Hedriocystis pellucida

Hertwig & Lesser, 1874

Most likely ID: n.a.

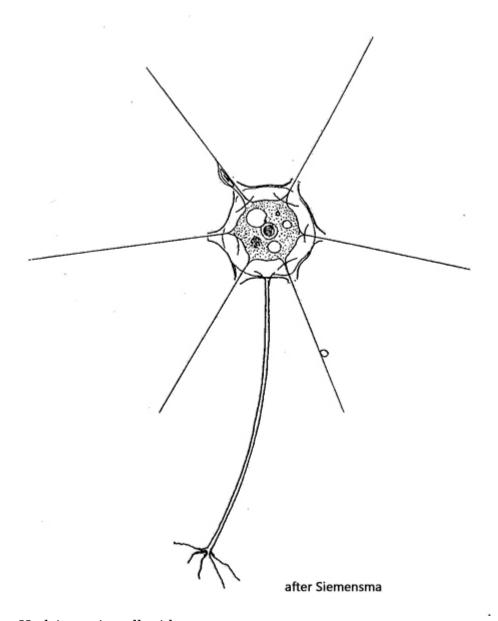
Synonym: n.a.

Sampling location: <u>Ulmisried</u>, <u>Simmelried</u>

Phylogenetic tree: <u>Hedriocystis pellucida</u>

Diagnosis:

- cell in a polygonal shell with long stalk
- shell with pores on conical elevations
- pseudopodia arise from pores
- pseudopodia granulated
- diameter of cell 10-12 μm
- diameter of shell 16-30 μm
- length of stalk 36-90 μm
- spherical nucleus with central nucleolus
- one or several contractile vacuoles



Hedriocystis pellucida

I find Hedriocystis pellucida in <u>Ulmisried</u> and <u>Simmelried</u>. The specimens are difficult to find in fresh samples. However, Hedriocystis pellucida likes to settle on the floating coverslip and is then easy to observe.

Hedriocystis pellucida forms a polygonal shell on a long stalk of organic, transparent material (s. figs. 1 a-b and 2). The shell has hump-like elevations with pores. The cell stretches its granulated pseudopodia outwards through these pores to catch prey. Bacteria are almost exclusively used as prey. This is the reason why *Hedriocystis pellucida* only settles on the floating coverslip when a sufficient growth of bacteria has formed there.

Cyst formation also takes place in the shell, which remains in the shell (s. fig. 4 a-b). The cysts have a diameter of 8-9 µm and are densely covered with short spines.

More images and information on *Hedriocystis pellucida*: Ferry Siemensma-Microworld-Hedriocystis pellucida

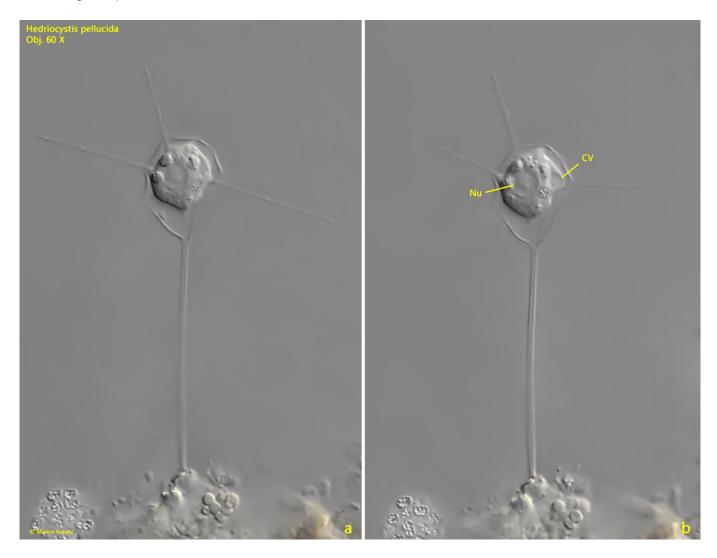


Fig. 1 a-b: Hedriocystis pellucida. $L = 58 \mu m$. Two focal planes of a specimen attached to a detritus flake. Nu = nucleus, CV = contractile vacuole. Obj. 60 X.

