

***Stentor multiformis***

**(Müller, 1786) Ehrenberg, 1838**

**Most likely ID:** n.a.

**Synonym:** n.a.

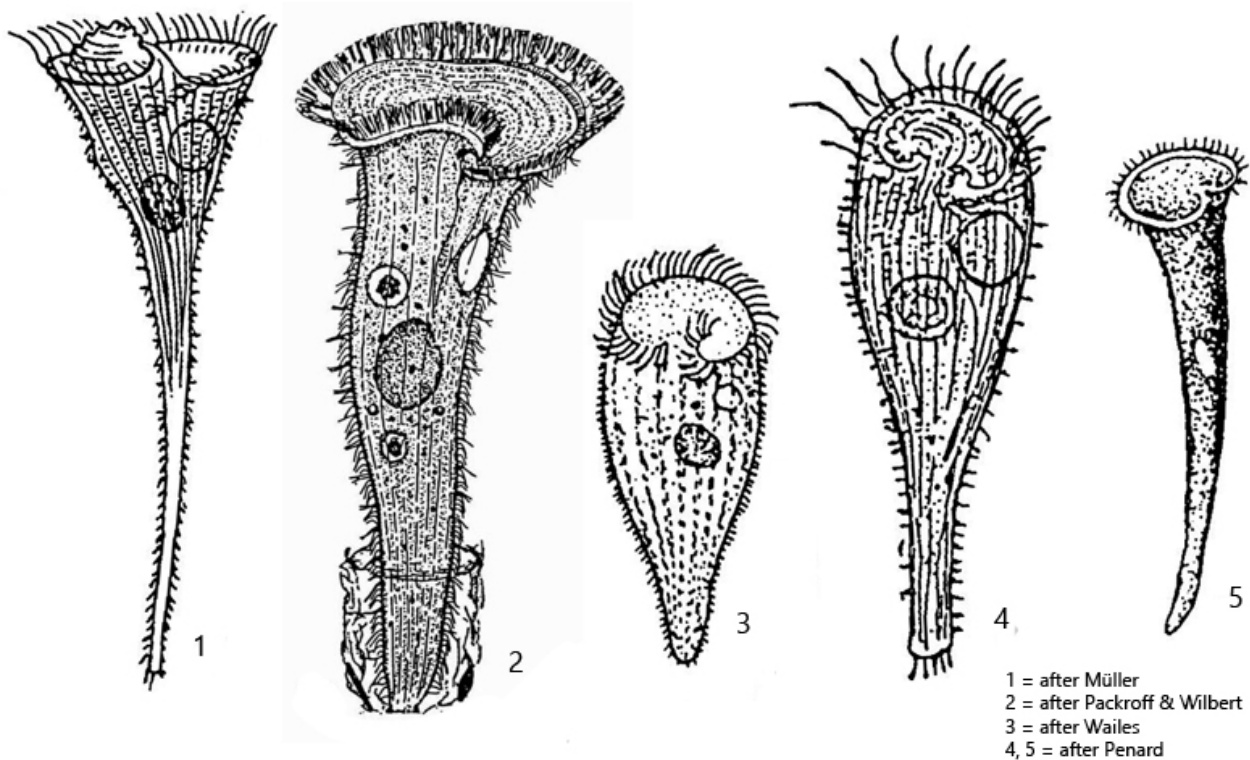
**Sampling location:** [Simmelried](#)

**Phylogenetic tree:** [Stentor multiformis](#)

**Diagnosis:**

- body elongated trumpet-shaped
- appears blueish to sea-green due to colored cortical granules
- no symbiotic algae
- length 200–500 µm (of elongated specimen)
- adoral membranelle running in clockwise to oral funnel
- attached with thigmotactic cilia to the substrate
- sometimes in a hyaline case, 200–300 µm long
- macronucleus globular in center of body
- many flattened micronuclei adjacent to the macronucleus

- contractile vacuole on left wall of oral funnel with short anterior and long posterior collecting duct
- presence of hyaline case not confirmed



