Gomphosphaeria aponina Kützing, 1836

Most likely ID: n.a.

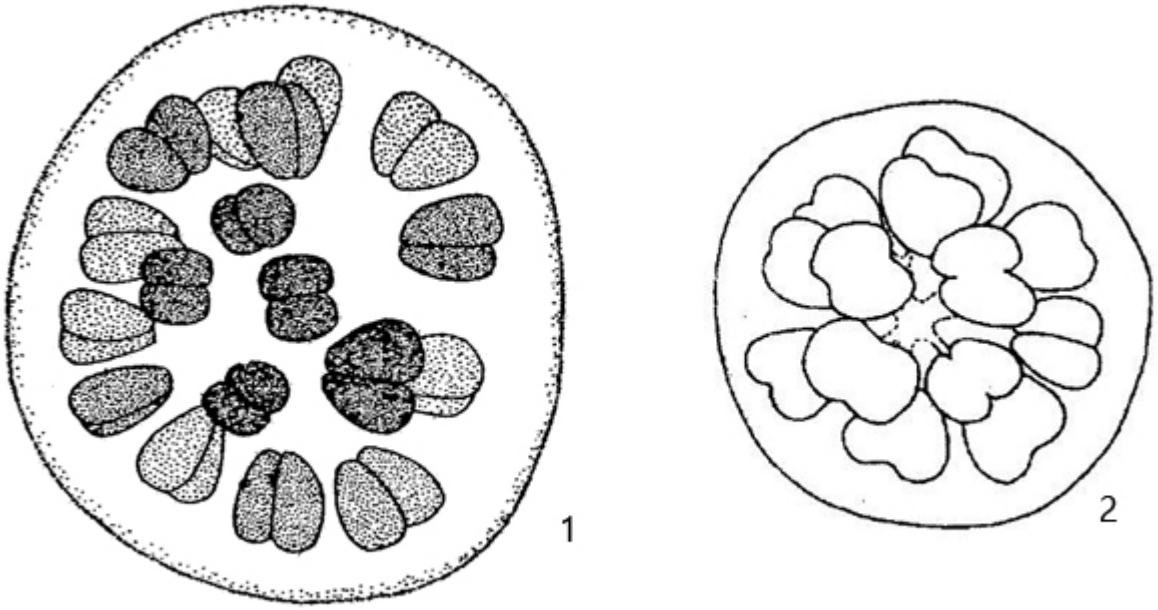
Synonym: n.a.

Sampling location: Simmelried

Phylogenetic tree: *Gomphosphaeria aponina*

Diagnosis:

- colonies spherical, ovoid or irregularly
- colonies covered with mucilage
- colonies 50–100 µm in diameter
- cells 6–12 µm long, obovoid or wedge-shaped
- cells closely adjoined after cell division in a cordiform shape
- cells in peripherical layer at distal ends of branched, mucilaginous stalks
- stalks originating in center of colony
- cells are separated from each other



1 = after Smith
2 = after Whitton

Gomphosphaeria aponina

I found *Gomphosphaeria aponina* among floating plant masses in the Simmelried. The center of the colony is formed by mucilaginous, branched stalks, at the ends of which are the ovoid or wedge-shaped cells. The cells remain connected after cell division and have a characteristic heart-shaped form (s. fig. 2). This peculiarity makes *Gomphosphaeria aponina* unmistakable. The similar genus *Snowella* (e.g. *Snowella litoralis*) also has branched stalks at the ends of which the cells of the colony are located. However, in this genus the cells do not remain connected after division.

