

Crucigenia mucronata

(G.M. Smith) Komárek, 1974

Most likely ID: n.a.

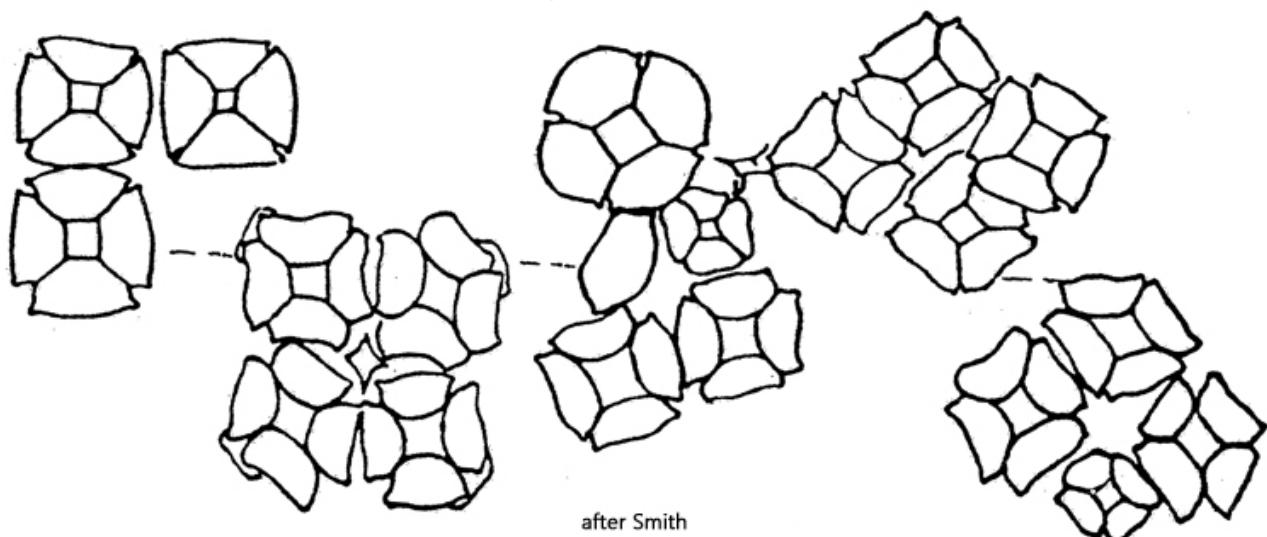
Synonym: n.a.

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 µm, width 3–6 µm
- chloroplast parietal, one pyrenoid
- planktonic lifestyle



