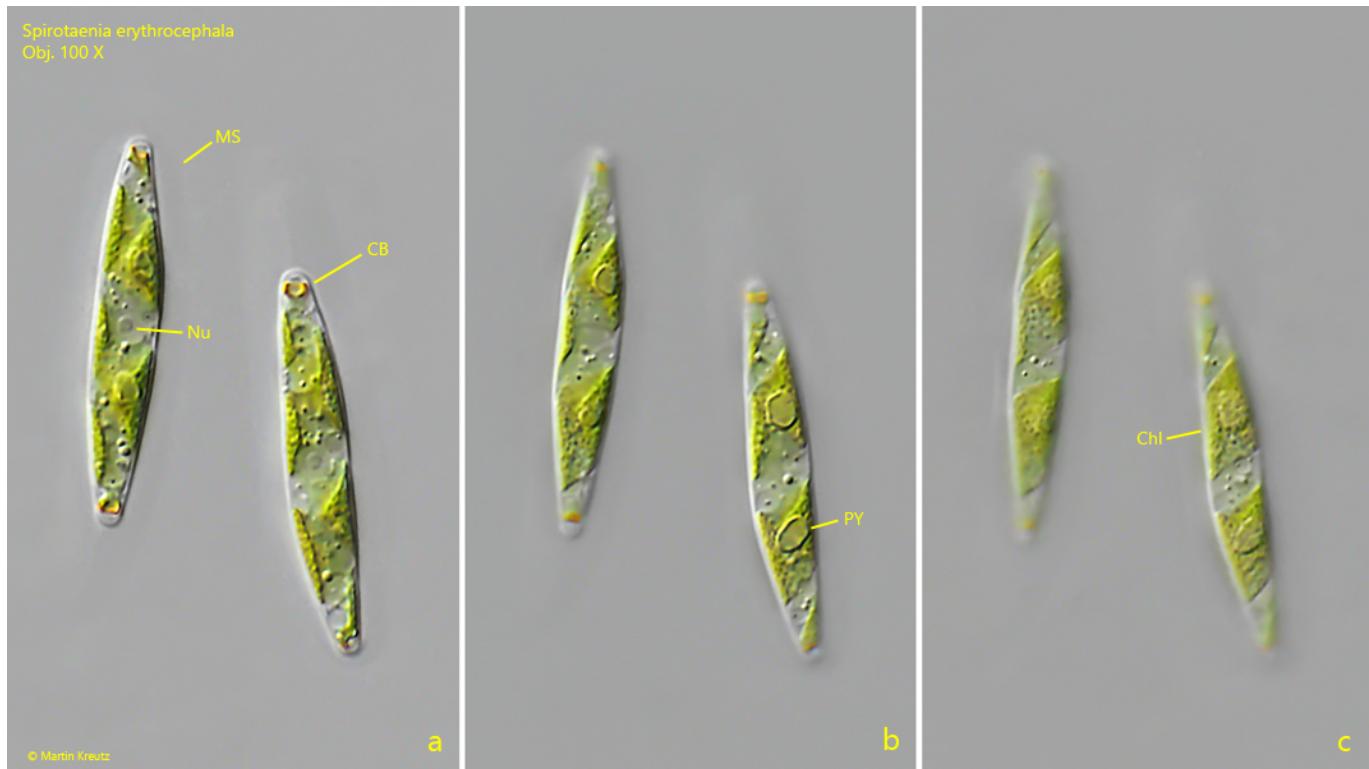
- cells spindle-shaped, sometimes cylindrical, apices rounded
- length 26–48 µm, width 4–7 µm
- with hyaline mucous sheath, 2–5 µm thick
- one ribbon-shaped, clockwise spirally chloroplast, 1.5–3 turns
- chloroplast with 2–4 pyrenoids
- both ends of the chloroplast with orange carotinoid bodies
- nucleus central



after Skuja

### *Spirotaenia erythrocephala*

I find *Spirotaenia erythrocephala* very rarely and exclusively in the [Simmelried](#). This desmid alga can be easily identified by its characteristic orange carotenoid bodies, which are located at the end of the chloroplast and thus in the apices of the cell (s. fig. 1 a). They appear to be ring-shaped, as described by Skuja (1964). The ribbon-shaped choroplast is spiralized in a clockwise direction and lies against the cell wall (s. fig. 1 c). In my specimens mostly 2 pyrenoids were present. The delicate mucous sheath is hard to see in the DIC, but still visible (s. fig. 1 a).



**Fig. 1 a-c:** *Spirotaenia erythrocephala*. L = 30-31  $\mu$ m. Three focal planes of two specimen. Note the orange colored carotinoid bodies (CB) at the end of the spirally, ribbon-shaped chloroplast (Chl). The mucous sheath (MS) covering the cells is hard to see in DIC. Nu = nucleus, PY = pyrenoid. Obj. 100 X