Cryptomonas erosa Ehrenberg, 1831

Most likely ID: n.a.

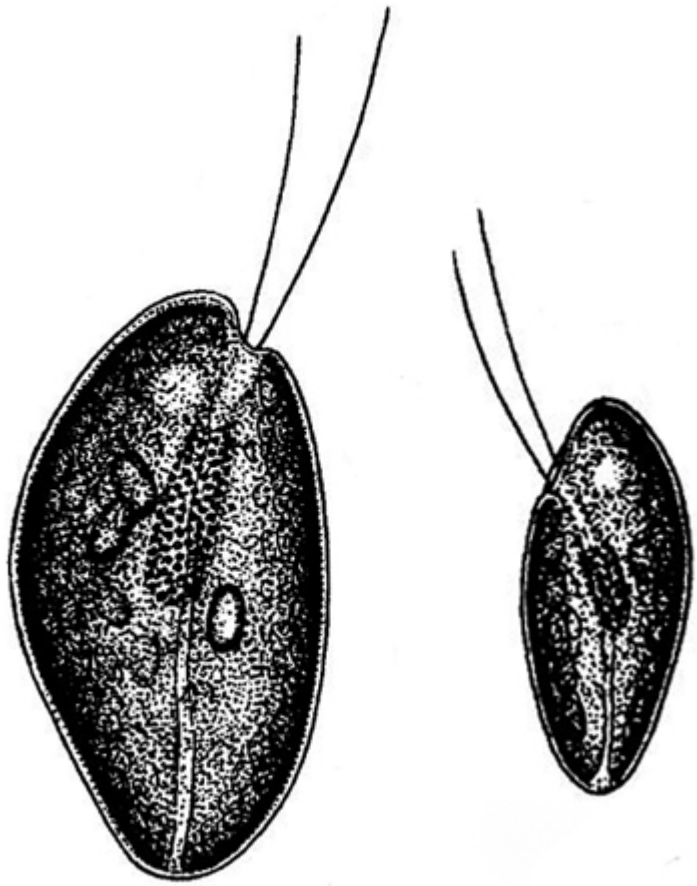
Synonym: n.a.

Sampling location: Simmelried, Purren pond, Mainau pond, Bussenried, Bündtlisried, Ulmisried, Mühlhalden pond

Phylogenetic tree: *Cryptomonas erosa*

Diagnosis:

- cells oval or slightly elliptical, laterally flattened
- posteriorly mostly weakly tapered
- dorsal side significantly convex, ventral side slightly convex or almost flat
- length 13–45 µm, width 6–26 µm
- two chromatophores coloured greenish, yellow or brown
- numerous polygonal or oval starch granules
- two Maupas bodies in anterior third
- gullet may reach mid-body, covered with ejectisomes
- pyrenoids are absent
- two flagella of equal length



Cryptomonas erosa

Cryptomonas erosa one of the most common representatives of this genus in my sampling sites. The identification of the cryptomonads is not easy, because the form and size of the species is often very variable. I recognize *Cryptomonas erosa* by the “asymmetrical” shape, because the dorsal side is always clearly convex, while the ventral side is only slightly curved or even completely flat (s. fig. 1 a). In addition, the body tapers weakly to the posterior end. I also consider the length of the gullet as a reliable characteristic. In *Cryptomonas erosa* the gullet does not extend further than to the middle of the body (s. fig. 2 a).

