

Gonyostomum depressum
(Lauterborn) Lemmermann, 1908

Most likely ID: n.a.

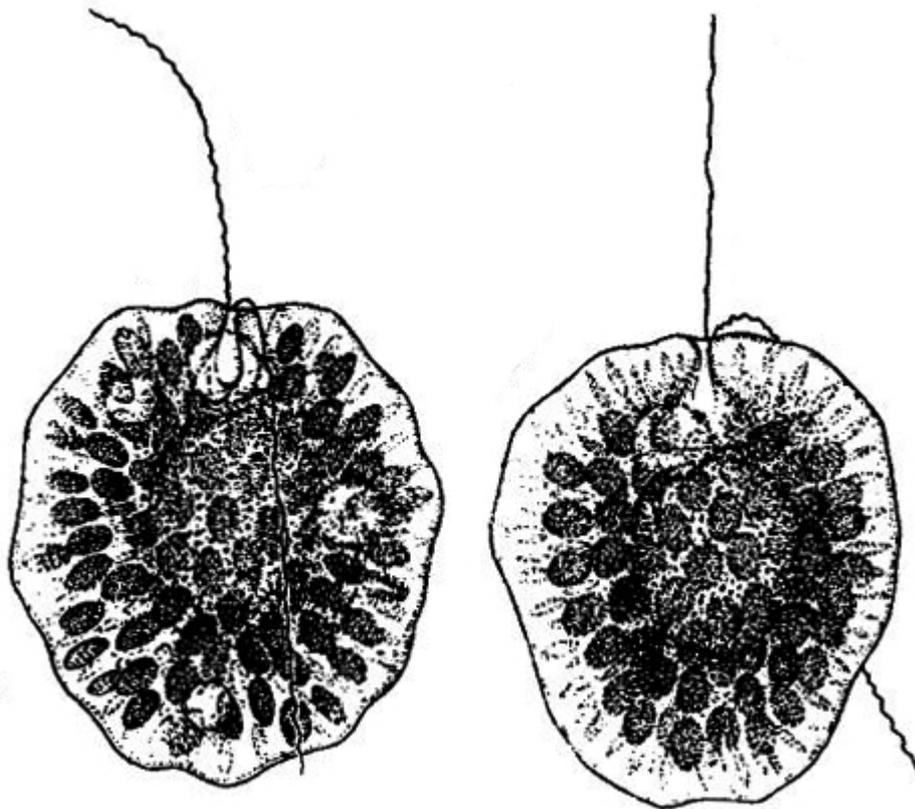
Synonym: *Gonyostomum latum*

Sampling location: [Mühlhalden pond](#)

Phylogenetic tree: [Gonyostomum depressum](#)

Diagnosis:

- cell dorsoventrally flattened, somewhat angular in outline, ovoid or heart-shaped
- dorsal side convex, ventral side concave
- length 25–40 μm , width 19–36 μm
- gullet triangular (hard to see)
- leading flagellum and trailing flagellum with body length
- one or two apical contractile vacuoles
- numerous disc-shaped chloroplasts, yellowish-green
- nucleus spherical, central
- extrusomes 3–4 μm , elongate ellipsoid or spindle-shaped
- extrusomes arranged radially at margin of cell



after Skuja

Gonyostomum depressum

I find *Gonyostomum depressum* only very rarely and so far only in the [Mühlhalden pond](#). In the plankton samples, the specimens collect on the side facing the light.

Gonyostomum depressum can be easily recognized by its outer shape, which appears polygonal, with the body also being strongly flattened. This effect is enhanced by the spindle-shaped extrusomes, which are arranged on the transparent margin (s. fig. 3). The specimens rotates when swimming. There are two flagella, of which the trailing flagellum pointing backwards is difficult to recognize as it is held close to the body. The leading flagellum, on the other hand, is easy to recognize as it also appears to be thicker than the trailing flagellum (s. fig. 2 a-c). In my population, the specimens had wedge-shaped extrusomes arranged around the nucleus, which I interpret as precursors of the spindle-shaped or ellipsoid extrusomes and which become part of the cortex once the final shape is reached (s. fig. 4 a-b).

