Aphanothece saxicola Nägeli, 1849

Most likely ID: n.a.

**Synonym:** n.a.

Sampling location: Simmelried, Pond of the convent Hegne

Phylogenetic tree: *Aphanothece saxicola*

Diagnosis:

- colony in a common mucilaginous sheath, irregularly or spherically shaped
- cells loosely arranged
- no individual mucilaginous envelope of cells
- cells oblong, broadly rounded ends, sometimes slightly curved
- cells 1.7–2.6 µm broad, 3–6 µm long
- color pale blue-green
- cytoplasm homogenous, only few granules
- gas vacuoles absent
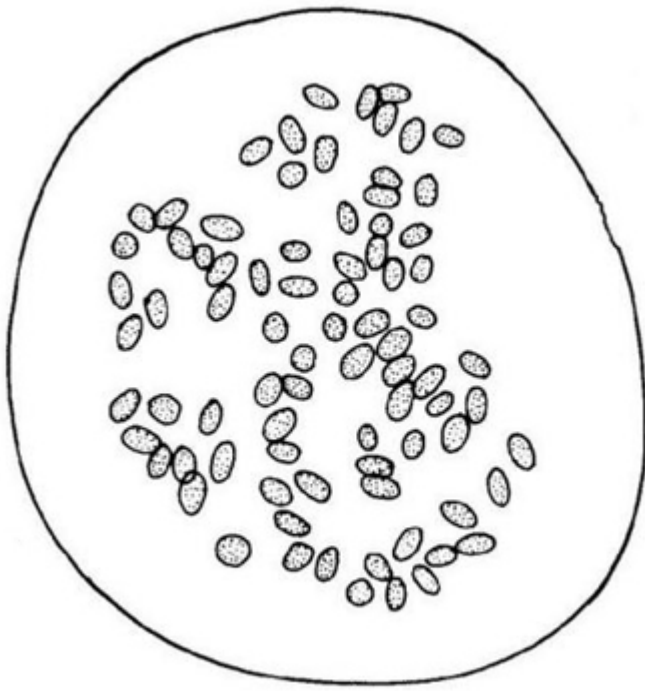
after Patil & Basarkar

Aphanothece saxicola

So far I have found *Aphanothece saxicola* in the Simmelried and in the pond of the convent of Hegne. There the colonies were found in the uppermost layer of mud.

The colonies were all between 70-100 µm in size and irregularly shaped. I did not find any spherical colonies. The distinction between the different species of the genus *Aphanothece* is essentially based on cell size, cell shape and habitat.

