

Euglena deses

(O.F. Müller) Ehrenberg, 1834

Most likely ID: n.a.

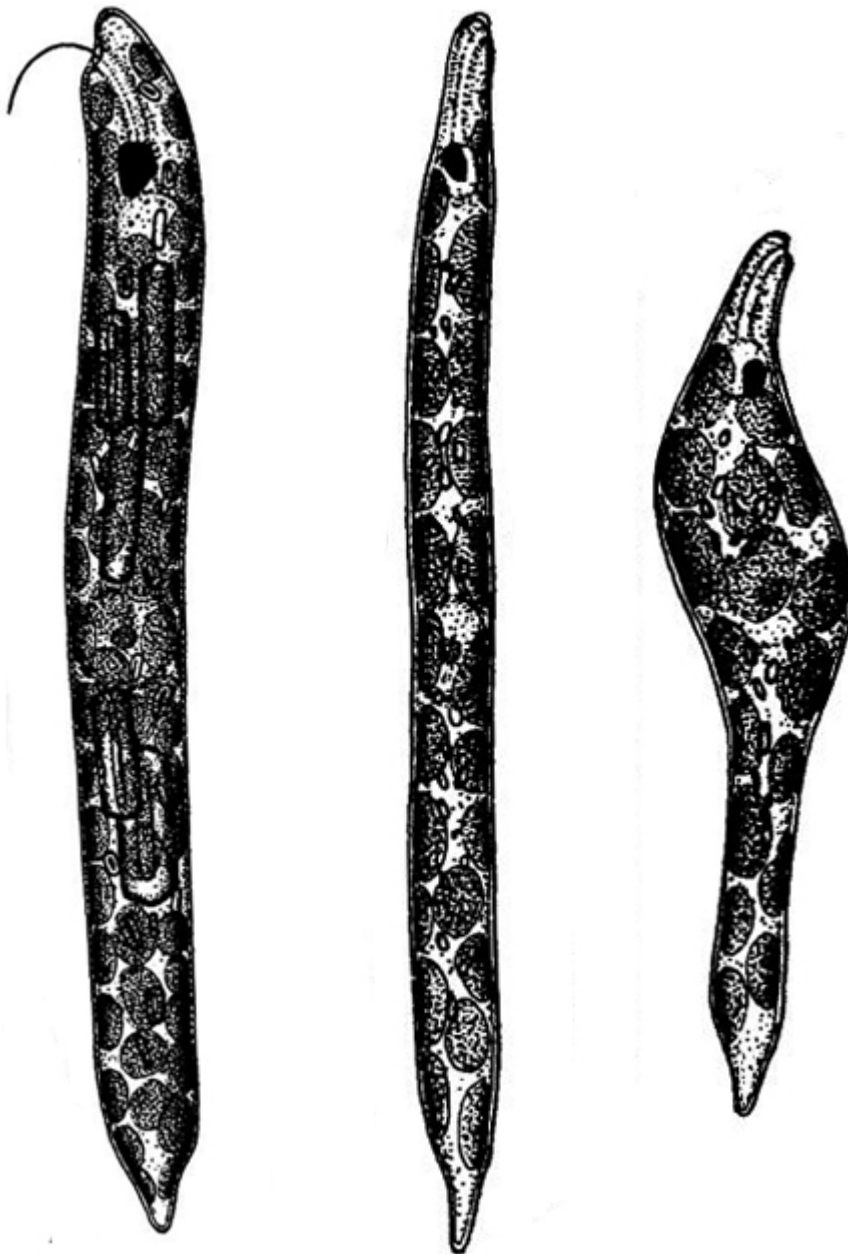
Synonym: *Euglena intermedia*, *Euglena klebsii*

Sampling location: [Simmelried](#)

Phylogenetic tree: [Euglena deses](#)

Diagnosis:

- cell elongated cylindrically with almost parallel sides
- posterior end tapered to short point
- anterior end blunt
- length 62–229 µm
- euglenoid movement
- flagellum short, one-sixth to one-third of body length
- numerous chloroplasts, disc-shaped, pyrenoids present or absent
- large paramylon grains, oblong shaped
- pellicle faintly striated
- nucleus central
- eyespot red, conspicuous



after Skuja

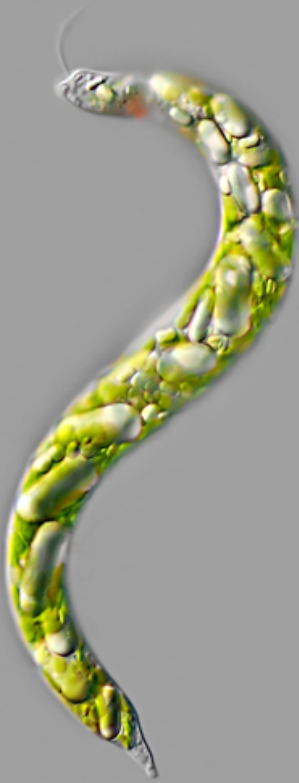
Euglena deses

In 2011 Karnkowska-Ishikawa et al. united the species *Euglena deses*, *Euglena intermedia* and *Euglena klebsii* under *Euglena deses* on the basis of morphological and genetic studies. This union also includes all the varieties described within the species *Euglena intermedia* and *Euglena klebsii*.

