Cryptodifflugia pusilla Playfair, 1917

Most likely ID: n.a.

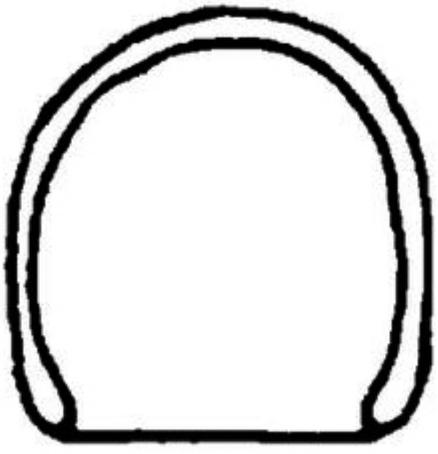
Synonym: n.a.

Sampling location: Simmelried

Phylogenetic tree: *Cryptodifflugia pusilla*

Diagnosis:

- shell helmet-shaped
- cross section circular
- shell chitinuous, orange-brown, without xenosomes
- aperture almost equal width of shell
- pseudostome with thickened border
- length 8-13 µm
- pseudopodia short, hard to see



after Playfair

Cryptodifflugia pusilla

So far I have only found *Cryptodifflugia pusilla* in the Simmelried. There I find the

specimens mainly in slimy detritus flakes interspersed with bacterial colonies.

As *Cryptodifflugia pusilla* is very small at around 10–15 µm and often burrows into the detritus flakes, the specimens are difficult to find in fresh samples. The shells in my population were between 8–16 µm long and clearly orange-brown in color. Although the species is said to have a smooth shell, all the specimens I found were covered with several xenosomes (s. fig. 3 b). This observation was also made by Siemensma (s. link below). I could never find specimens with outstretched pseudopodia. The nucleus is located posteriorly and has a central nucleolus. There seems to be only one contractile vacuole, which is located in the posterior third.

More images and information on *Cryptodifflugia pusilla*: Ferry Siemensma-Microworld-*Cryptodifflugia pusilla*