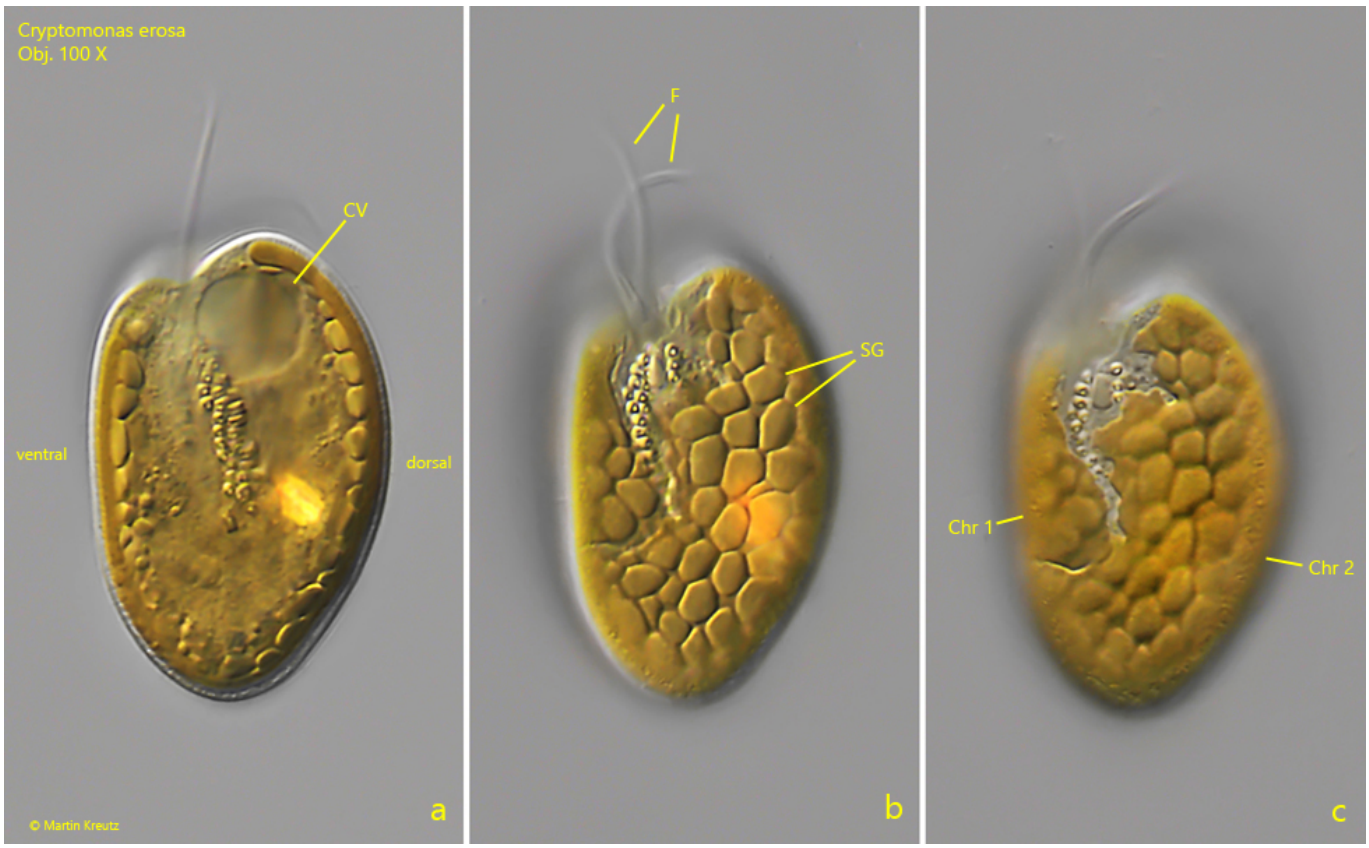


Fig. 1 a-c: *Cryptomonas erosa*. L = 35 µm. Three focal planes of a slightly squashed specimen. Note the convex dorsal side and the almost flat ventral side (a). Chr 1, Chr 2 = the two chromatophores, CV = contractile vacuole, F = flagella, SG = polygonally shaped starch grains. Obj. 100 X.