So far I have only been able to find *Euglena deses* in the [Simmelried](#). The species stands out due to its elongated, cylindrical shape with a short tip. However, a reliable classification can only be made by closely examining the chloroplasts. In *Euglena deses* they are disc-shaped with or without a pyrenoid.

All the specimens I observed were larger than 150 μm . Some specimens even had a length of 180 μm . In my population, none of the chloroplasts had a pyrenoid (s. fig. 4).

Euglena deses
Obj. 40 X



a



b



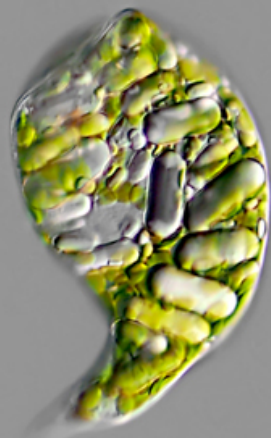
c



d



e



f

Fig. 1 a-f: *Euglena deses*. L = 179 μm . Different phases of the euglenoid movement. Obj. 40 X.



Fig. 2 a-b: *Euglena deses*. L = 158 μm . 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 μm . Obj. 40 X.



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

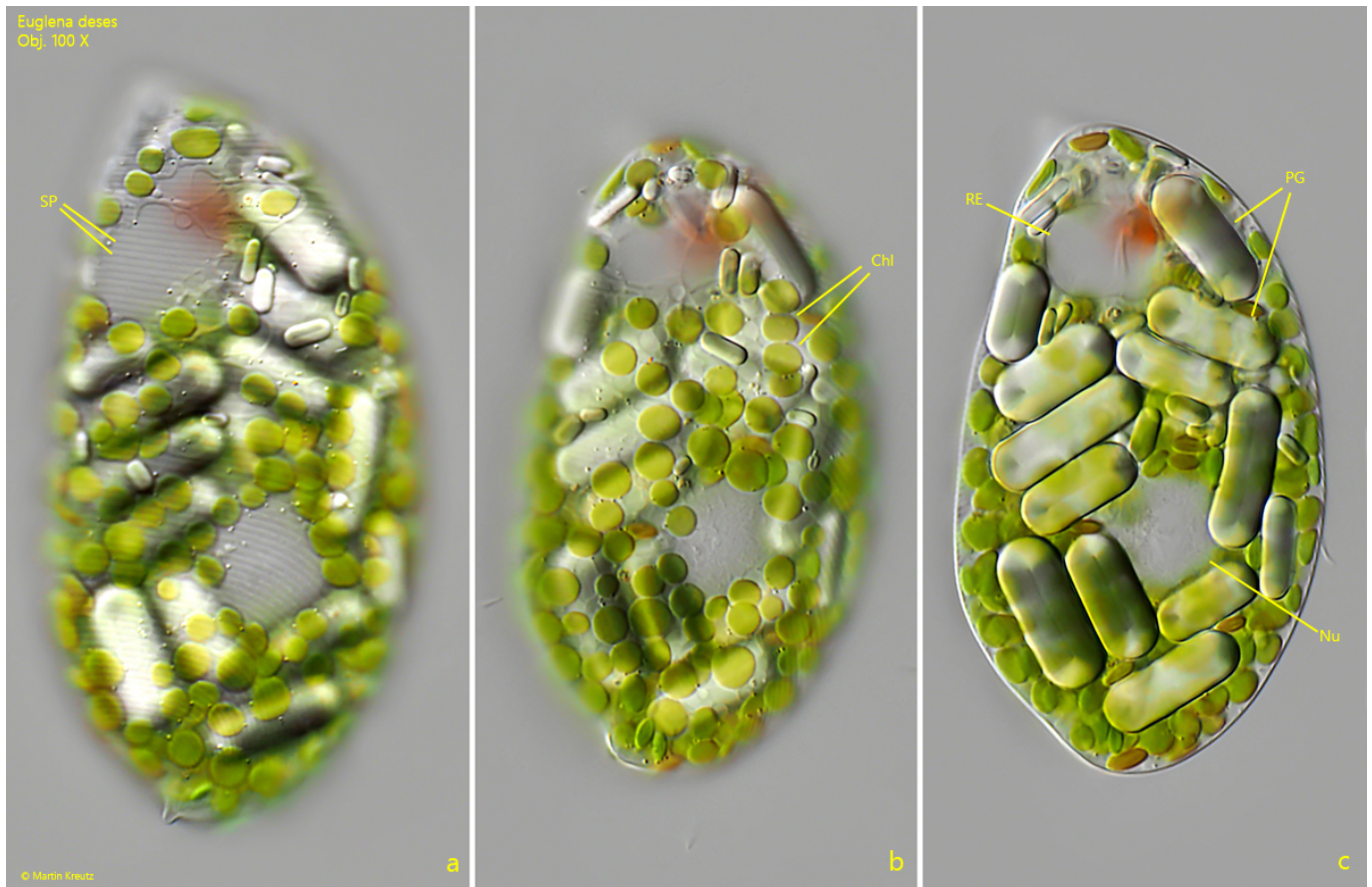


Fig. 4 a-c: *Euglena deses*. Three focal planes on the faint striation of the pellicle (SP), the disc-shaped chloroplasts (Chl) without pyrenoid and the oblong shaped paramylon grains (PG). Nu = nucleus, RE = Reservoir. Obj. 100 X.