Desmodesmus denticulatus

(Lagerheim, 1882) An, Friedl & Gegewald, 1999

Most likely ID: n.a.

Synonym: *Scenedesmus denticulatus*

Sampling location: Pond of the waste disposal company Constance

Phylogenetic tree: ***Desmodesmus denticulatus***

Diagnosis:

- colonies of 4 (2–8–16) alternating cells
- single cells 6–15 µm, 4–11 µm wide
- cells ovoid or narrowly oval
- cells with spiny projections at the apices
- cell wall smooth, granulated or ridged
- one pyrenoid per cell
- nucleus central



after Lagerheim

Desmodesmus denticulatus

I found *Desmodesmus denticulatus* in the plankton of the strongly eutrophic pond of

the waste disposal company Constance. This pond is fed by the purified water of the sewage plant, which is still very rich in nutrients. *Desmodesmus denticulatus* can be identified by the compact shape of mostly 4 cells. The two terminal cells bear short spines on both apices, while the middle cells bear spines only on one side. The colonies are quite small with a length of about 15–25 µm. In my population the cell wall of the specimens was always finely granulated. There is probably some variability here, as this can also be smooth or ridged.

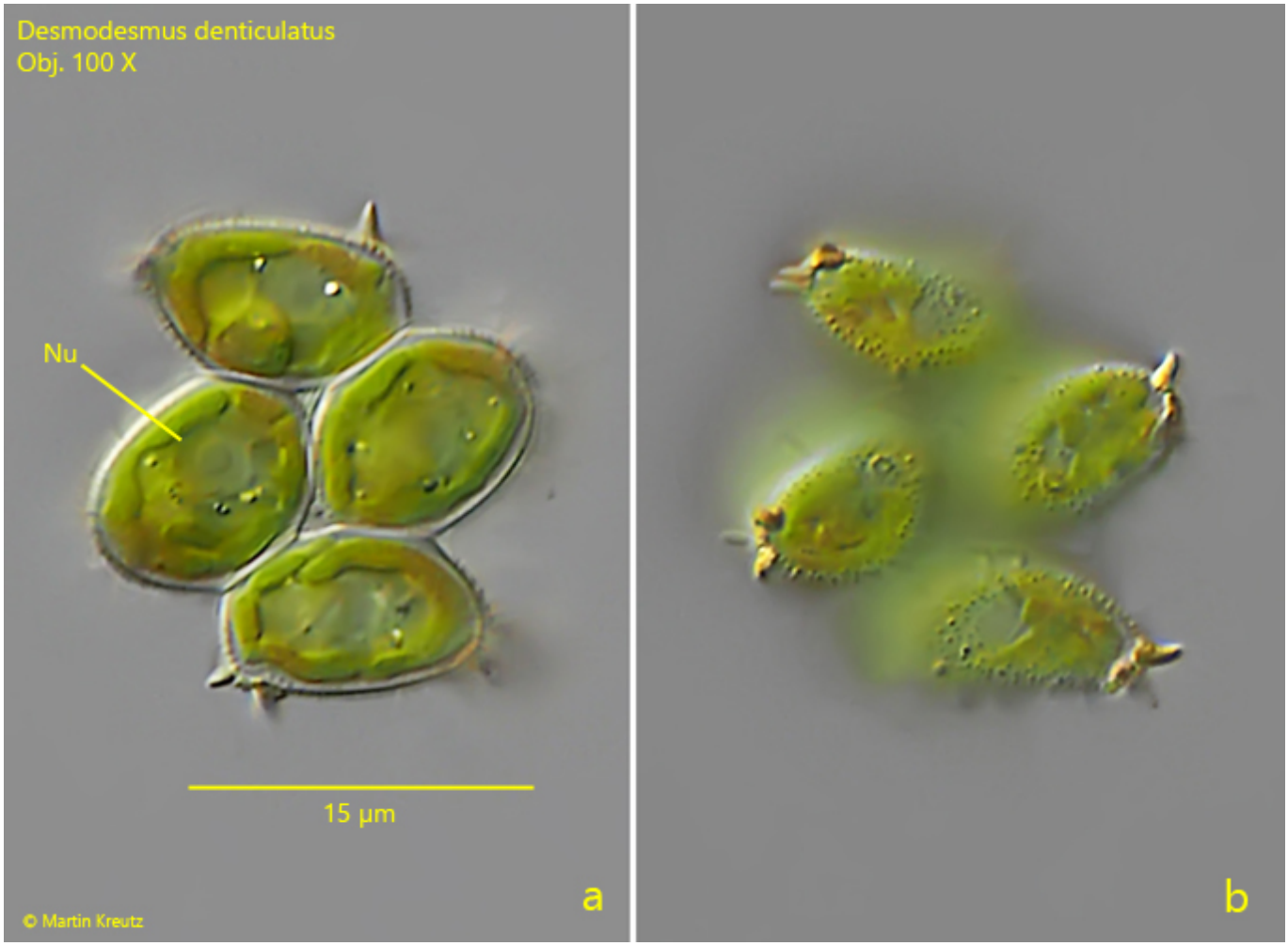


Fig. 1 a-b: *Desmodesmus denticulatus*. L = 23 µm (of the colony). Two focal planes of a slightly squashed specimen. Note the brownish colored, short spines at the apices of the cells. The cell wall is finely granulated (s. fig. 2b). Nu = nucleus. Obj. 100 X.

