

***Colacium mucronatum***

**Bourrelly & Chadeffaud, 1948**

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

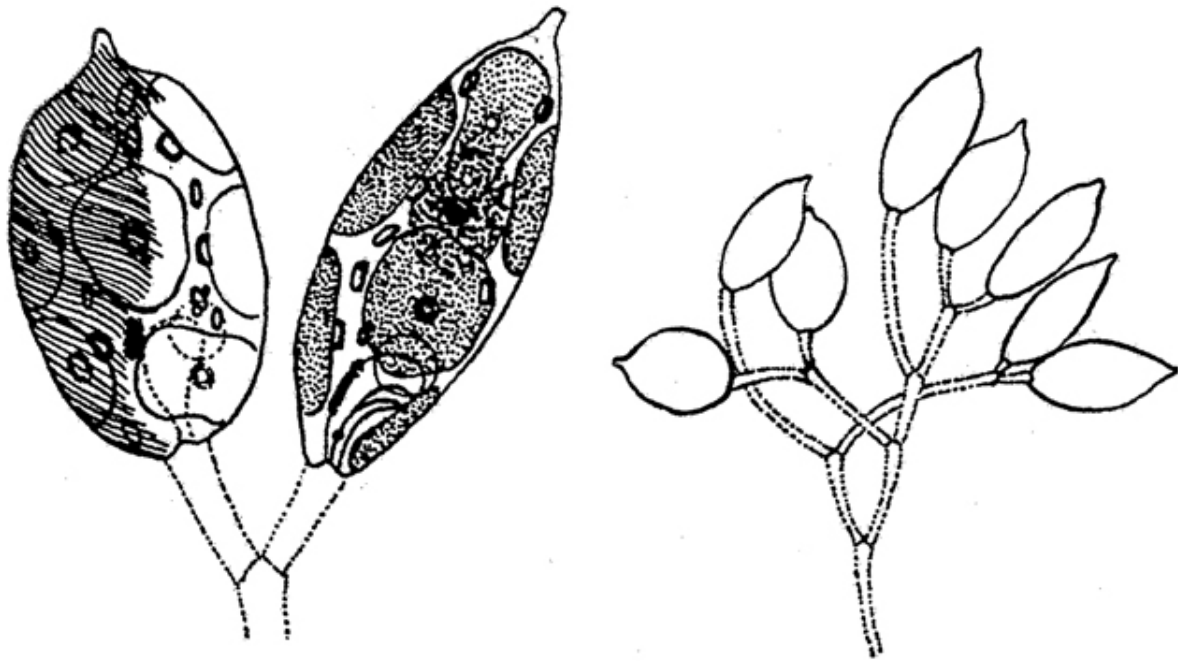
**Synonym:** n. a.