The cells in the colonies from both localities were very constant between 3.0–3.7 µm long and between 2.2–2.6 µm wide (s. figs. 2, 4 and 6). The cell shape was oblong, with broadly rounded ends. The similar species *Aphanothece microscopica* has larger cells (length = 3.2–10 µm, width = 3–6 µm).
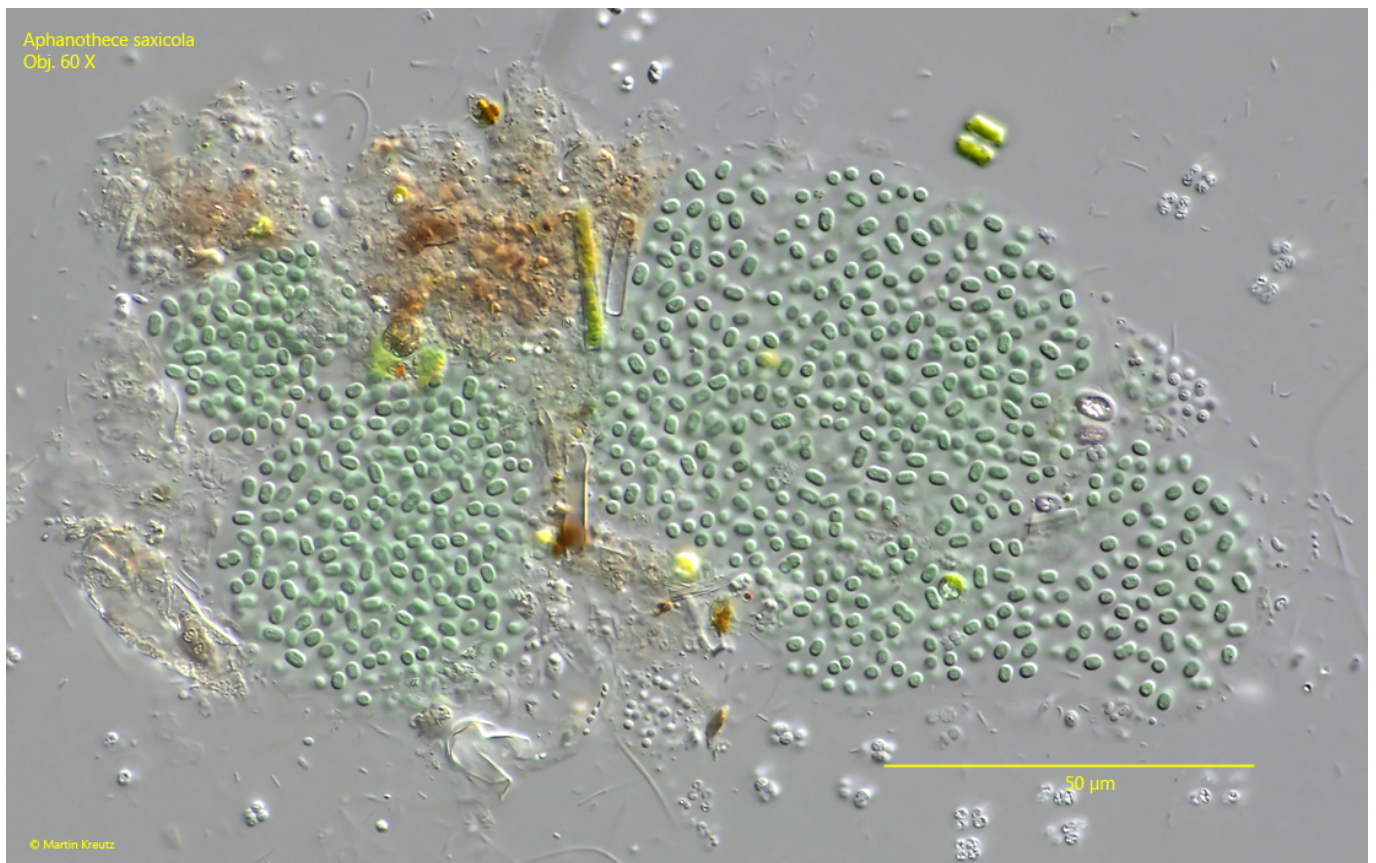
