

***Euglena intermedia***

**(Klebs) Schmitz, 1884**

**Most likely ID:** n.a.

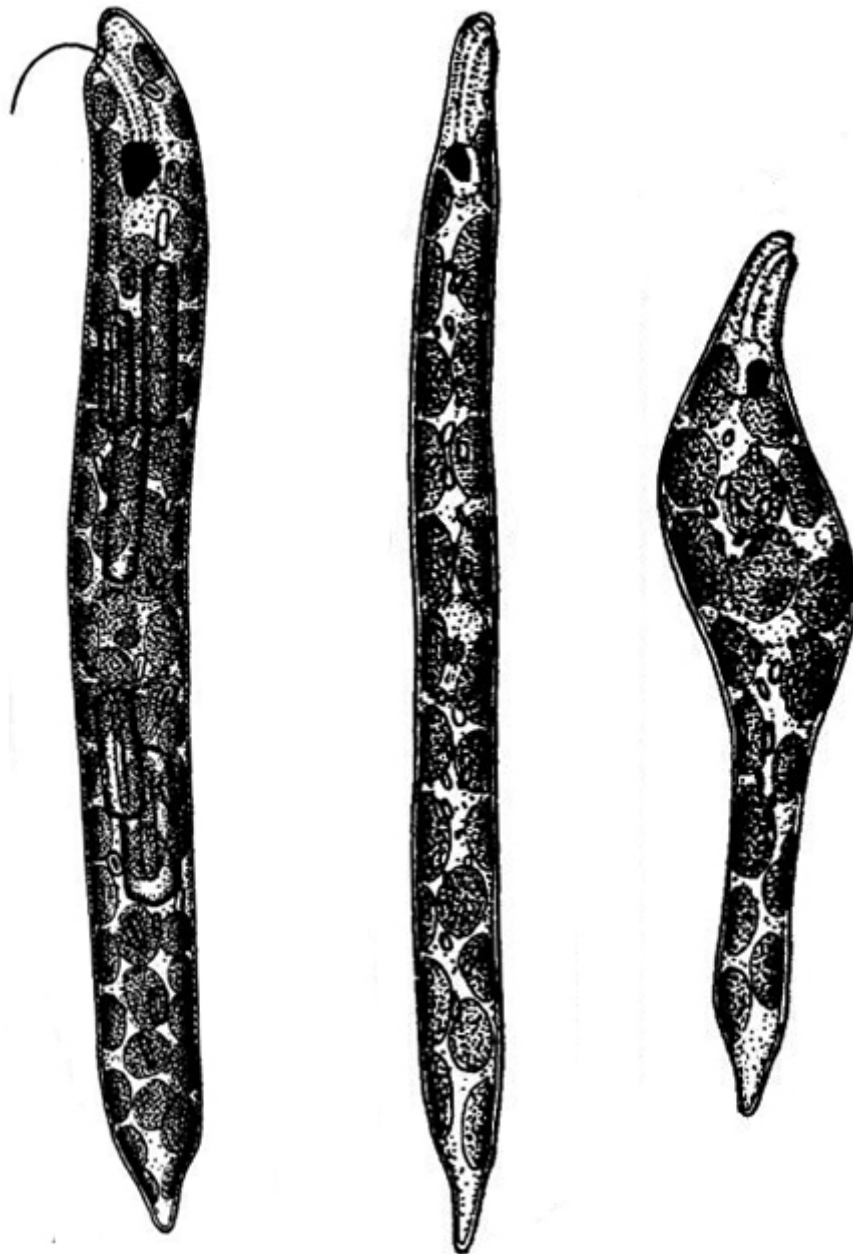
**Synonym:** n.a.

