

Chlamydocapsa ampla

(Kützing) Fott, 1972

Most likely ID: n.a.

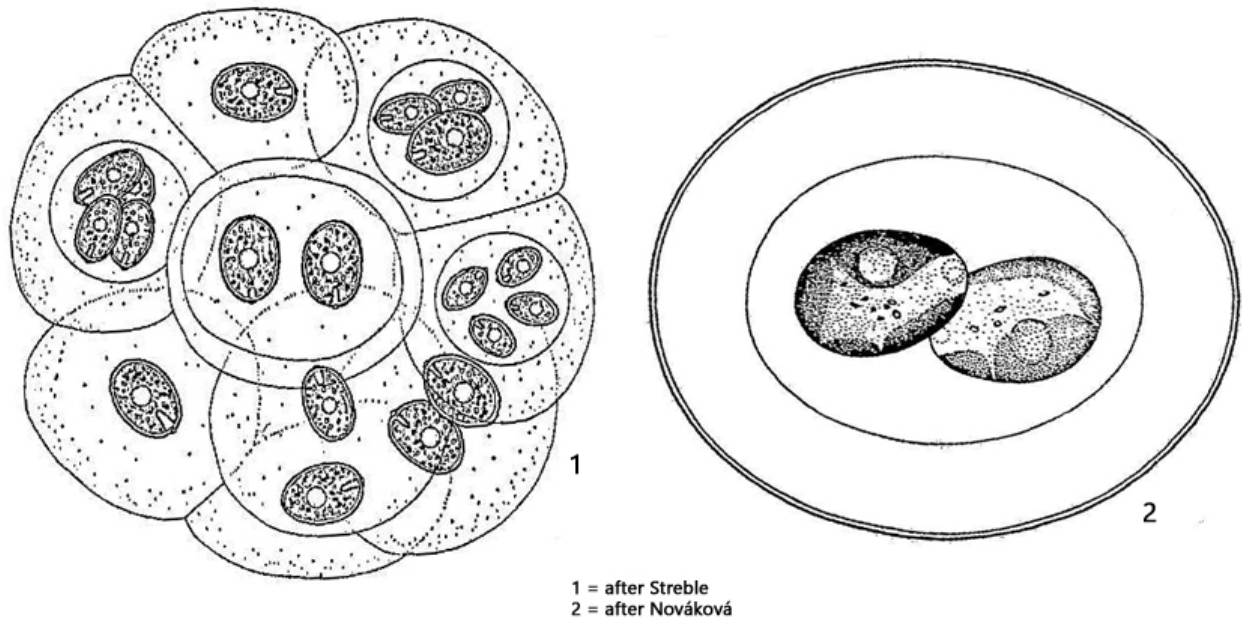
Synonym: *Gloeocystis ampla*, *Sphaerello cystis ampla*

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

Phylogenetic tree: [Chlamydocapsa ampla](#)

Diagnosis:

- colonies roundish or grape-shaped, 50-1500 µm
- 2-4-8 cells each in a spherical gelatinous sheath
- gelatinous sheath limited by distinct membrane in young cells, otherwise amorphous
- cells ovoid or oval, length 5-14 µm
- one chloroplast, multiple lobed
- one pyrenoid, localized in one of the lobes
- contractile vacuole in the narrowed cell end
- one eyespot (hard to see)
- vegetative cells can form flagella



Chlamydocapsa ampla

I find *Chlamydocapsa ampla* regularly but rarely in two of my sampling sites. Mostly I find the colonies growing on the surface of the mud layer.

