Petalomonas platyrhyncha Skuja, 1948

Most likely ID: n.a.

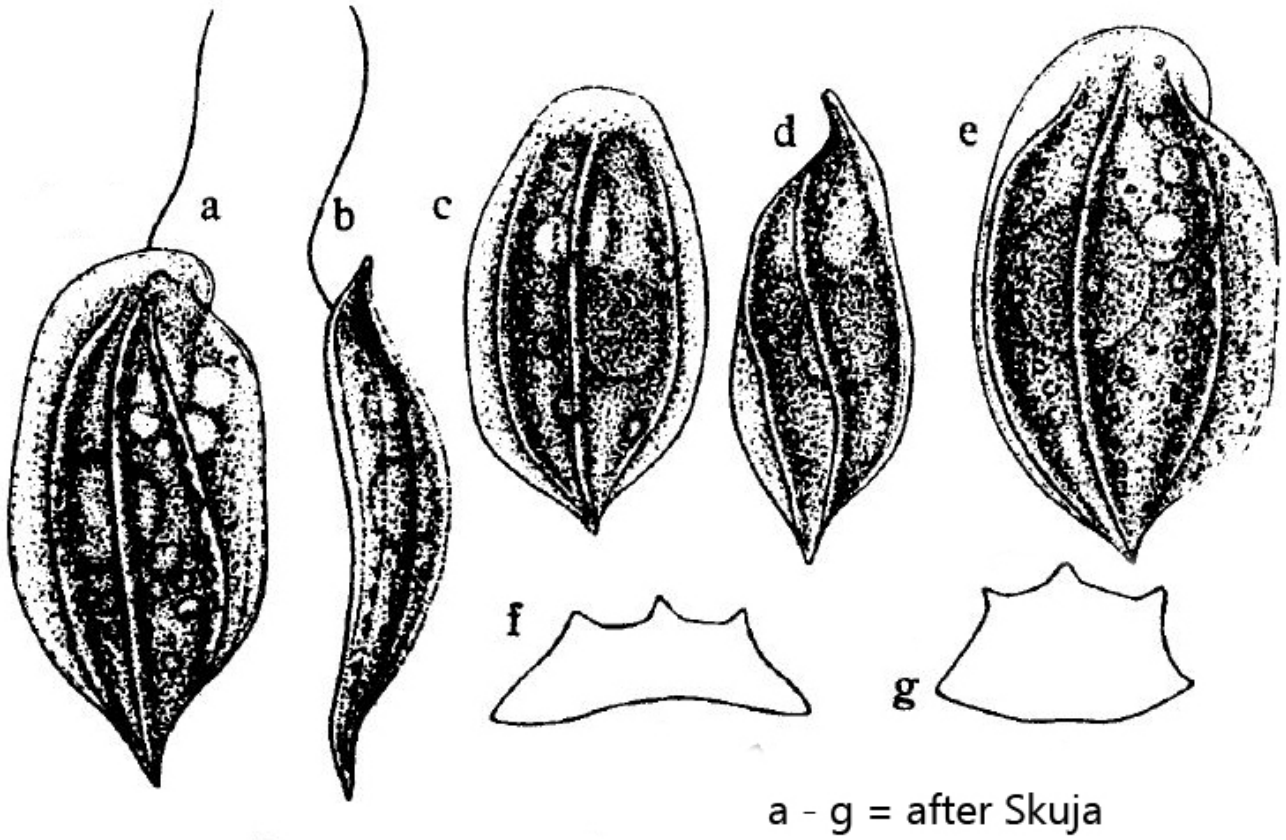
Synonym: n.a.

Sampling location: Simmelried

Phylogenetic tree: *Petalomonas platyrhyncha*

Diagnosis:

- length 35–48 µm, width 19–26 µm, thickness 10–20 µm
- body broadly ovoid
- tapered posteriorly end
- anteriorly a round, snout-shaped apex
- dorso-ventrally flattened
- one flagellum
- three dorsal keels
- the keels converge anteriorly and posteriorly
- ventrally no keels, flat or concave shaped



Petalomonas platyrhyncha

Petalomonas platyrhyncha is a very common species in the Simmelried. Almost every sample contains specimens. The population in Simmelried seems to be larger than the one described by Skuja from Swedish Lapland. He gives a maximum length of 48 µm. However, I could also find specimens with more than 70 µm length. Thus, *Petalomonas platyrhyncha* belongs to one of the largest *Petalomonas* species. The cells are mostly filled with colorless or orange, highly refractive spheres. The nucleus is large and centrally located. The species has a round, snout-shaped apex, which reliably distinguishes it from the similar species *Petalomonas praegnans*, which is symmetrically pointed at the anterior end.