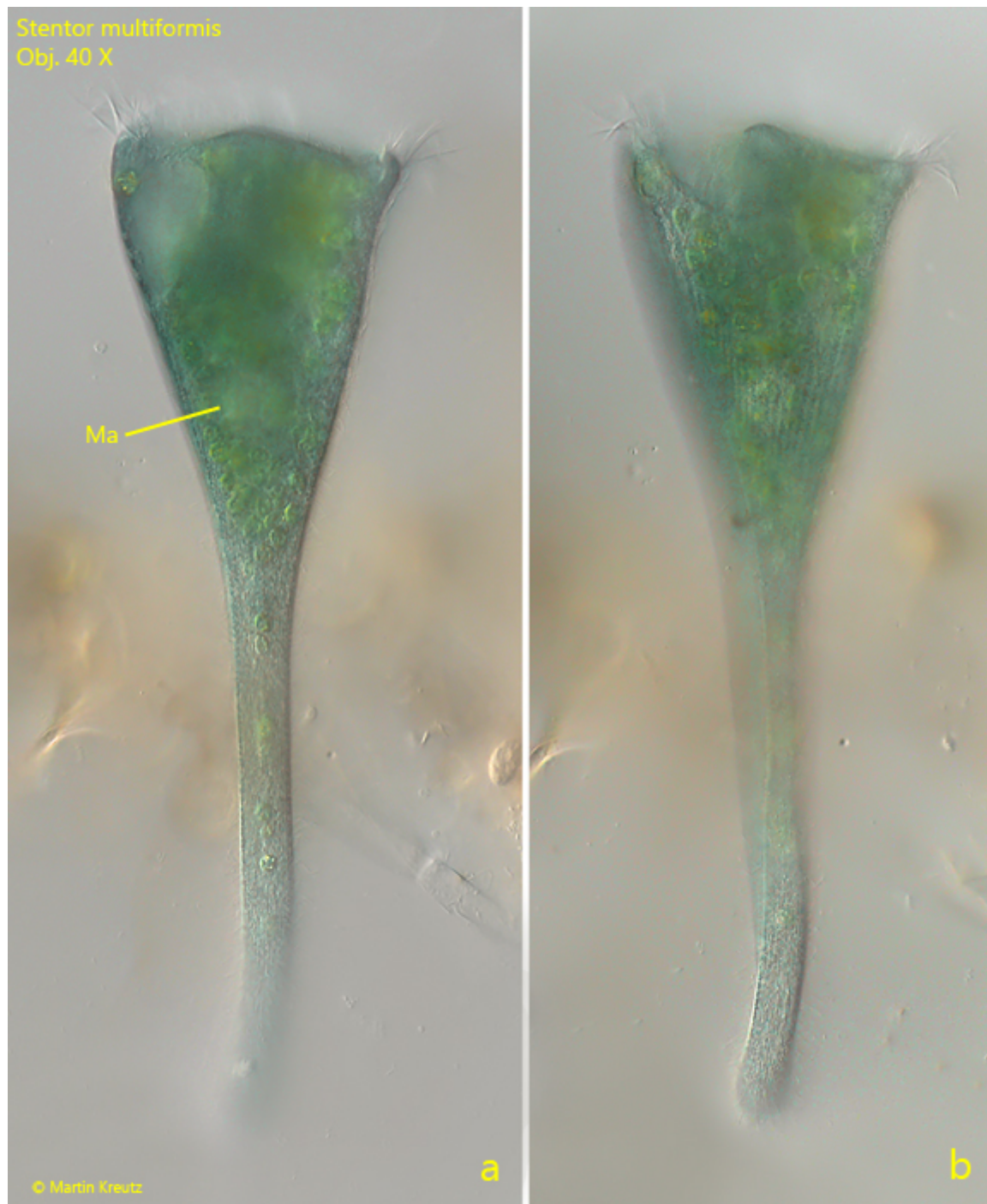
*Stentor multififormis*

*Stentor multififormis* is one of the *Stentor* species that I find comparatively rarely. So far I have only found *Stentor multififormis* in the mud of the [Simmelried](#).