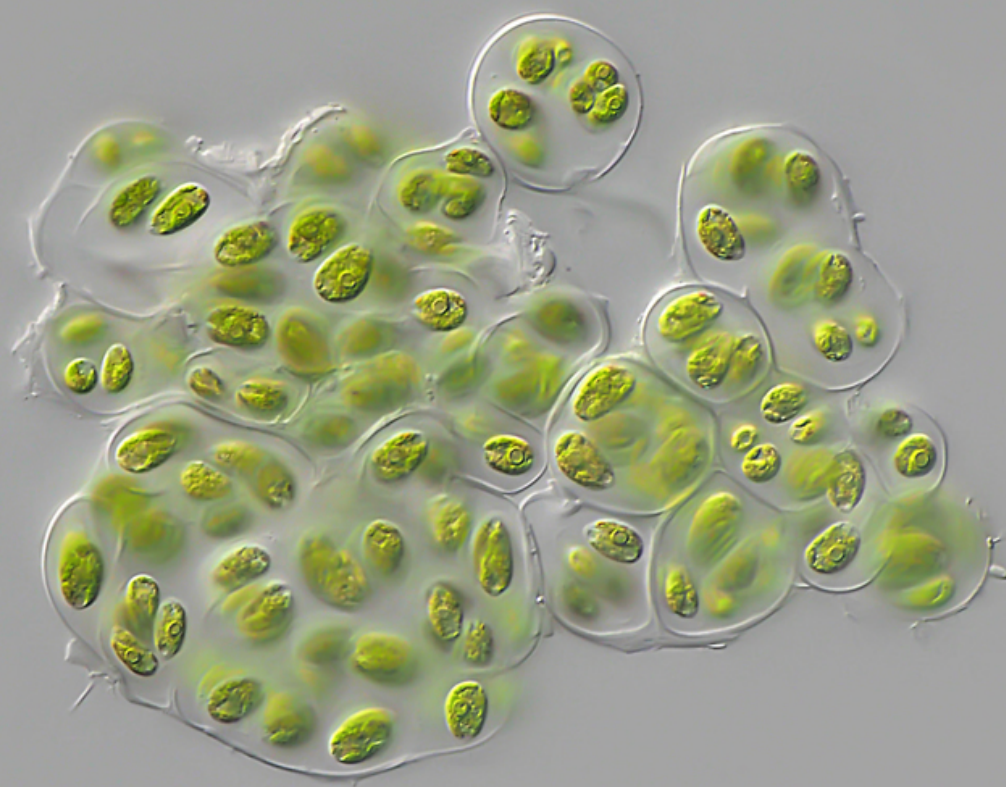
The main characteristics of *Chlamydocapsa ampla* are the mostly ovoid shaped cells, which are located in a gelatinous sphere with a distinct, sharply defined membrane. There are 2-8 cells in each of these gelatinous spheres. These spherical colonies are often connected to form larger, irregularly shaped aggregates, which then appear grape-shaped (s. fig. 1 a-b).

Chlamydocapsa ampla belongs to the tetrasporal algae, which have a contractile vacuole and an eyespot. In addition, the vegetative cells can form a pair of flagella, although this is rarely observed. The contractile vacuole is located in the tapered end of the cell, which is often transparent (s. figs 2 and 4). The eyespot is adhering to the cell wall, is very small and can only be seen at high magnification (s. figs. 2 and 4).

Chlamydocapsa ampla
Obj. 40 X



a



b

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Fig. 1 a-b: *Chlamydocapsa ampla*. L = 8-12 μm (cells). Two focal planes of a colony with a diameter of 200 μm . Obj. 40 X.

