

## ***Cryptomonas 1***

**Most likely ID:** *Cryptomonas nov. spec.*

**Synonym:** n.a

**Sampling location:** [Purren pond](#)

**Phylogenetic tree:** n.a.

### **Diagnosis:**

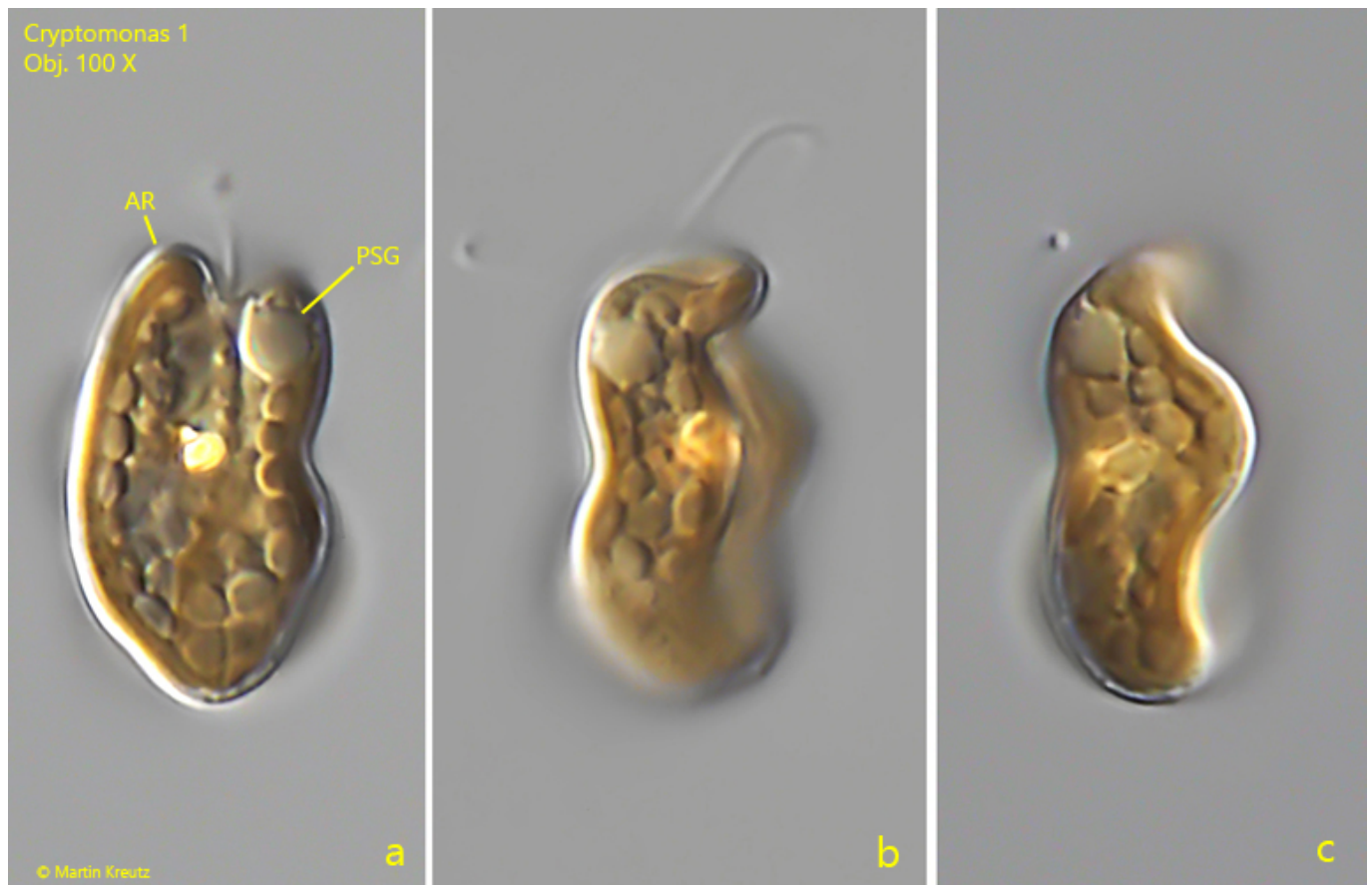
- body irregularly oval, dorso-ventrally slightly flattened
- anterior and posterior end and lateral margins curved ventrally
- dorsal side saddle-shaped
- length 18-25 µm, width 10-16 µm
- two chromatophores, brown or yellow-brown
- wide open mouth
- apical rostrum broadly rounded, slightly elongated
- 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 to the right
- one contractile vacuole located apically to the left
- two flagella

No drawings from previous authors available.