**Sampling location:** [Pond of the waste disposal company Constance](#)

**Phylogenetic tree:** [Colacium mucronatum](#)

**Diagnosis:**

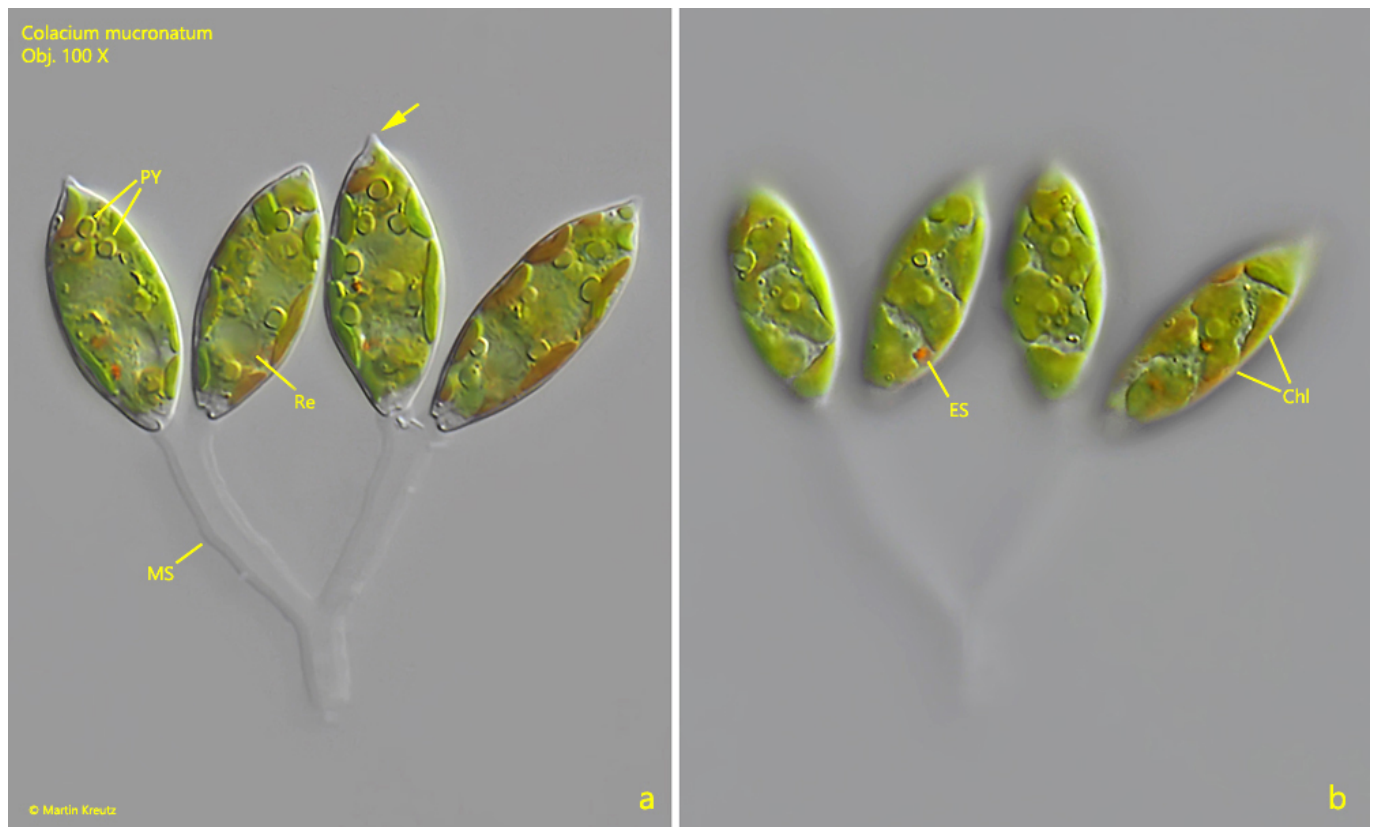
- cells obvoid, rounded at anterior end, papilla at posterior end
- length 28–25 µm, width 12–16 µm
- 6–8 disc-shaped chloroplasts, irregularly shaped
- each chloroplast with a small pyrenoid
- eyespot near anterior end
- nucleus central
- sessile cells slightly metobolic
- sessile cells on dichotomously branched, mucilaginous stalks
- width of hollow stalks 2–2.5 µm
- motile cells with one flagellum
- cells faintly striated



after Bourrelly

## Colacium mucronatum

*Colacium mucronatum* belongs to the Euglenophyceae and has a sessile and motile phase in the life cycle. In the sessile phase, the cells sit with their anterior end (i.e. where the flagellum originates) on gelatinous stalks. The flagellum is fused with the cell body in this phase. On the stalks the cells divide and form branched colonies. The species *Colacium mucronatum* can be recognized by the dichotomous branching of the stalks as well as by the typical papilla at the posterior end. They are usually oval or slender in shape. The similar species *Colacium vesiculosum* also has a papilla at the posterior end, but the cell as a whole tapers to the posterior end in a cone shape. This is not the case with the species presented here.



**Fig. 1 a-b:** *Colacium mucronatum*. L = 25 – 28  $\mu$ m. Two focal planes of a small colony of 4 cells. Note the characteristic papilla at the posterior end of the cell (arrow). Chl = chloroplasts, ES = eyespot, MS = mucilaginous stalk, PY = pyrenoids, Re = reservoir. Obj. 100 X.