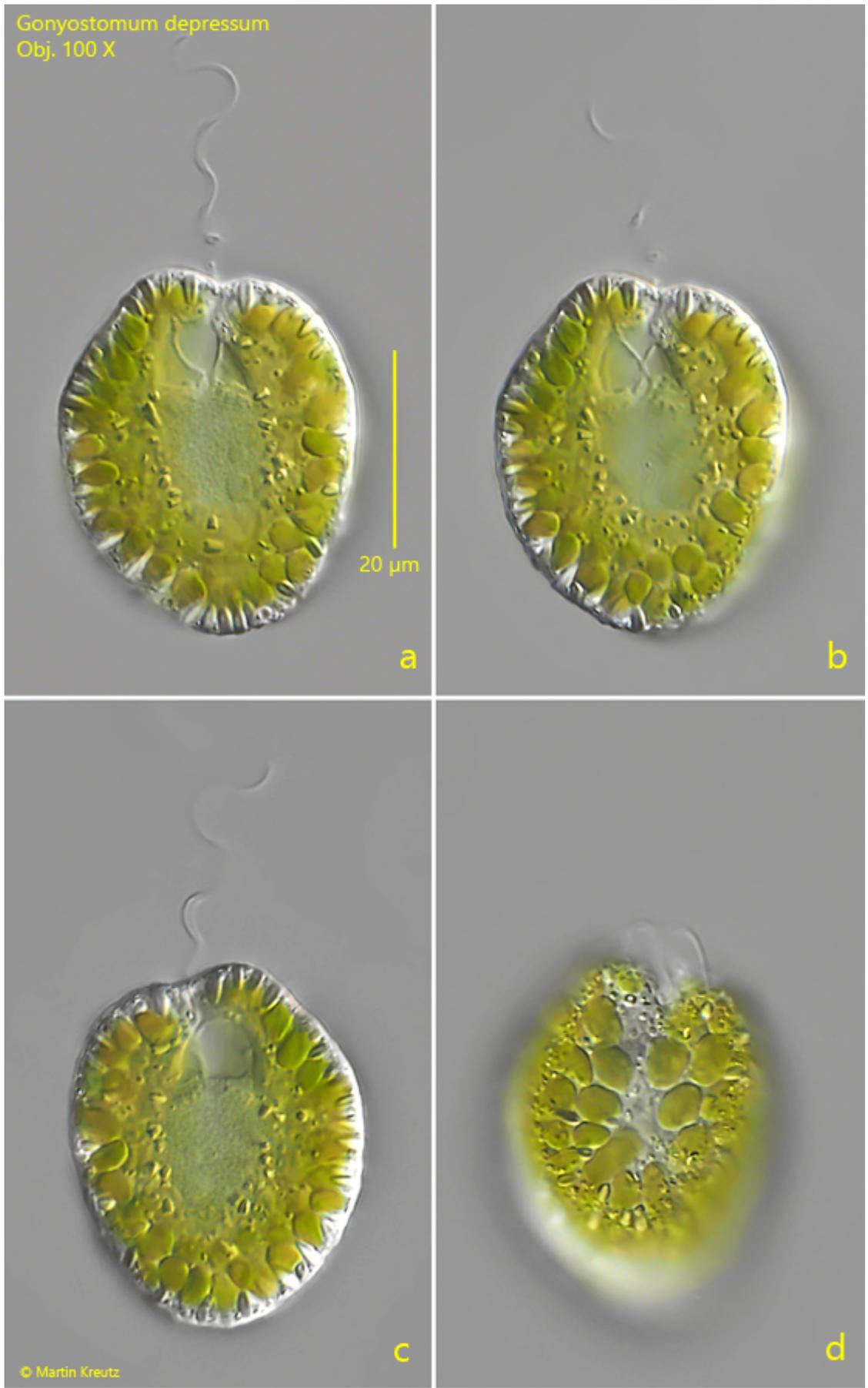


Fig. 1 a-d: *Gonyostomum depressum*. L = 36 µm. A freely swimming specimen. Obj. 100 X.