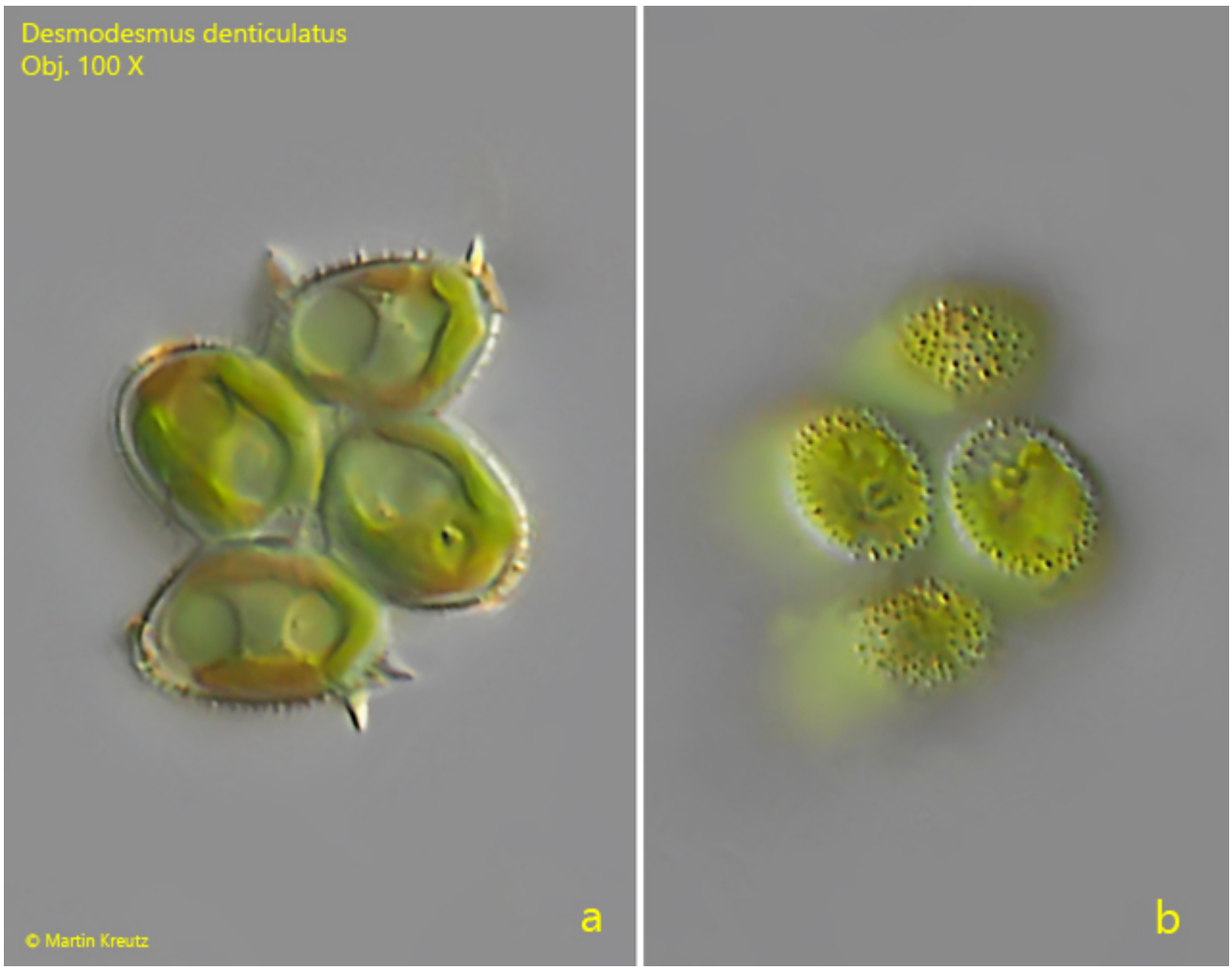


Fig. 2 a-b: *Desmodesmus denticulatus*. L = 20 µm (of the colony). Two focal planes of a second colony. The cell wall of this specimen was also finely granulated (s. fig. 2b). Obj. 100 X.