

***Euglena deses***

**(O.F. Müller) Ehrenberg, 1834**

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

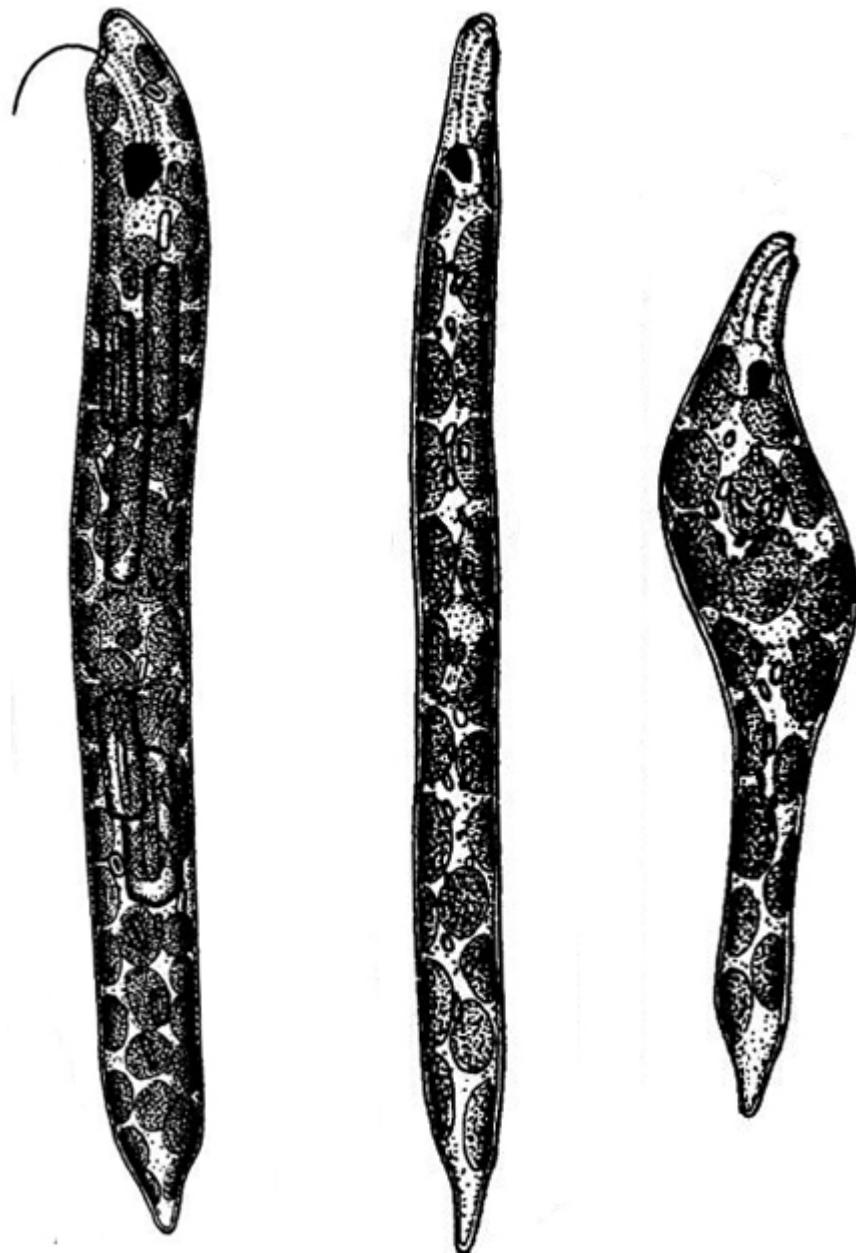
**Synonym:** *Euglena intermedia*, *Euglena klebsii*

**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

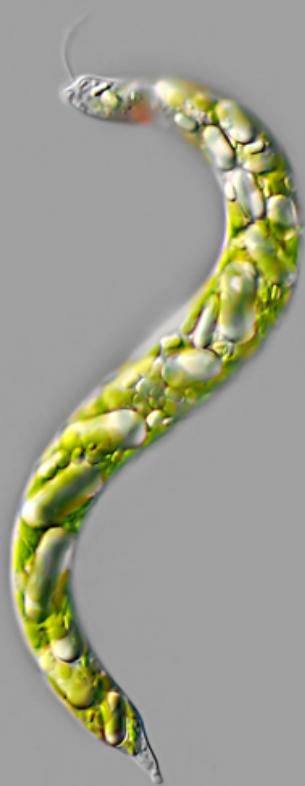
### Euglena deses

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  $\mu\text{m}$ . Some specimens even had a length of 180  $\mu\text{m}$ . In my population, none of the chloroplasts had a pyrenoid (s. fig. 4).

