Chlamydodon mnemosyne Ehrenberg, 1835

Most likely ID: n.a.

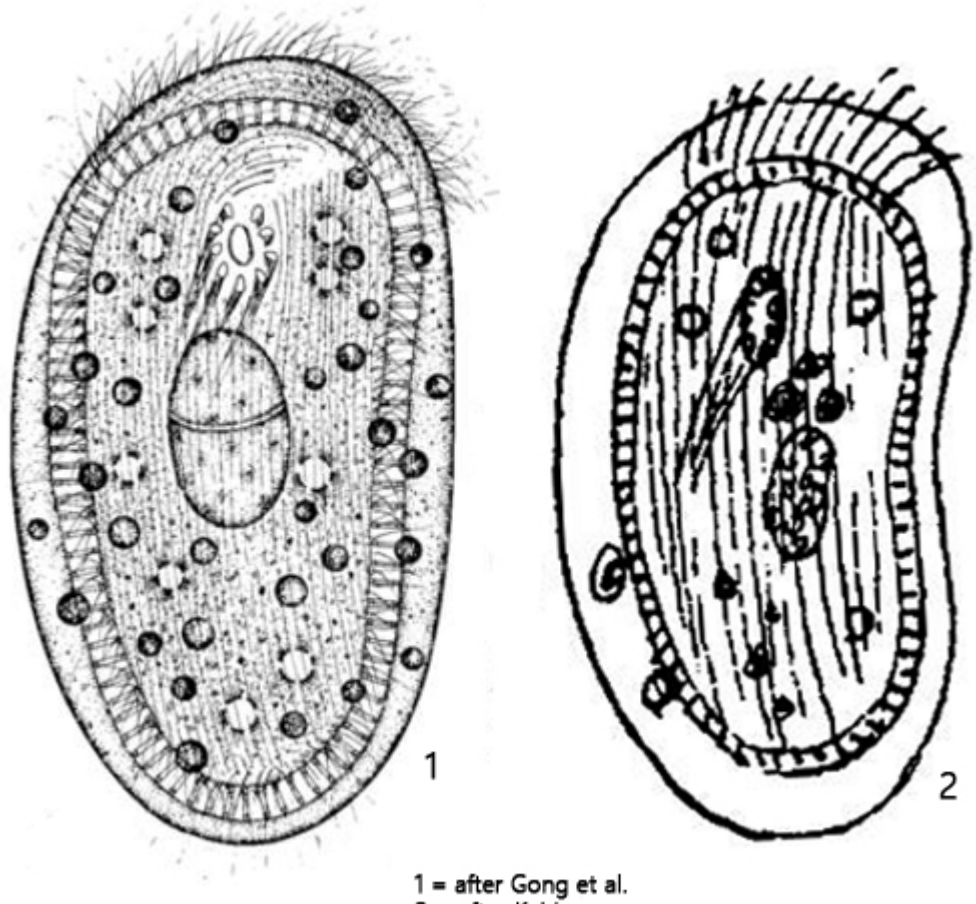
Synonym: n.a.

Sampling location: Tidal outlet Kloster (Hiddensee)

Phylogenetic tree: *Chlamydodon mnemosyne*

Diagnosis:

- body ellipsoid or slightly reniform, dorso-ventrally flattened
- length 80–90 µm
- anteriorly an orange colored pigment spot, left side
- oral aperture oval
- cytopharyngeal basked consisting of 8–10 rods
- ciliatur restrichted to ventral side
- macronucleus heteromerous, ovoid, centrally located
- cross-striated band without interruptions
- several contractile vacuoles scattered throughout cytoplasm
- yellowish or orange vesicles scattered in cytoplasm



1 = after Gong et al.
2 = after Kahl

Chlamydodon mnemosyne

I found *Chlamydodon mnemosyne* in a tidal outlet in the village of Kloster on the island of Hiddensee. There were a only a few specimens in the samples.

Chlamydodon mnemosyne is a marine, cyrthophorid ciliate. The genus *Chlamydodon* is characterized by the possession of a unique organelle. A tubular structure runs along the margin of the body, which is reinforced by rings, similar to a suction tube with ring reinforcement. This organelle has already been studied in detail by earlier authors, but its function is still unknown. In *Chlamydodon mnemosyne*, this cross-striated band is continuous and encircles the entire body without interruption (s. fig. 2 a-b). This makes it easy to distinguish *Chlamydodon mnemosyne* from the similar species *Chlamydodon triquetrus*, whose cross-striated band is interrupted at the posterior end.

