Dendromonas virgaria

(J.F. Weisse) F. Stein, 1878

Most likely ID: n.a.

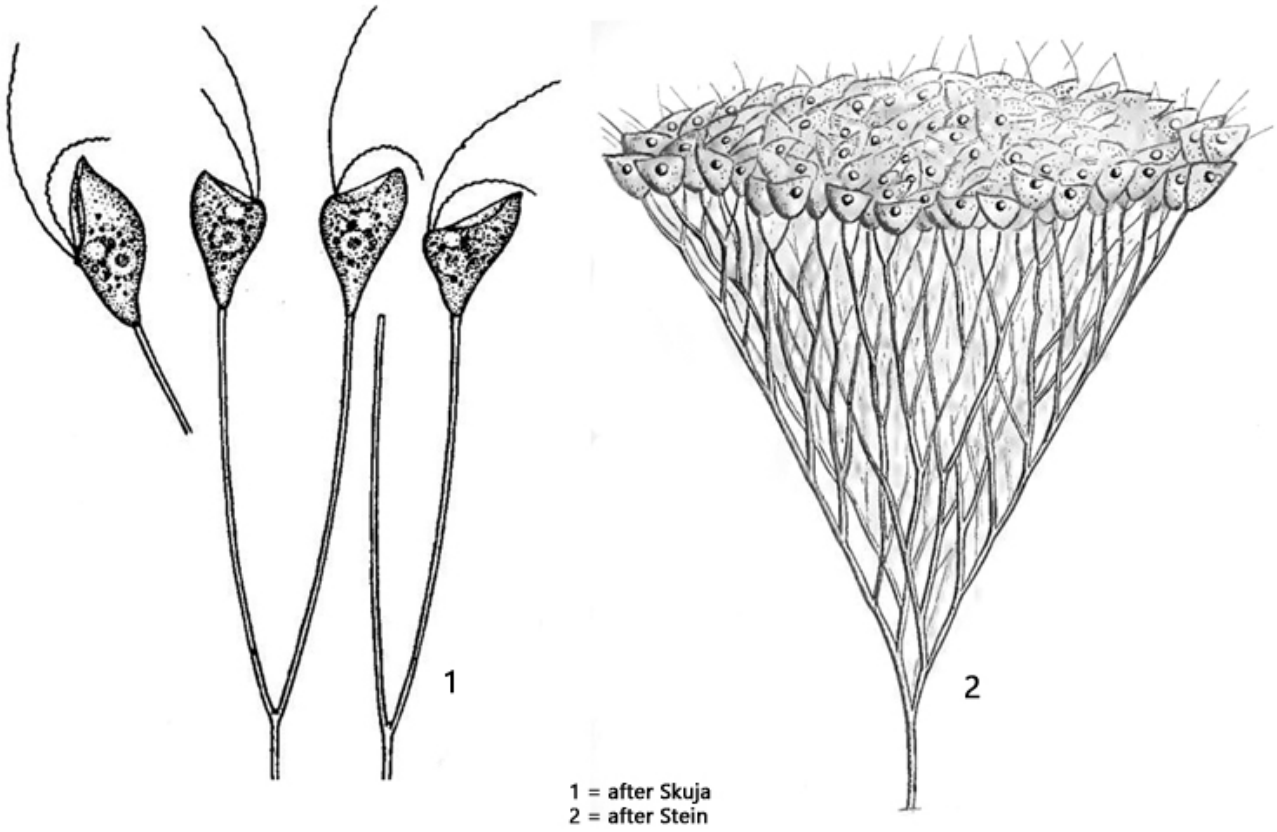
Synonym: n.a.

Sampling location: Simmelried, Ulmisried, Bussenried

Phylogenetic tree: *Dendromonas virgaria*

Diagnosis:

- colonies umbel-shaped, up to 250 µm high
- cells obovate or nearly triangular at ends of branched stalks
- length (of cells) about 8 µm
- one contractile vacuole at anteror end
- spherical nucleus in posterior third
- two flagella of inequal length
- stalks stiff, hollow, about 1 µm in diameter



Dendromonas virgaria

I rarely find *Dendromonas virgaria*. Mostly between decomposing plant masses. The colonies are almost always umbel-shaped, in very rare cases also spherical.

The cells in my population are almost always triangular in shape. They stand very densely on the same radius at the end of the dichotomously branched stalks. If the layer thickness is reduced in order to examine the cells more closely, the cells press against each other and become deformed. Therefore, it is not easy to examine the inner structure of a non-deformed cell.