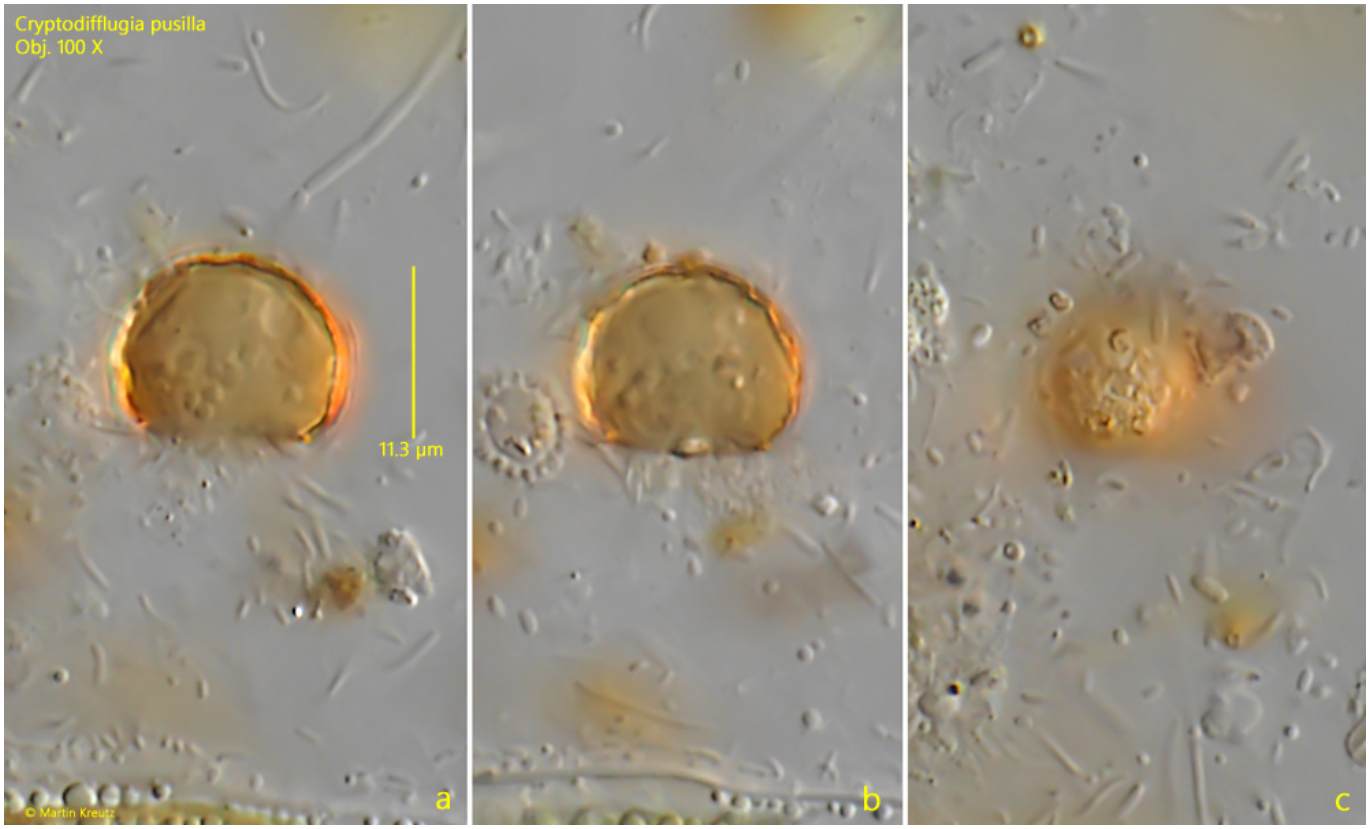


Fig. 1 a-c: *Cryptodifflugia pusilla*. L = 11.3 µm. Three focal planes of a specimen embedded in a gelatinous detritus flake. Obj. 100 X.

