

Basichlamys sacculifera

(Scherffel) Skuja, 1956

Most likely ID: n.a.

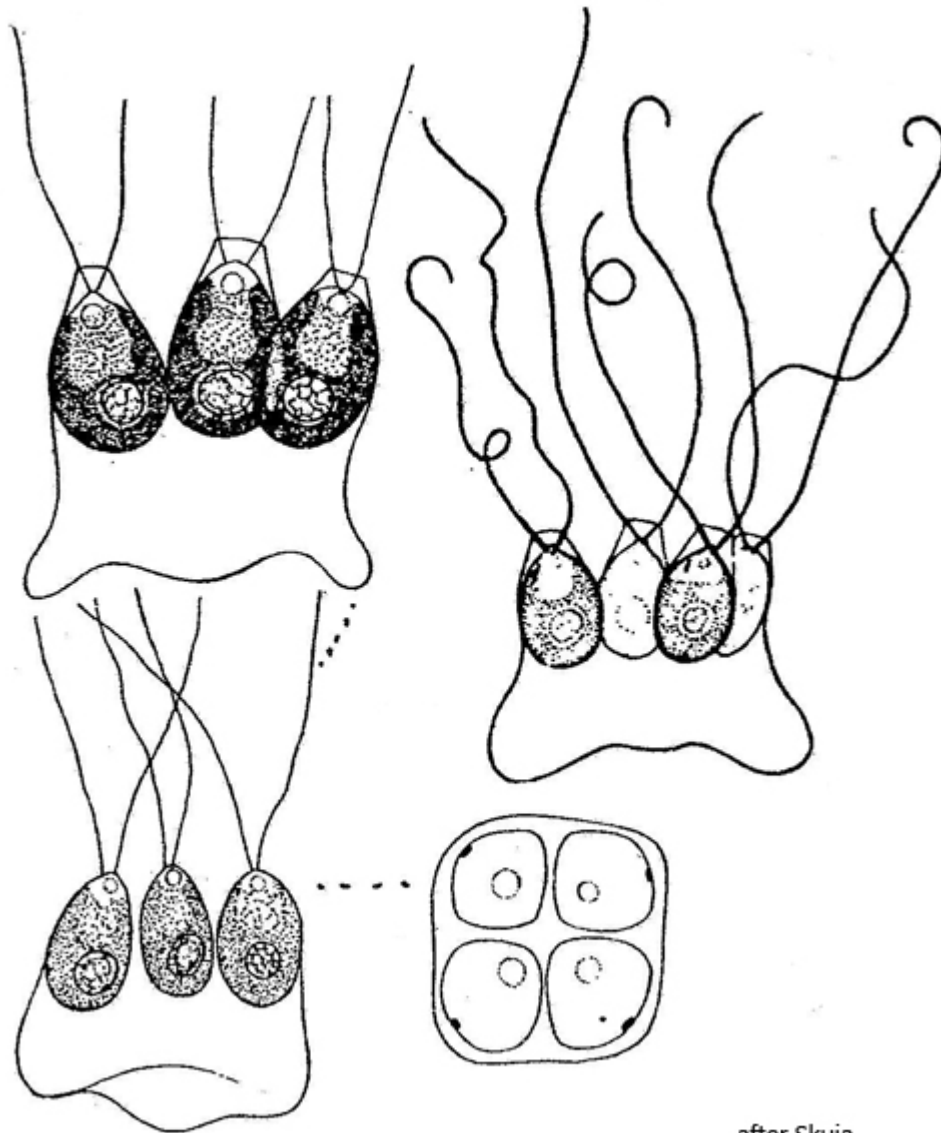
Synonym: *Gonium sacculifera*

Sampling location: [Simmelried](#), [Pond of the convent Hegne](#)

Phylogenetic tree: [Basichlamys sacculifera](#)

Diagnosis:

- coenobium a flat plate of 4 cells
- coenobium about 50 µm in diameter
- cells obvoid, 9–20 µm long
- apical 2 contractile vacuoles
- two flagella of equal length
- one eyespot in equatorial position,
- cells in mucilaginous envelope, cup-shaped
- chloroplast cup-shaped, one basal pyrenoid



Basichlamys sacculifera

I found *Basichlamys sacculifera* in the [Simmelried](#) in March 2022 and, two years later, in January 2025 in the [pond of the convent Hegne](#). The specimens accumulated at the surface in the samples.