I was able to recognize the contractile vacuole at the anterior end. The cell nucleus was mostly in the posterior third. The two flagella of unequal length can only rarely be seen in one focal plane. To recognize their length the focal plane have to follow them.

The genus *Dendromonas* can be distinguished from the similar genus *Pseudodendromonas* by the flagella of unequal length. In *Pseudodendromonas* they have the same length. In addition, the cells of *Pseudodendromonas* have a mucous sheath containing fine scales.

The genus *Dendromonas* belongs to the colorless Chrysophyceae, which is why it is listed here under algae.

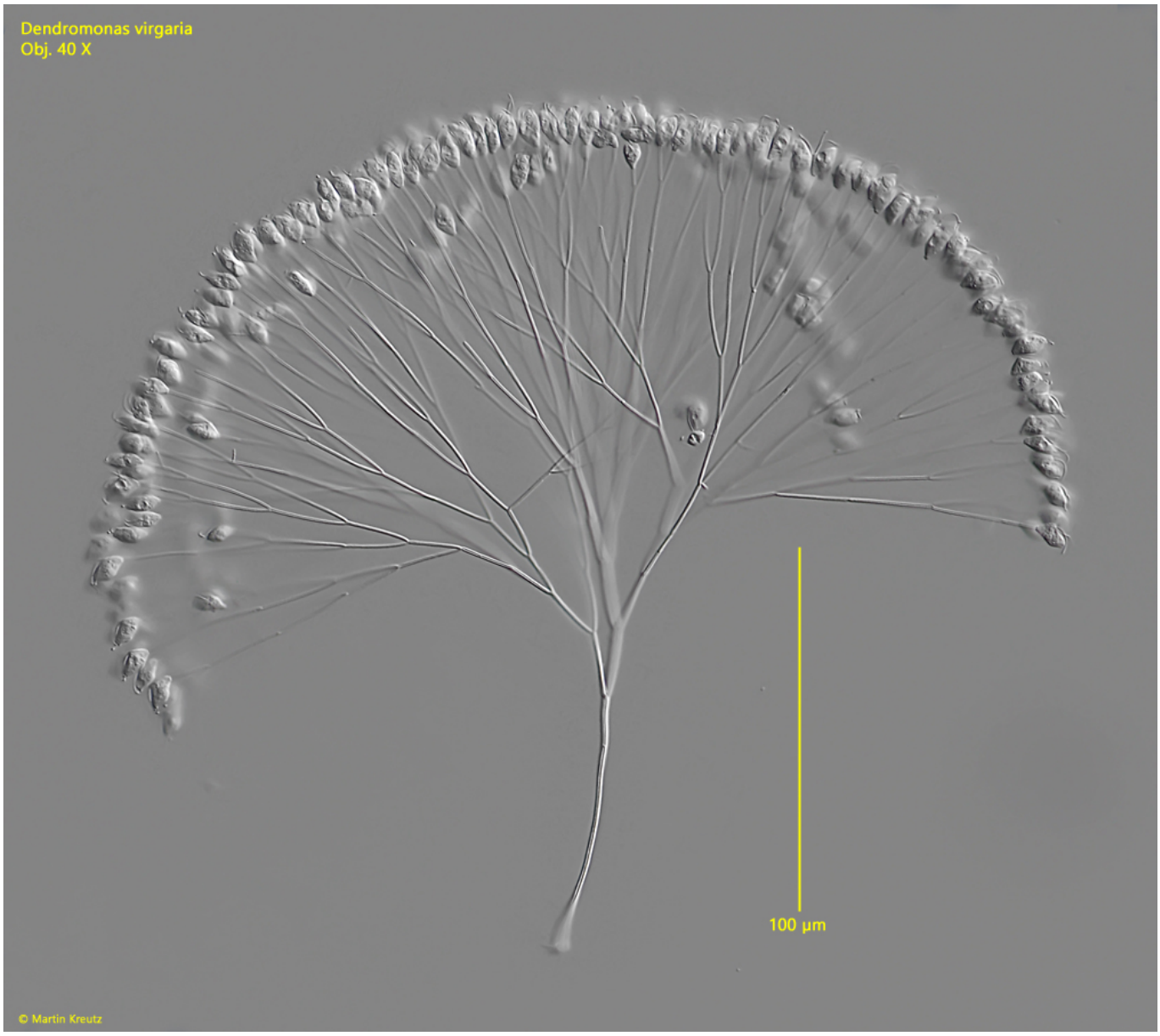


Fig. 1: *Dendromonas virgaria*. L = 234 µm (of colony). An umbel-shaped colony on dichotomously branched stalks. Obj. 40 X.

