Pteridomonas pulex Penard, 1889

Most likely ID: n.a.

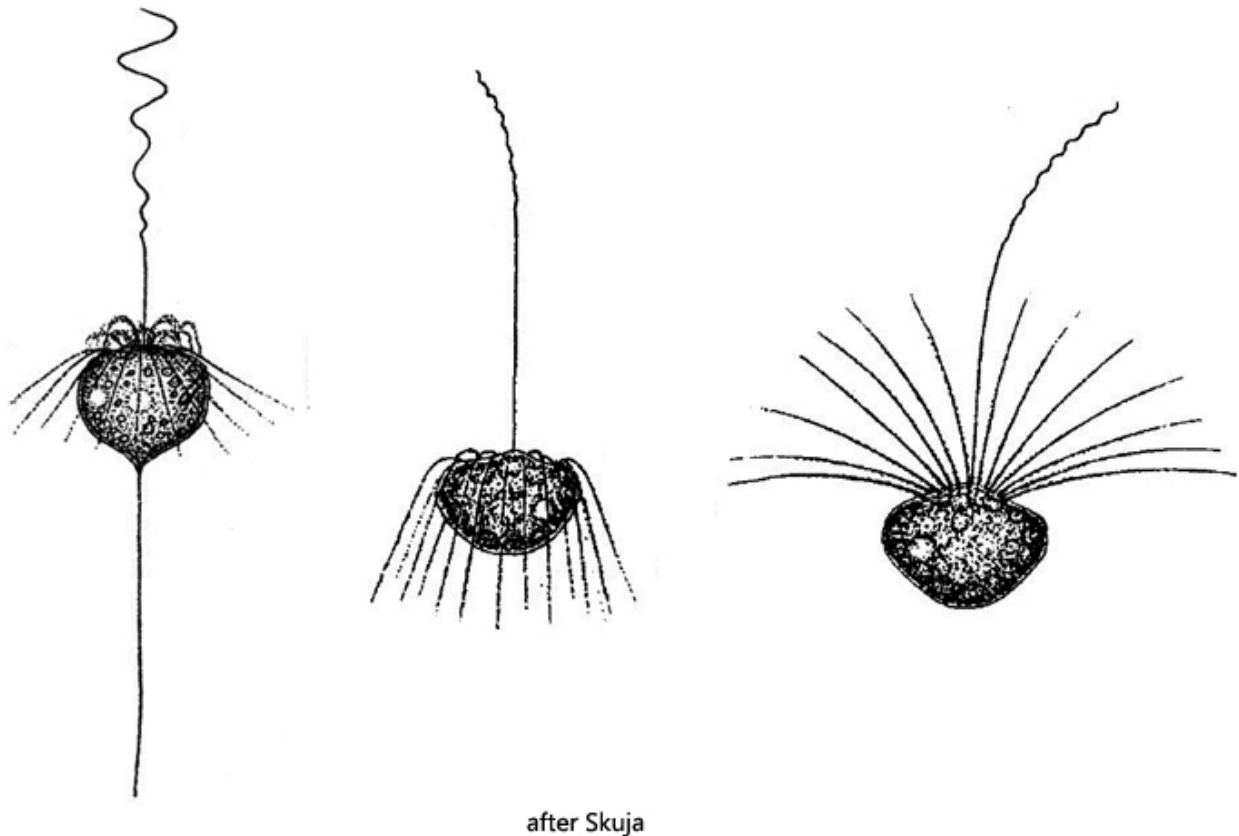**Synonym:** n. a.

