Gyropaigne kosmos Skuja, 1939

Most likely ID: n.a.

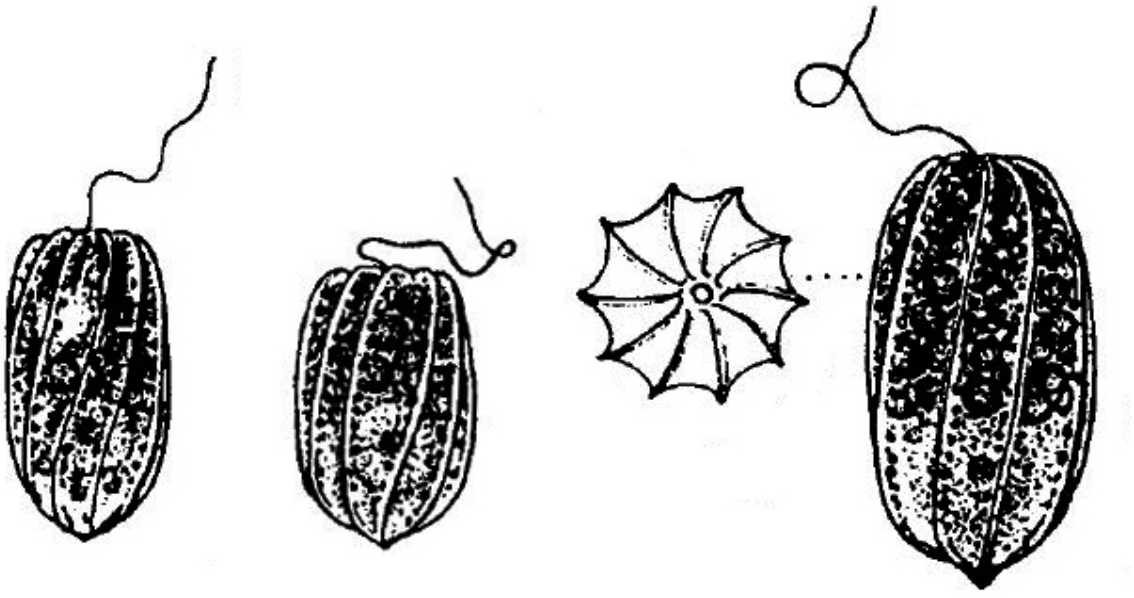
Synonym: n. a.

Sampling location: Simmelried

Phylogenetic tree: ***Gyropaigne kosmos***

Diagnosis:

- cells rounded-cylindrical, barely flattened, not metabolic
- length 30–46 µm
- cell with 8–10 longitudinal ribs, twisted clockwise
- ribs containing paramylon grains inside
- anterior part often filled with spherical or oval paramylon grains
- one flagellum, about body length
- movement rapid, spirally circling
- nucleus spherical, below the middle



after Skuja

Gyropaigne kosmos

I have found *Gyropaigne kosmos* so far exclusively in the Simmelried, mainly between decaying plants. Due to its distinct ribs, which run clockwise in a spiral, this flagellate is conspicuous even at low magnifications. Together with other saprophytic genera like *Rhabdomonas* or *Menoidium* it belongs to the Euglenophyceae. Often the cells are heavily filled with paramylon grains and shine brightly in DIC, while appearing black in brightfield illumination. In my experience, the cells are quite coverslip sensitive and quickly shed the flagellum. As Skuja described it, the longitudinal ribs always have small paramylon grains arranged in rows (s. fig. 1c).