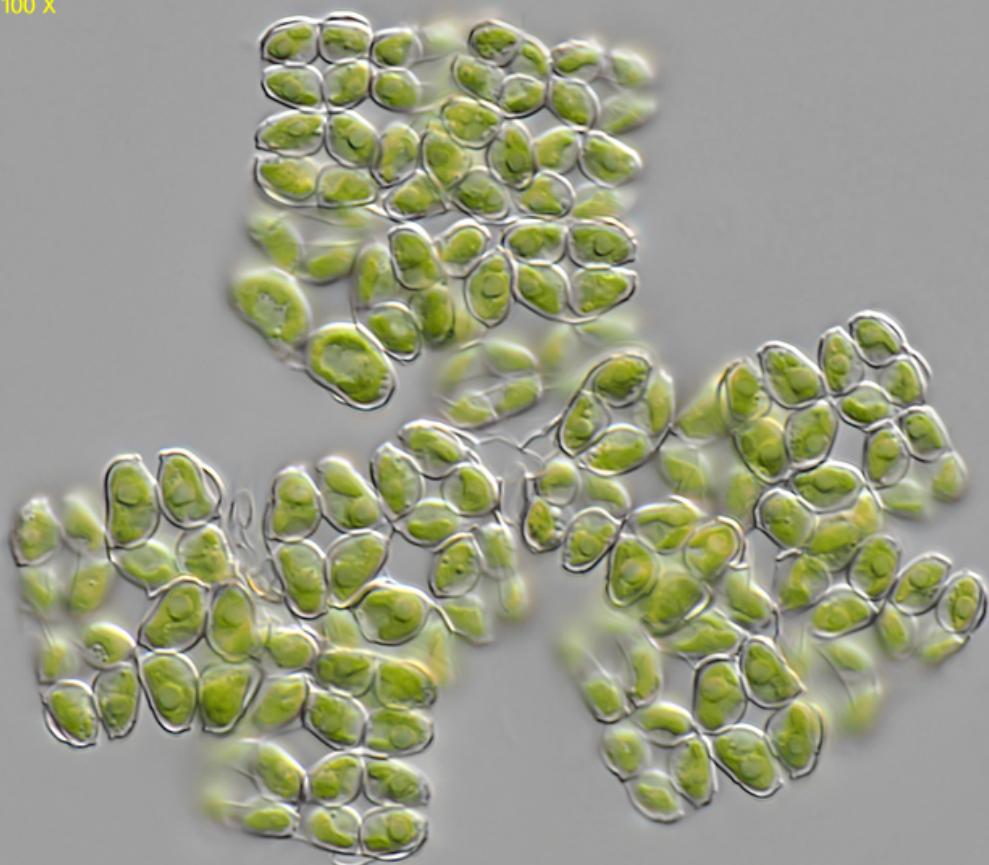
Crucigenia mucronata

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

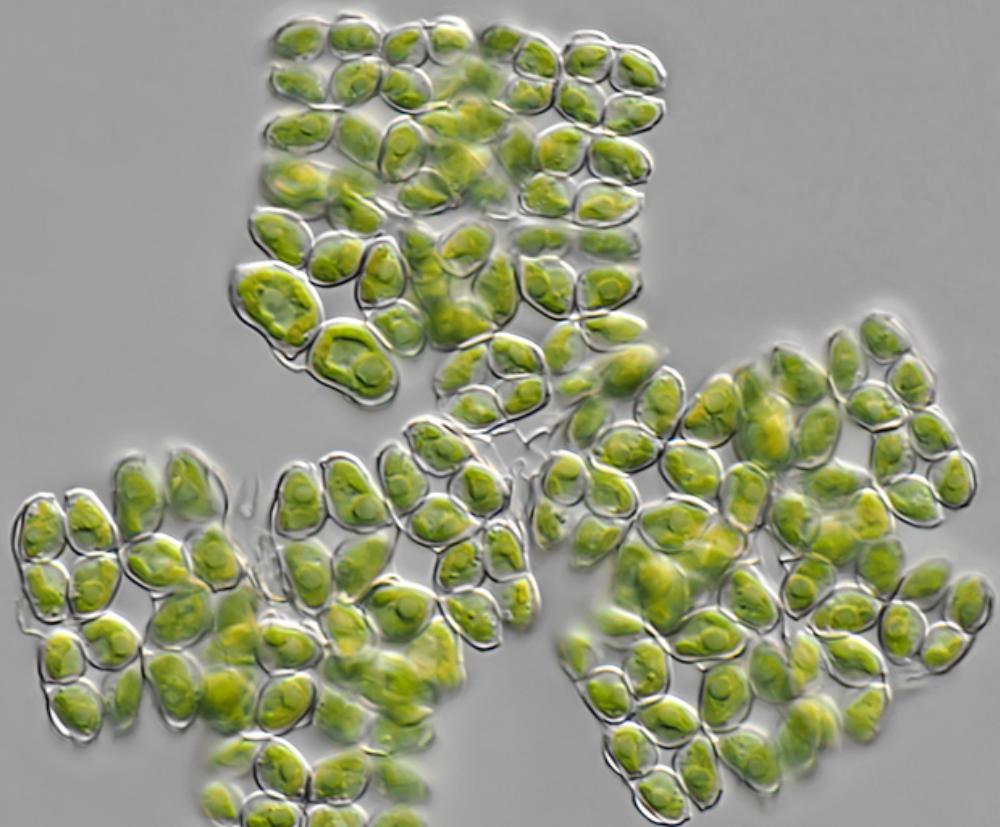
[the waste disposal company Constance](#). This pond is highly eutrophic. This matches the descriptions by Komarek & Fott (1983), who described it as a rare species in the plankton of eutrophic waters.

In my finding, it was a large, contiguous *synzoenobium* consisting of about 10-15 coenobia with 8-16 cells. In the coenobia, 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 μm . 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 μm (of syncoenobium). Two focal planes of a syncoenobium of several coenobia of 8-16 cells. Obj. 100 X.