Sampling location: Simmelried

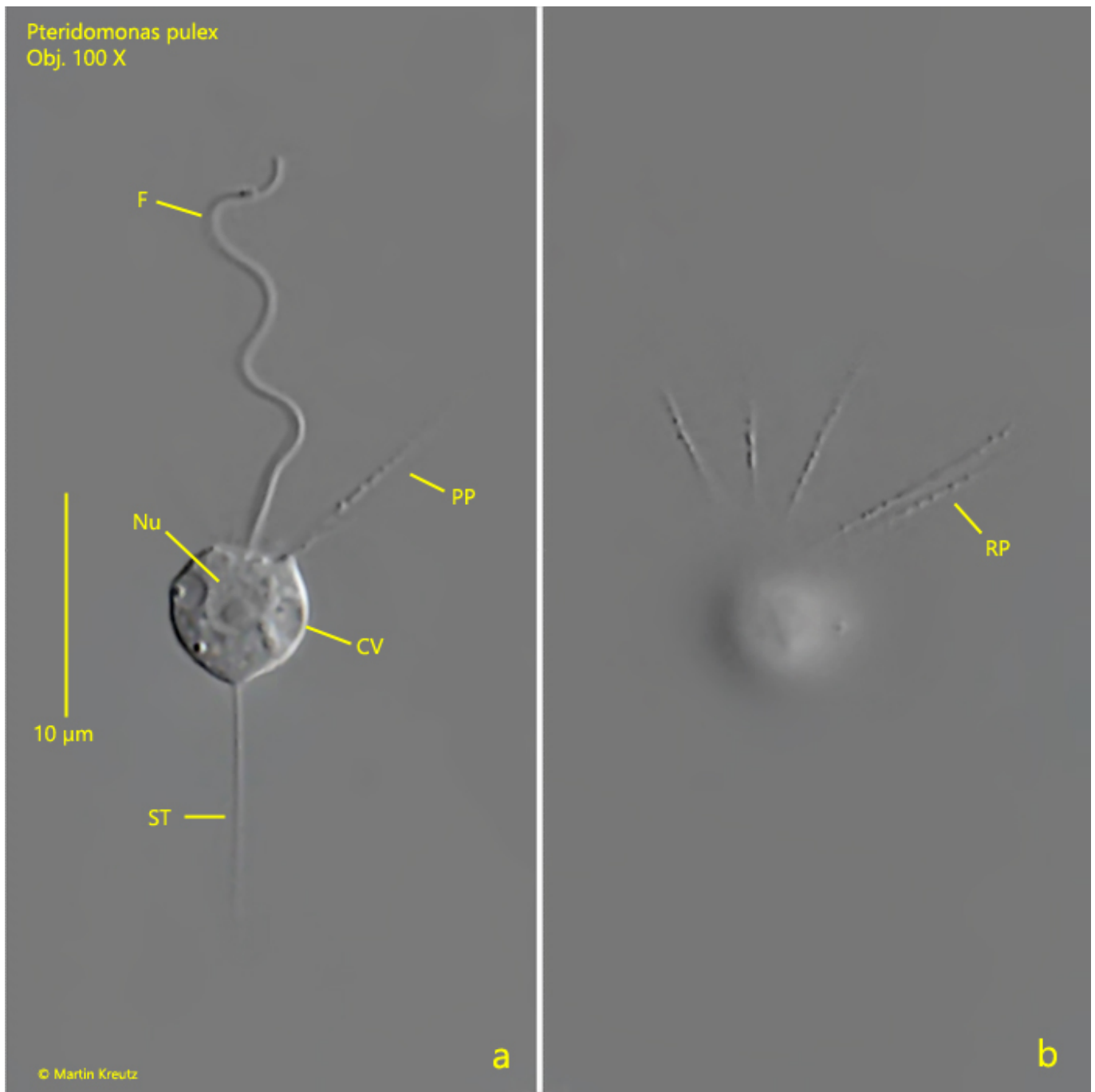**Phylogenetic tree:** *Pteridomonas pulex*

Diagnosis:

- body spherical, sometimes pentagonal or hexagonal
- length 7–10 µm, width 9–12 µm
- one anterior flagellum, 2–5 times of body length
- one ring of fine pseudopodia around the base of the anterior flagellum
- posteriorly a thin stalk, trailing behind or attached to the substrate
- one spherical nucleus in mid-body
- 2–3 contractile vacuoles near surface

after Skuja

Pteridomonas pulex

Pteridomonas pulex is a very small, colorless flagellate that is difficult to find in samples under the coverslip. It can be better observed on floating coverslips, on which *Pteriodomonas pulex* sometimes settles. The exact structure of the flagellate can only be seen at high magnification. At the base of the apical flagellum a ring of fine granulated pseudopodia arises (s. fig. 1b). This feature distinguishes *Pteridomonas pulex* from the similar species *Actinomonas mirabilis* (Kent, 1880), which has two such rings. A fine stalk of cytoplasm arises from the posterior end of *Pteridomonas pulex* (s. fig. 1a). With this stalk the flagellate can attach itself to the substrate (or coverslip). In freely swimming specimens this stalk is sometimes absent.

A virtually identical species was found in saltwater and described as *Pteridomonas danica* by Patterson and Fenchel (1985). I could not see any difference in the description of *Pteridomonas danica* and *Pteridomonas pulex*. Likely this flagellate occurs in both saltwater and freshwater that is *Pteridomonas danica* and *Pteridomonas pulex* are identical species.

Fig. 1 a-b: *Pteridomonas pulex.* L = 6.8 µm. Two focal planes of a specimen attached to a floating coverslip. Note the ring of pseudopodia (RP) arising at the base of the flagellum (F). CV = contractile vacuole, Nu = nucleus, PP = pseudopodium, ST = stalk. Obj. 100 X.