***Ankistrodesmus arcuatus* Korshikov, 1953**

Most likely ID: n.a.

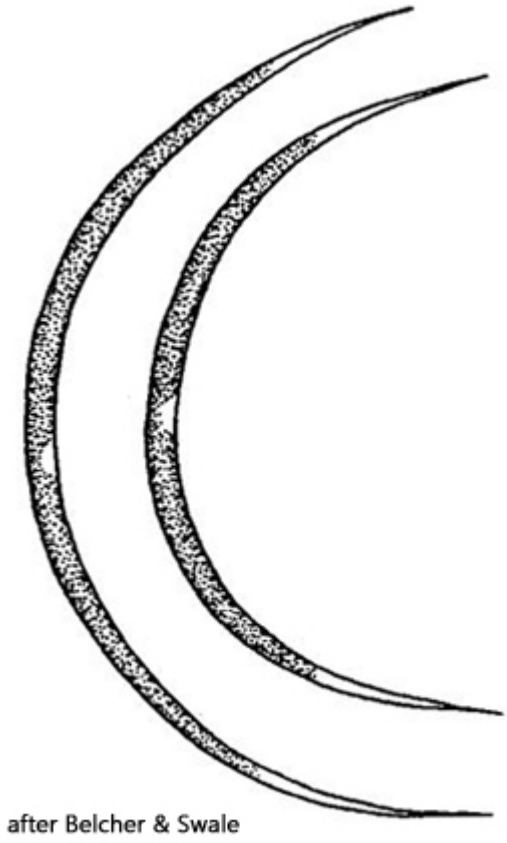
Synonym: *Monoraphidium arcuatum*

Sampling location: Pond of the convent Hegne

Phylogenetic tree: *Ankistrodesmus arcuatus*

Diagnosis:

- cells elongated spindle-shaped, circularly curved or sigmoid
- cells connected via the convex sides
- length 26–90 µm, width 2–4.4 µm
- one parietal chloroplast
- pyrenoid absent
- nucleus central in notch of chloroplast



Ankistrodesmus arcuatus

So far, I have only found *Ankistrodesmus arcuatus* in the pond of the convent Hegne, where the species is, however, rare. Due to its slender and strongly curved shape, the alga is easy to recognize. There is only one chloroplast present, which lies against the convex side of the cell (s. fig. 3 b). In the middle of the concave side is the very small nucleus, which is often located in an indentation of the chloroplast (s. fig. 3 a). After cell division, the daughter cells remain connected by their concave sides before these aggregates later break down into individual cells (s. fig. 1 a).

