

***Crucigenia mucronata***  
**(G.M. Smith) Komárek, 1974**

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

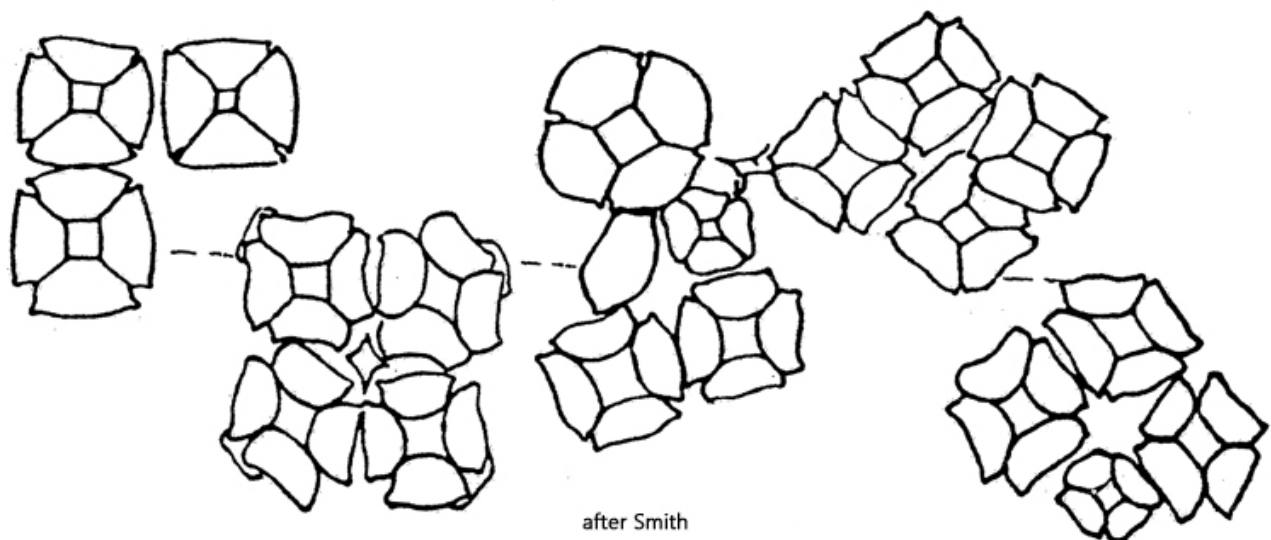
**Synonym:** n.a.

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

**Phylogenetic tree:** [Crucigenia mucronata](#)

**Diagnosis:**

- coenobia square with square gap in center
- forming composite syncoenobia without gelatinous sheath
- cells irregular oval or trapezoid
- outer side of cell almost straight, inner side convex
- apices slightly tapered with warts
- length 6-9  $\mu\text{m}$ , width 3-6  $\mu\text{m}$
- chloroplast parietal, one pyrenoid
- planktonic lifestyle



