Cryptomonas obovata Skuja, 1948

Most likely ID: n.a.

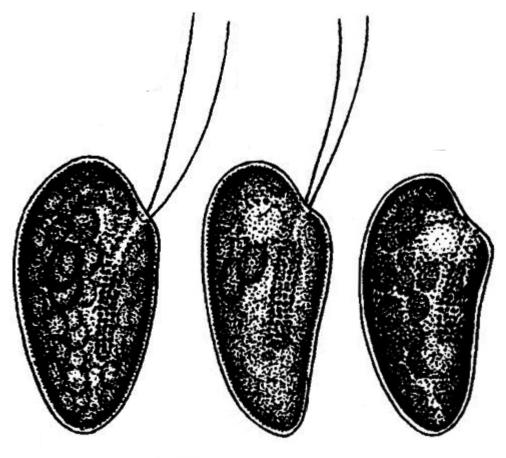
Synonym: n.a.

Sampling location: Simmelried

Phylogenetic tree: Cryptomonas obovata

Diagnosis:

- cells obovoid or inverted conical
- laterally slightly flattened
- length 24-46 µm
- funnel-shaped mouth
- pharynx with ejectisomes reaches mid-body or posterior third
- two Maupas' bodies present
- pyrenoids absent
- two chromatophores, brownish-greenish or olive
- two flagella
- contractile vacuole apical, near pharynx



after Skuja

Cryptomonas obovata

So far, I have only found *Cryptomonas obovata* in the <u>Simmelried</u>. The specimens are mainly found in floating or decomposing plant matter.

Cryptomonas obovata has only been described in detail by Skuja, who frequently found the species in Latvia and in the lakes of Uppland. A characteristic feature of this species is its approximately obovate shape with an oblique apical end. The apical end has no indentation, as is the case with <u>Cryptomonas erosa</u>. The dorsal side is always distinctly convex, while the ventral side is less convex or may even be concave (s. drawings above). There are always two Maupas' bodies, which glow brightly in the DIC.

Skuja explicitly mentions the numerous starch grains, which are densely packed directly below the two chloroplasts. I can confirm this observation (s. fig. 2 b). The specimens in my population were between 45-55 µm long and thus slightly larger than those reported by Skuja. The chloroplasts in my specimens were brownish-yellow in color. A greenish tinge was only faintly perceptible.



Fig. 1 a-c: *Cryptomonas obovata*. $L = 50 \mu m$. Three focal planes of a freely swimming specimen from right. Obj. 100 X.

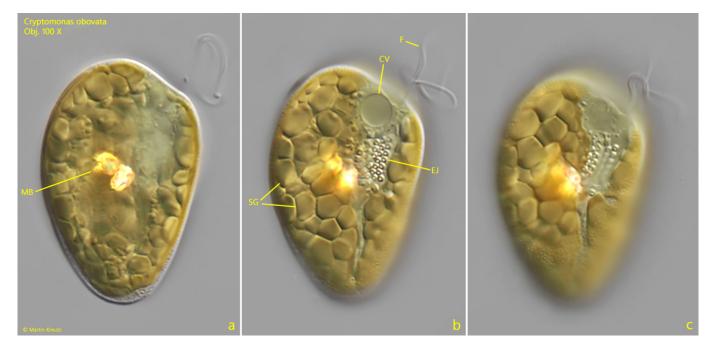


Fig. 2 a-c: Cryptomonas obovata. $L = 45 \mu m$. Three focal planes of a second specimen from right. Note the densely packed starch grains (SG) located beneath the chloroplasts. CV = contractile vacuole, EJ = ejectisomes, F = flagellum, MB = Maupas' bodies. Obj. 100 X.

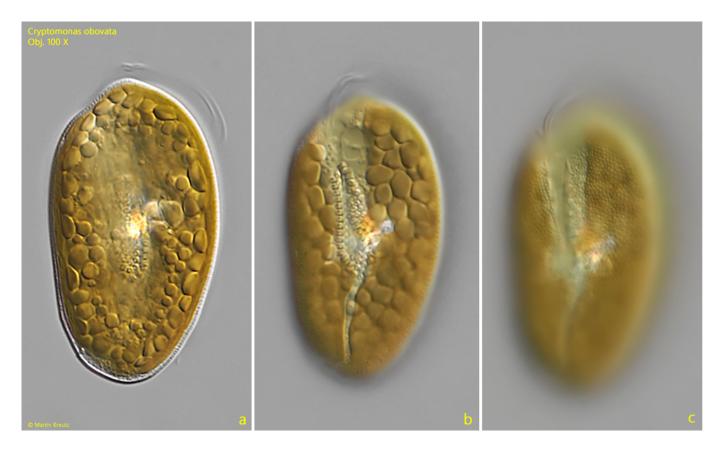


Fig. 3 a-c: Cryptomonas obovata. L = 54 μm . Three focal planes of a third specimen from left with a more obvoid shape. Obj. 100 X.

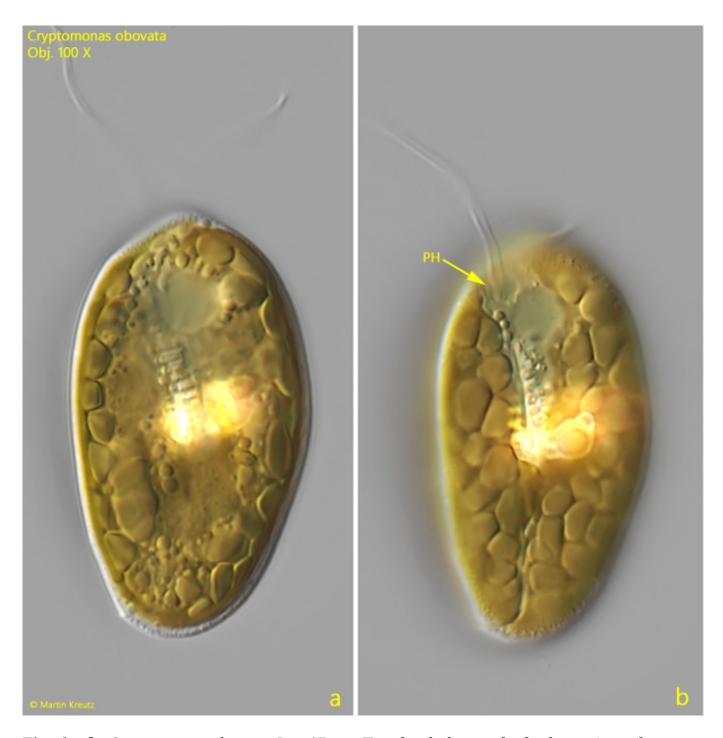


Fig. 4 a-b: Cryptomonas obovata. L = 47 μm . Two focal planes of a forth specimen from ventral. The pharynx (PH) is visible where the flagella rises. Obj. 100 X.