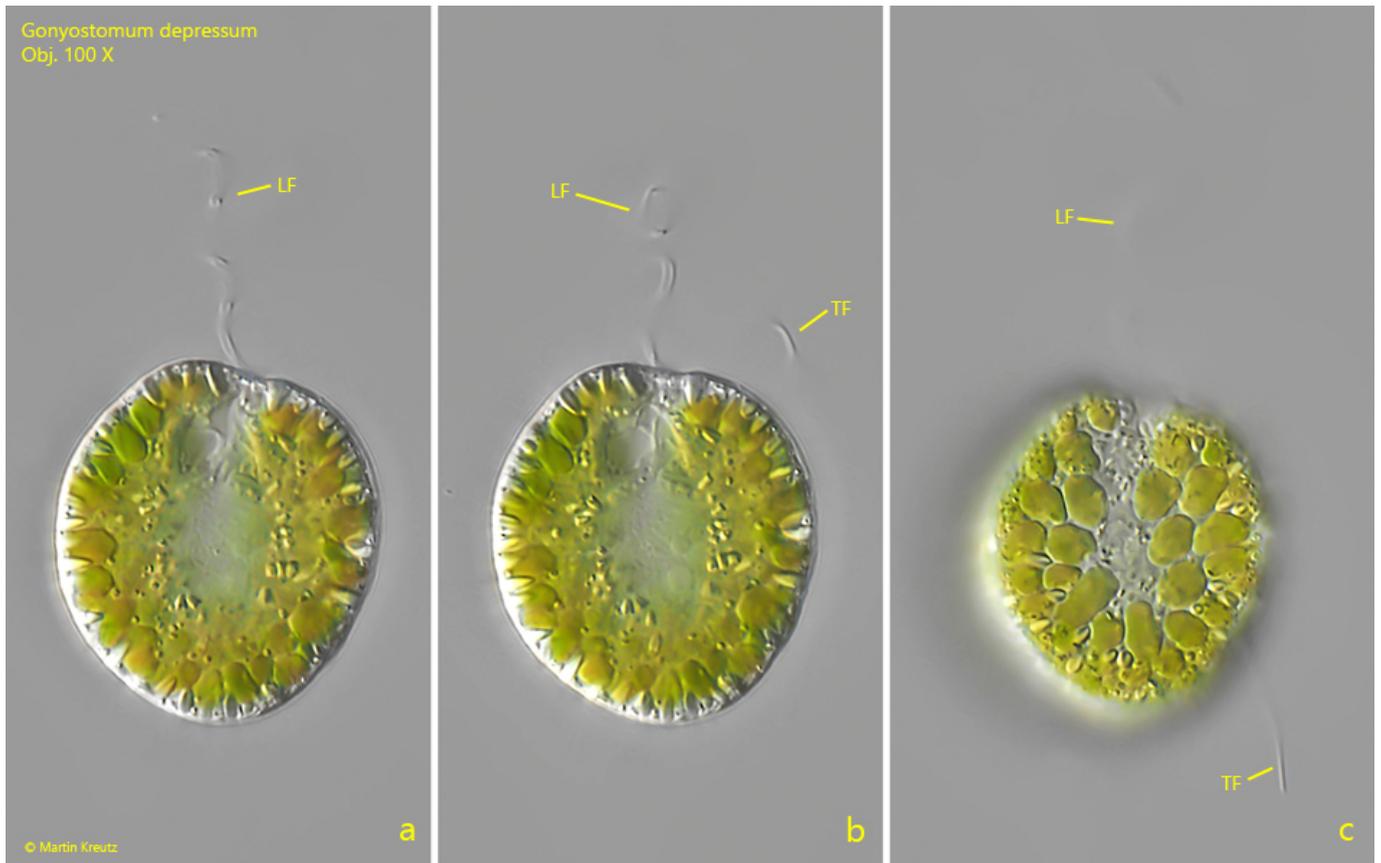


Fig. 2 a-c: *Gonyostomum depressum*. L = 36 μ m. The slightly squashed specimen as shown in fig. 1 a-d for visualisation of the leading flagellum (LF) and the trailing flagellum (TF). Obj. 100 X.

