

Cryptomonas 1

Most likely ID: *Cryptomonas nov. spec.*

Synonym: n.a

Sampling location: [Purren pond](#)

Phylogenetic tree: n.a.

Diagnosis:

- body irregularly oval, dorso-ventrally slightly flattened
- anterior and posterior end and lateral margins curved ventrally
- dorsal side saddle-shaped
- length 18–25 μm , width 10–16 μm
- two chromatophores, brown or yellow-brown
- wide open mouth
- apical rostrum broadly rounded, incon, slightly elongated
- gullet inconspicuous, reaching to first third
- gullet lined with only a few ejectisomes
- two Maupas bodies
- starch grains polygonal or round
- one prominent starch grain located apically right
- one contractile vacuole located apically left
- two flagella

No drawings from previous authors available.

I found this *Cryptomonas* species in July 2022 in the [Purren pond](#) in large amounts. Although the species is quite small with a length of about 20 μm , it has characteristic features. The lateral margins as well as the anterior and posterior end are clearly bent ventrally (s. figs. 1 a-c, 3 a-b and 4 a-b). This makes the shape somewhat similar to a gummy bear in semi-lateral view (s. fig. 1 b). The dorsal side has a slight indentation in the middle and making it saddle-shaped. The gullet mouth is open at a wide angle. The apical rostrum is broadly rounded and only slightly extended beyond the apical end (s. fig. 1 a). In addition to the bent body margins, this species has a large starch grain in the anterior end on the

right side as a conspicuous and constant feature. The contractile vacuole is located on the left side in the anterior end. Two brown or yellow-brown chromatophores are present and two distinct Maupas bodies. The gullet is short and extends only to the first third. It is lined with only a few ejectisomes.

In the literature available to me I could not find a comparable species despite the striking characteristics. Therefore I think it is probable that it could be a not yet described species of the genus *Cryptomonas* (*Cryptomonas nov. spec.*).