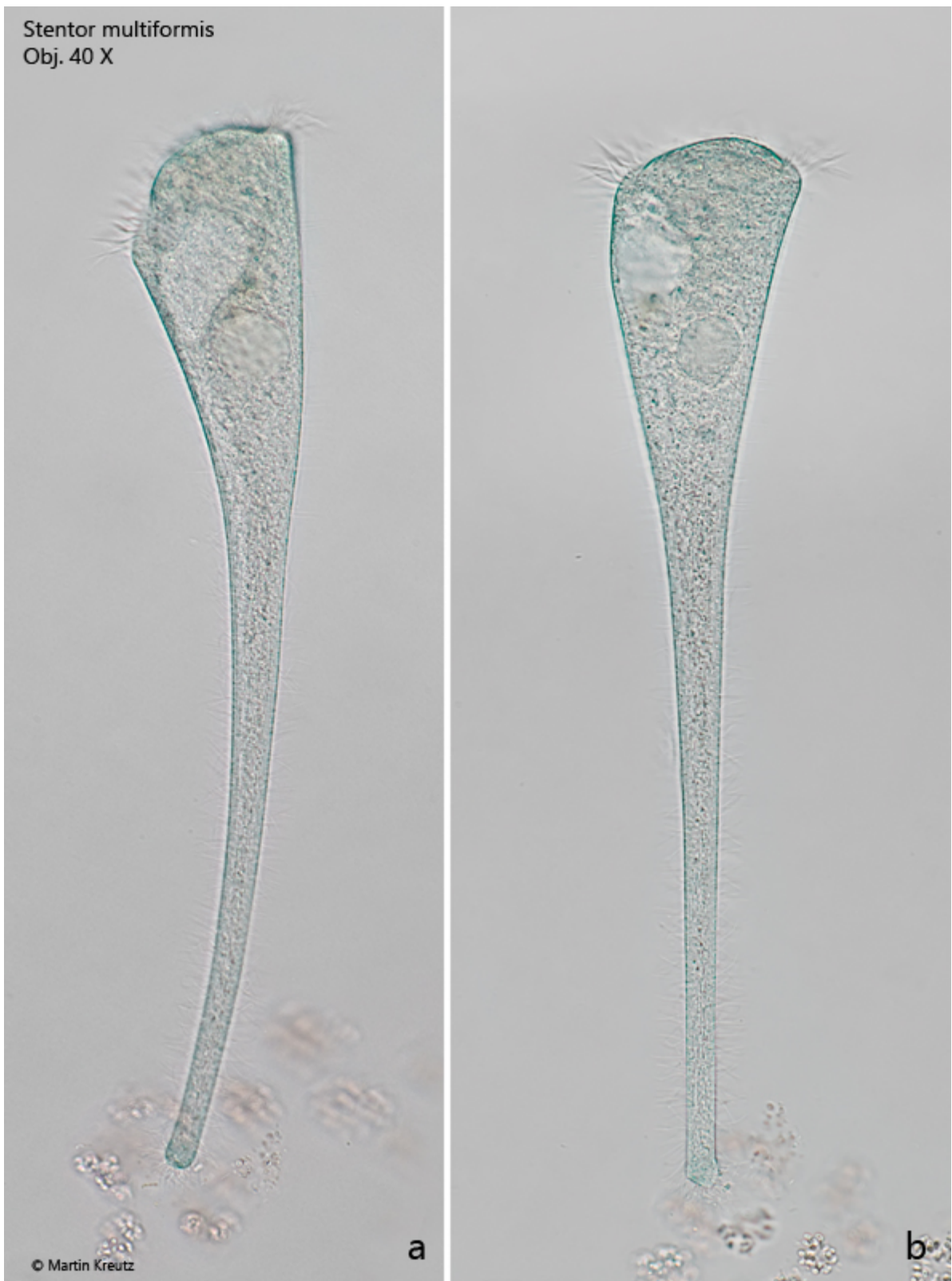
The main characteristics of *Stentor multififormis* are a blueish or sea-green coloration and a spherical macronucleus in the middle of the cell. Due to its blueish coloration, it can easily be confused with *Stentor coeruleus*. However, *Stentor coeruleus* has a moniliform macronucleus and is also 3-6 times larger than *Stentor multififormis*.

The specimens of my population of *Stentor multififormis* were mostly sea-green in color, although the intensity of the coloration varied greatly. In addition to intensely colored specimens (s. fig. 1 a-b), I also found almost colorless ones (s. fig. 4 a-b). I could not exactly determine the number of micronuclei attached to the macronucleus, but there were more than 5. The shape of the micronuclei is described as flattened by Foissner et al. (1992). I could not recognize such a flattening in my specimens. Rather, they appeared to be spherical (s. fig. 5). The outstretched specimens of my population were mostly 300-320 µm

long.