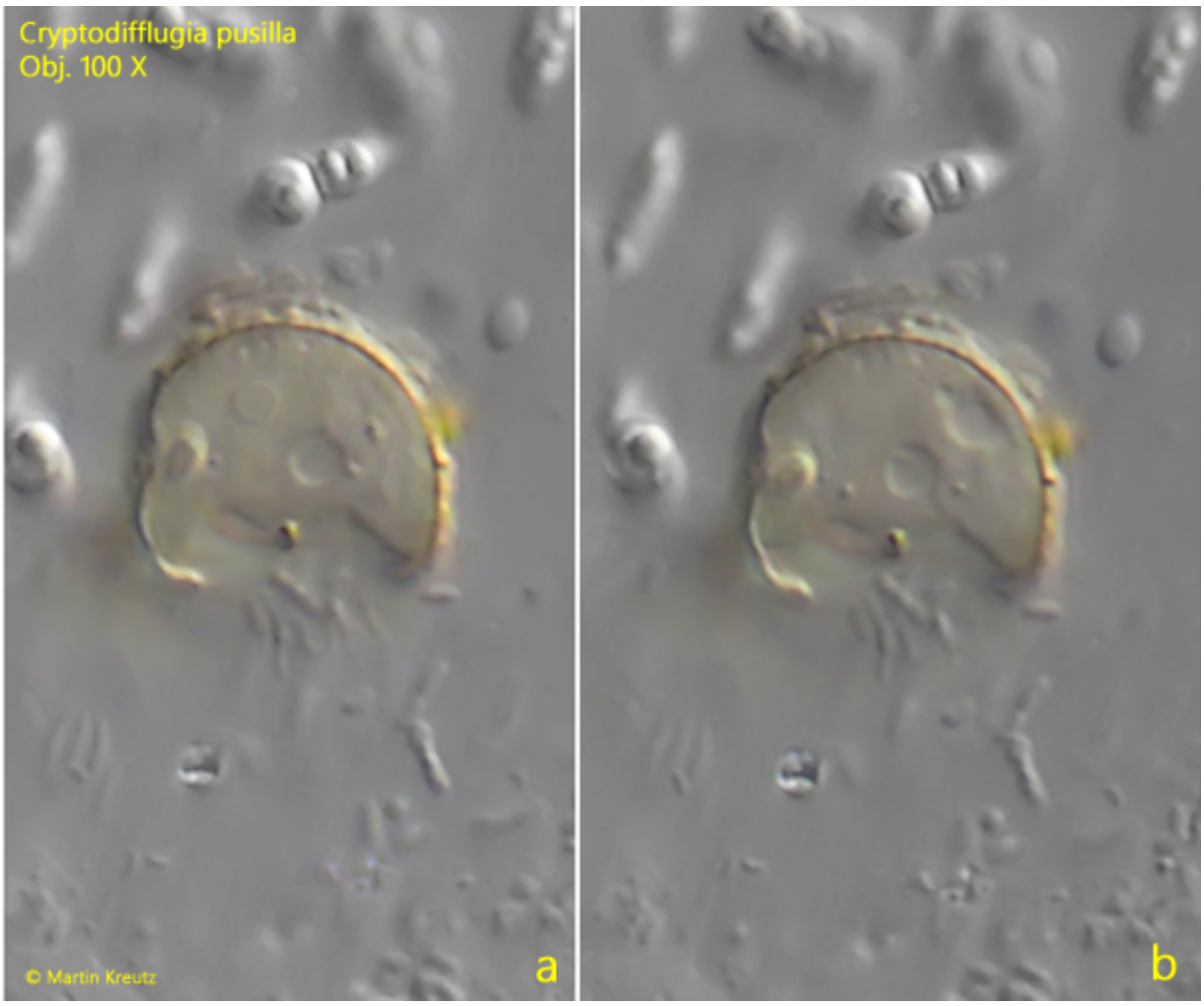


Fig. 2 a-b: *Cryptodifflugia pusilla*. L = 16.8 µm. Two focal planes of a second specimen. Obj. 100 X.