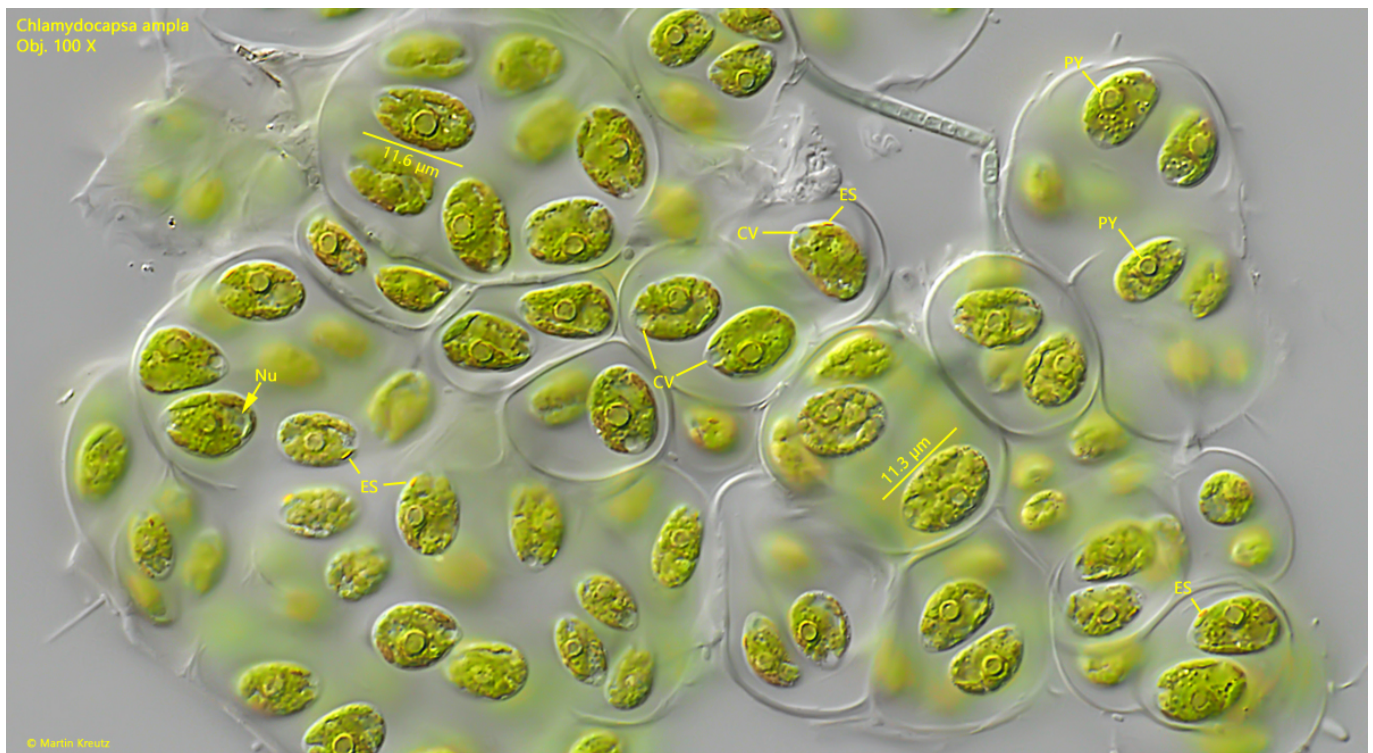


Fig. 2: *Chlamydocapsa ampla*. L = 8-12 μm (cells). A detail of the colony as shown in fig. 1 a-b. Note the contractile vacuoles (CV) and eyespots (ES) in the cells. Nu = nucleus, PY = pyrenoid. Obj. 100 X.

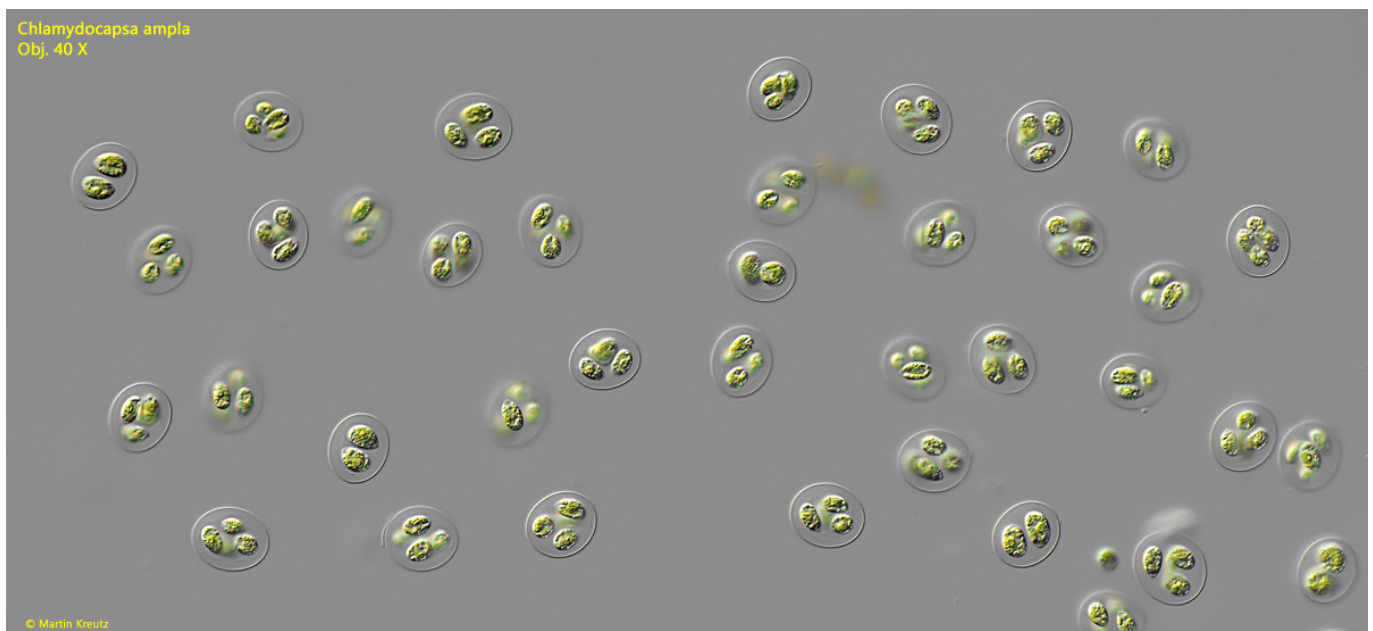


Fig. 3: *Chlamydocapsa ampla*. D = 20-24 μm (of colonies). An aggregation of young, spherical colonies with each 2 or 4 cells. Obj. 40 X.