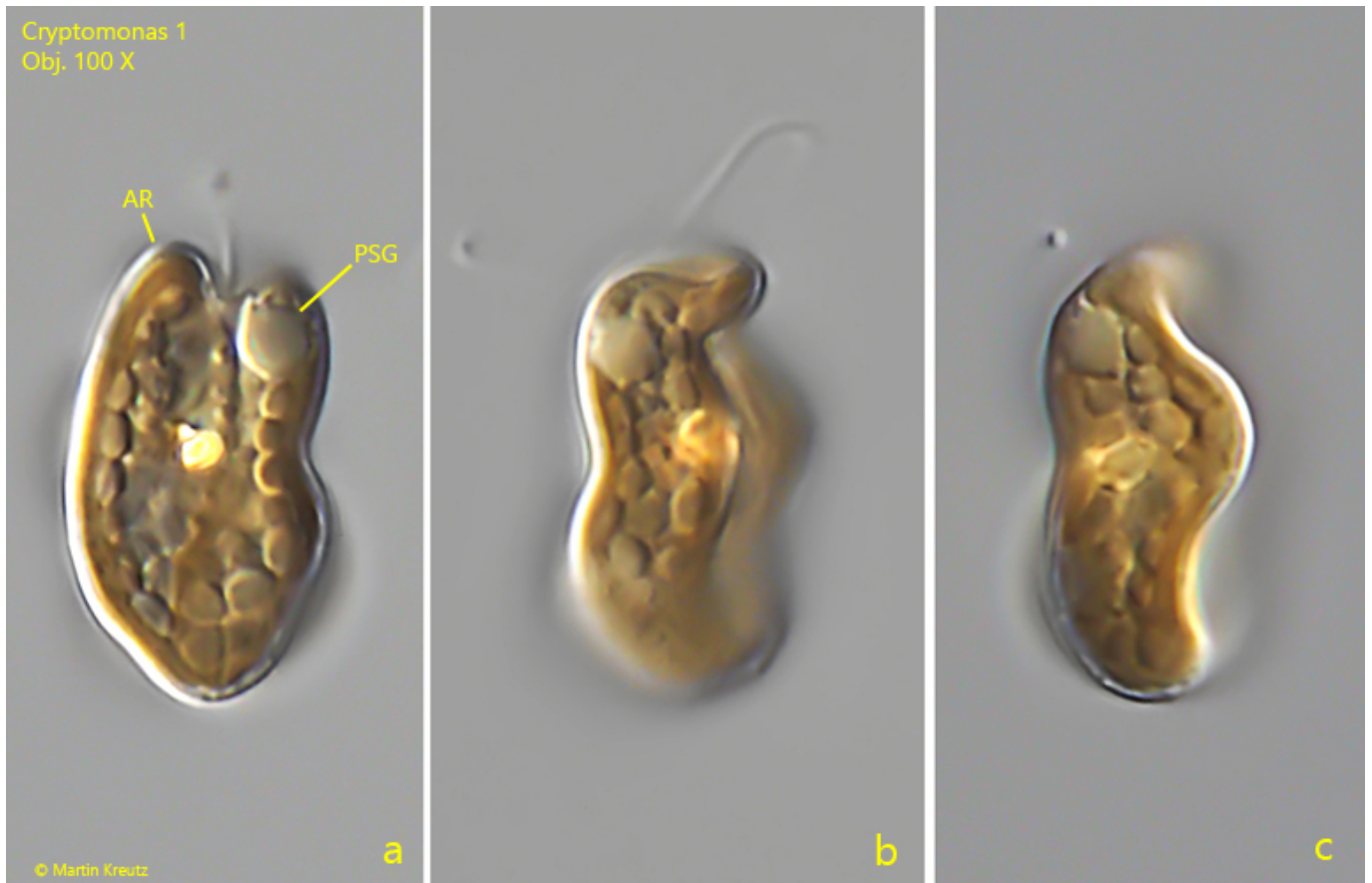


Fig. 1 a-c: *Cryptomonas 1*. L = 20 μ m. A freely swimming specimen from dorsal (a) starts to turn clockwise and the half-right (b) and lateral view from right (c) become visible. Note the prominent starch grain (PSG) located apically right. AR = apical rostrum. Obj. 100 X