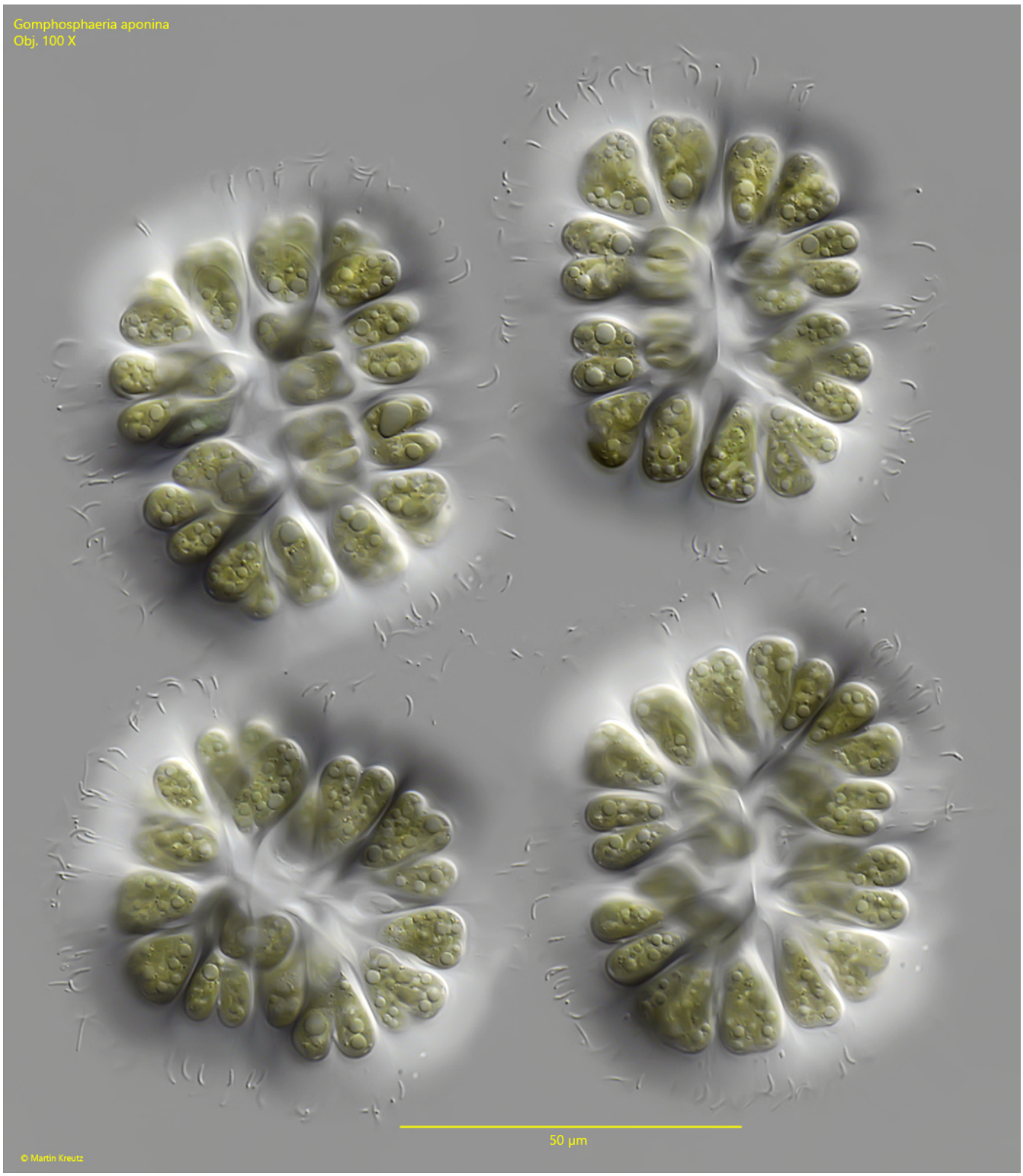


Fig. 1: *Gomphospharia aponina*. Four colonies with a diameter of about 40–50 µm each. The gelatinous sheat covering the colonies is colonized by curved bacteria. Obj. 100 X.