At 70 µm, the specimens in my population were somewhat smaller than indicated by Kahl (80–90 µm). All specimens possessed a clear orange pigment spot at the anterior end near the left margin (s. figs. 1 b and 2 a-b). The cytopharyngeal basket

usually had 10–11 nematodesmal rods and the mouth opening was clearly oval.

More information and a video on *Chlamydodon mnemosyne*: Dr. Jeffrey Silverman-iNaturalist-*Chlamydodon mnemosyne*

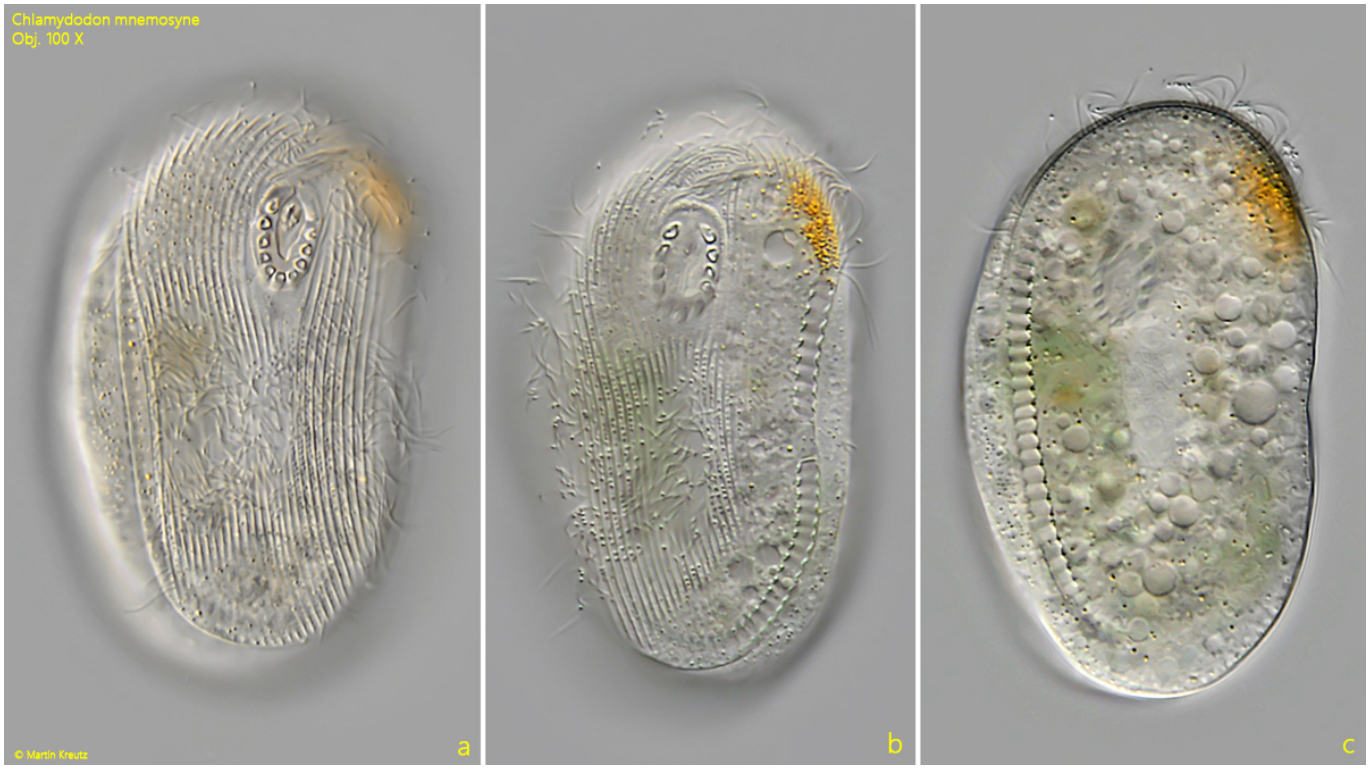


Fig. 1 a-c: *Chlamydodon mnemosyne*. L = 70 µm. Different focal planes of a freely swimming specimen from ventral. Obj. 100 X.