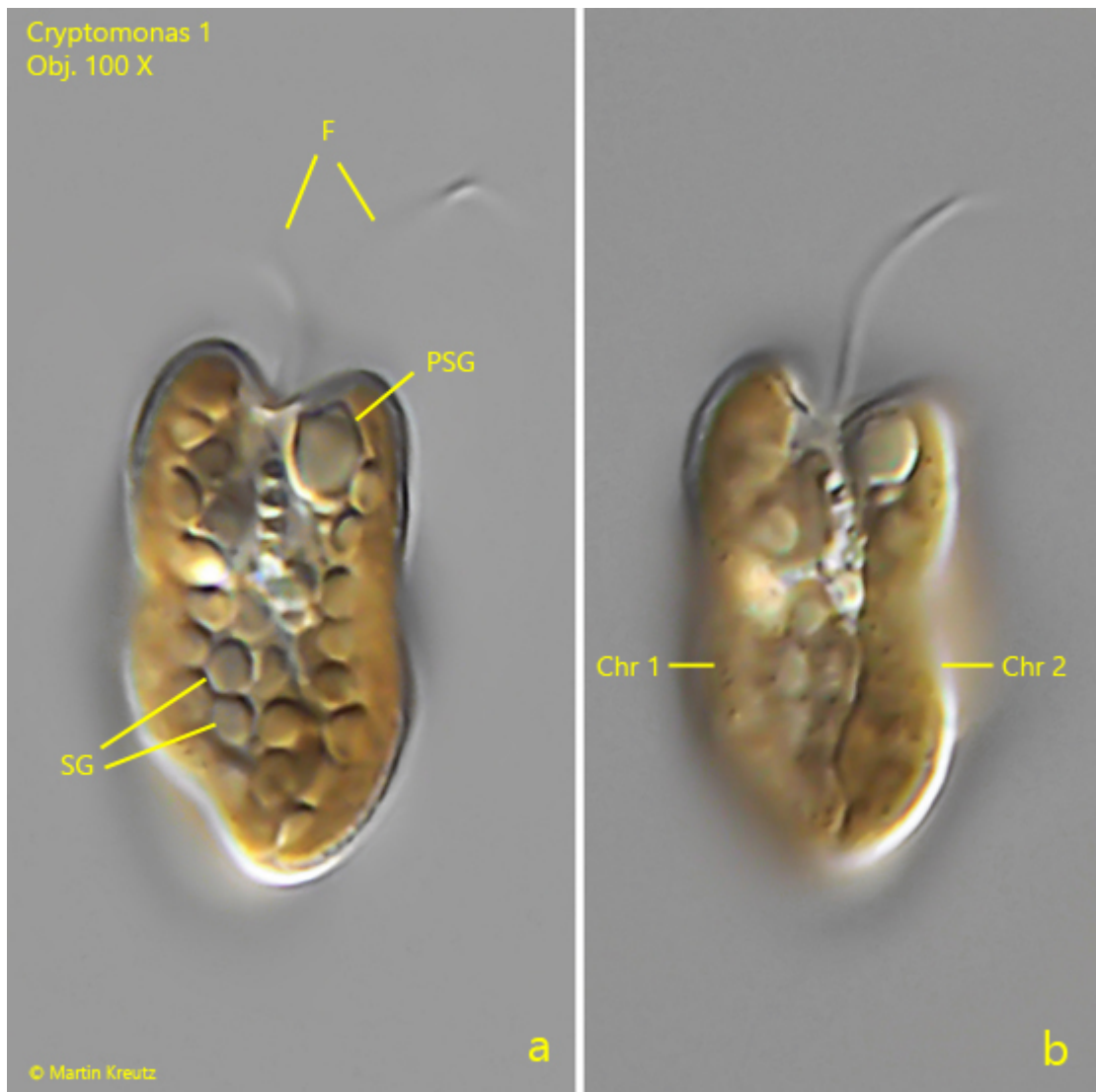


Fig. 2 a-b: *Cryptomonas 1*. L = 19 μ m. A second specimen from dorsal. Chr 1, Chr 2 = chromatophores, F = flagella, PSG = prominent starch grain, SG = starch grains. Obj. 100 X

