

## ***Belonocystis spinifera* Brown, 1918**

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

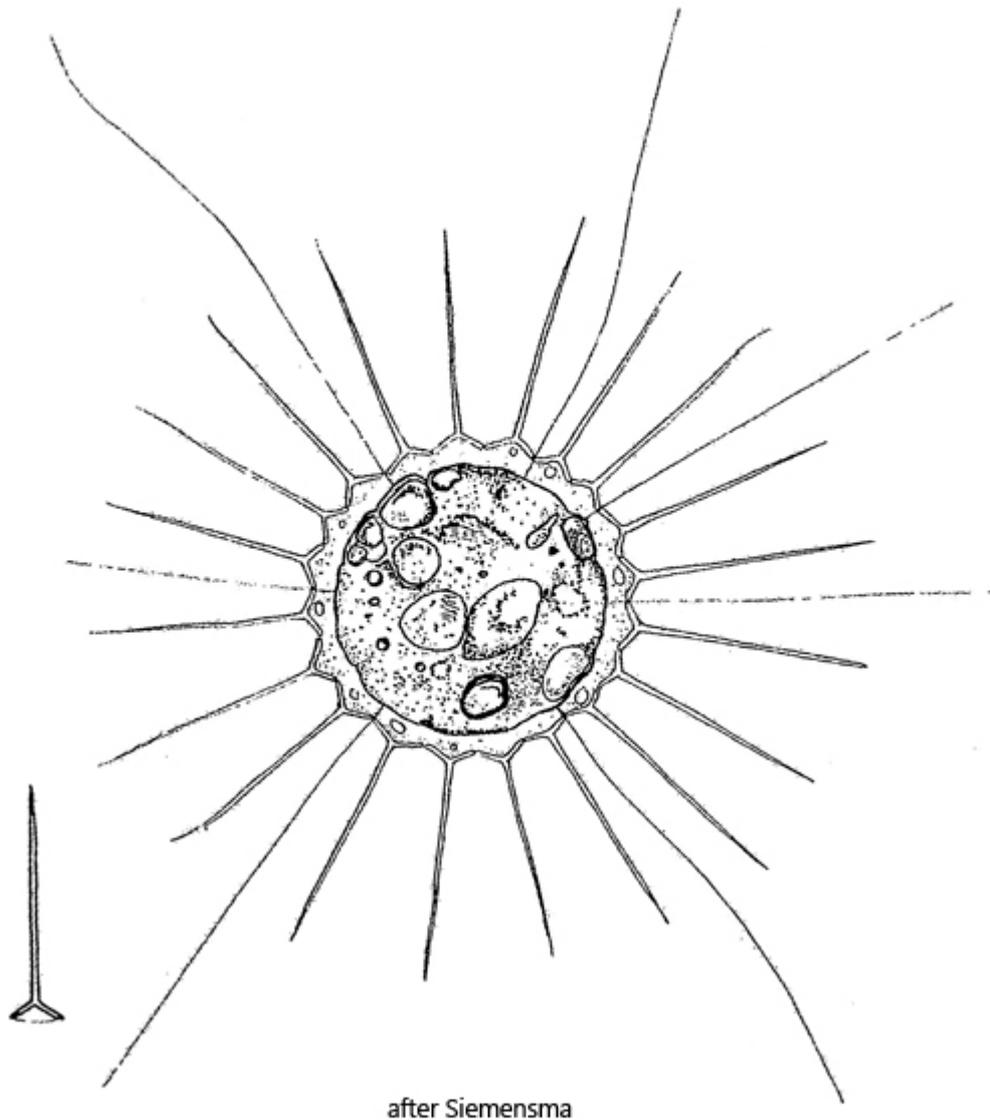
**Synonym:** *Belonocystis tubistella*

**Sampling location:** Kulzer Moos, [Sima Moor \(Austria\)](#), [Simmelried](#)

**Phylogenetic tree:** [Belonocystis spinifera](#)

### **Diagnosis:**

- cells spherical
- diameter of cell 8–16  $\mu\text{m}$
- cells covered by hollow spines with a tent-shaped base
- filopodia thread-like, wavy (hard to see)
- 1–4 contractile vacuoles
- nucleus eccentrically, with spherical nucleolus



