

***Comasiella arcuata* var. *platydisca***

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

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

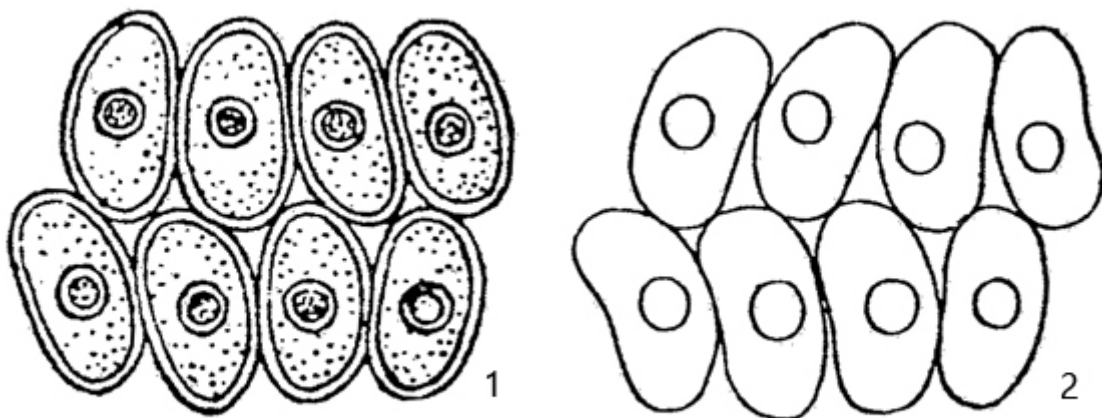
**Synonyms:** *Scenedesmus platydiscus* , *Scenedesmus arcuatus* var. *platydiscus*,  
*Scenedesmus obtusus* f. *obtusius*

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

**Phylogenetic tree:** [Comasiella arcuata](#) var. *platydisca*

**Diagnosis:**

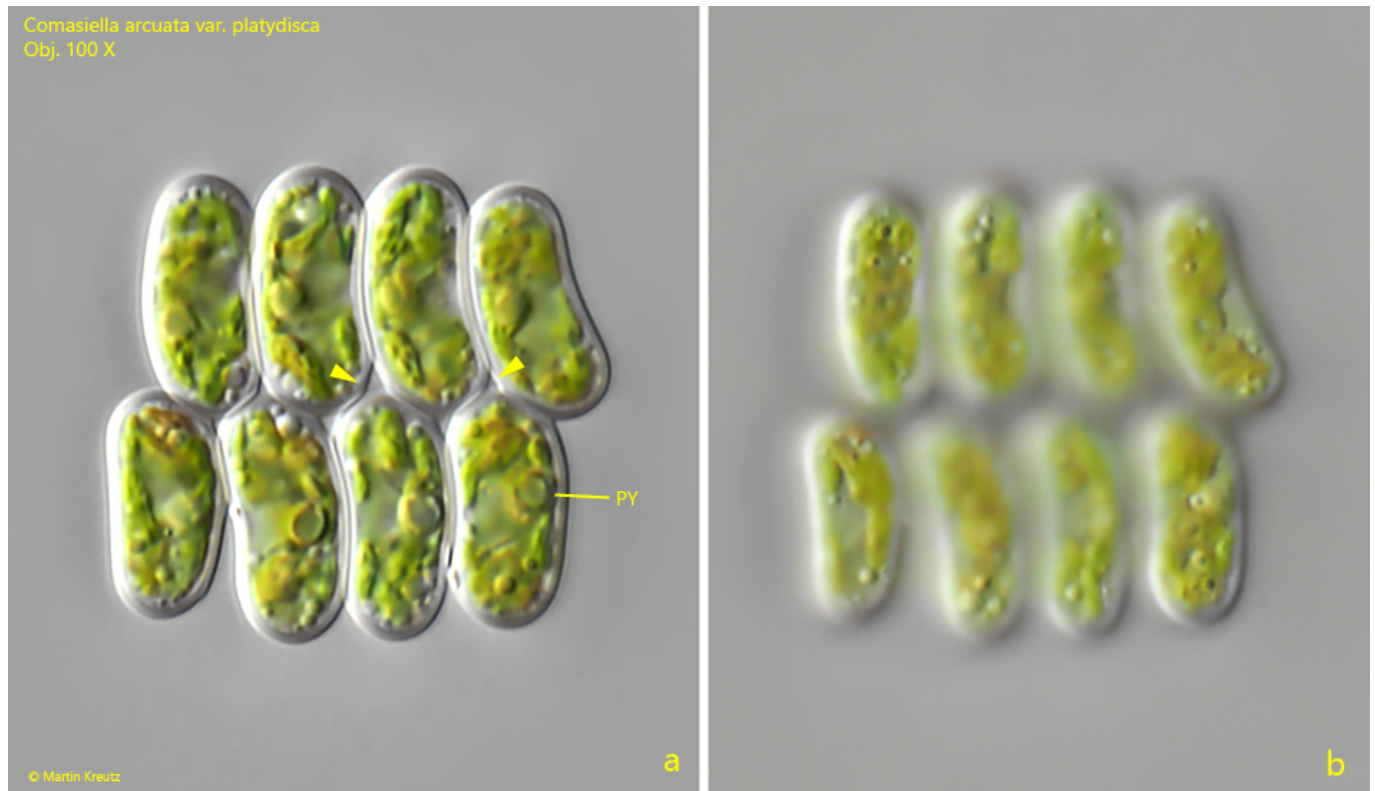
- coenobia of 4-8-16 cells, arranged in 2 rows
- cells 7-18 µm long, width 3-9.9 µm
- cell surface smooth
- cells ovoid to cylindrical or curved (bean-shaped) with rounded apices
- cells touch each other at their apices and longitudinal sides
- with perforations between the apical contact points of the 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 perforation 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  $\mu$ m (of coenobium). Two focal planes of a coenobium of 8 cells. The cells are bean-shaped and 10–12  $\mu$ m long (width 5  $\mu$ m). The surface of the cells is smooth (b). Note the perforation between the contact points of the apices of the cells (arrowheads). Obj. 100 X.