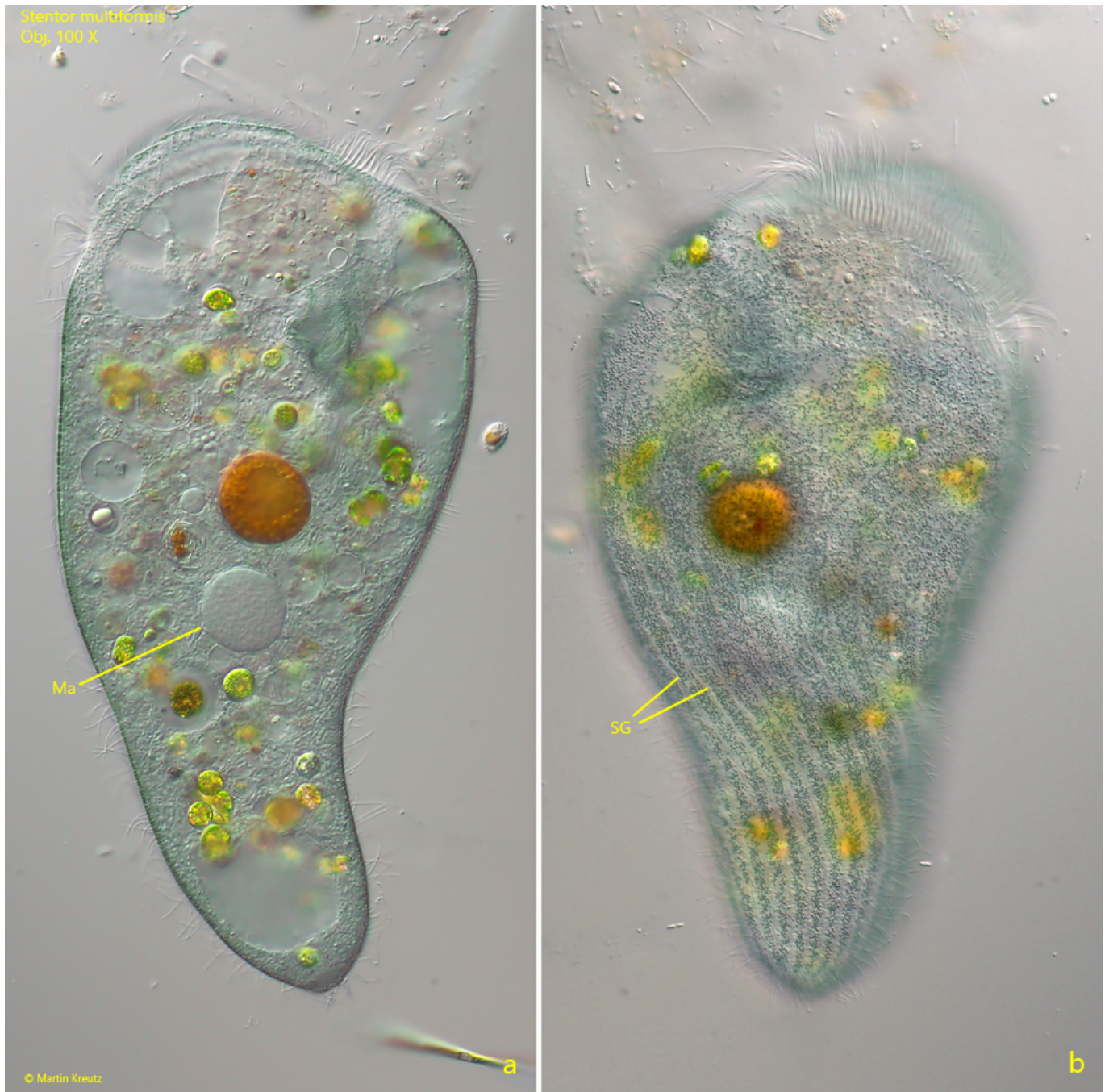


**Fig. 1 a-b:** *Stentor multiformis*. L = 360  $\mu$ m. A fully elongated specimen with an intense sea green color. Obj. 40 X.