after Siemensma

### Belonocystis spinifera

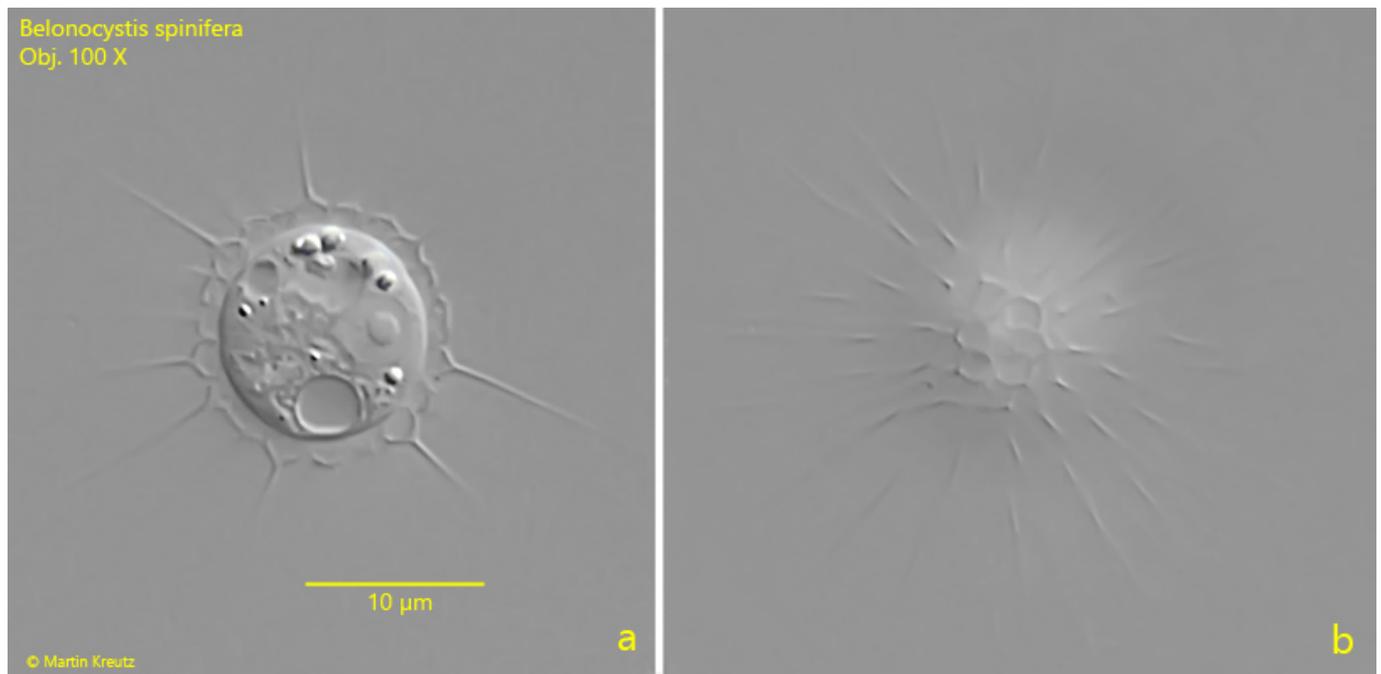
I usually find *Belonocystis spinifera* in acidic, peaty waters. Very rarely, I also find this species in the [Simmelried](#). In fresh samples, the small specimens are usually difficult to find. In older samples, the specimens are more easily found in grown detritus flakes on the walls of the sample containers.

Although *Belonocystis spinifera* has the external appearance of a heliozoan, the species belongs to the amoebae. This is due to the fine, flexible filopodia with which *Belonocystis spinifera* can also move. These are not rigid axopodia with central, axonemal microtubules.

The scales of *Belonocystis spinifera* cover the entire body and leave no oral aperture. They consist of a hollow spine that broadens umbrella-like at the base. In

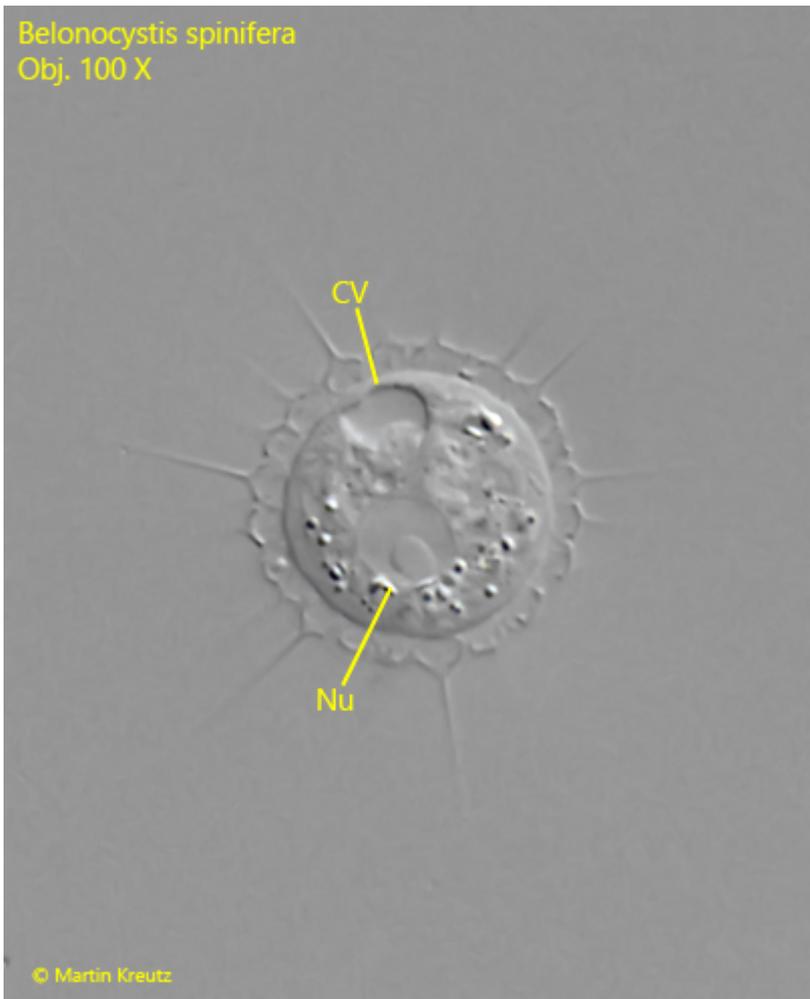
optical section, this structure appears tent-shaped. The fine filopodia extend between these scales and are very difficult to see. I myself have not been able to observe them so far.

More images and information on *Belonocystis spinifera*: [Ferry Siemensma-Microworld-Belonocystis spinifera](#)



**Fig. 1 a-b:** *Belonocystis spinifera*.  $D = 11.2 \mu\text{m}$  (without scales). Two focal planes of an unsquashed specimen. Obj. 100 X.

Belonocystis spinifera  
Obj. 100 X



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**Fig. 2:** *Belonocystis spinifera*.  $D = 11.2 \mu\text{m}$  (without scales). The slightly squashed specimen as shown in fig. 1 a-b. CV = contractile vacuole, Nu = nucleus. Obj. 100 X.