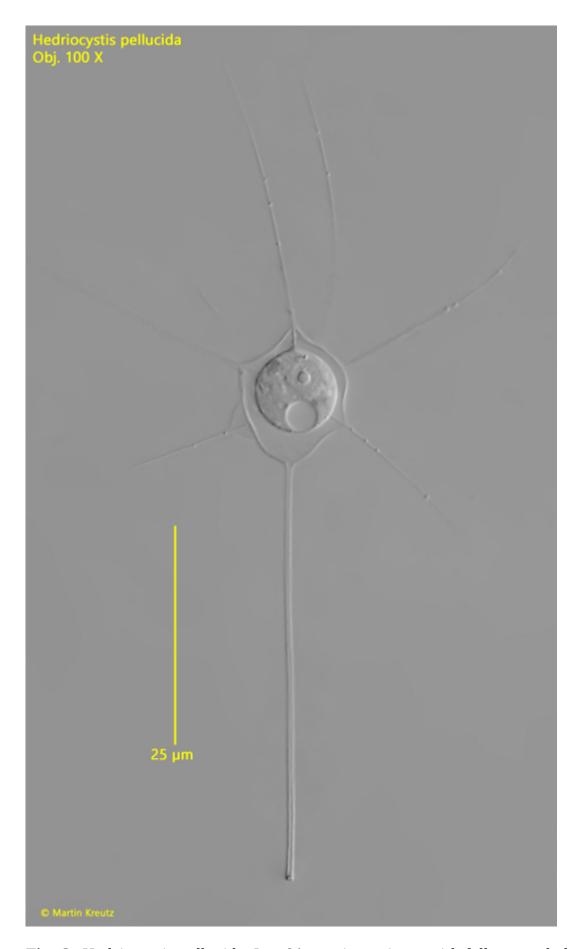


Fig. 2: Hedriocystis pellucida. $L=64~\mu m$. A specimen with fully extended pseudopodia attached to a floating coverslip. Obj. 100 X.

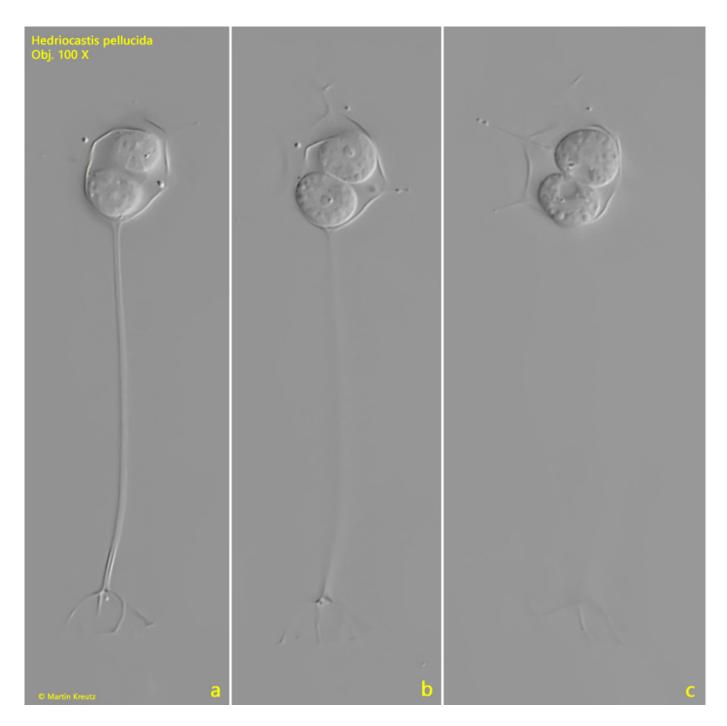


Fig. 3 a-c: $Hedriocystis\ pellucida$. L = 68 μm . Different focal planes of two cells in a shell after cell division. Obj. 100 X.

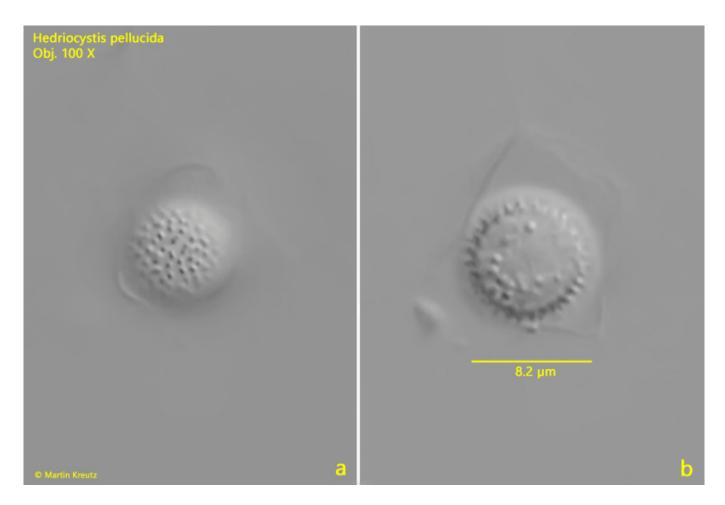


Fig. 4 a-b: Hedriocystis pellucida. A cyst with a diameter of 8.2 $\mu m.$ The surface of the cyst is covered with short spines. Obj. 100 X.