Fig. 1: *Aphanothece saxicola*. L = 110 μm (of colony). A colony found in the Simmelried. Ob. 60 X.
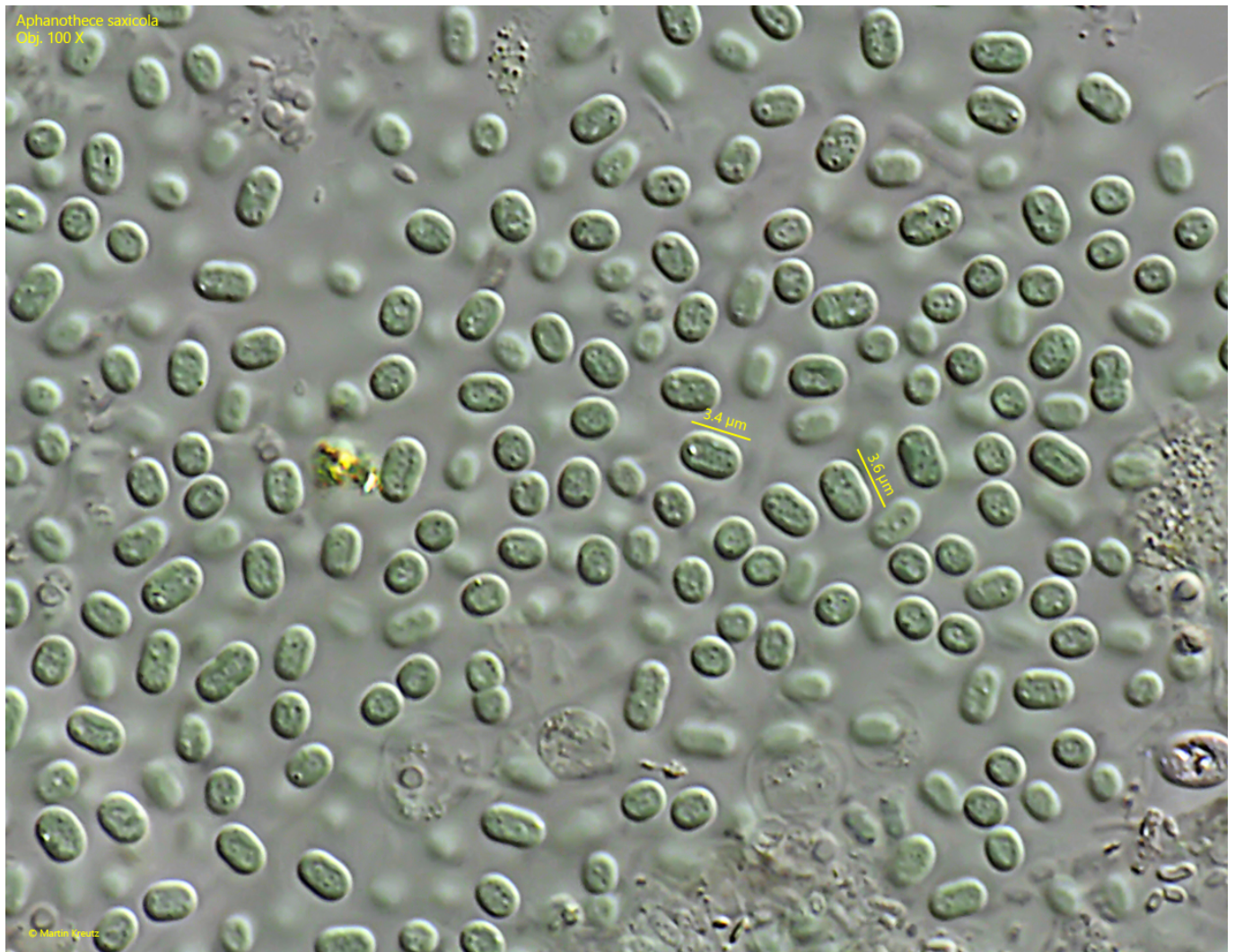
Fig. 2: *Aphanothece saxicola*. L = 3.0–3.8 µm (of cells). The cells are broadly oblong. In the cytoplasm some granules or crystals are visible. Obj. 100 X.

