Euglena deses

(O.F. Müller) Ehrenberg, 1834

Most likely ID: n.a.

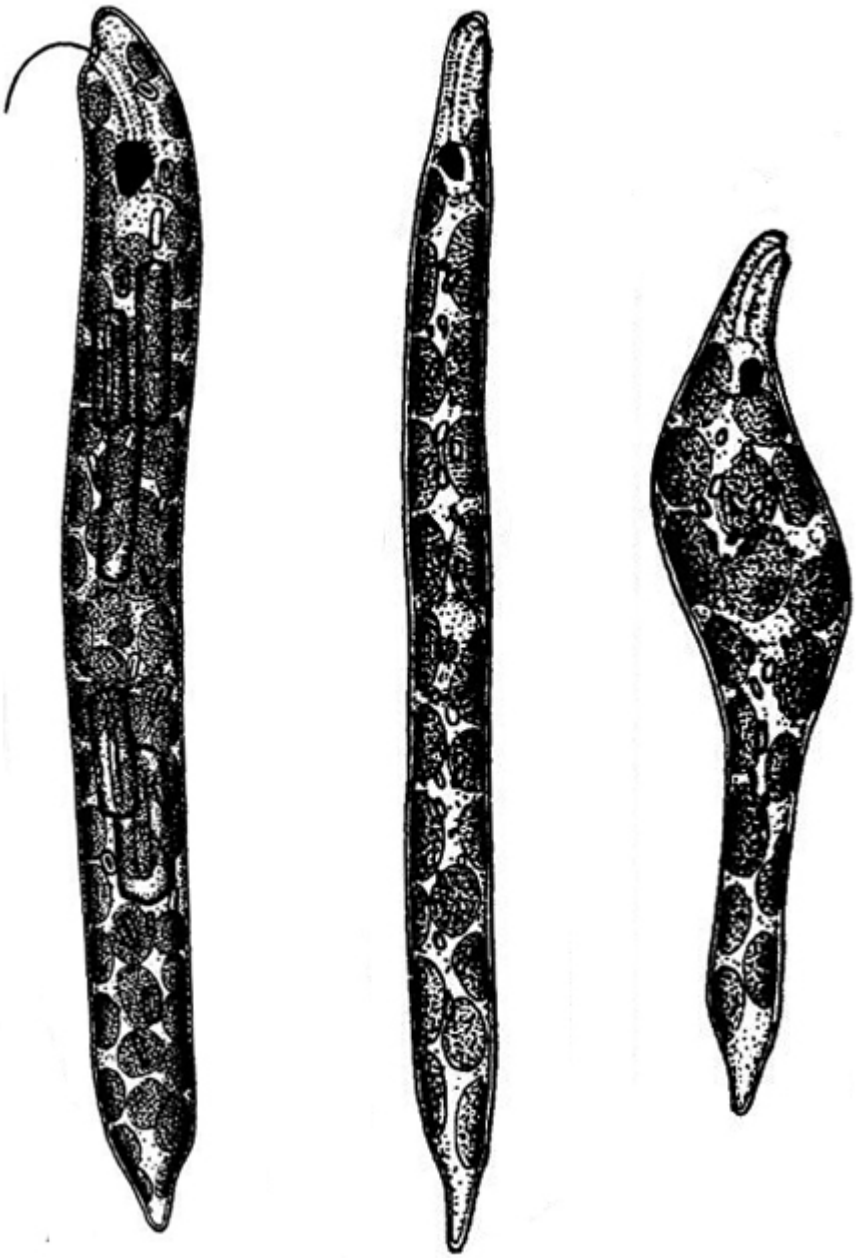
Synonym: *Euglena intermedia*, *Euglena klebsii*

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).