**Fig. 2 a-b:** *Stentor multiformis*. L = 350  $\mu$ m. A second elongated specimen with a faint coloration. Obj. 20 X.



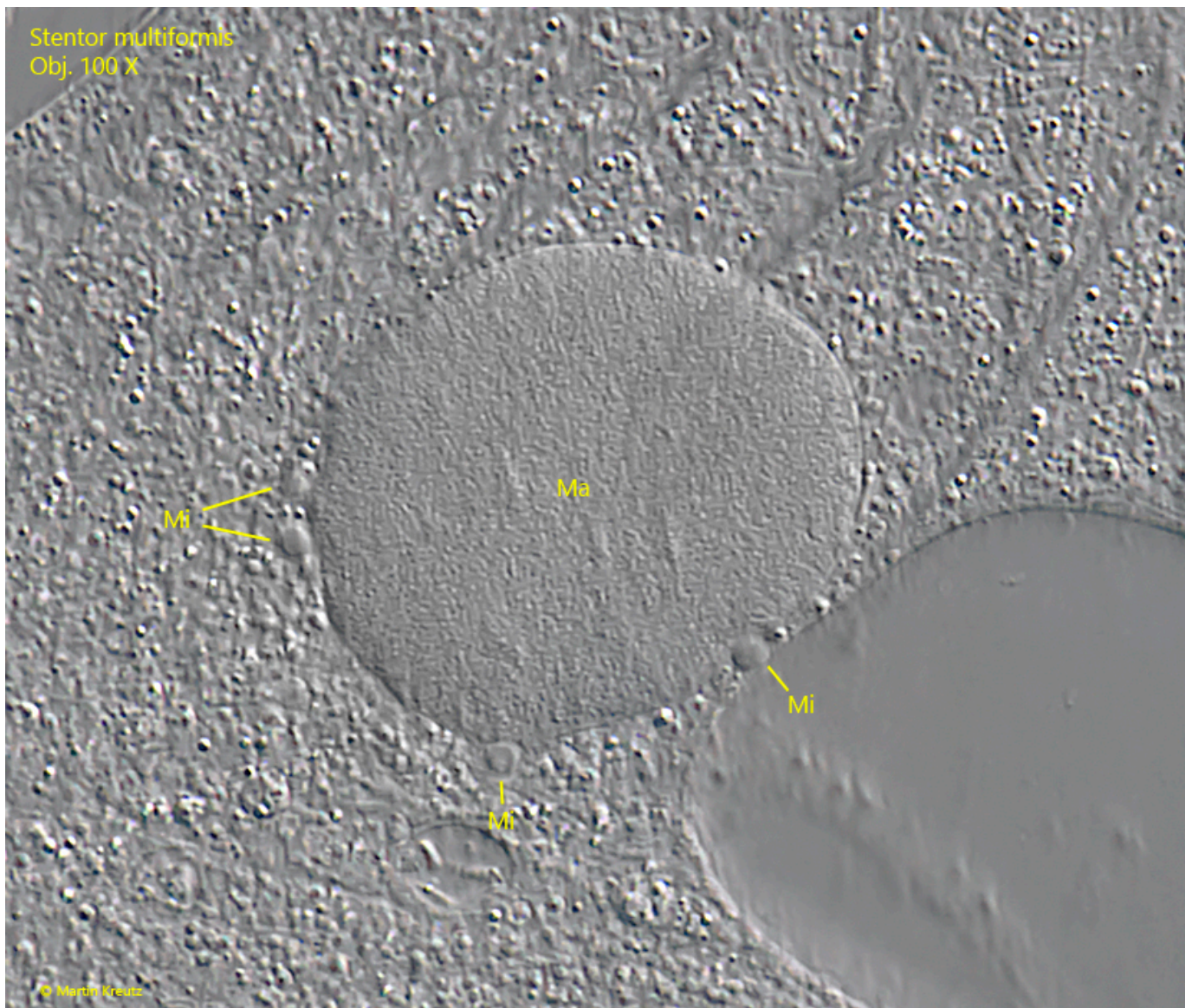


**Fig. 3 a-b:** *Stentor multiformis*. Two focal planes of a slightly squashed specimen. Note the sea green coloration and the centrally located spherical macronucleus (Ma). Obj. 100 X.



**Fig. 4 a-b:** *Stentor multiformis*. L = 105  $\mu$ m. A slightly squashed, contracted specimen. This specimen is almost colorless with only a few colored cortical granules (CG). Ma = macronucleus. Obj. 100 X.





**Fig. 5:** *Stentor multiformis*. The spherical macronucleus (Ma) in a strongly squashed specimen with some of the adjacent micronuclei (Mi). Obj. 100 X.