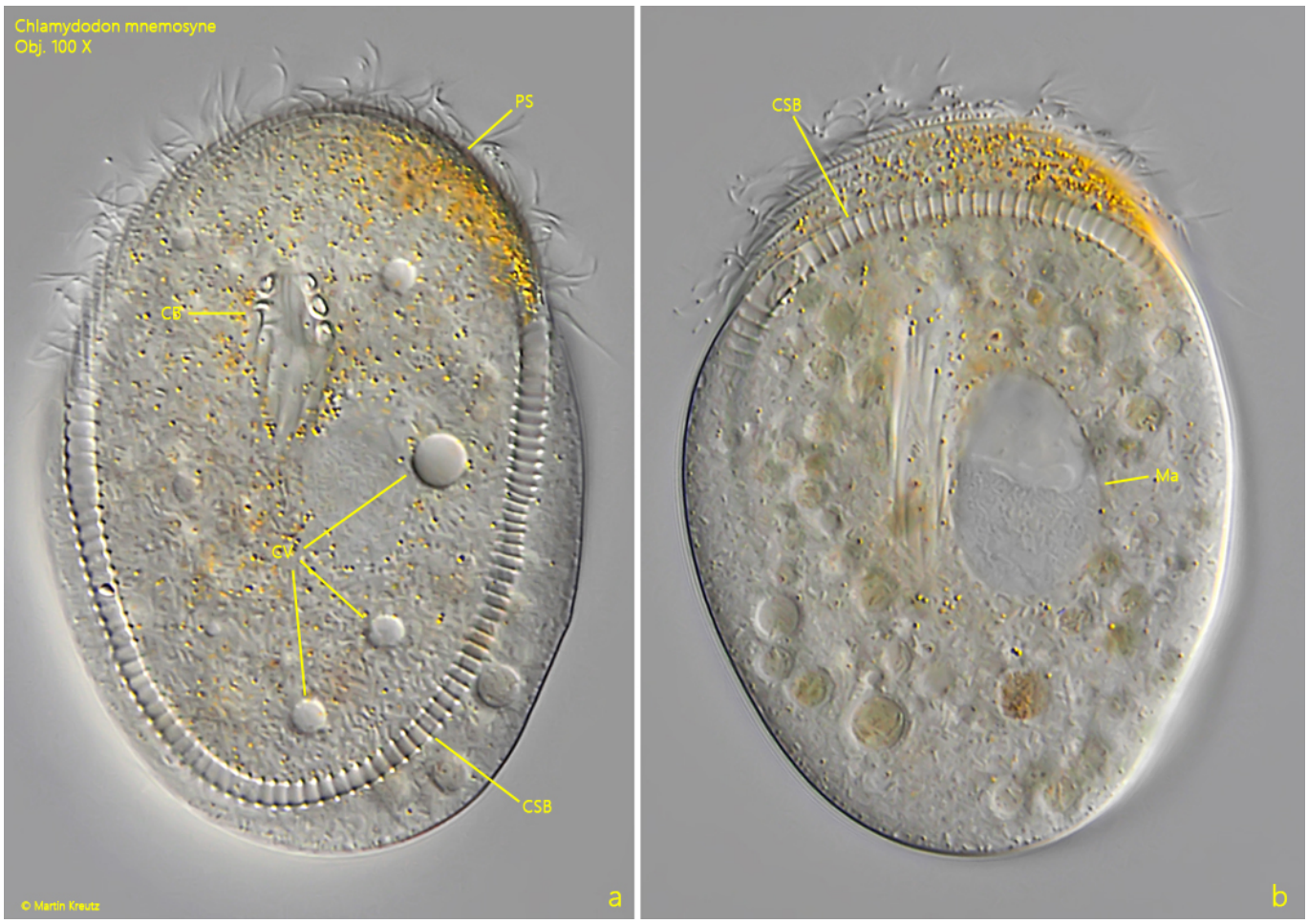


Fig. 2 a-b: *Chlamydodon mnemosyne*. Two focal planes of a squashed specimen from ventral. Note the continuous cross-striated band (CSB) encircle the complete body. Several contractile vacuoles (CV) are scattered throughout the cytoplasm. The macronucleus (Ma) is heteromerous and oval. CB = cytopharyngeal basket, PS = pigment spot of orange colored vesicles. Obj. 100 X.