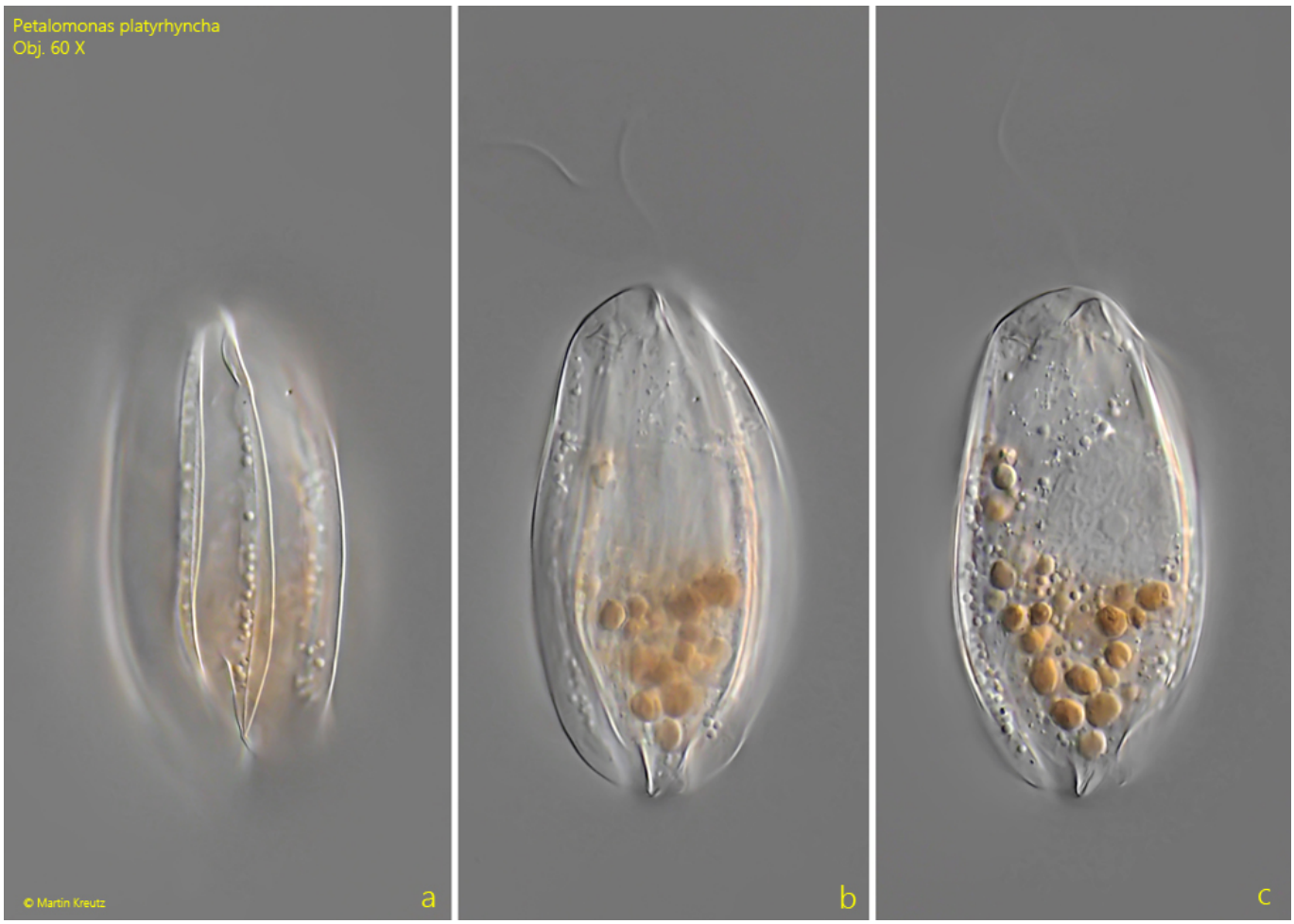


Fig. 1 a-c: *Petalomonas platyrhyncha*. L = 59 µm. Three focal planes of a freely swimming specimen from dorsal. Obj. 60 X.