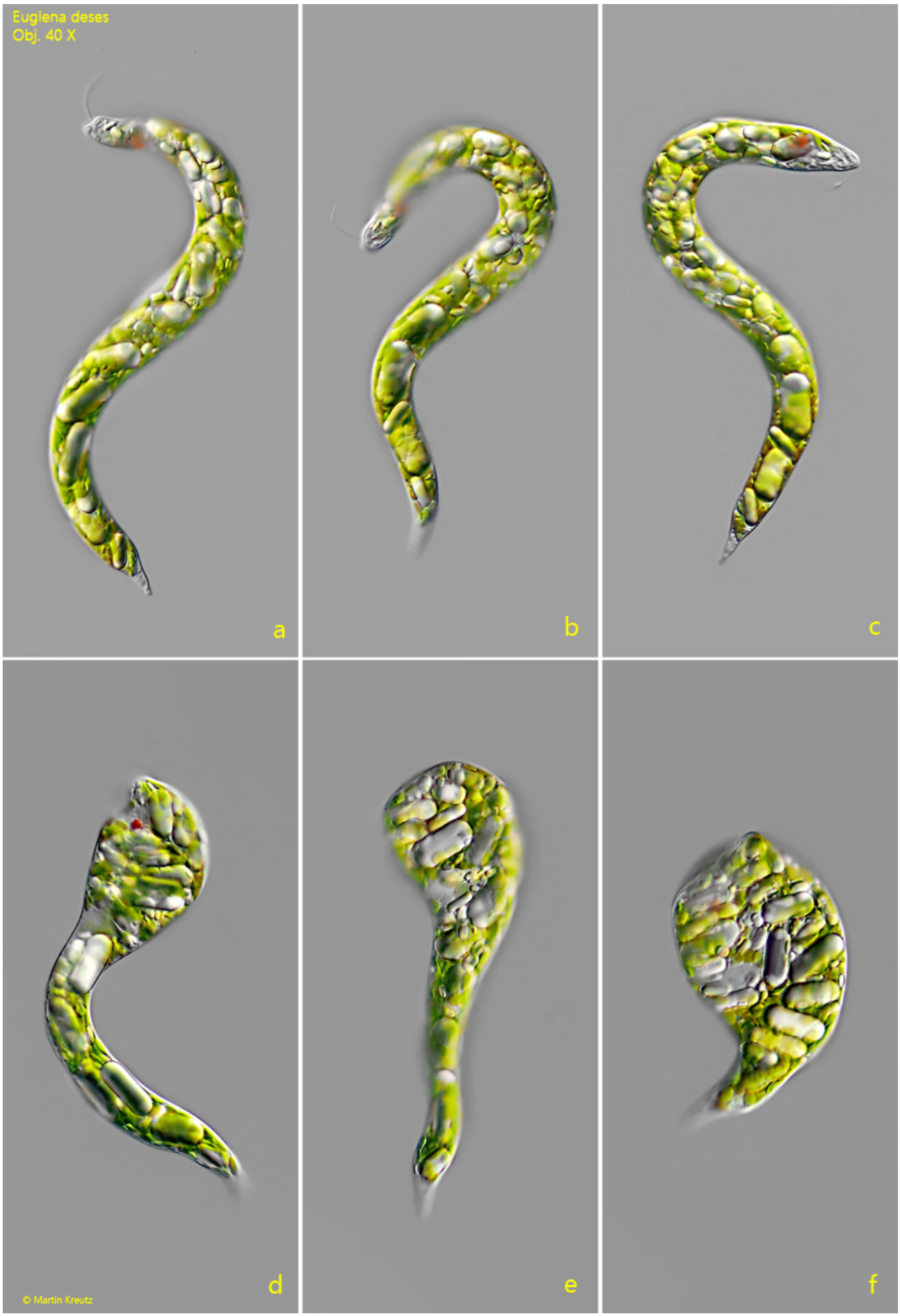

Euglena deses
Obj. 40 X
a
b
c
d
e
f
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Fig. 1 a-f: *Euglena deses*. L = 179 µm. Different phases of the euglenoid movement. Obj. 40 X.

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 µm. A slightly squashed specimen in detail. The flagellum was already shed off. ES = eyespot, RE = reservoir. Obj. 100 X.