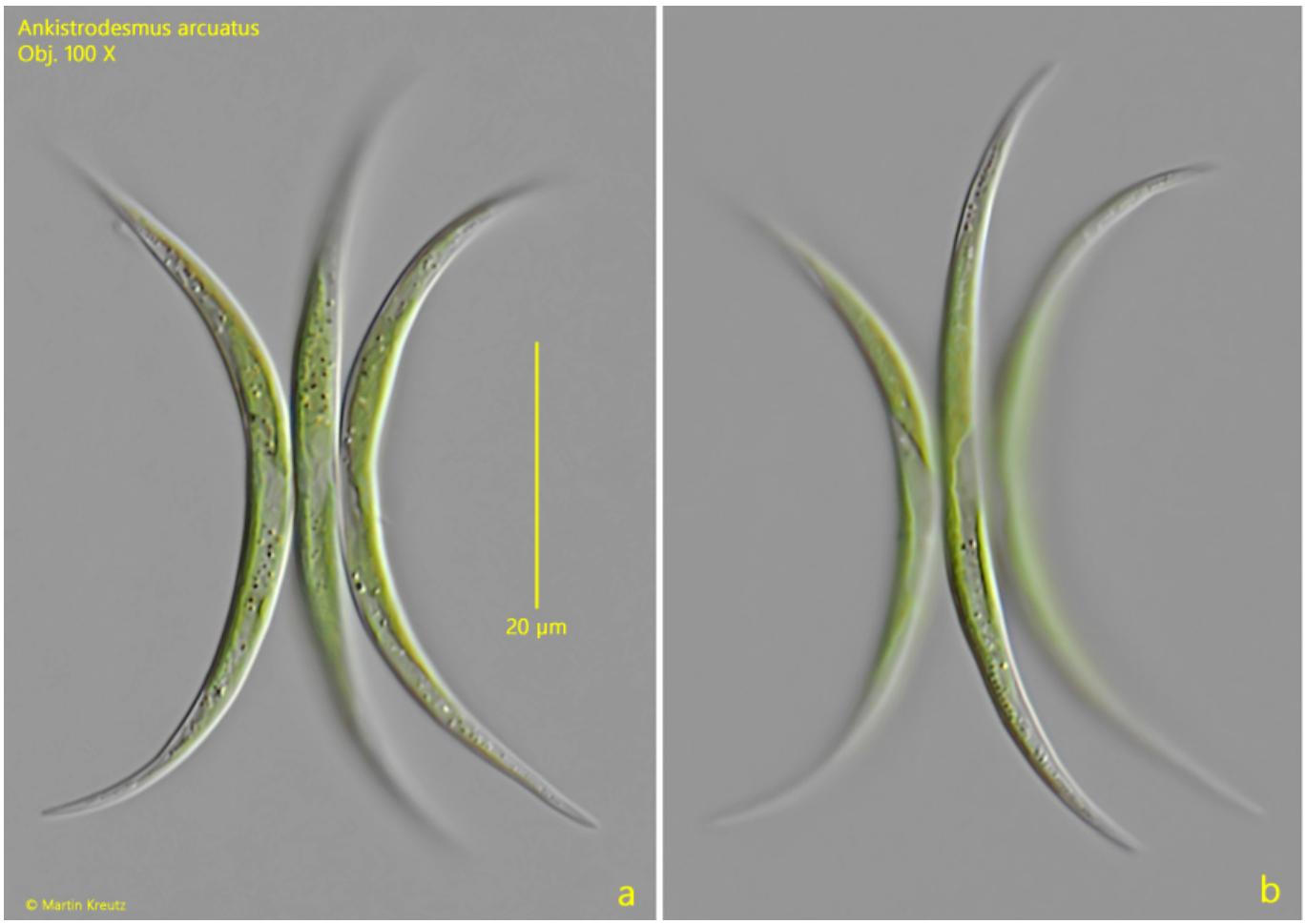


Fig. 1 a-b: *Ankistrodesmus arcuatus*. L = 50–60 µm. Two focal planes of 3 specimens connected with their convex sides. Obj. 100 X.

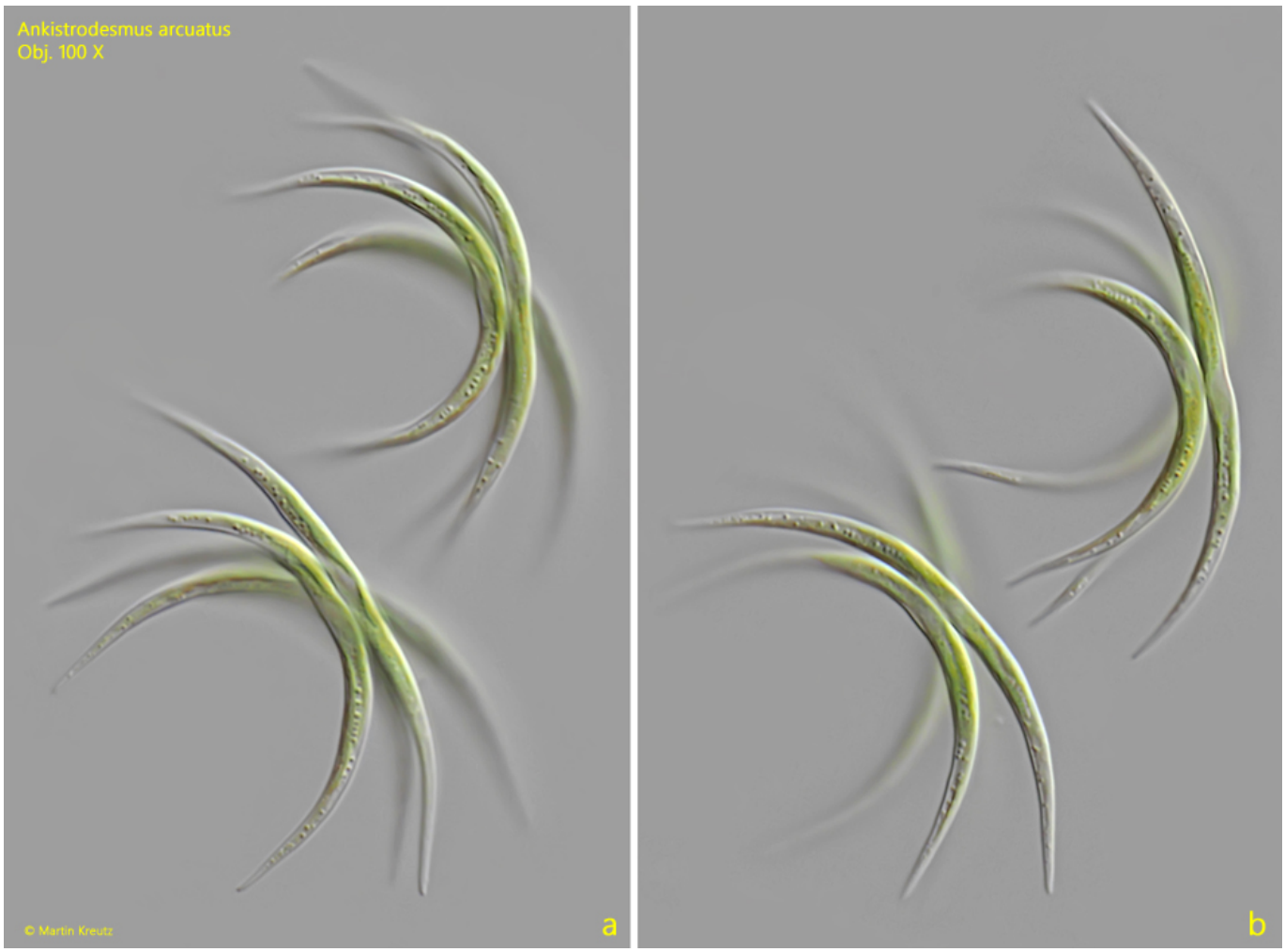


Fig. 2 a-b: *Ankistrodesmus arcuatus*. L = 50–60 µm. Two colonies of 4 cells each. Obj. 100 X.

Fig. 3 a-b: *Ankistrodesmus arcuatus*. L = 50–60 µm. Four squashed cells. Note the very small nucleus (Nu) near the concave side of the cell. The single chloroplast (Chl) is attached to the convex side. SG = starch grains. Obj. 100 X.