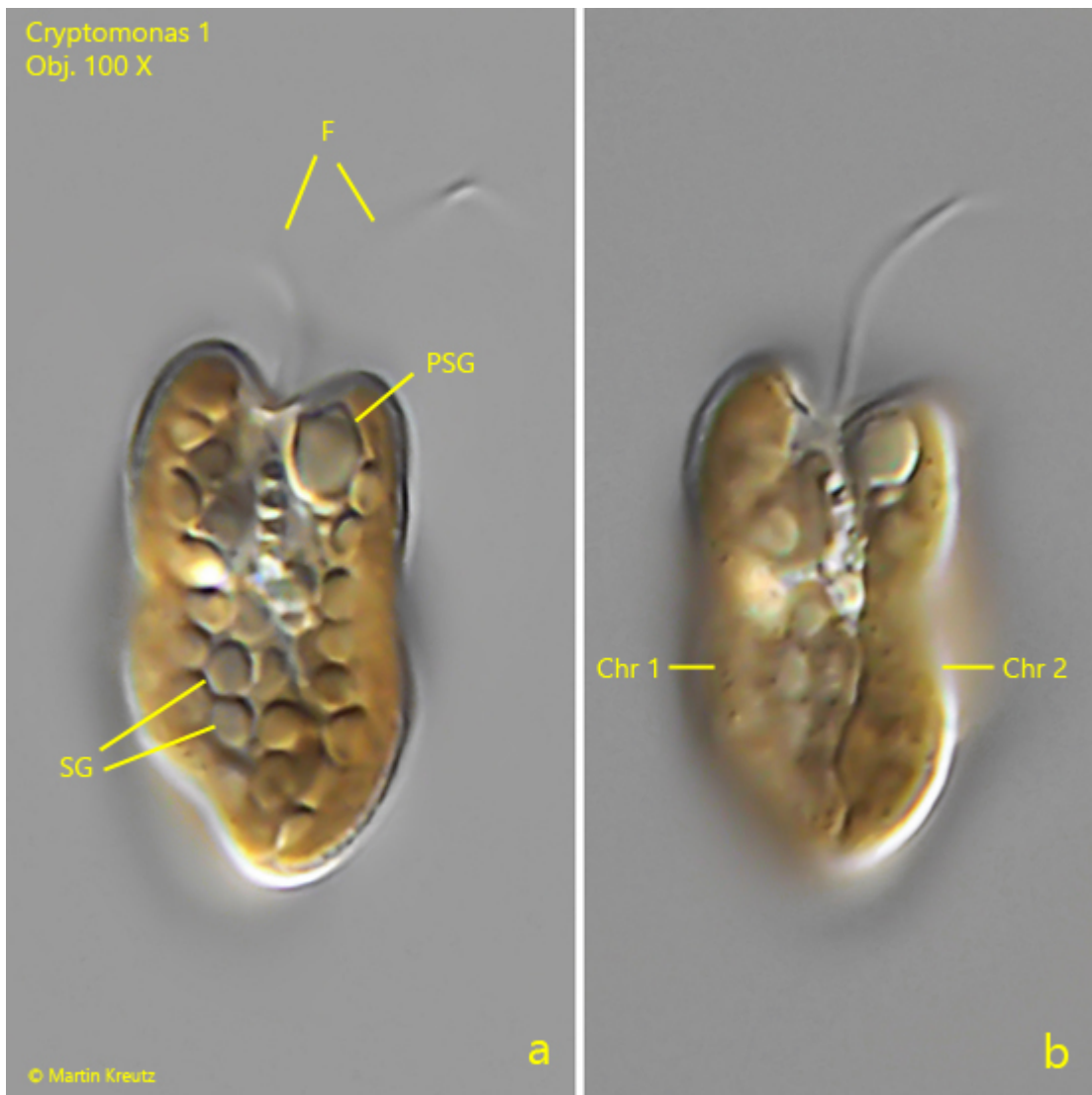
I found this *Cryptomonas* species in July 2022 in the [Purren pond](#) in large amounts. Although the species is quite small with a length of about 20 µm, it has characteristic features. The lateral margins as well as the anterior and posterior end are clearly bent ventrally (s. figs. 1 a-c, 3 a-b and 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 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.