Aphanothece saxicola
Obj. 100 X

25 µm
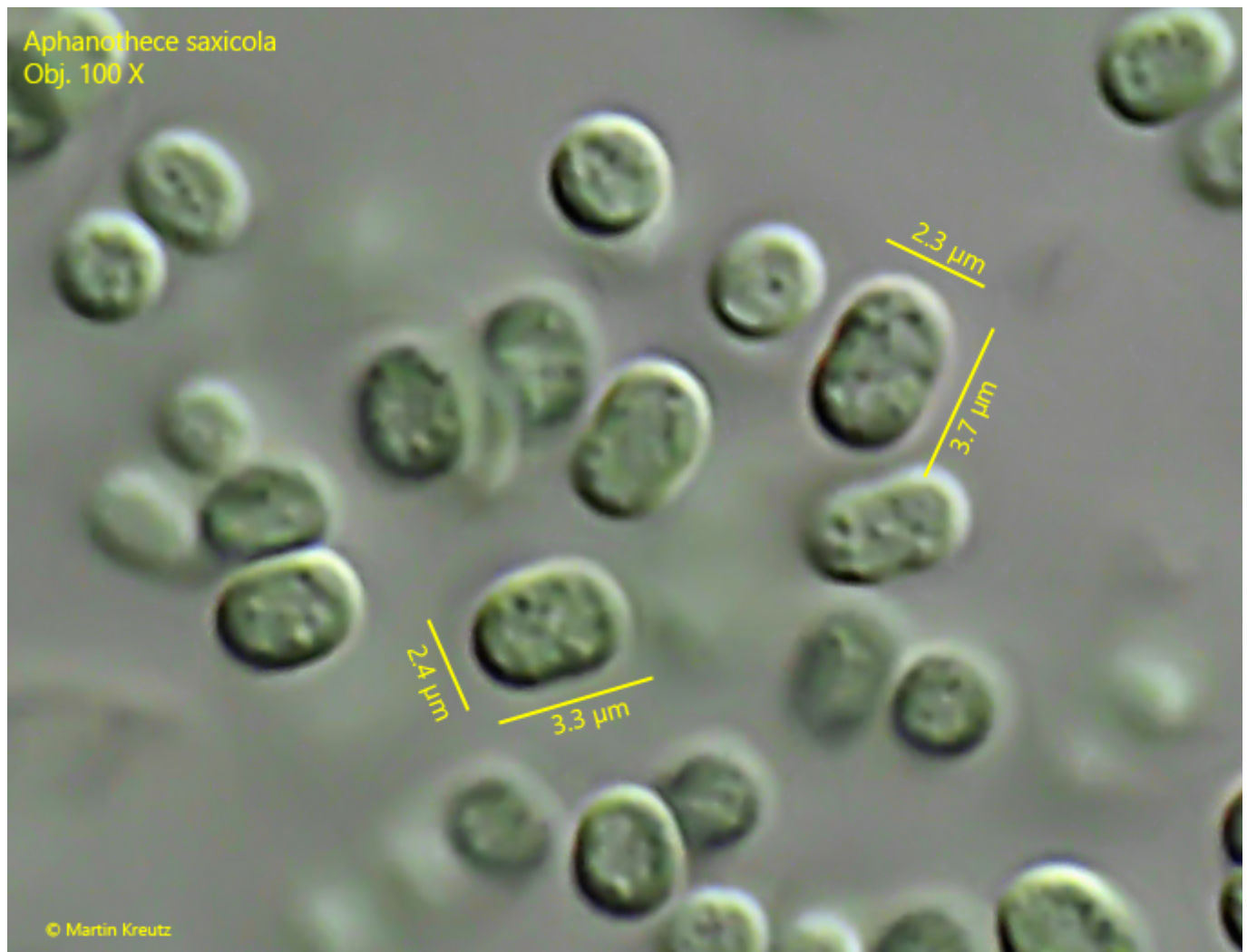