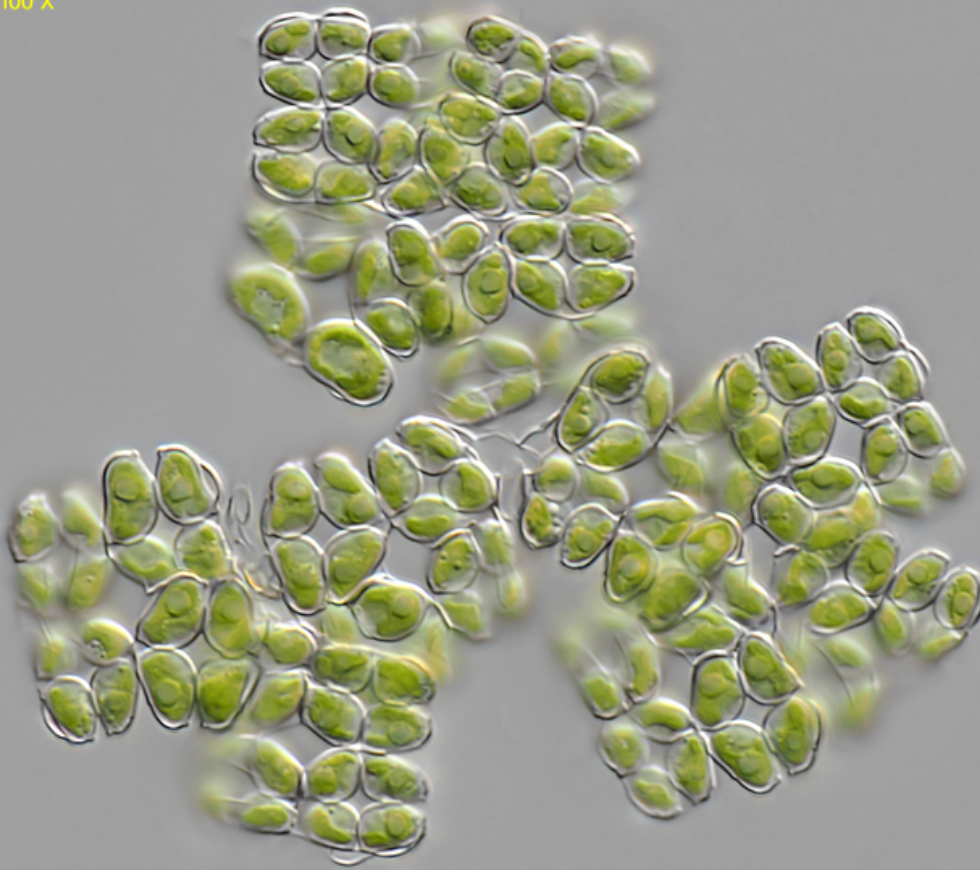
*Crucigenia mucronata*

So far, I have found *Crucigenia mucronata* only once in the plankton of the [pond of the](#)

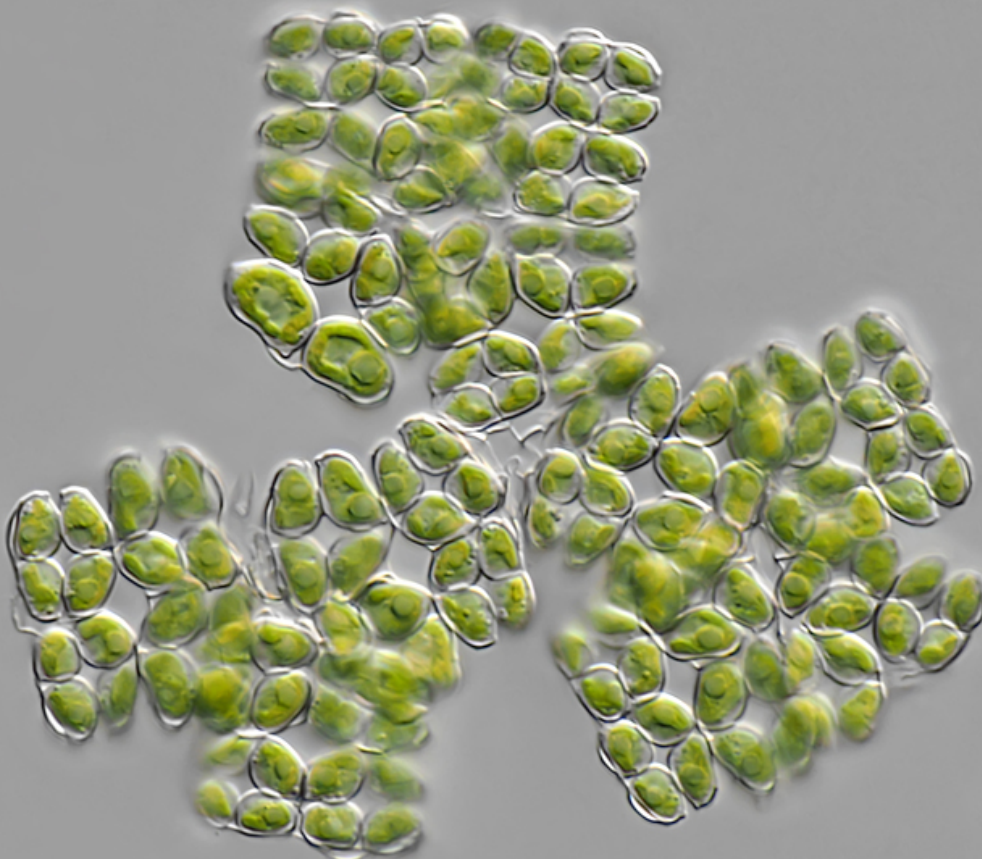
[waste disposal company Constance](#). This pond is highly eutrophic. This matches the descriptions by Komarek & Fott (1983), who described it as a rare species in the plankton of eutrophic waters.

In my finding, it was a large, contiguous synzooenobium consisting of about 10-15 zooenobia with 8-16 cells. In the zooenobia, the cells were arranged in a square pattern. The cells were either flat or slightly convex on the outward-facing side, while the inward-facing side was distinctly convex (s. fig. 2 a-b). The cells had a length of 7.0-8.5  $\mu\text{m}$ . The apices were shaped into short warts, as is typical for this species (s. fig. 2 a-b). The pyrenoid was clearly visible, as was the cell nucleus in the center of the cell.

