Hyalotheca dissiliens

Brébisson ex Ralfs 1848

Most likely ID: n.a.

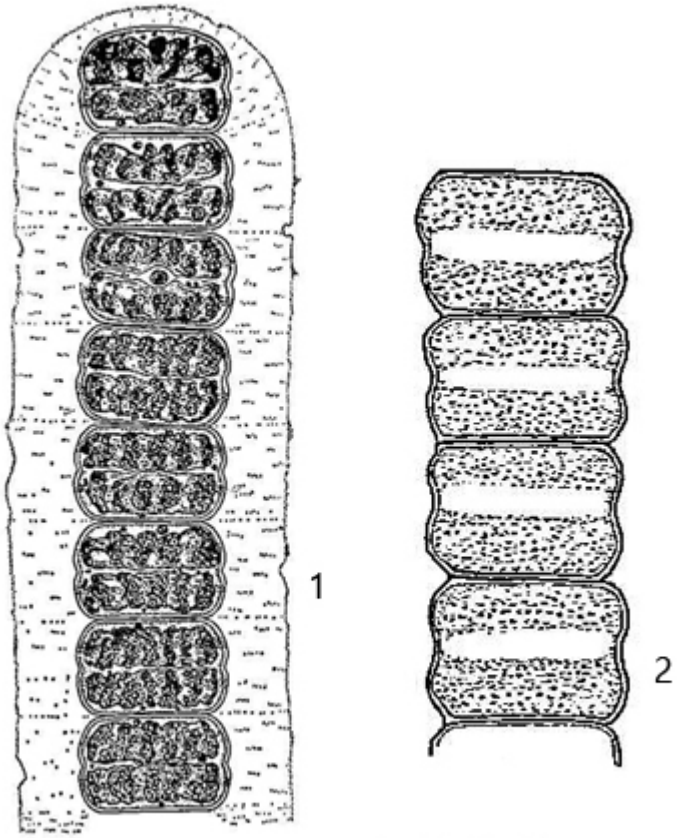
Synonym: n.a.

Sampling location: Simmelried, Ulmisried, Paradieswiesen

Phylogenetic tree: *Hyalotheca dissilens*

Diagnosis:

- cells subcylindrical, lateral margings slightly constriczed
- length 15–25 µm, width 20–30 µm
- cells with two rings of pores
- filaments of cells covered with thick mucilage sheath
- one chloroplast per cell with one pyrenoid
- nucleus central



Hyalotheca dissiliens

The desmid alga *Hyalotheca dissiliens* is very common and sometimes occurs in masses. It then forms algal mats similar to *Spirogyra*. It is very easy to identify due to a typical constriction of the cell equator (s. fig. 3 a), which the similar species *Hyalotheca mucosa* lacks. In addition, the cell wall of *Hyalotheca dissiliens* has two rings of pores (s. fig. 3 b), which are sometimes hard to see. The cell filament is surrounded by a thick mucilage sheath, which has typical radial stripes.