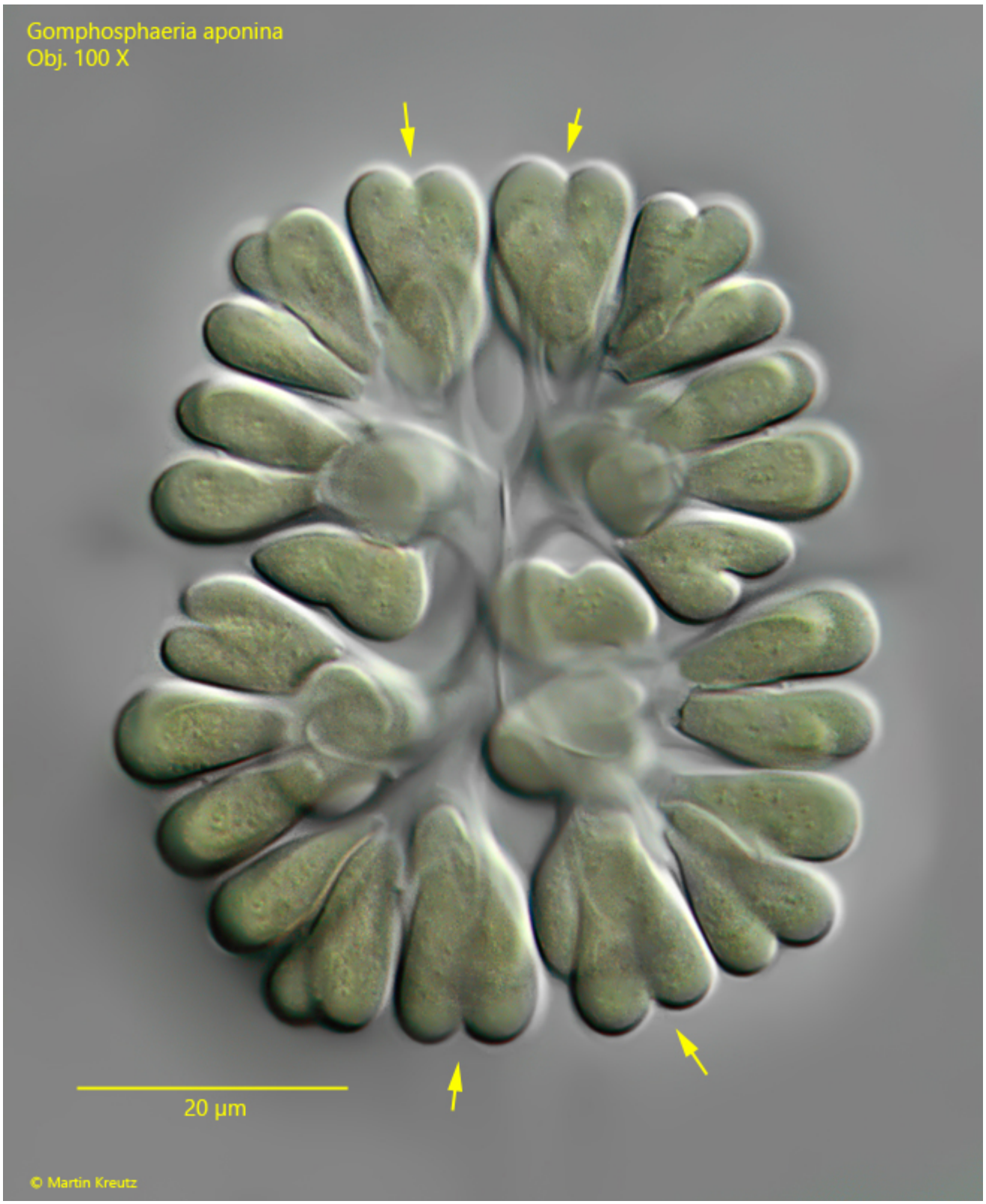


Fig. 2: *Gomphospharia aponina*. D = 84 µm (of colony). A slightly squashed colony. Note the cordiform shaped cells during cell division (arrows) and the branched mucilaginous stalks in the center of the colony. The cells are 10–12 µm long. Obj. 100 X.