

***Distigma proteus* (Ehrenberg, 1831)**

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

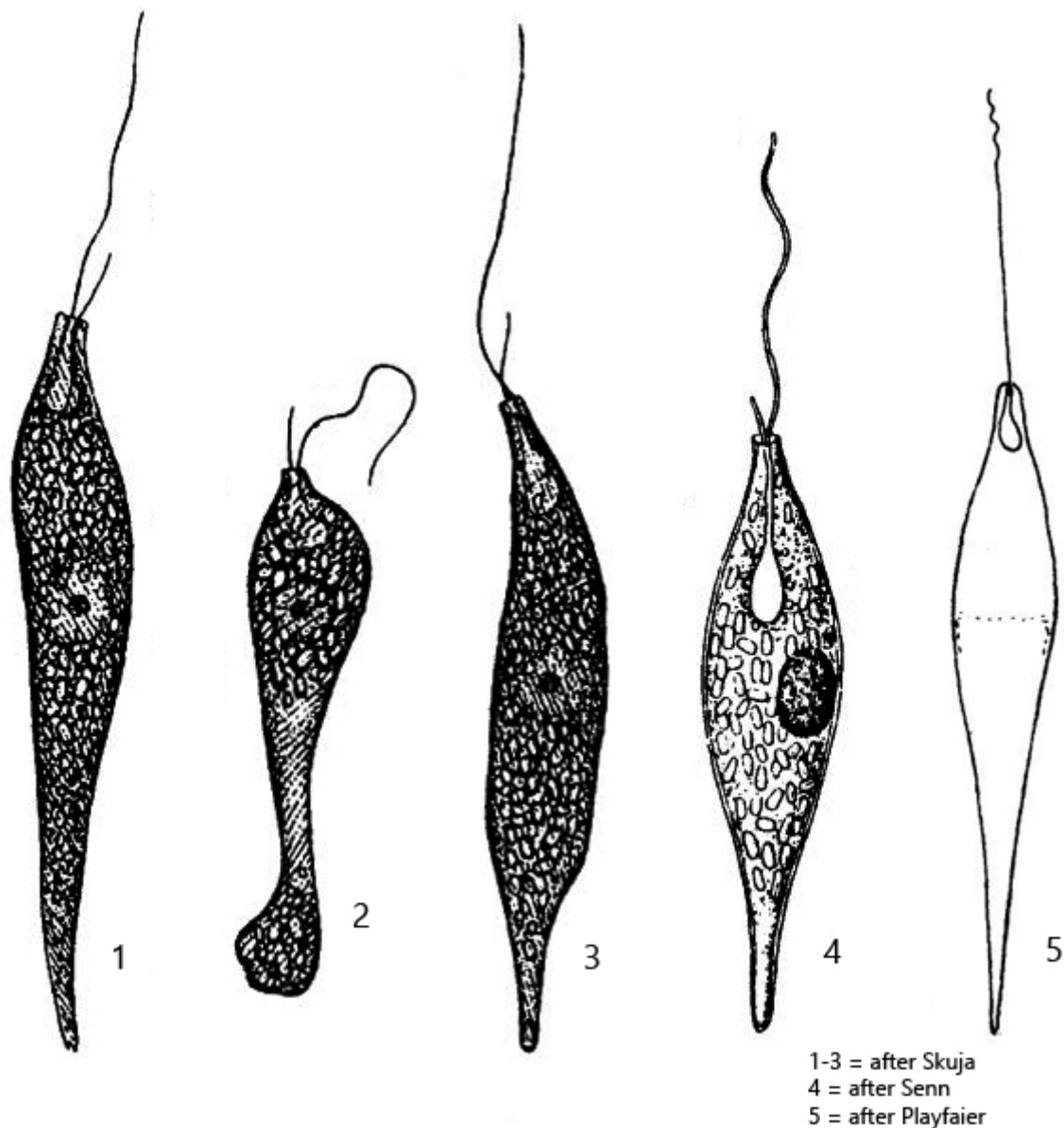
**Synonym:** n.a.