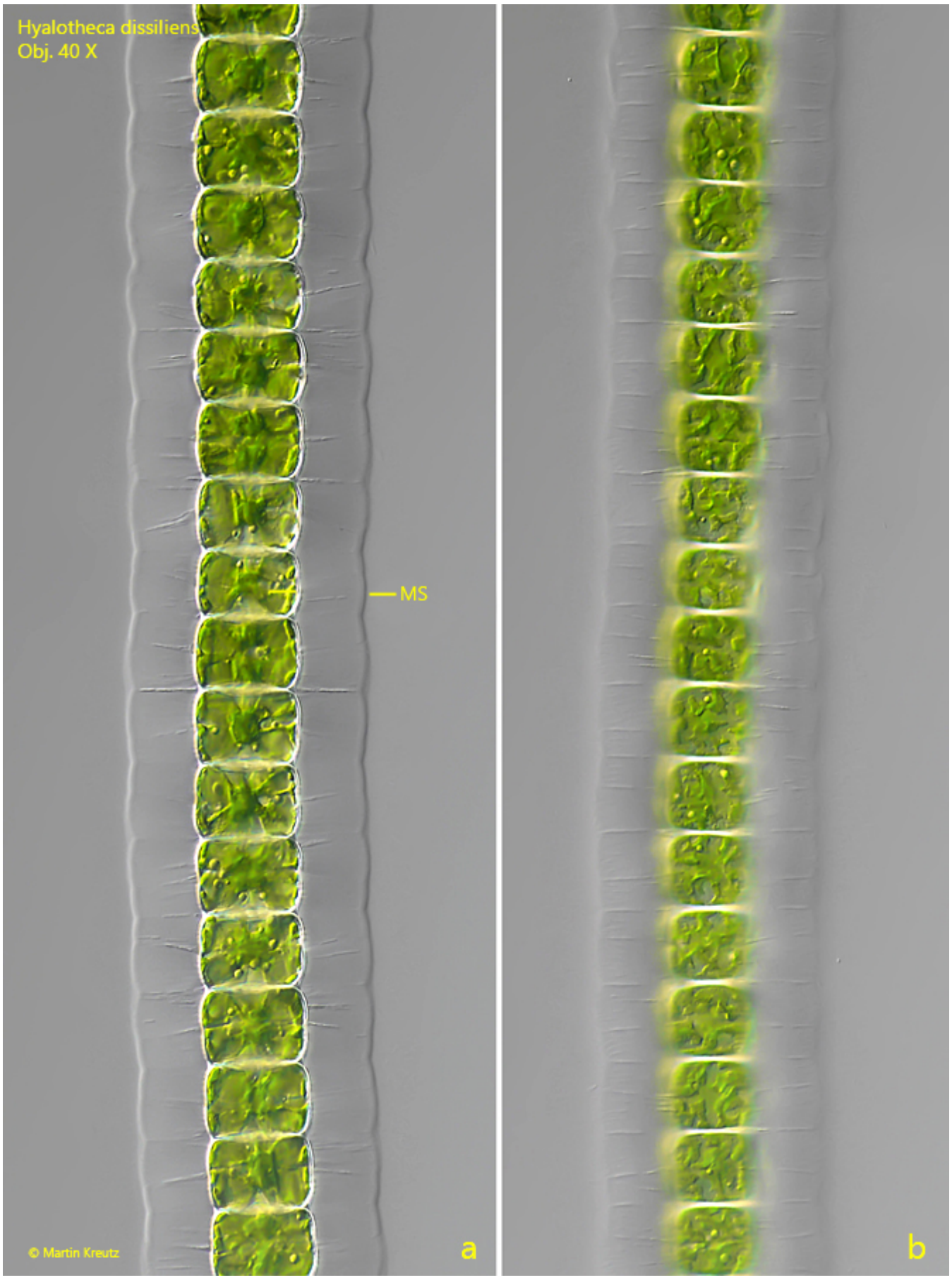


Fig. 1 a-b: *Hyalotheca dissiliens*. L = 19 µm (of cells). Two focal planes of a filament of cells. Note the mucilage sheath (MS) with a thickness of about 18 µm. Obj. 40 X.