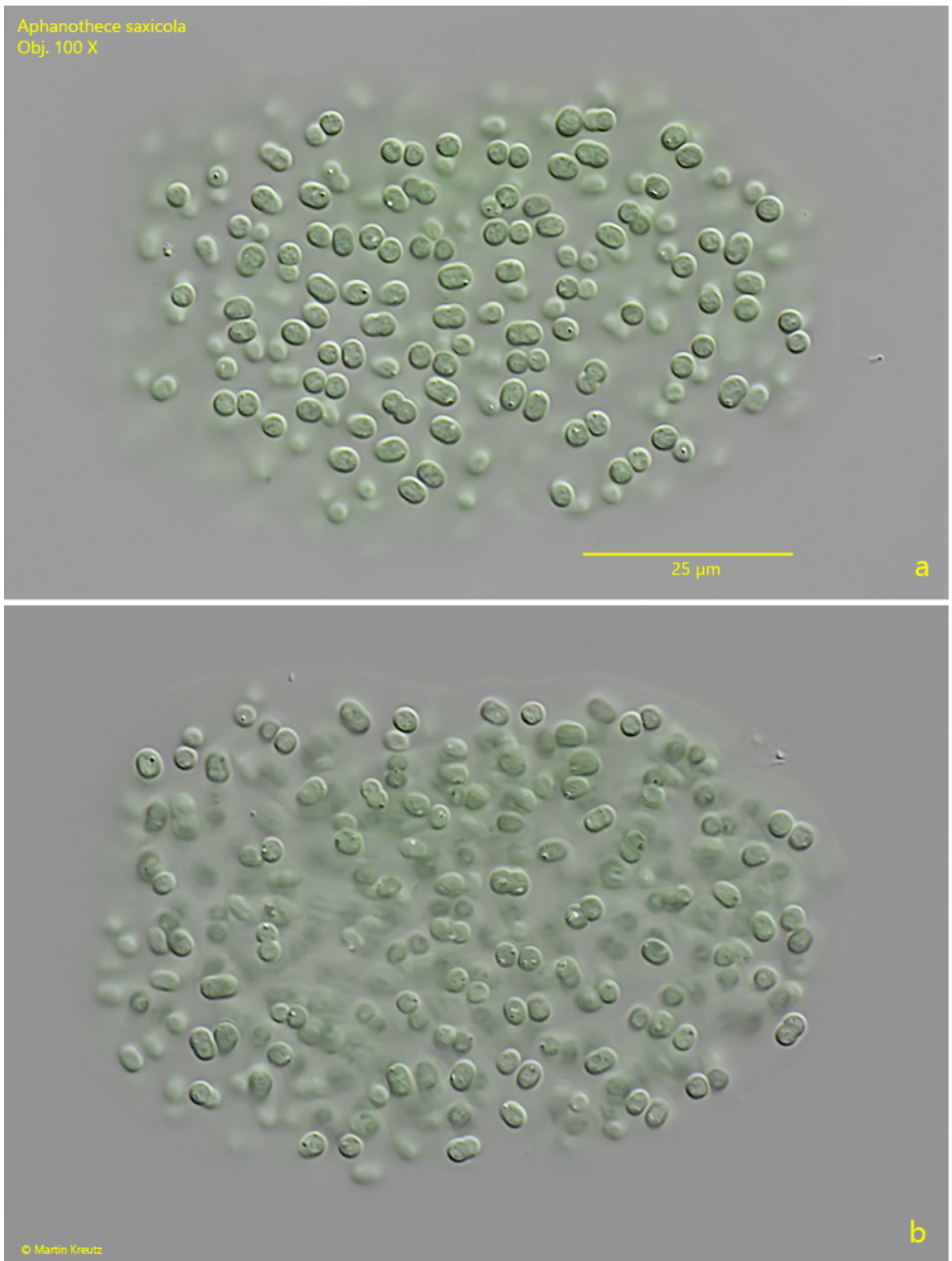
a