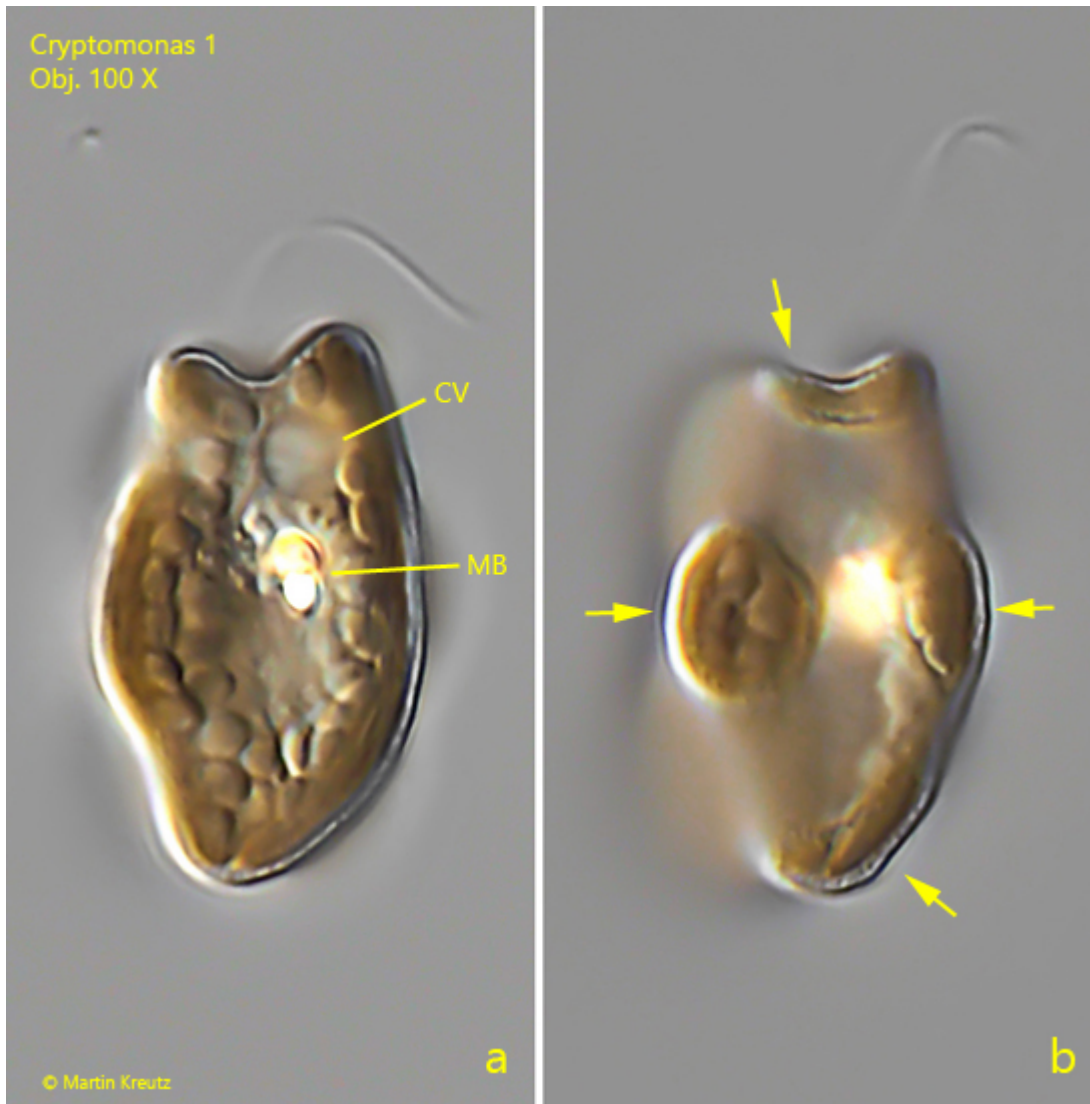
In the literature available to me I could not find a comparable species despite its striking characteristics. Therefore I think it is probable that it could be a species of the genus *Cryptomonas* not described yet (*Cryptomonas nov. spec.*).