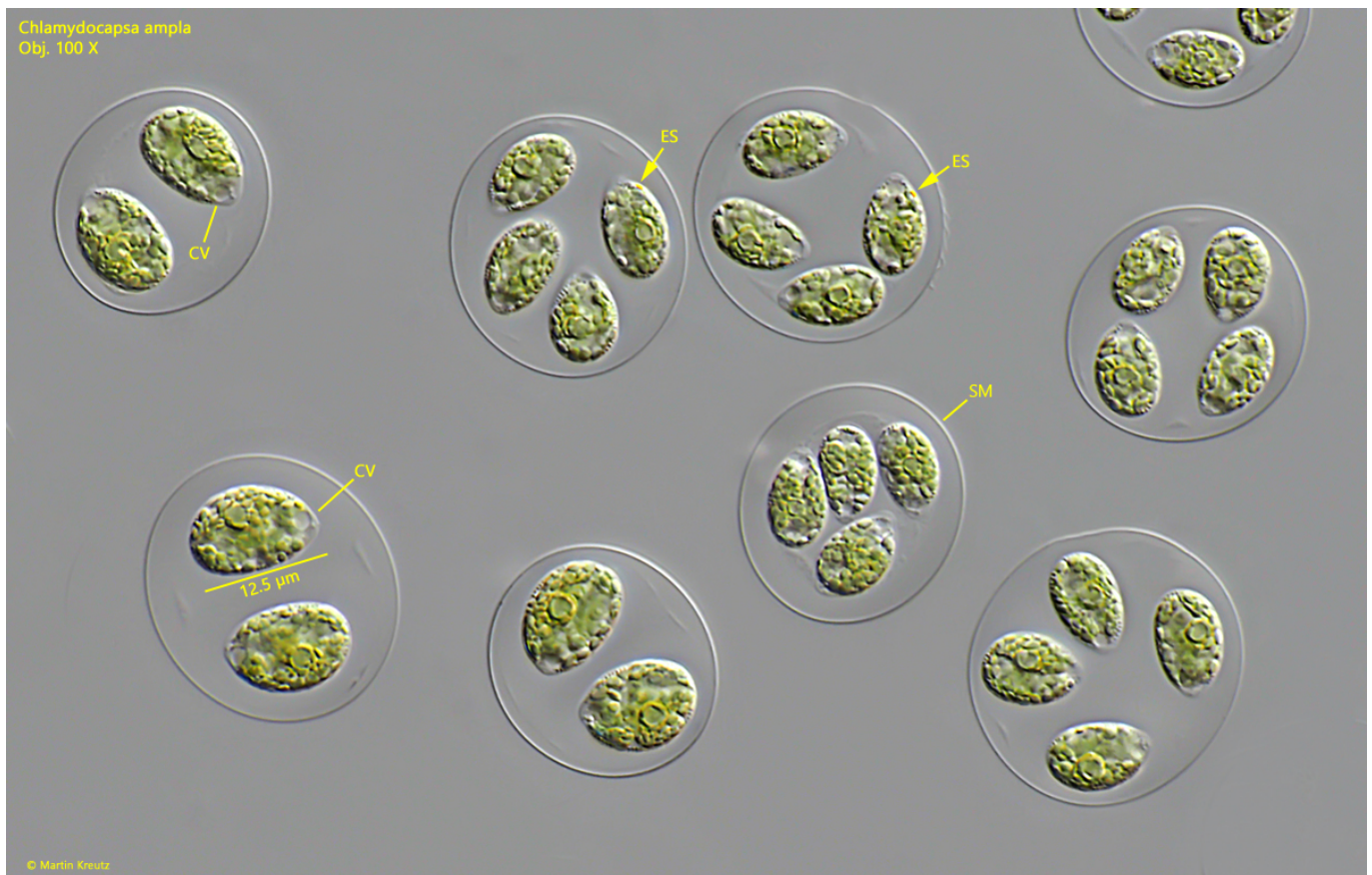


Fig. 4: *Chlamydocapsa ampla*. L = 7-13 μm (of cells). Some colonies as shown in fig. 3 in detail. The cells are ovoid. The contractile vacuole (CV) is located in the tapered end of the cells. ES = eyespot, SM = spherical membrane. Obj. 100 X.