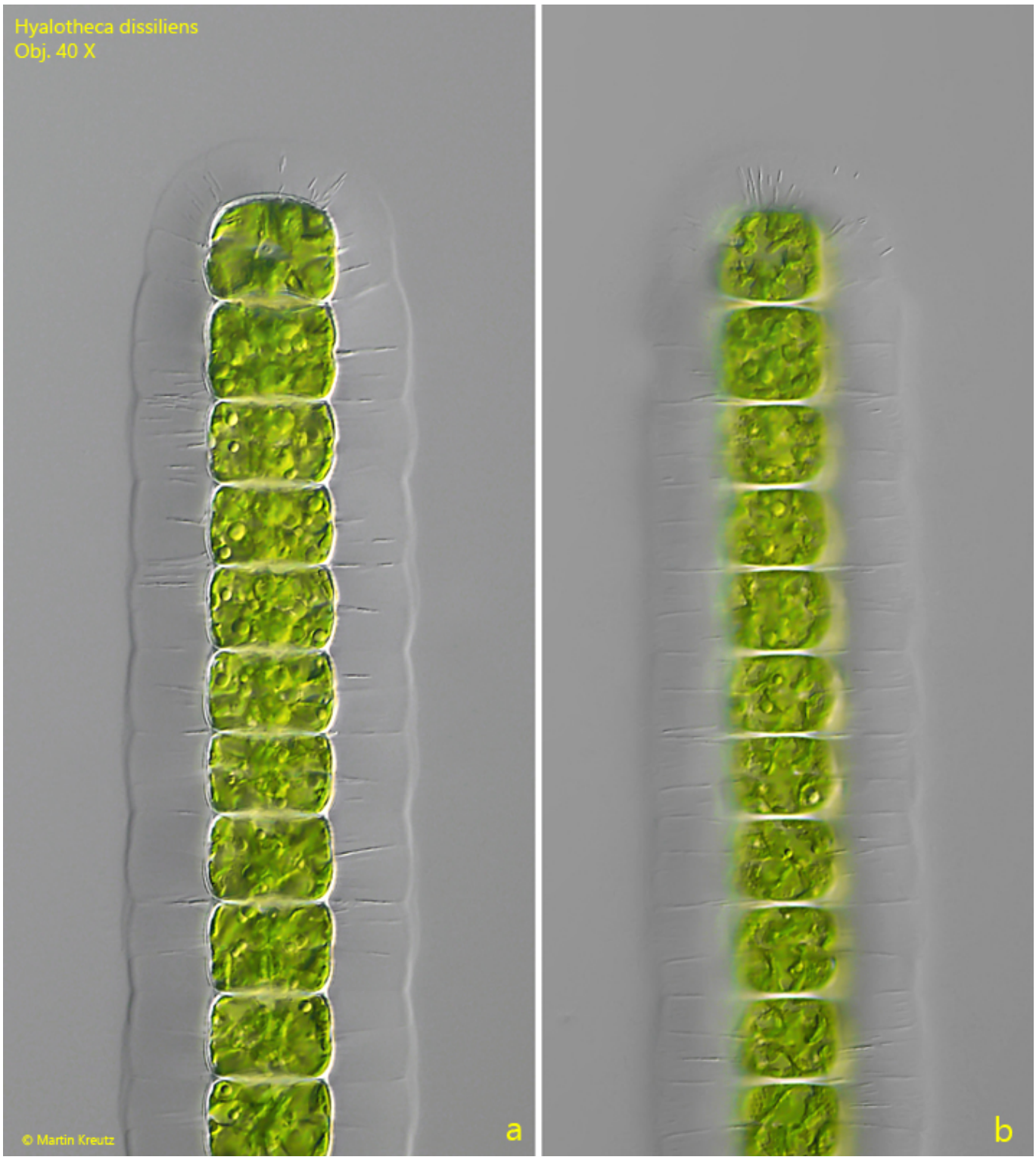


Fig. 2 a-b: *Hyalotheca dissiliens*. L = 19 µm (of cells). Two focal planes of the end of the filament as shown in fig. 1 a-b. The terminal cells are broadly rounded. Obj. 40 X.