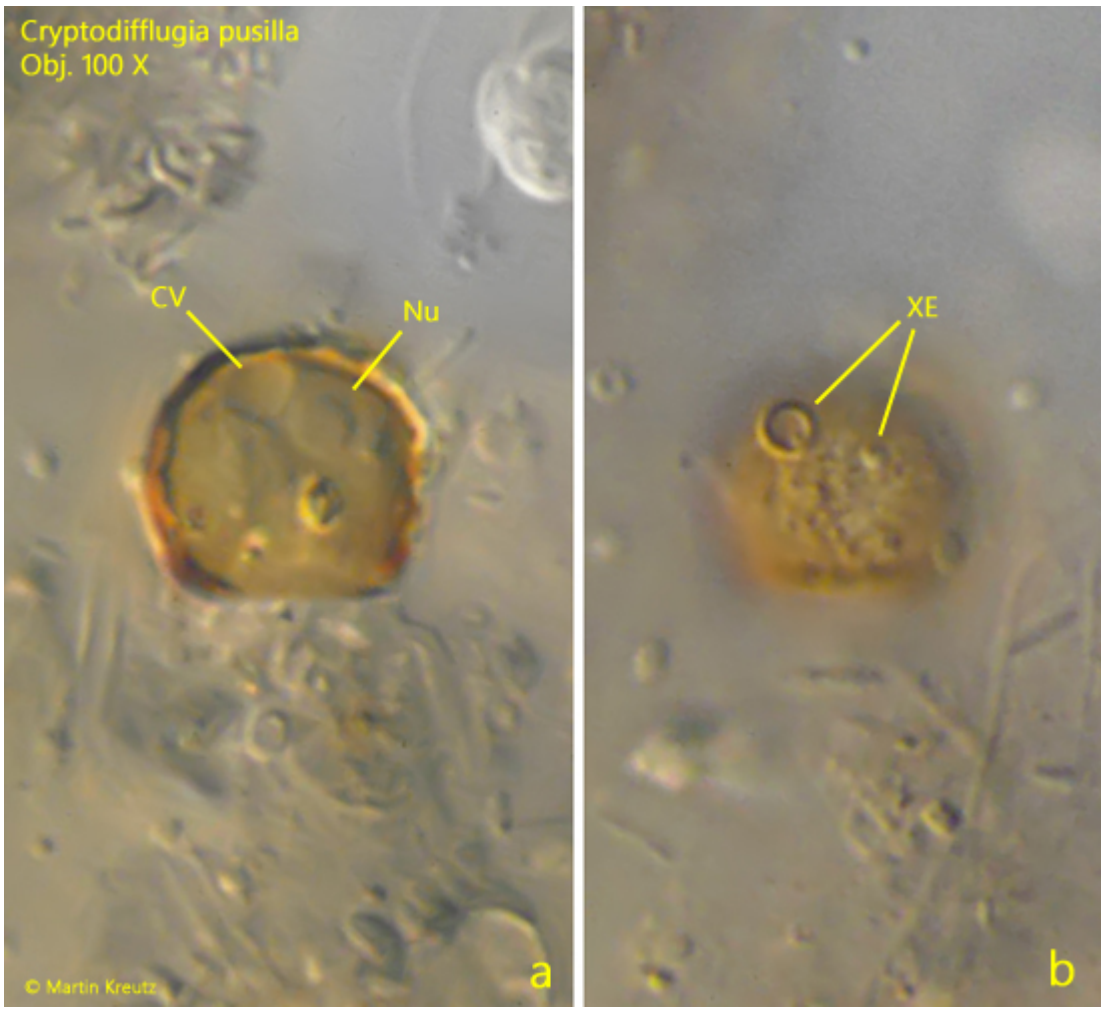


Fig. 3 a-b: *Cryptodifflugia pusilla*. L = 10.0 µm. Two focal planes of a specimen found in Feb 2007. Note the xenosomes (XE) attached to the shell. CV = contractile vacuole, Nu = nucleus. Obj. 100 X.

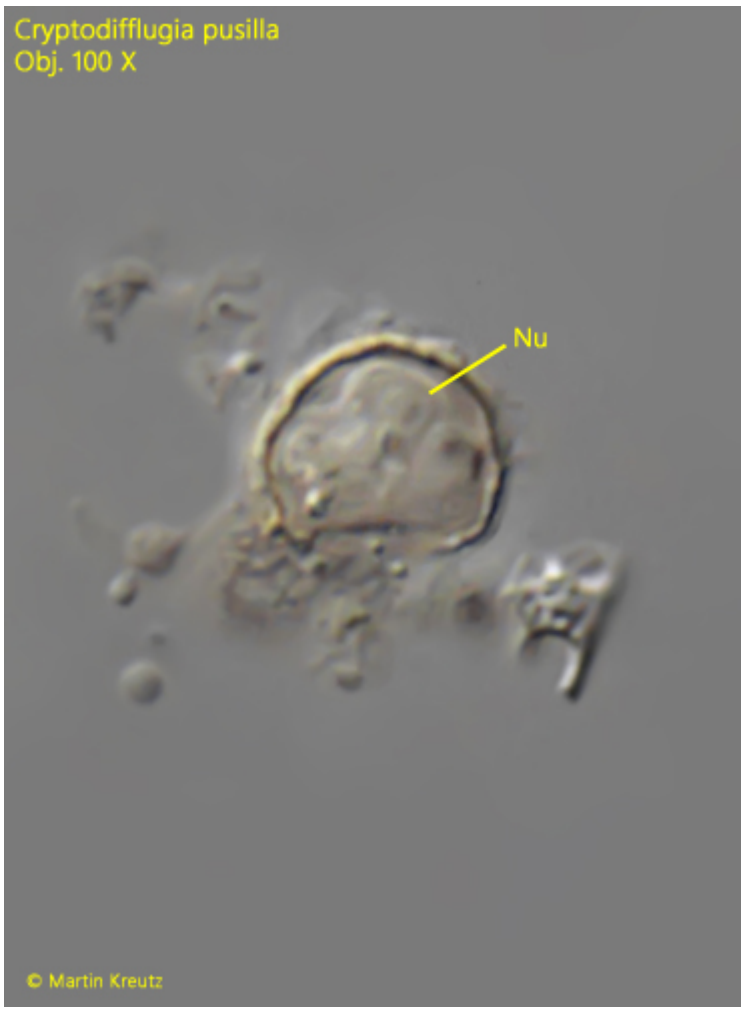


Fig. 4: *Cryptodifflugia pusilla*. L = 9.3 µm. A fourth specimen. Nu = nucleus. Obj. 100 X.