Fig. 2 a-b: *Petalomonas platyrhyncha*. L = 59 µm. The same specimen as shown in fig. 1-a-c flightly squashed. Nu = nucleus. Obj. 100 X.

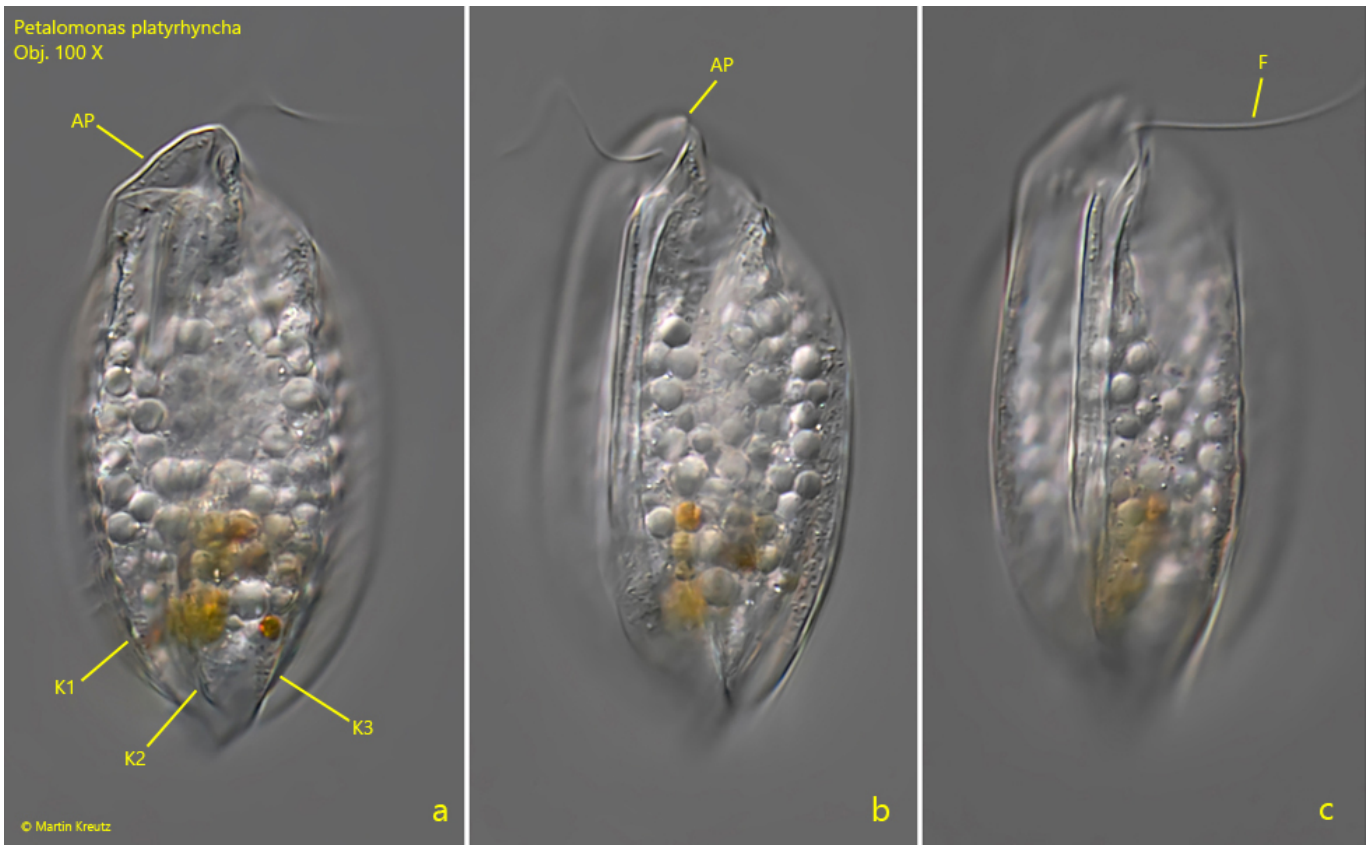


Fig. 3 a-c: *Petalomonas platyrhyncha*. L = 71 µm. A second freely swimming specimen from dorsal (a) and in lateral view from left (b, c). AP = apex, F = flagellum, K1–K3 = dorsal keels. Obj. 100 X.