**Sampling location:** [Simmelried](#)

**Phylogenetic tree:** [Euglena intermedia](#)

**Diagnosis:**

- cell elongated cylindrically with almost parallel sides
- posterior end tapered to short point
- anterior end blunt
- length 94–145 µm
- euglenoid movement
- flagellum short, one-sixth to one-third of body length
- numerous chloroplasts, disc-shaped, pyrenoids absent
- large paramylon grains, oblong shaped
- pellicle faintly striated
- nucleus central
- eyespot red, conspicuous



after Skuja

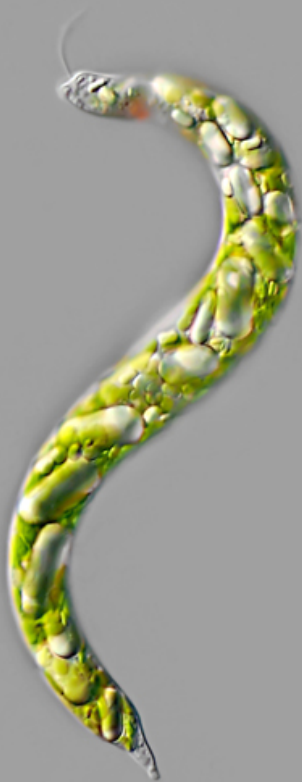
*Euglena intermedia*

So far I have only been able to find *Euglena intermedia* in the [Simmelried](#). The species stands out due to its elongated, cylindrical shape with a short posterior tip. However, a reliable classification can only be made by closely examining the chloroplasts. In *Euglena intermedia* they are disc-shaped and have no pyrenoid (s. fig. 4 b). This distinguishes it from the similar species *Euglena deses*, which has an almost identical body shape and also disc-shaped chloroplasts. However, the chloroplasts of *Euglena deses* all have a central pyrenoid.

In my population of *Euglena intermedia*, I have observed deviations in body length from the descriptions of earlier authors. All the specimens I observed were larger than 150 µm. Some

specimens even had a length of 180  $\mu\text{m}$ . This means that they were about 20 % larger than described in the literature. As the size specifications for *Euglena intermedia* also vary between authors, this deviation is perhaps within the natural variance. All other characteristics correspond to the descriptions in the literature.