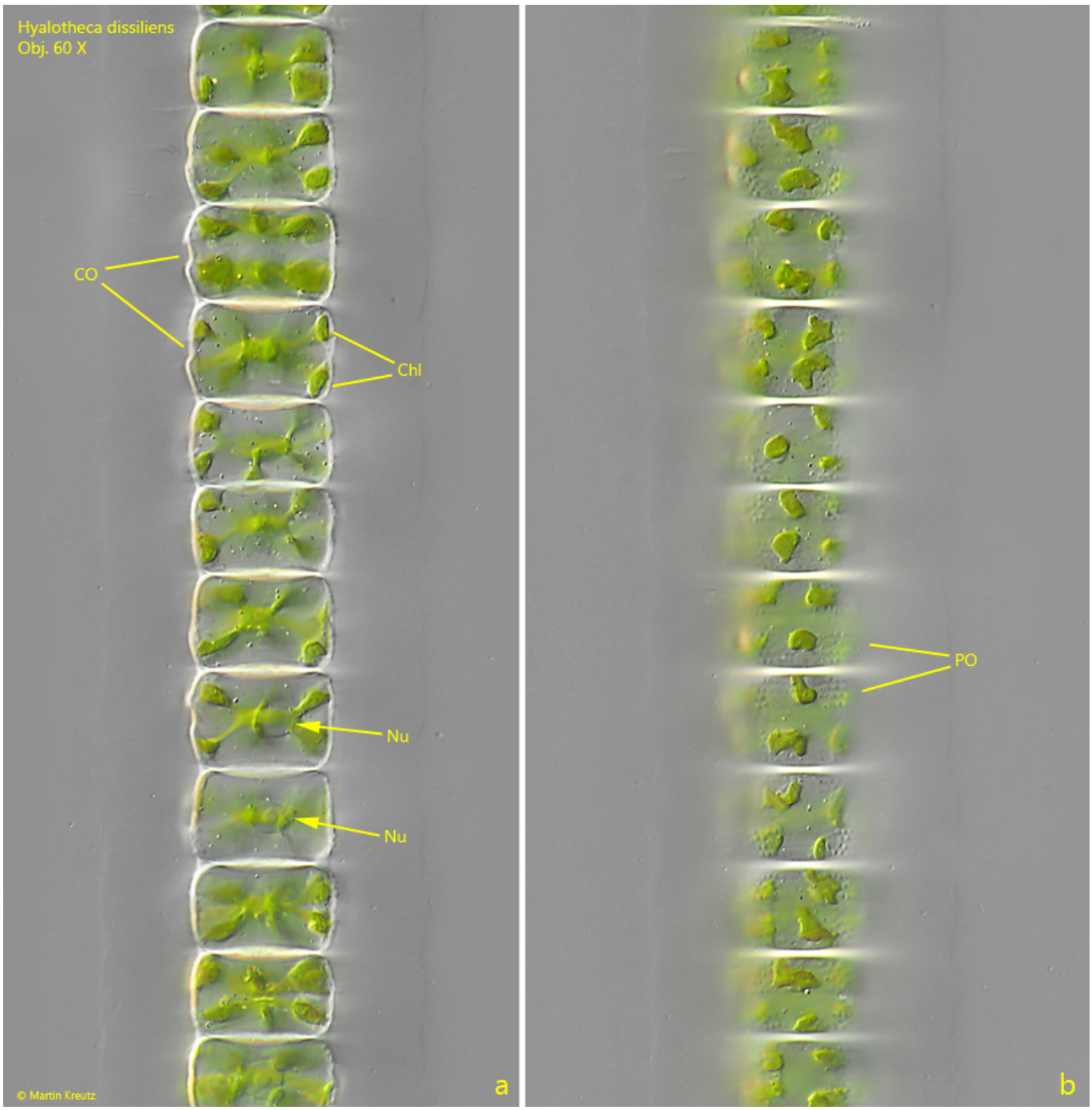


Fig. 3 a-b: *Hyalotheca dissiliens*. L = 15 µm (of cells). Two focal planes of a filament of young, transparent cells. Note the central nucleus (Nu) in each cell and the cell wall with two rings of pores (PO). Chl = chloroplast, CO = constriction of the lateral margins. Obj. 60 X.