Fig. 4: *Petalomonas platyrhyncha*. A squashed specimen from dorsal with focal plane on the delicate striation of the pellicle (SP). Obj. 100 X.

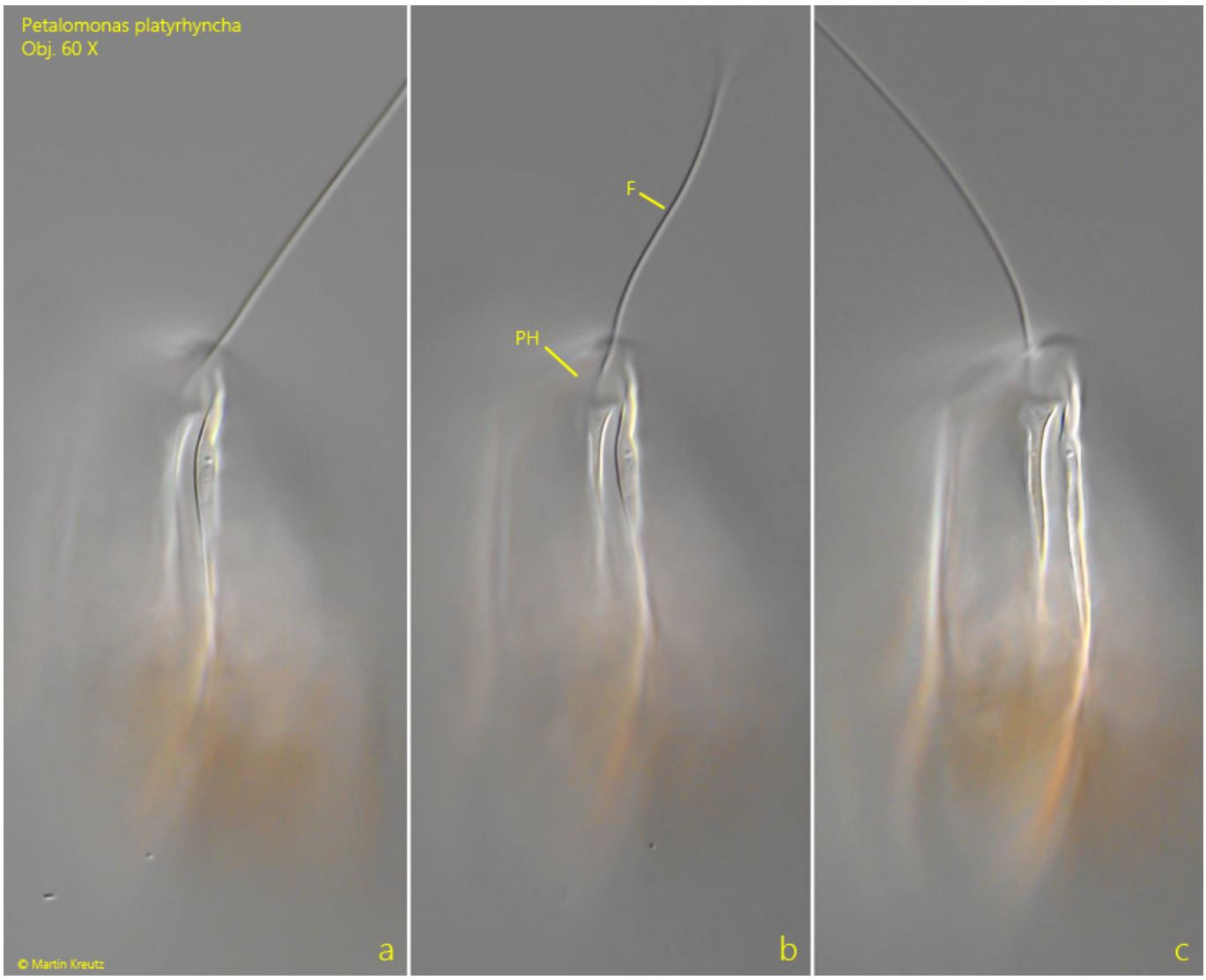


Fig. 5: *Petalomonas platyrhyncha*. The pharynx (PH) and the flagellum (F) in detail. Obj. 60 X.



Fig. 6: *Petalomonas platyrhyncha*. L = 52 µm. Lateral view of a specimen during cell division. Obj. 40 X.