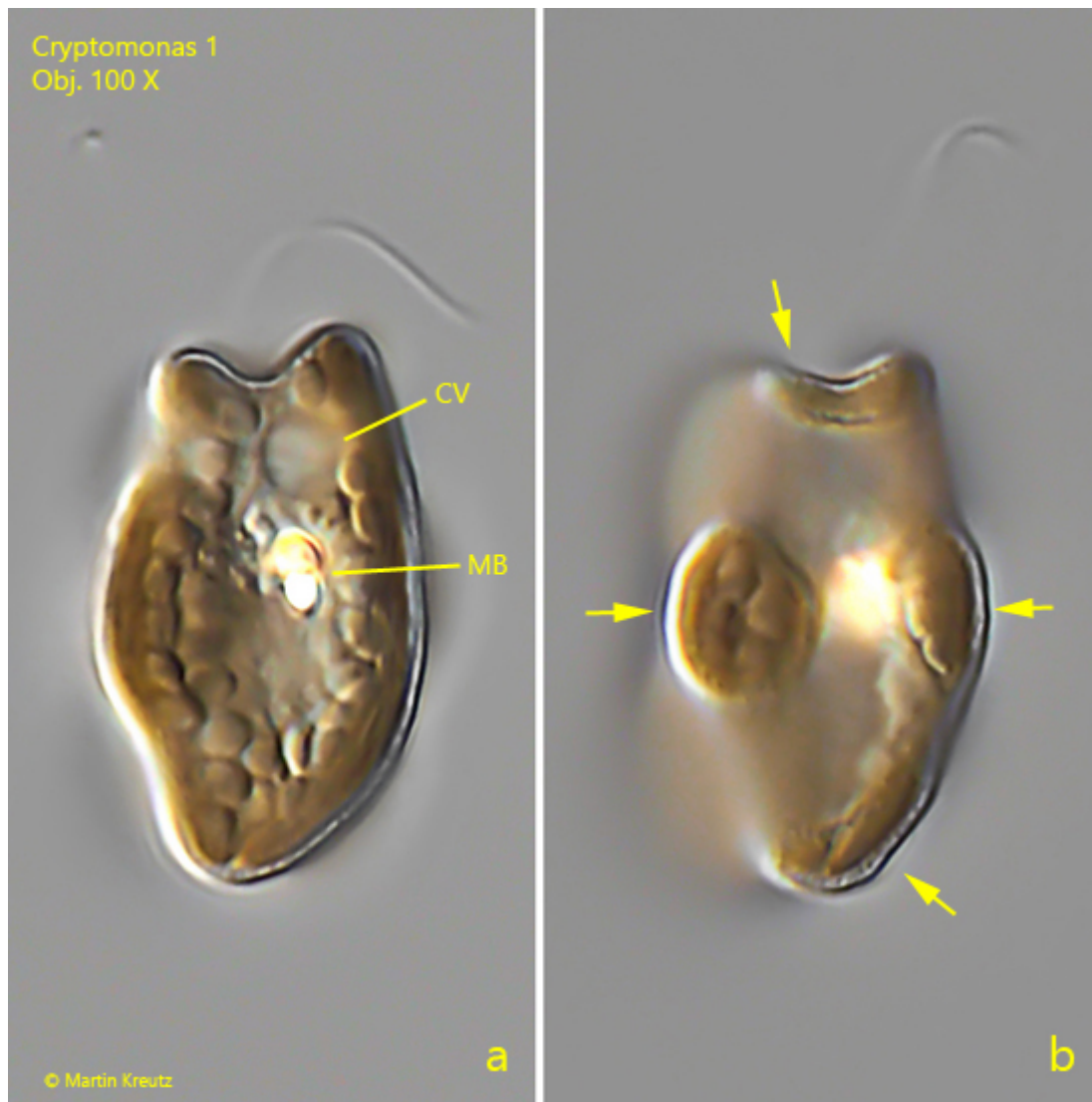


Fig. 3 a-b: *Cryptomonas 1*. L = 21 μ m. A third specimen from ventral. Note that the lateral margins as well as the anterior and posterior end are ventrally curved (arrows). CV = contractile vacuole, MB = Maupas bodies. Obj. 100 X

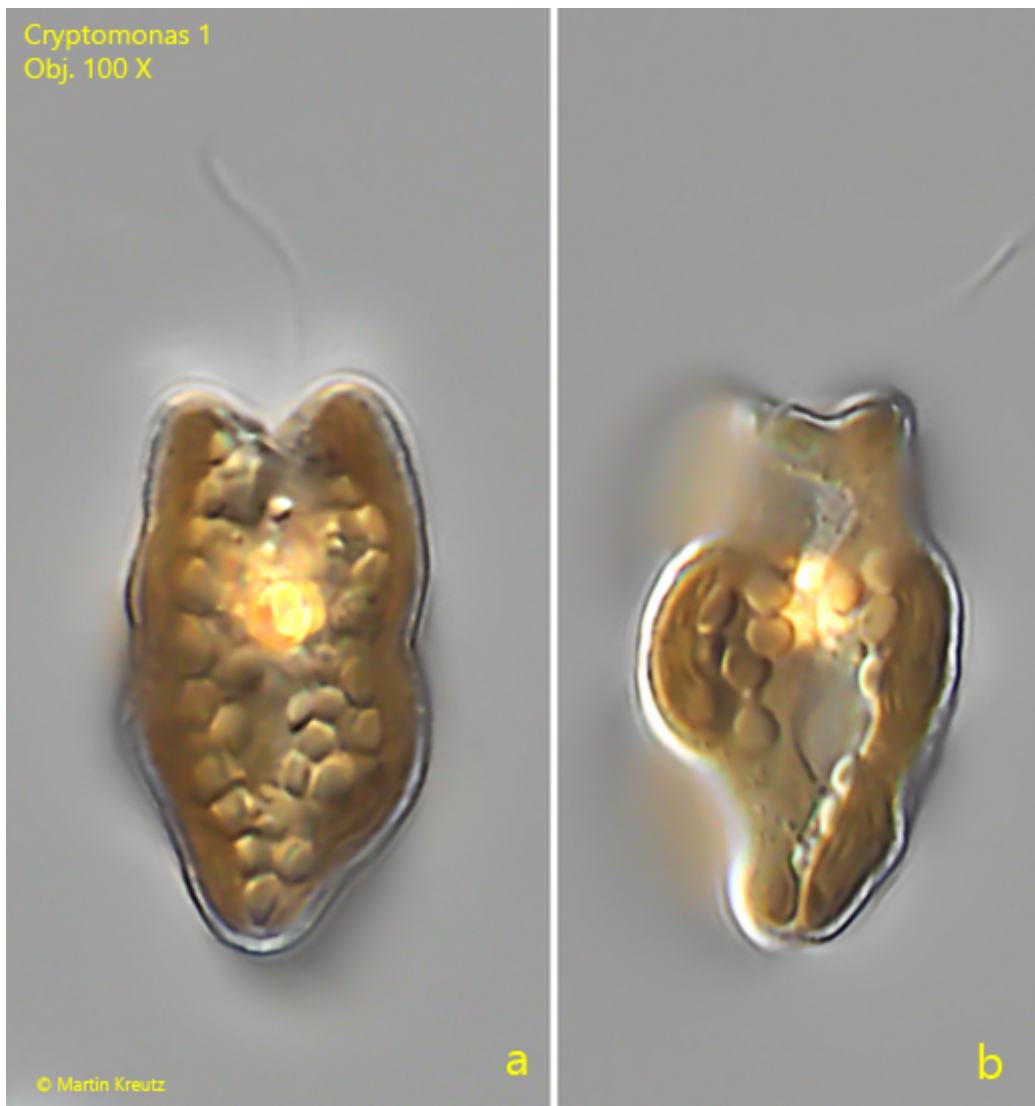


Fig. 4 a-b: *Cryptomonas 1*. L = 24 μ m. A fourth specimen from ventral. Obj. 100 X