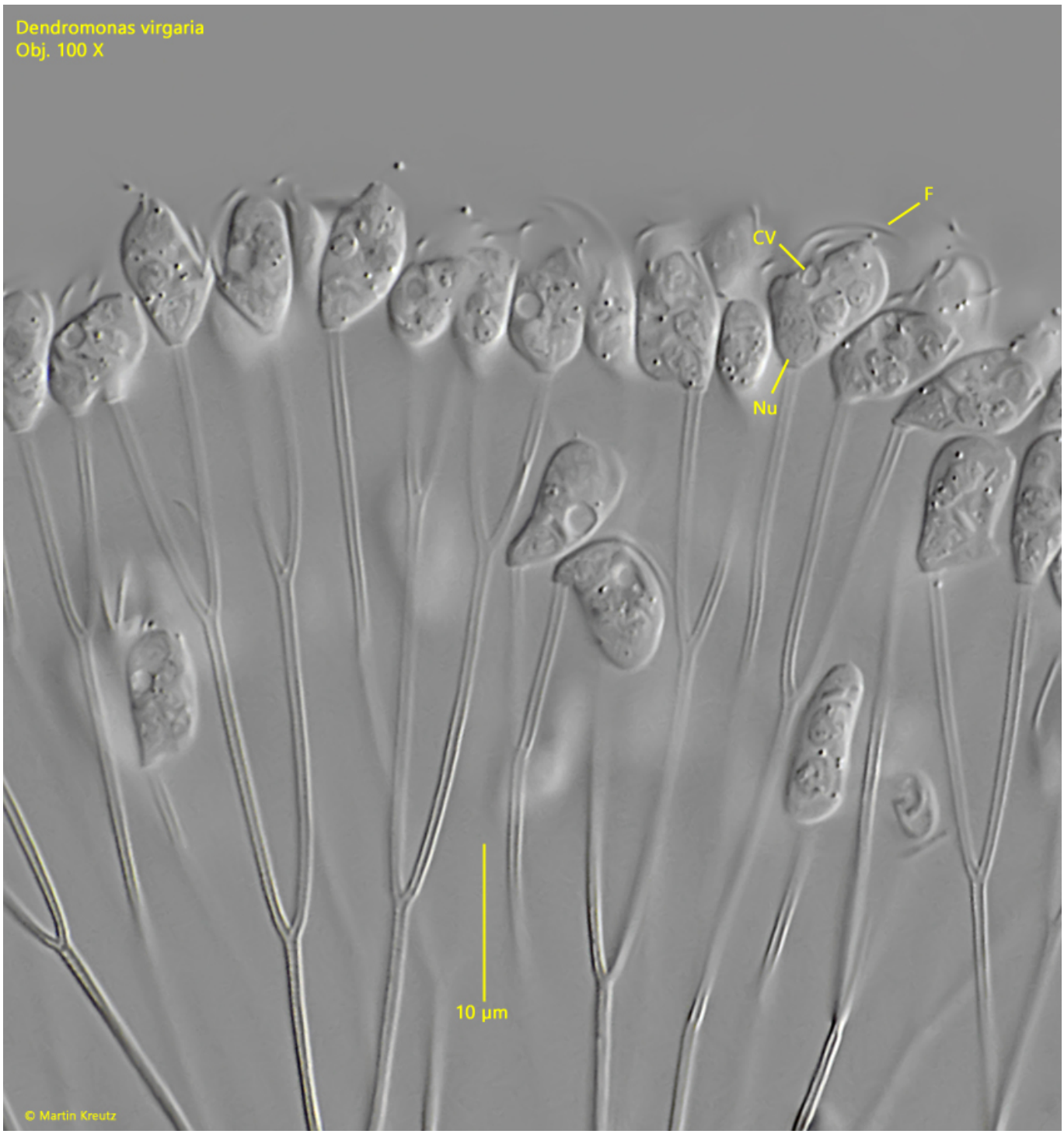


Fig. 2: *Dendromonas virgaria*. L = 6.2–9.5 µm (of cells). The cells of the colony as shown in fig. 1 in detail. The hollow stalks are stiff and have a diamter of 0.8–1.0 µm. CV = contractile vacuole, F = two flagella of inequal length, Nu = nucleus. Obj. 100 X.