Euglena deses  
Obj. 40 X



a



b



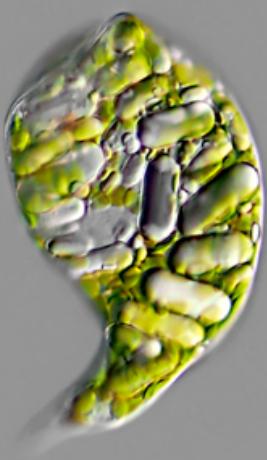
c



d



e



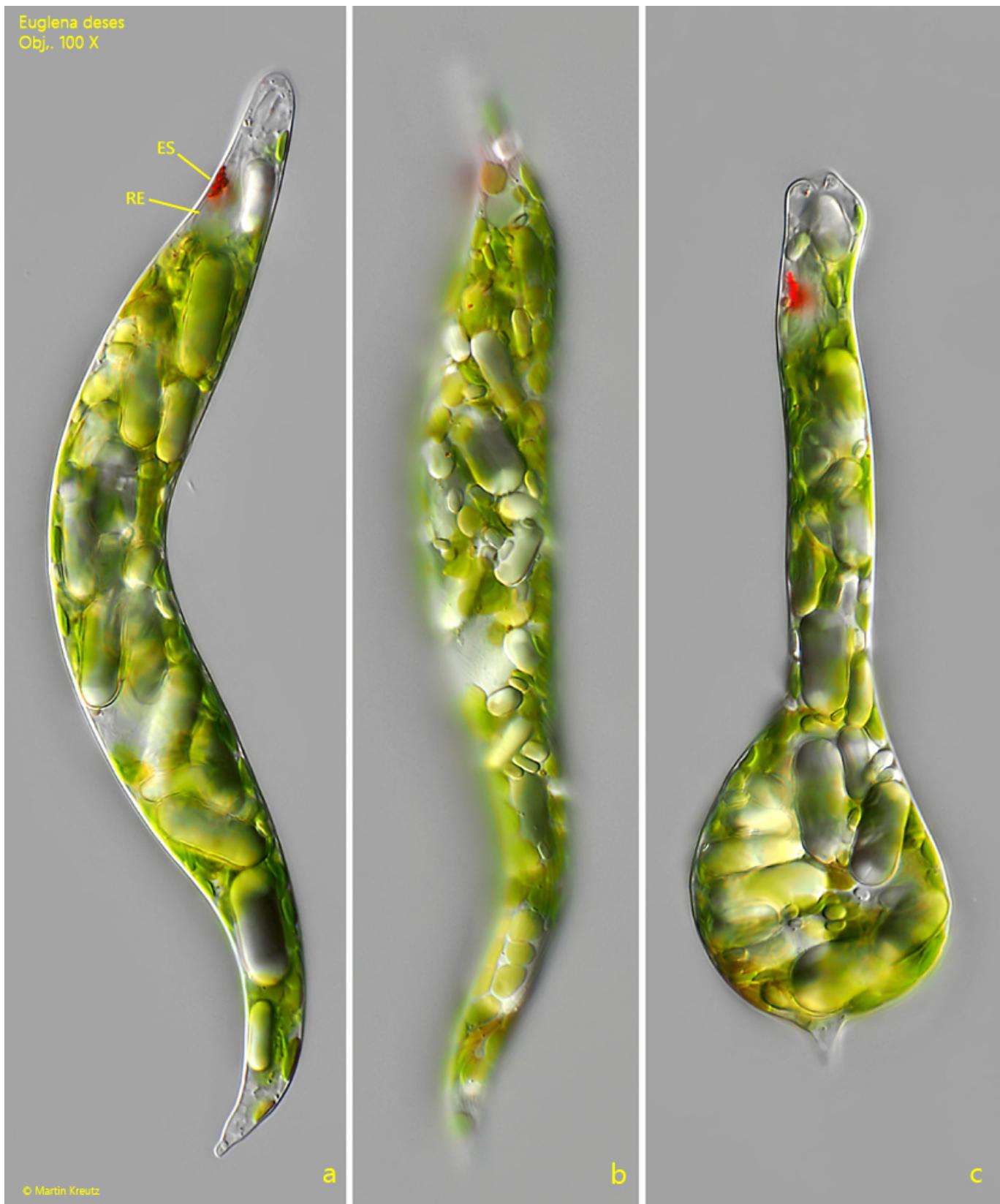
f

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



**Fig. 2 a-b:** *Euglena deses*. 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 deses*. 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 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.