The coenobia are sensitive to a coverslip placed on them and denature quickly. In order to document the natural form I tried to photograph the freely swimming specimens. Although the resolution is greatly reduced at the high layer thickness required for this, all essential features can be seen.

The 4 cells sit in a gelatinous envelope and are held together by it. This envelope consists of the gelatinized cell wall of the mother cell. The concave-shaped base of this envelope is typical. The cells possess two flagella of equal length (s. fig. 2 b)

and two contractile vacuoles at the anterior end (s. fig. 1 c). The eyespot is located near the cell equator (s. fig. 2 c). The pyrenoid is located near the posterior end (s. fig. 2 a). The cells themselves were consistently 13–14 μm long and more or less egg-shaped in my population.

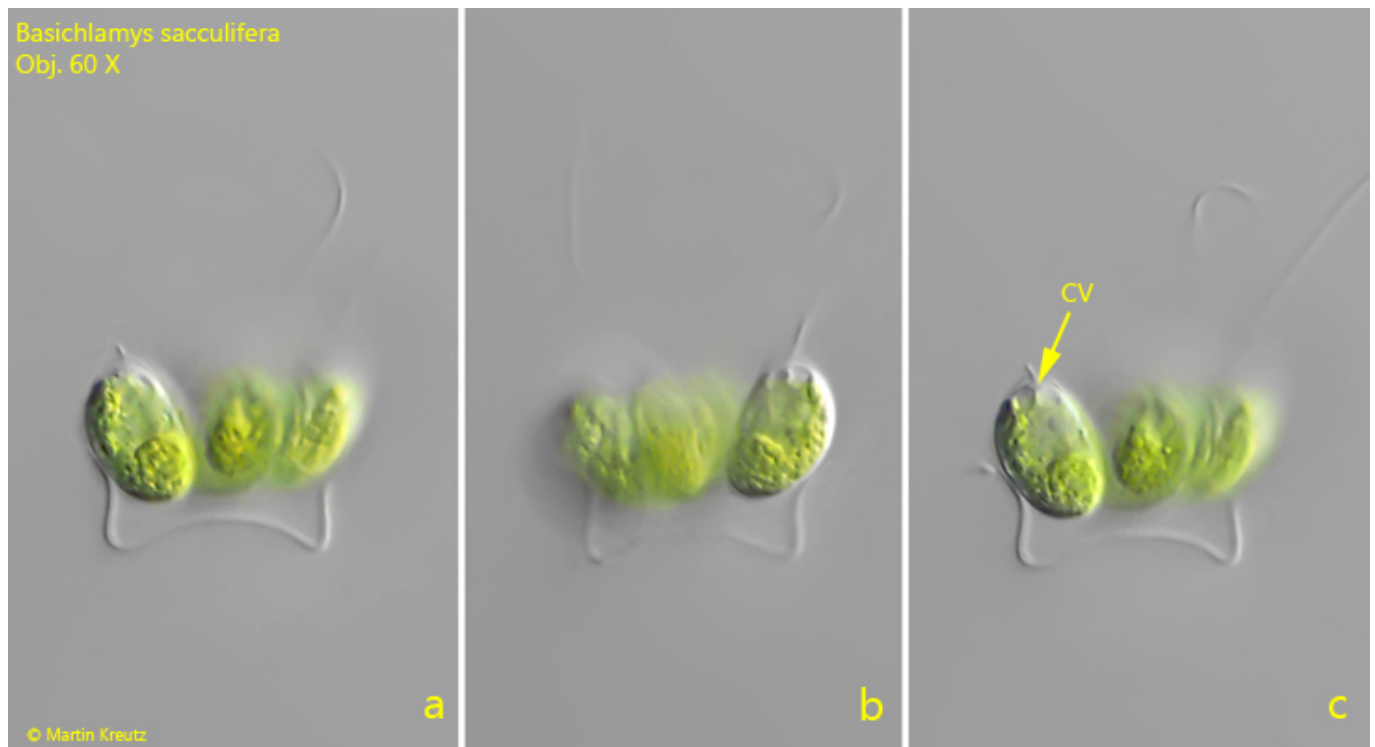


Fig. 1 a-c: *Basichlamys sacculifera*. $L = 13 \mu\text{m}$ (of cells). A freely swimming coenobium in lateral view. Note the two contractile vacuoles (CV) at the anterior end. Obj. 60 X.

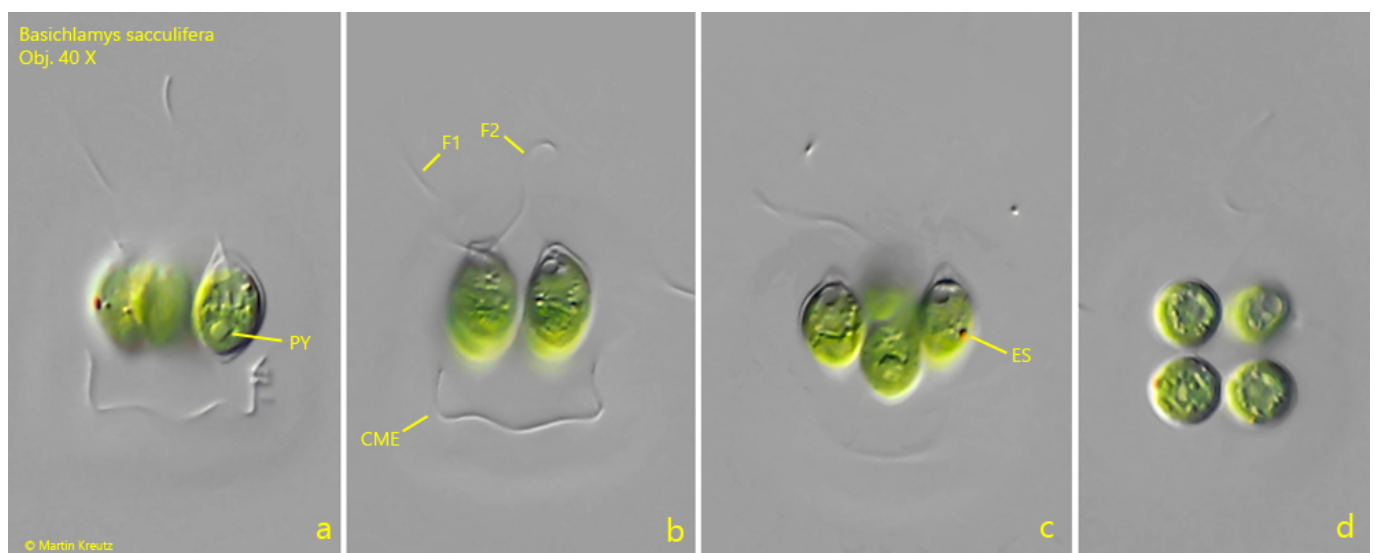


Fig. 2 a-d: *Basichlamys sacculifera*. $L = 13\text{--}14 \mu\text{m}$ (of cells). A second freely swimming coenobium. Note the eyespot (ES) in equatorial position. The cells sit in a cub-shaped mucilaginous envelope (CME). Each cell has two flagella (F1, F2) of equal length. Obj. 40 X.