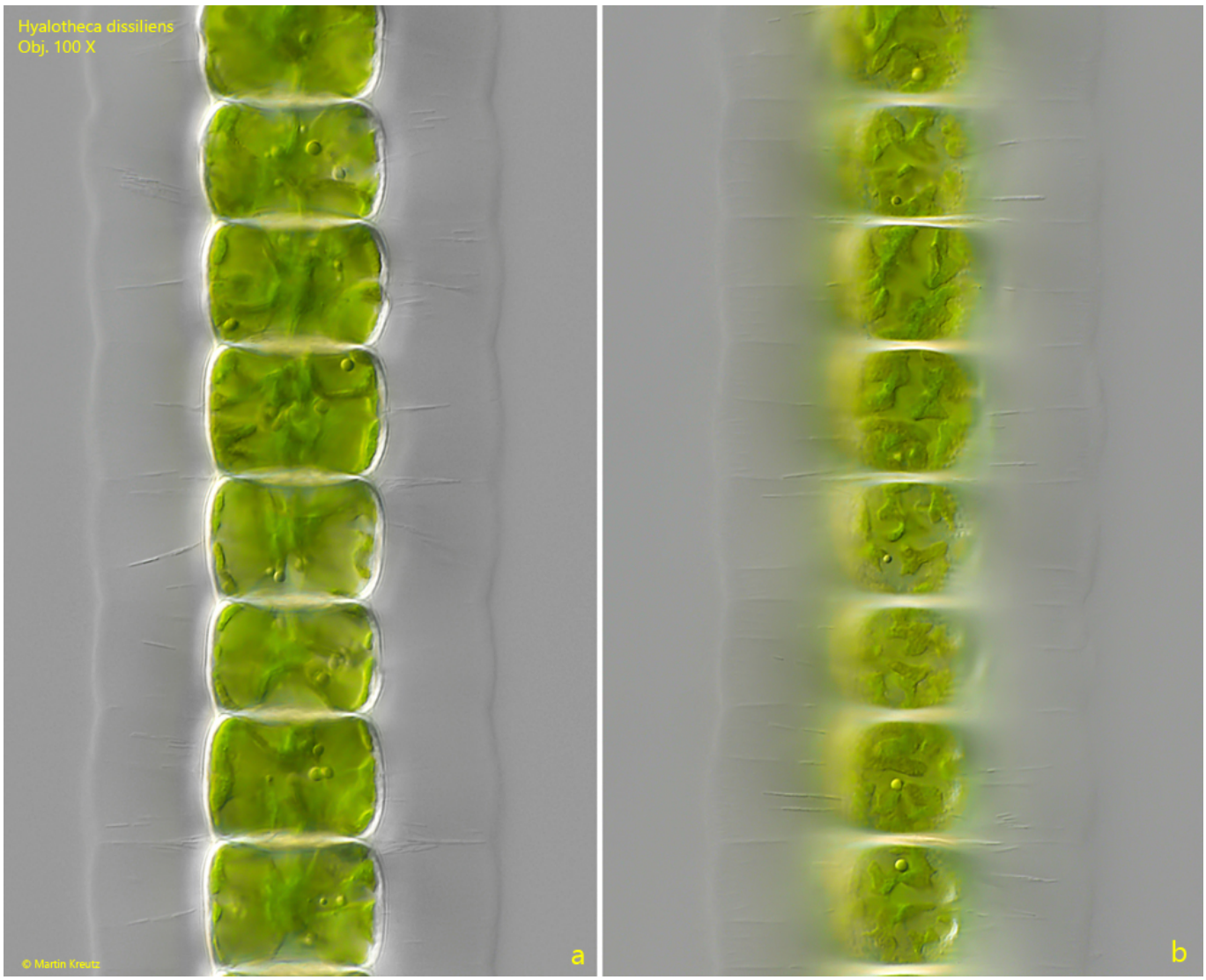


Fig. 4 a-b: *Hyalotheca dissiliens*. L = 19 µm (of cells). The slightly squashed filament as shown in fig. 1 a-b in detail. Obj. 100 X.