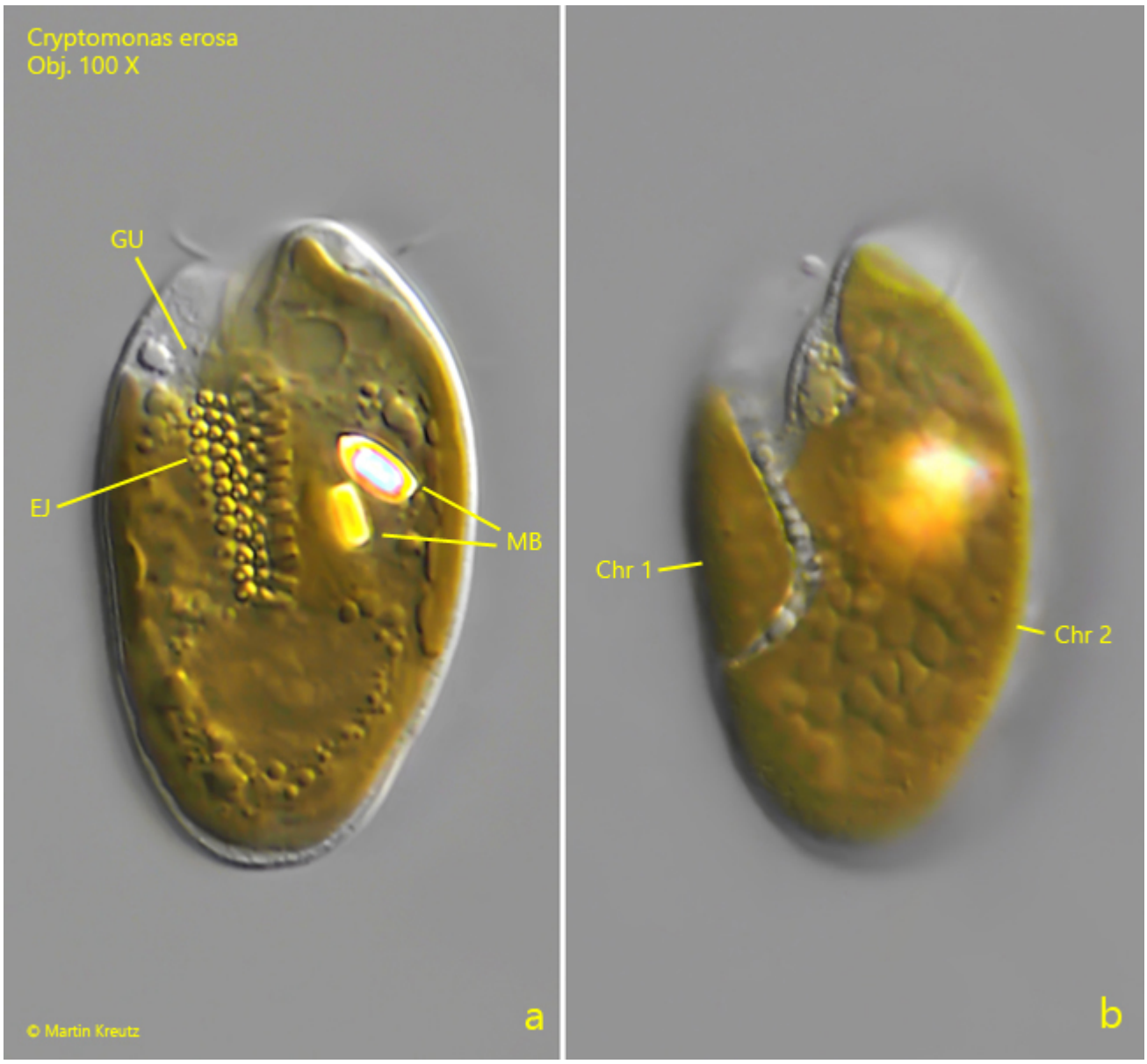


Fig. 2 a-b: *Cryptomonas erosa*. L = 35 µm. Two focal planes of a slightly squashed second specimen. Note the ejectisomes (EJ) covering the gullet (GU). The gullet reaches down to the mid-body. Chr 1, Chr 2 = chromatophores, MB = Maupas bodies. Obj. 100 X.