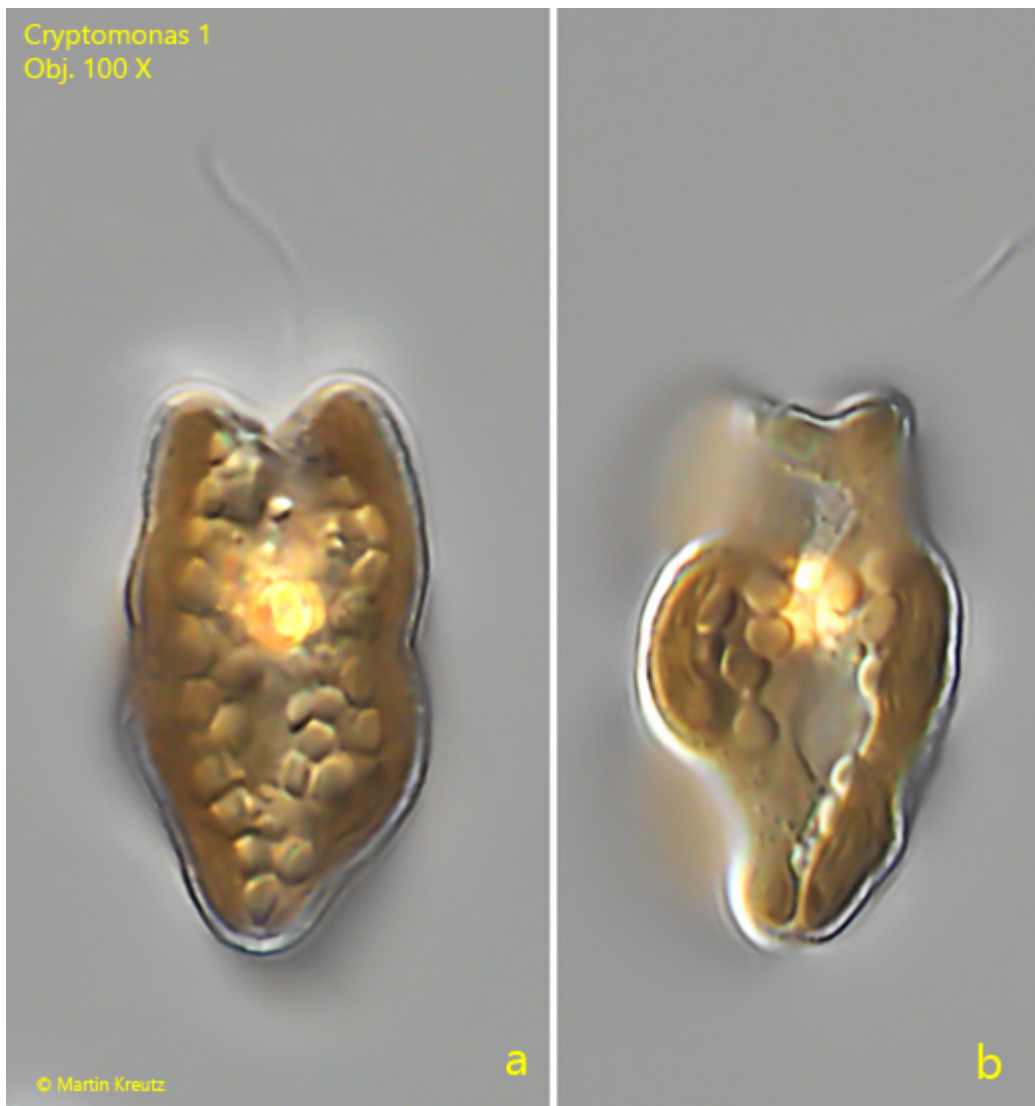
**Fig. 1 a-c:** *Cryptomonas 1*. L = 20  $\mu$ m. A freely swimming specimen from dorsal (a) starts to turn clockwise and the half-right (b) and lateral view from right (c) become visible. Note the prominent starch grain (PSG) located apically to the right. AR = apical rostrum. Obj. 100 X



**Fig. 2 a-b:** *Cryptomonas 1*. L = 19  $\mu$ 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  $\mu$ 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  $\mu$ m. A fourth specimen from ventral. Obj. 100 X