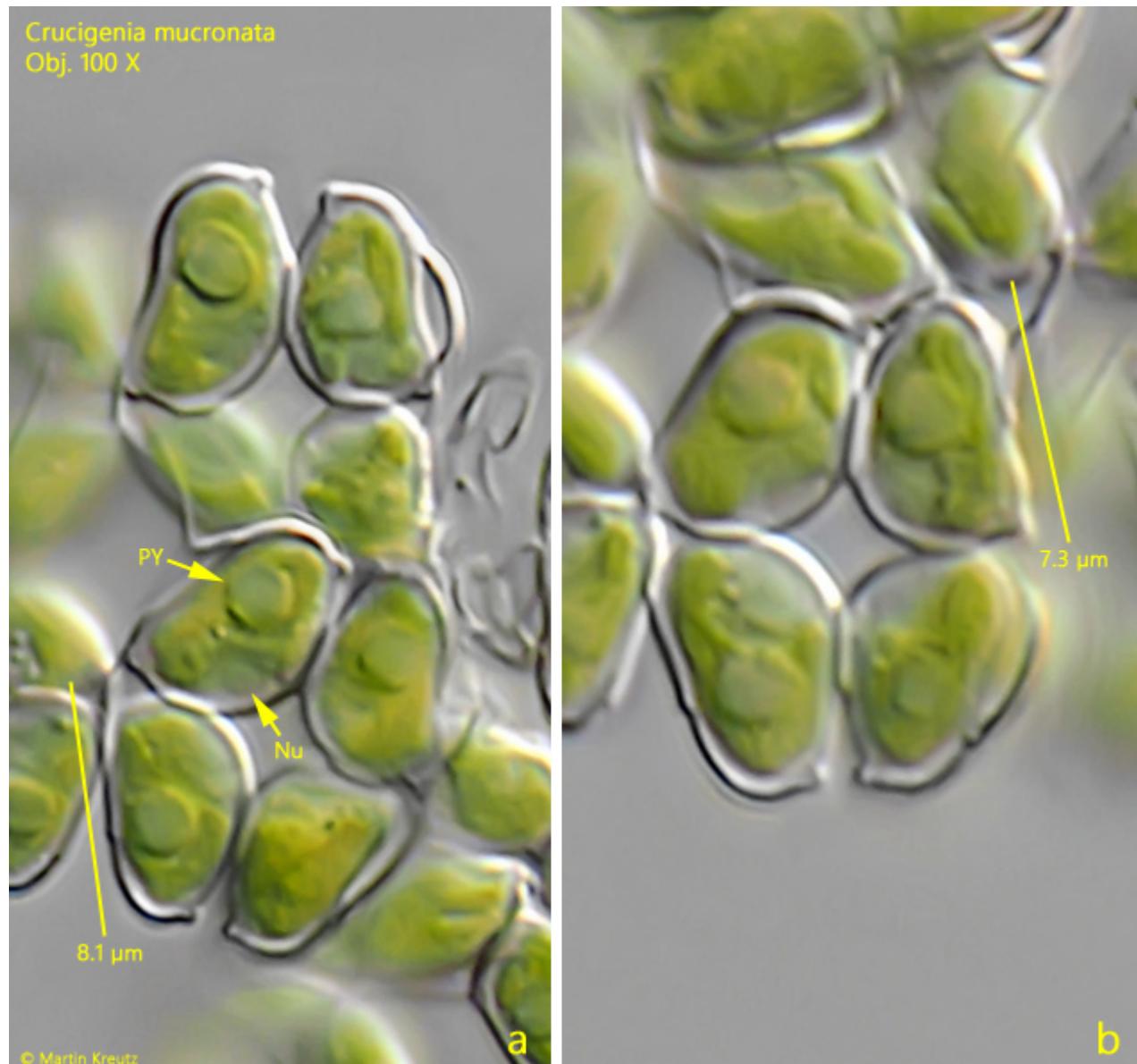


Fig. 2 a-b: *Crucigenia mucronata*. L = 7.0-8.5 μm (of cells). Two crops of the fig. 1 a-b with the cells in detail. Note the wart-shaped protuberances at the apices of the cells. Nu = nucleus, PY = pyrenoid. Obj. 100 X.