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b

Fig. 3 a-b: *Aphanothece saxicola*. L = 70 μm (of colony). Two focal planes of a colony from the [pond of the convent Hegne](). Obj. 100 X.
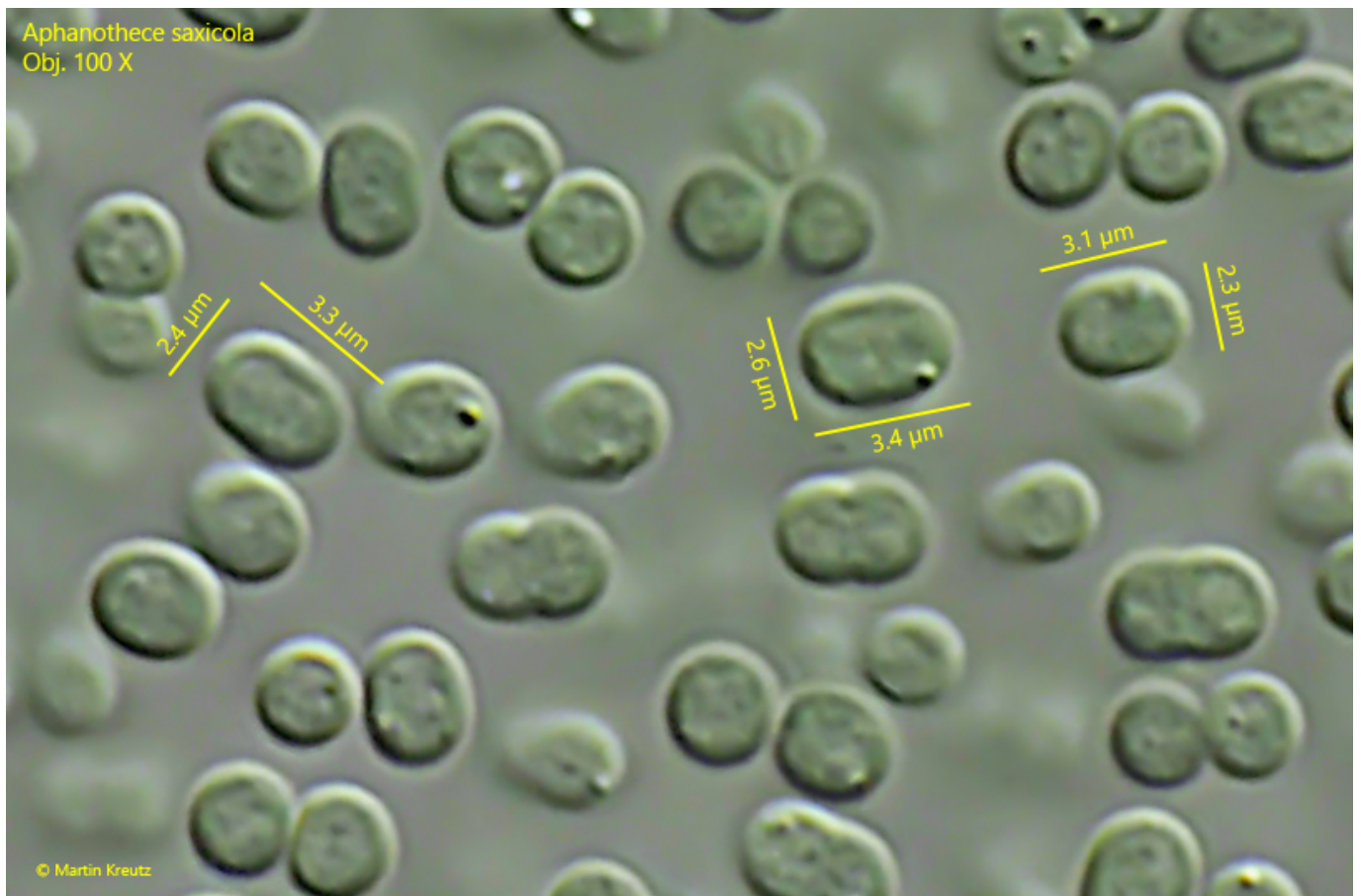

Fig. 4: *Aphanothece saxicola*. L = 3.3–3.7 μm (of cells). Image section of fig. 3 a. Obj. 100 X.

Fig. 5 a-b: *Aphanothece saxicola*. L = 77 µm (of colony). Two focal planes of a second colony from the pond of the convent Hegne. Obj. 100 X.

Fig. 6: *Aphanothece saxicola*. L = 3.1–3.4 µm (of cells). Image section of fig. 5 a. Obj. 100 X.