*Crucigenia mucronata*  
Obj. 100 X



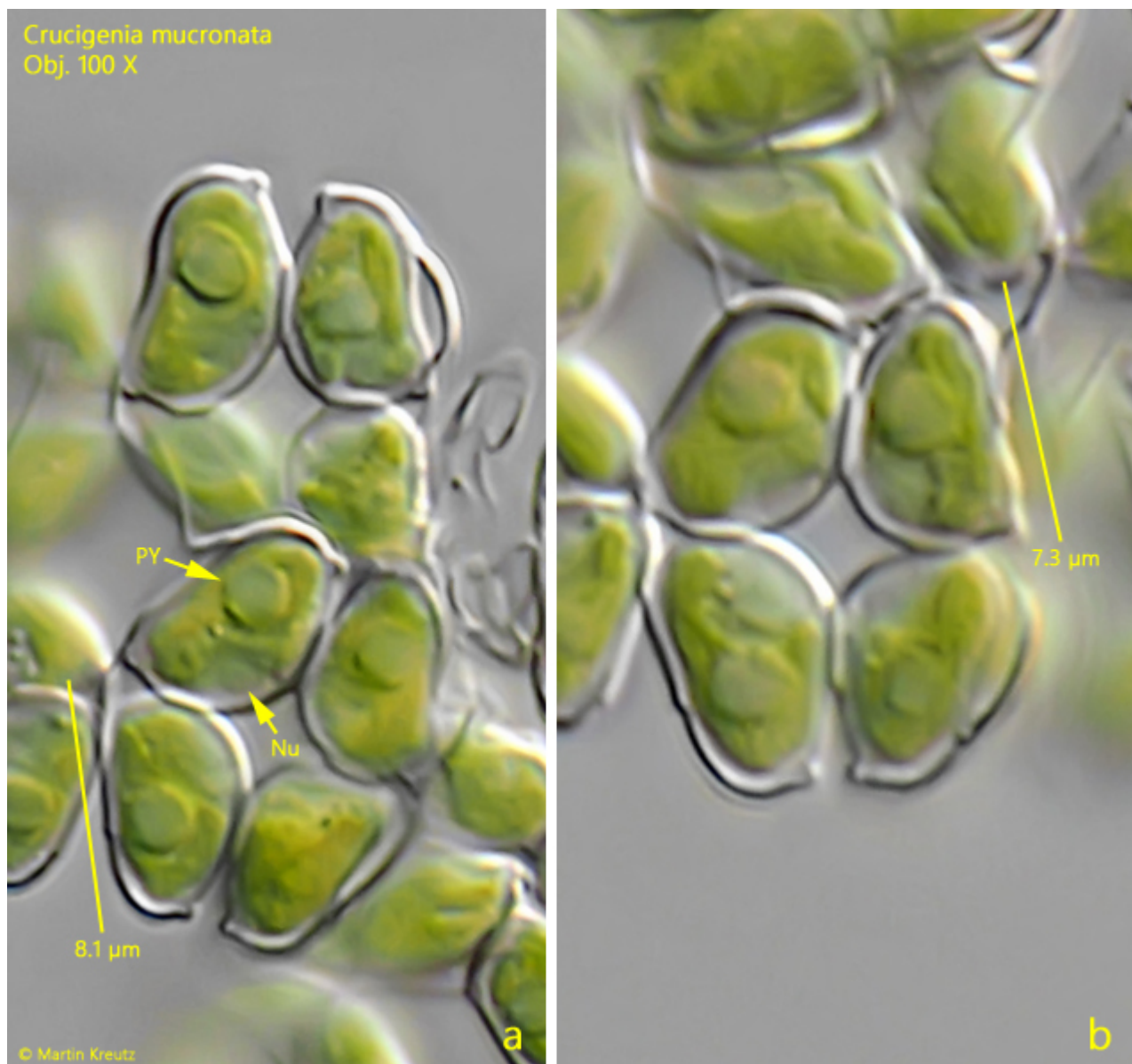
a



b

© Martin Kreutz

**Fig. 1 a-b:** *Crucigenia mucronata*. D = 90  $\mu\text{m}$  (of syncoenobium). Two focal planes of a syncoenobium of several coenobia of 8-16 cells. Obj. 100 X.



**Fig. 2 a-b:** *Crucigenia mucronata*. L = 7.0-8.5  $\mu\text{m}$  (of cells). Two crops of the fig. 1 a-b with the cells in detail. Note the wart-shaped protuberances at the apices of the cells. Nu = nucleus, PY = pyrenoid. Obj. 100 X.