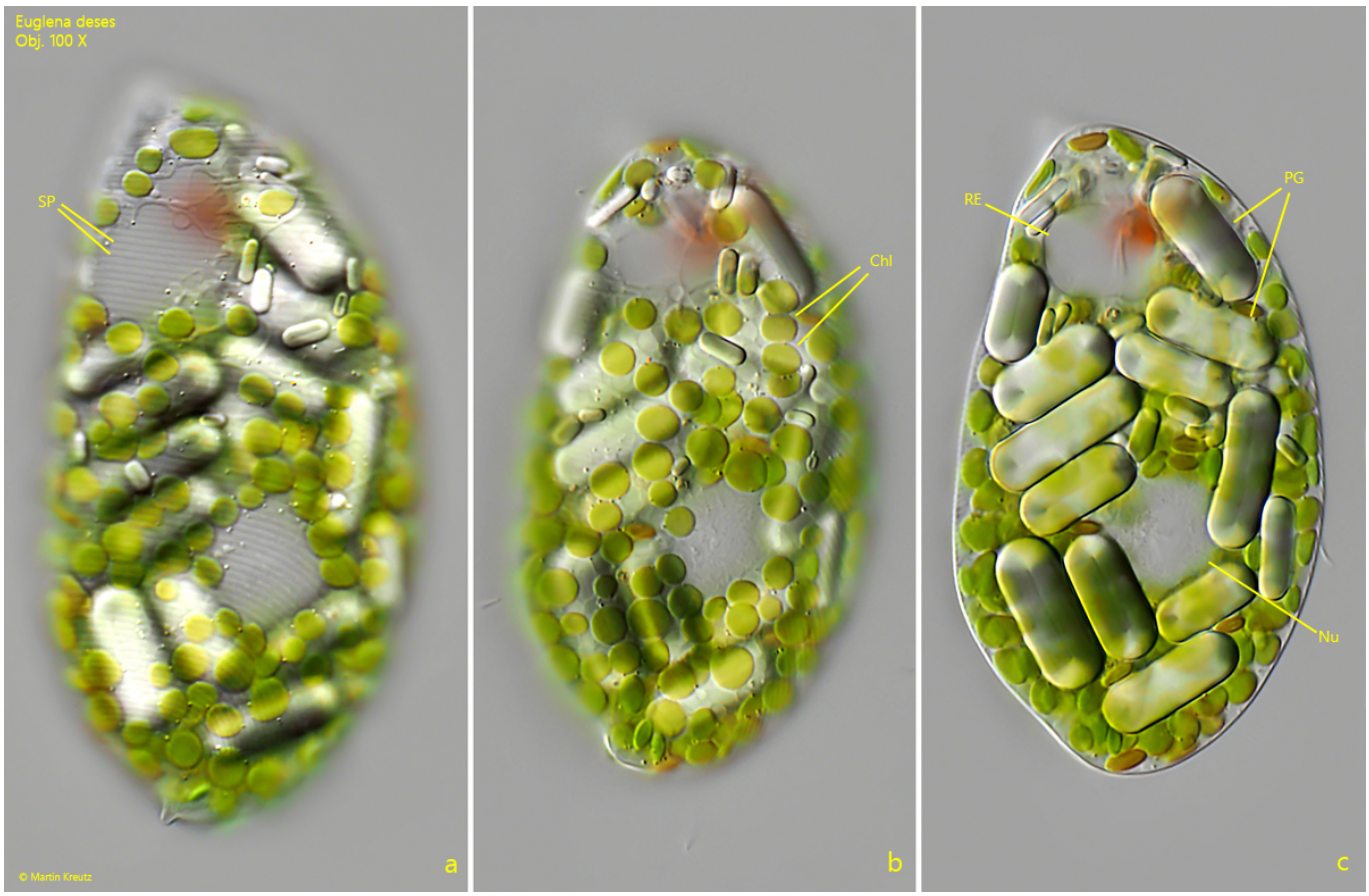

Fig. 4 a-c: *Euglena deses*. Three focal planes on the faint striation of the pellicle (SP), the disc-shaped chloroplasts (Chl) without pyrenoid and the oblong shaped paramylon grains (PG). Nu = nucleus, RE = Reservoir. Obj. 100 X.