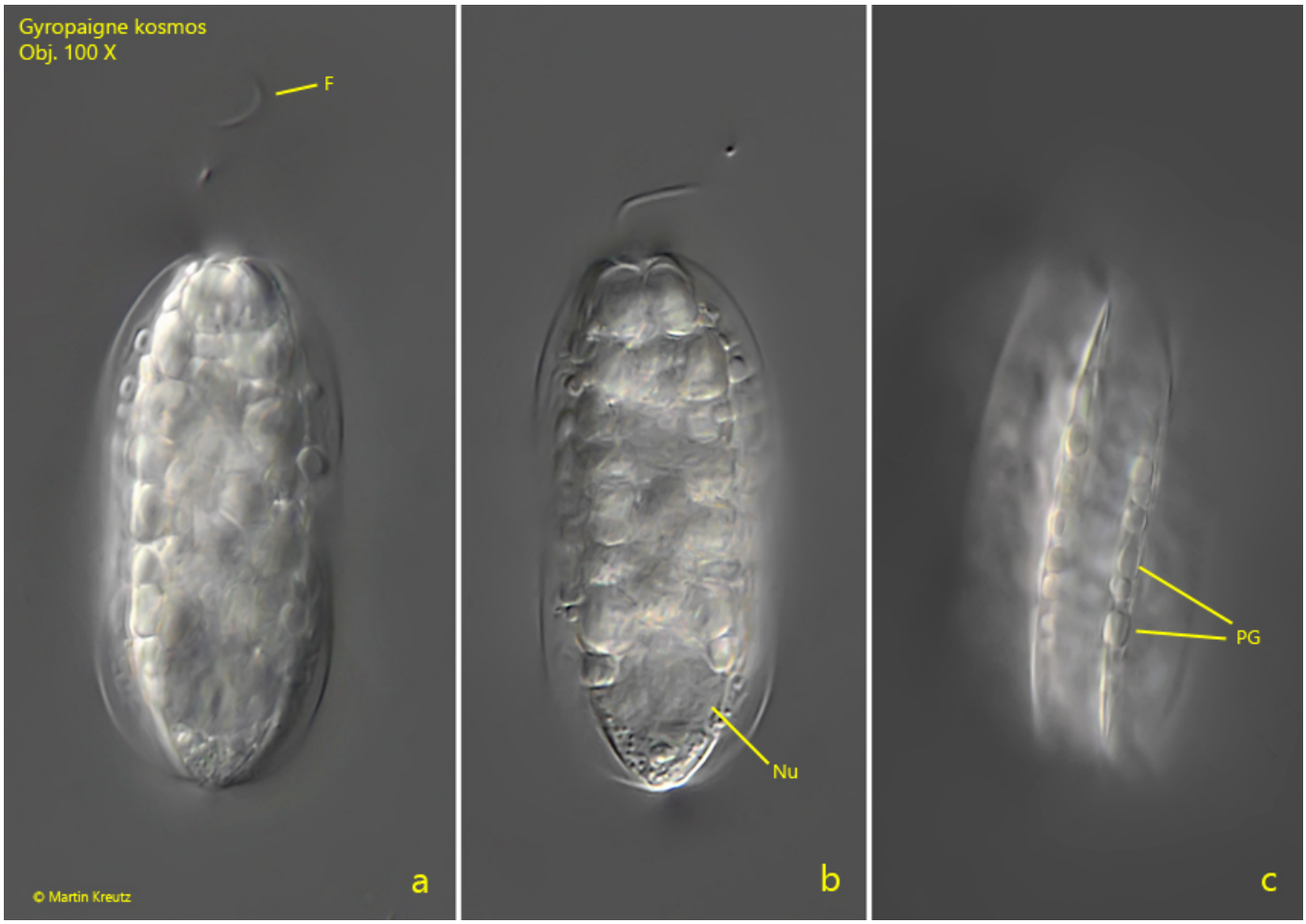


Fig. 1 a-c: *Gyropaigne kosmos*. L = 45 µm. Three focal planes of a freely swimming specimen. Note the small paramylon grains (PG) arranged in the longitudinal ribs. F = flagellum, Nu = nucleus. Obj. 100 X.



Fig. 2 a-c: *Gyropaigne kosmos*. L = 34 µm. Three focal planes of a second specimen. Obj. 100 X.