*Euglena intermedia*  
Obj. 40 X



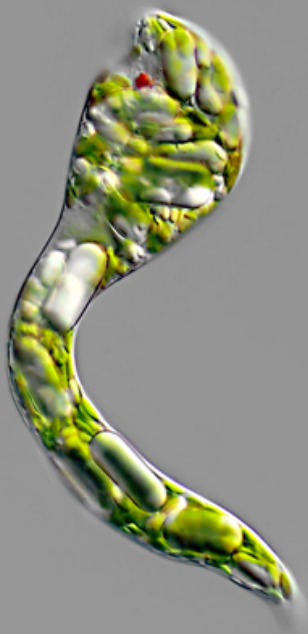
a



b



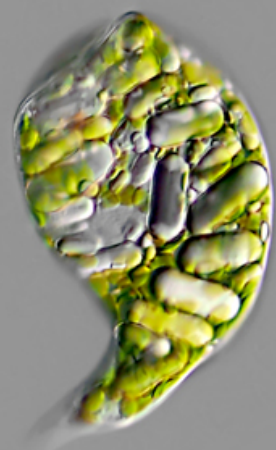
c



d



e



f

**Fig. 1 a-f:** *Euglena intermedia*. L = 179  $\mu\text{m}$ . Different phases of the euglenoid movement. Obj. 40 X.

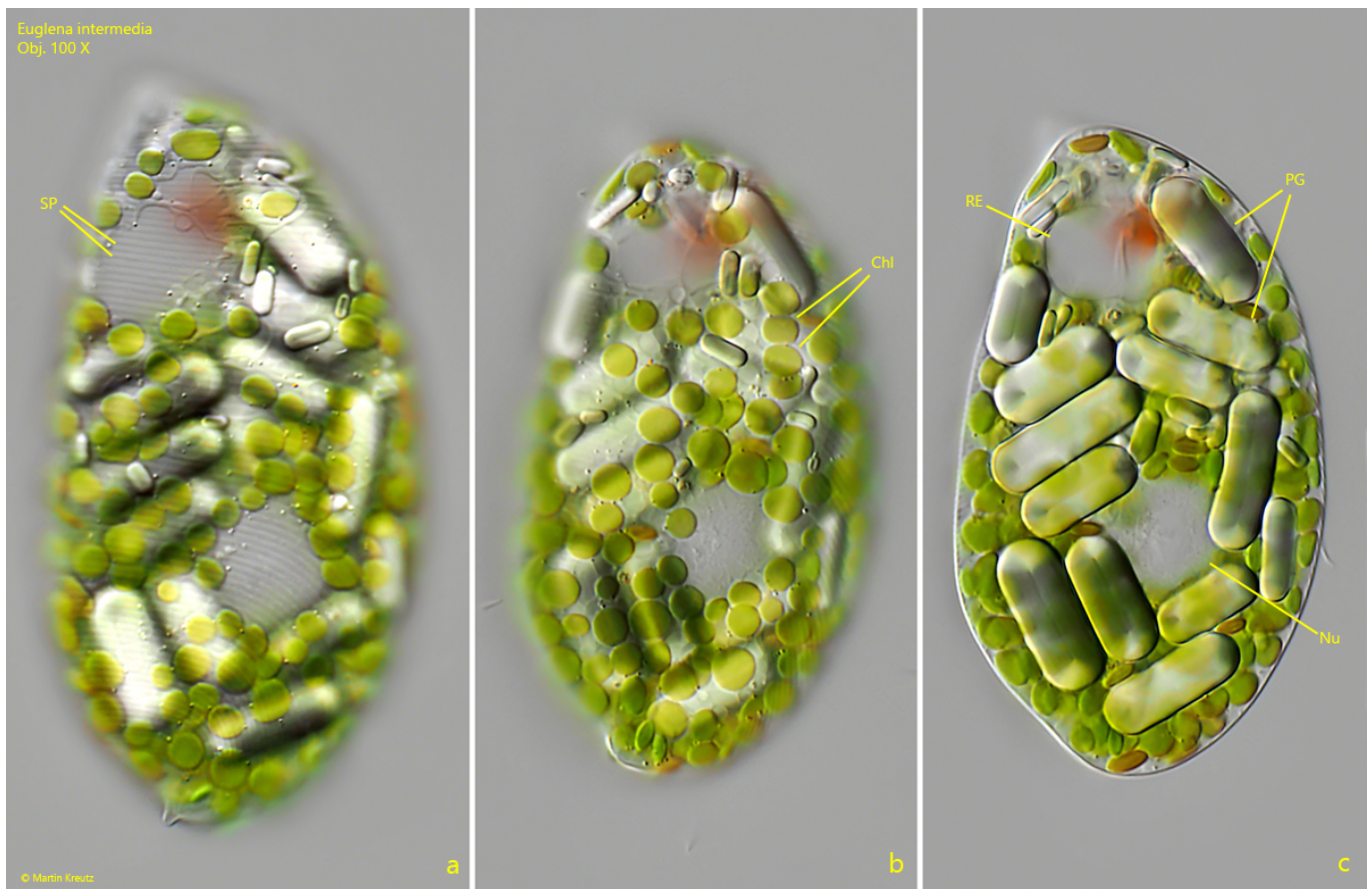


**Fig. 2 a-b:** *Euglena intermedia*. L = 158  $\mu\text{m}$ . Two focal planes of a slightly squashed specimen. Note the pointed posterior end (PE). The flagellum (F) of this specimen has a length of about 50-60  $\mu\text{m}$ . Obj. 40 X.





**Fig. 3 a-c:** *Euglena intermedia*. L = 162  $\mu$ m. A slightly squashed specimen in detail. The flagellum was already shed off. ES = eyespot, RE = reservoir. Obj. 100 X.



**Fig. 4 a-c:** *Euglena intermedia*. Three focal planes on the faint striation of the pellicle (SP), the disc-shaped chloroplasts (Chl) without pyrenoid and the oblong shaped paramylon grains (PG). Nu = nucleus, RE = Reservoir. Obj. 100 X.