Gonyostomum depressum
Obj. 100 X



Fig. 3: *Gonyostomum depressum*. L = 40 µm. A slightly squashed specimen with the radially arranged, spindle-shaped extrusomes (EX). Obj. 100 X.

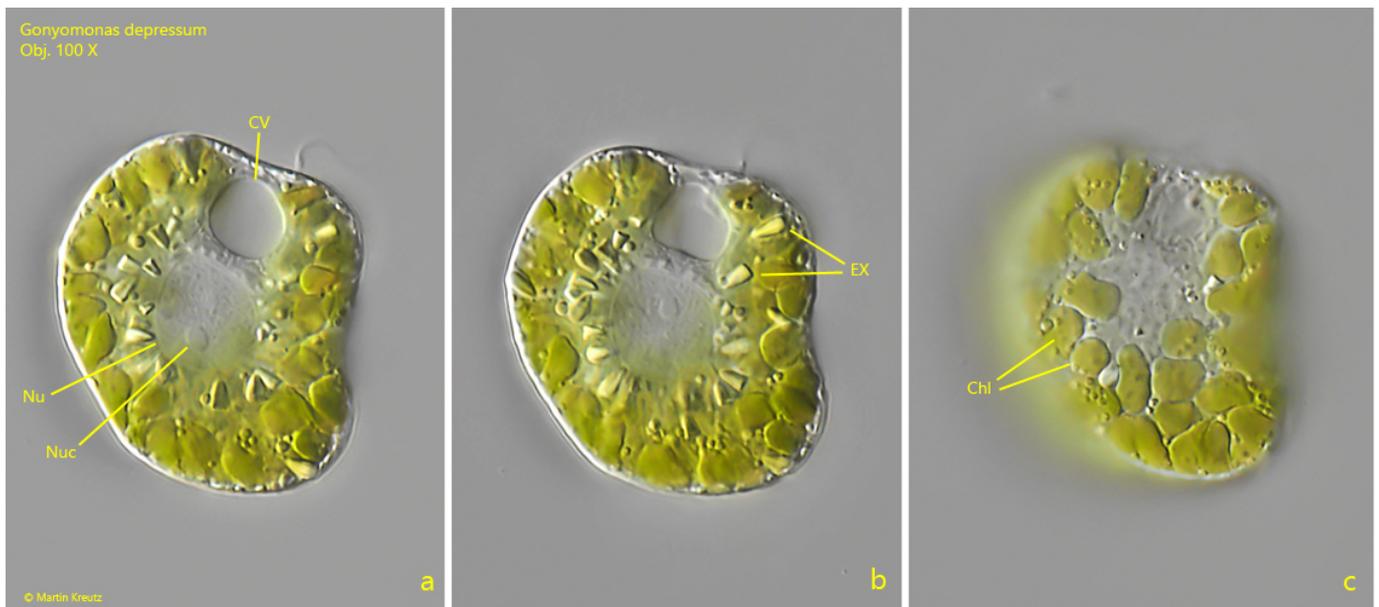


Fig. 4 a-c: *Gonyostomum depressum*. Different focal planes of a squashed specimen. Note the wedge-shaped pre-stages of the extrusomes arranged around the nucleus (Nu). The yellowish-green chloroplasts (Chl) are disc-shaped and arranged beneath the pellicle. CV = contractile vacuole, Nuc = nucleolus. Obj. 100 X.