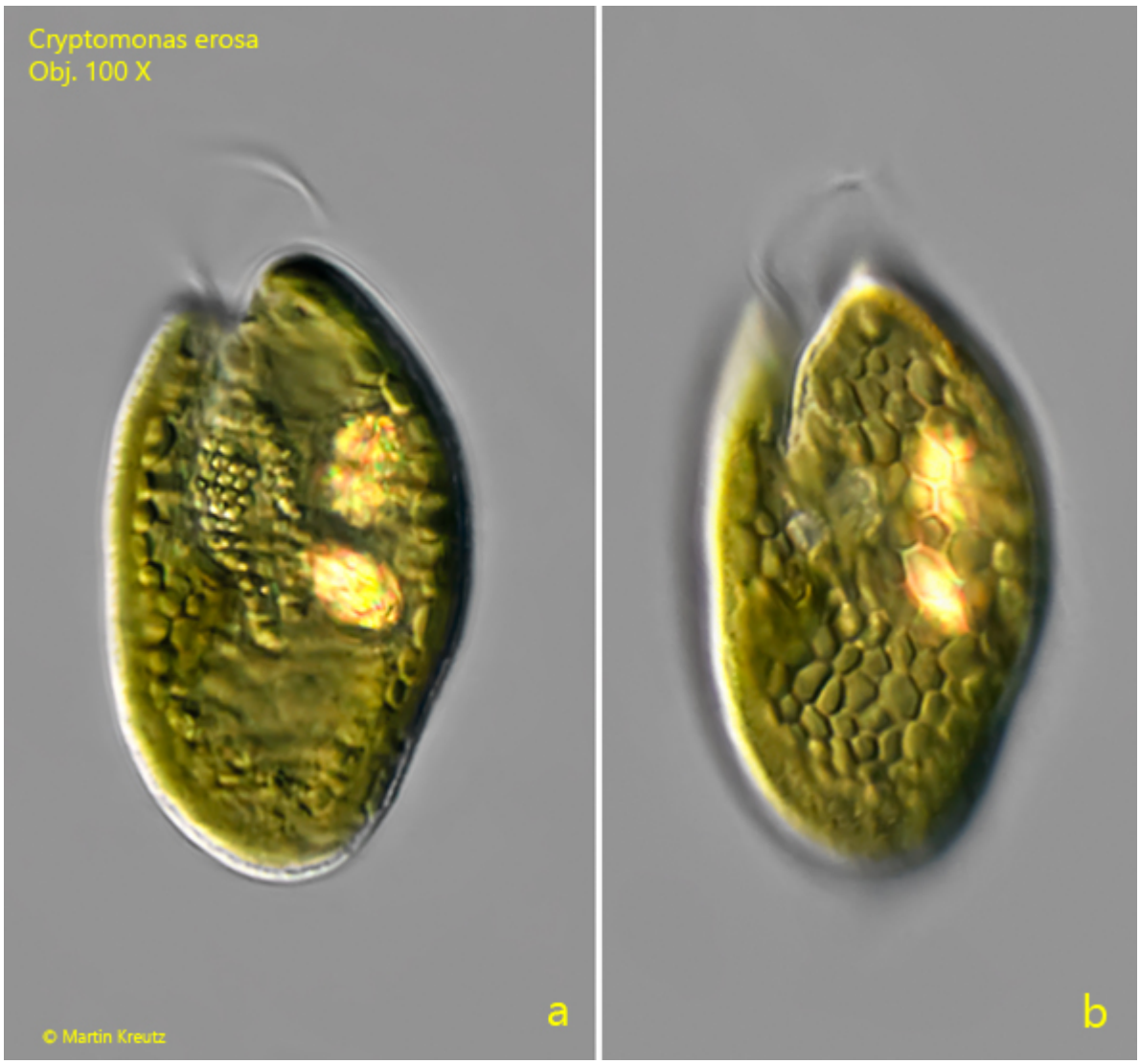


Fig. 3 a-b: *Cryptomonas erosa*. L = 50 µm. A freely swimming third specimen. Obj. 100 X.