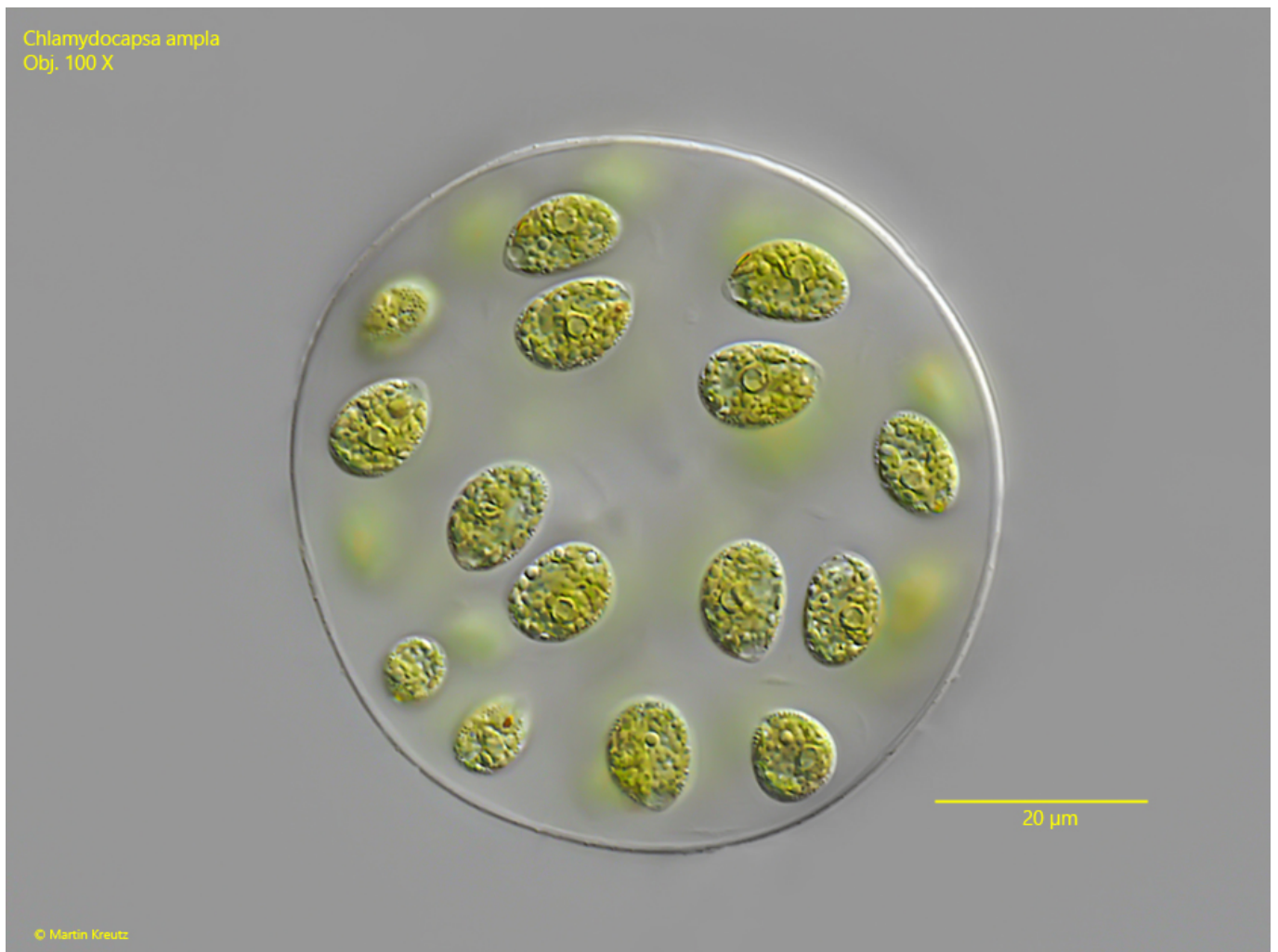


Fig. 5: *Chlamydocapsa ampla*. D = 62 μm (of colony). A young, spherical colony. Obj. 100 X.