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

**Phylogenetic tree:** [Distigma proteus](#)

**Diagnosis:**

- body spindle-shaped, anterior end snout-shaped
- broadest part of body near anterior end
- length 50–120 µm
- two flagella of different length
- numerous rod-shaped paramylon grains, mainly in anterior half
- active euglenoid movement
- nucleus central
- distinct striation of the pellicle



*Distigma proteus*

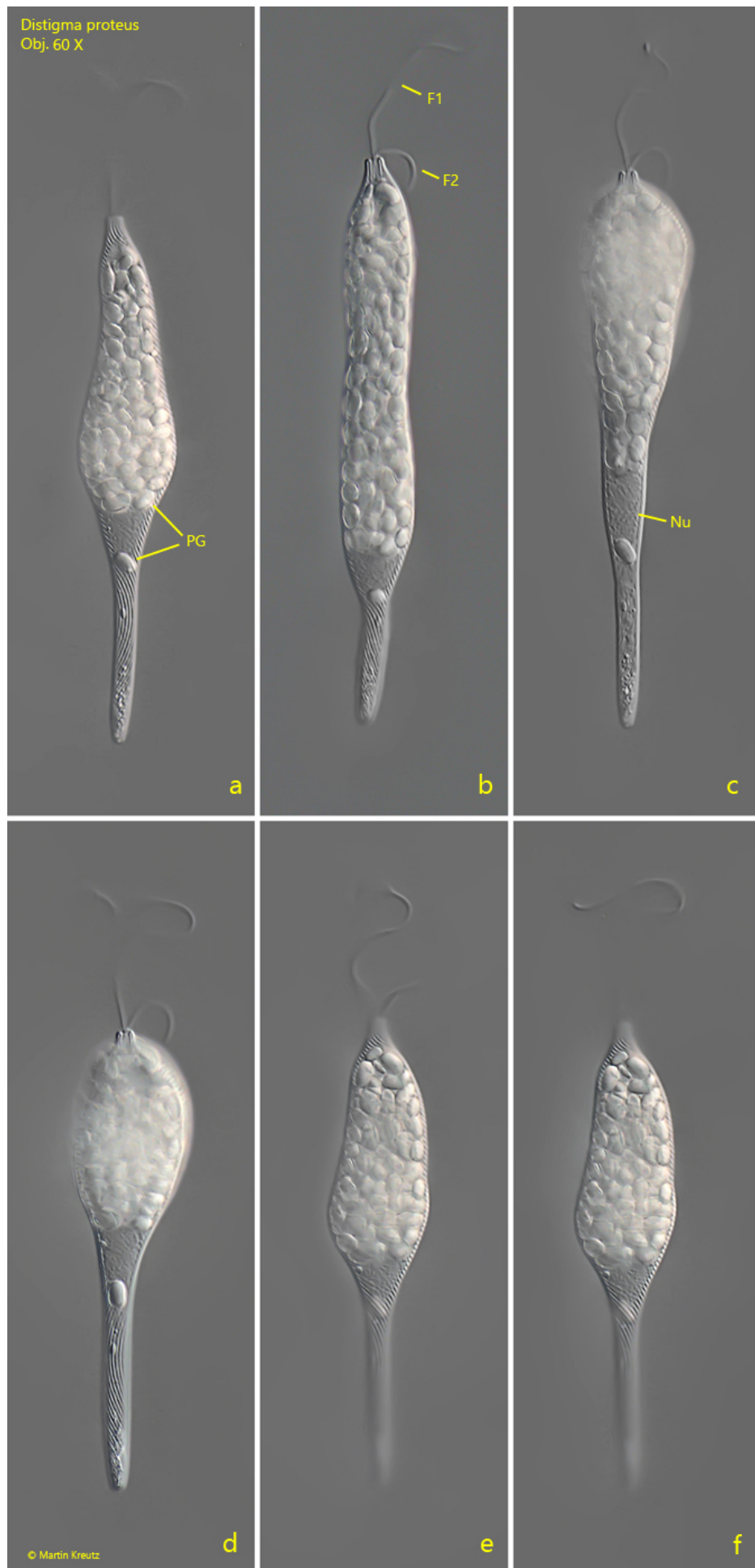
So far I have only found *Distigma proteus* in the [Simmelried](#). Especially in old samples with decomposing plant masses.

Members of the genus *Distigma* can be easily recognized by the two flagella of unequal length. This is the main difference to the genus *Astasia*. Within the genus *Distigma*, *Distigma proteus* is the largest representative, reaching a body length of over 100 µm. This prevents any confusion with comparable species.

According to my observations, *Distigma proteus* is considerably less metabolic than representatives of the genus *Astasia*. The secondary flagellum is often bent backwards and

moves less than the main flagellum. The distinct striation of the pellicle runs counterclockwise. The anterior half of the cell was filled with ellipsoidal paramylon grains of about the same size with a length of about 5-7  $\mu\text{m}$ . During swimming, the posterior end was often stretched out like a rod.

More images and information on *Distigma proteus*: [Michael Plewka-Freshwater life-Distigma proteus](#)



**Fig. 1 a-f:** *Distigma proteus*. L = 116  $\mu\text{m}$  (of elongated specimen). A freely swimming specimen. Note the two flagella (F1, F2) of different length. Nu = nucleus, PG = paramylon grains. Obj. 60 X.