Comasiella arcuata var. platydisca

(G.M. Smith) Hegewald & Wolf, 2010

Most likely ID: n.a.

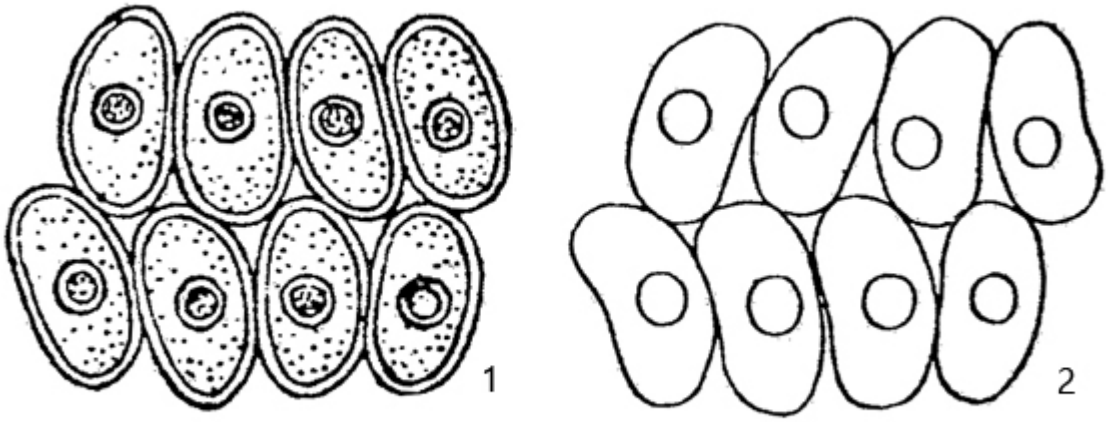
Synonyms: *Scenedesmus platydiscus* , *Scenedesmus arcuatus var. platydiscus*, *Scenedesmus obtusus f. obtusus*

Sampling location: Bussenried, Simmelried

Phylogenetic tree: *Comasiella arcuata var. platydisca*

Diagnosis:

- coenobia of 4–8–16 cells, arranged in 2 rows
  cells 7–18 µm long, width 3–9.9 µm
- cell surface smooth
- cells ovoid to cylindrical or curved (bean-shaped) with rounded apices
- cells touch each other at their apices and longitudinal sides
- with perforations between the apical contact points of the cells
- one pyrenoid per cell



1 = after Palik
2 = after Philipose

Cosmasiella arcuata var. platydisca

I have found *Comasiella arcuata var. platydisca* so far in the Bussenried as well as in the Simmelried. For identification it is important that the cells are staggered in two rows by half a cell width and that there is a small space between the contact points in the midline of the colony (s. fig. 1 a), where the cells are not in contact. In my population, the cells of the coenobia were almost always bean-shaped.

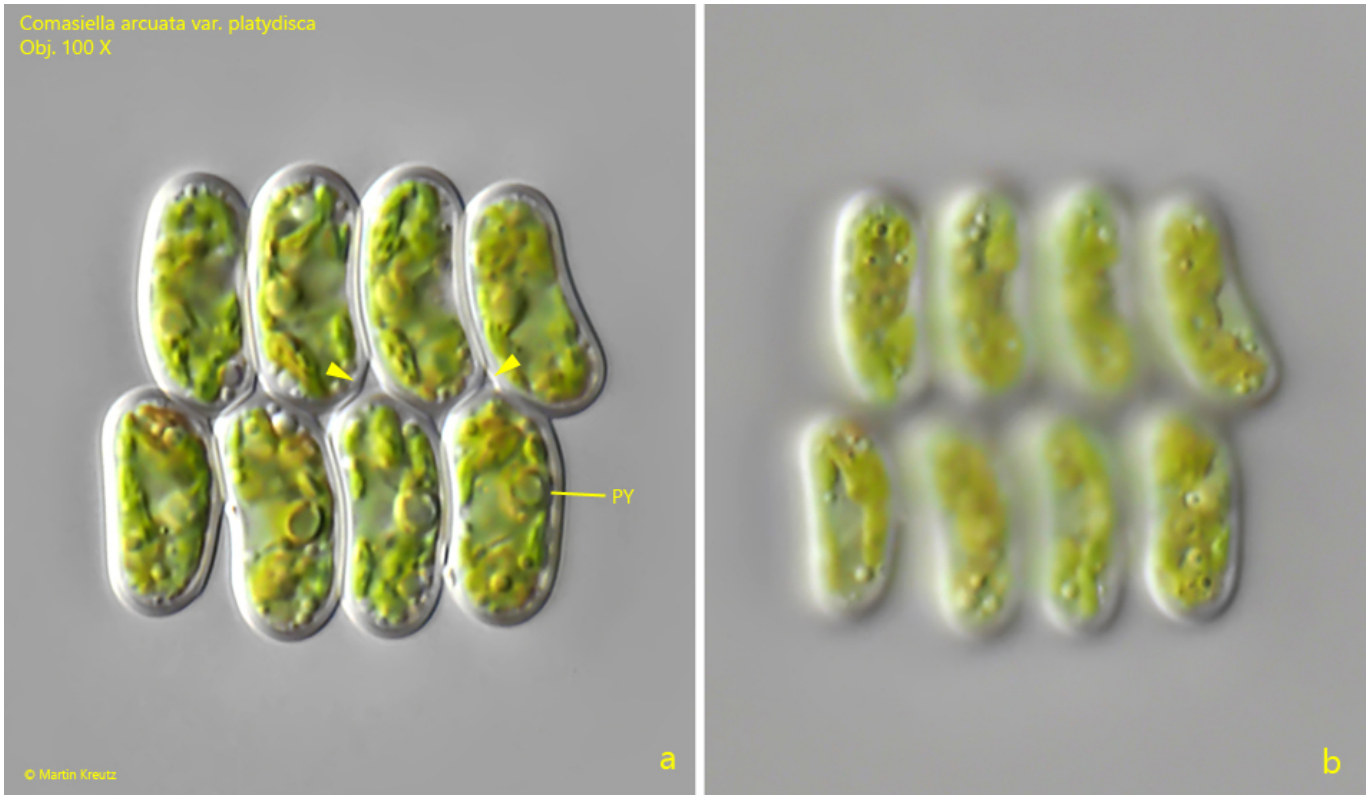


Fig. 1 a-b: *Comasiella arcuata var. platydisca*. L = 24 µm (of coenobium). Two focal planes of a coenobium of 8 cells. The cells are bean-shaped and 10–12 µm long (width 5 µm). The surface of the cells is smooth (b). Note the pore between the contact points of the apices of the cells (arrowheads). Obj. 100 X.