Chaos nobile

(Penard, 1902) Bovee & Jahn, 1973

Most likely ID: n.a.

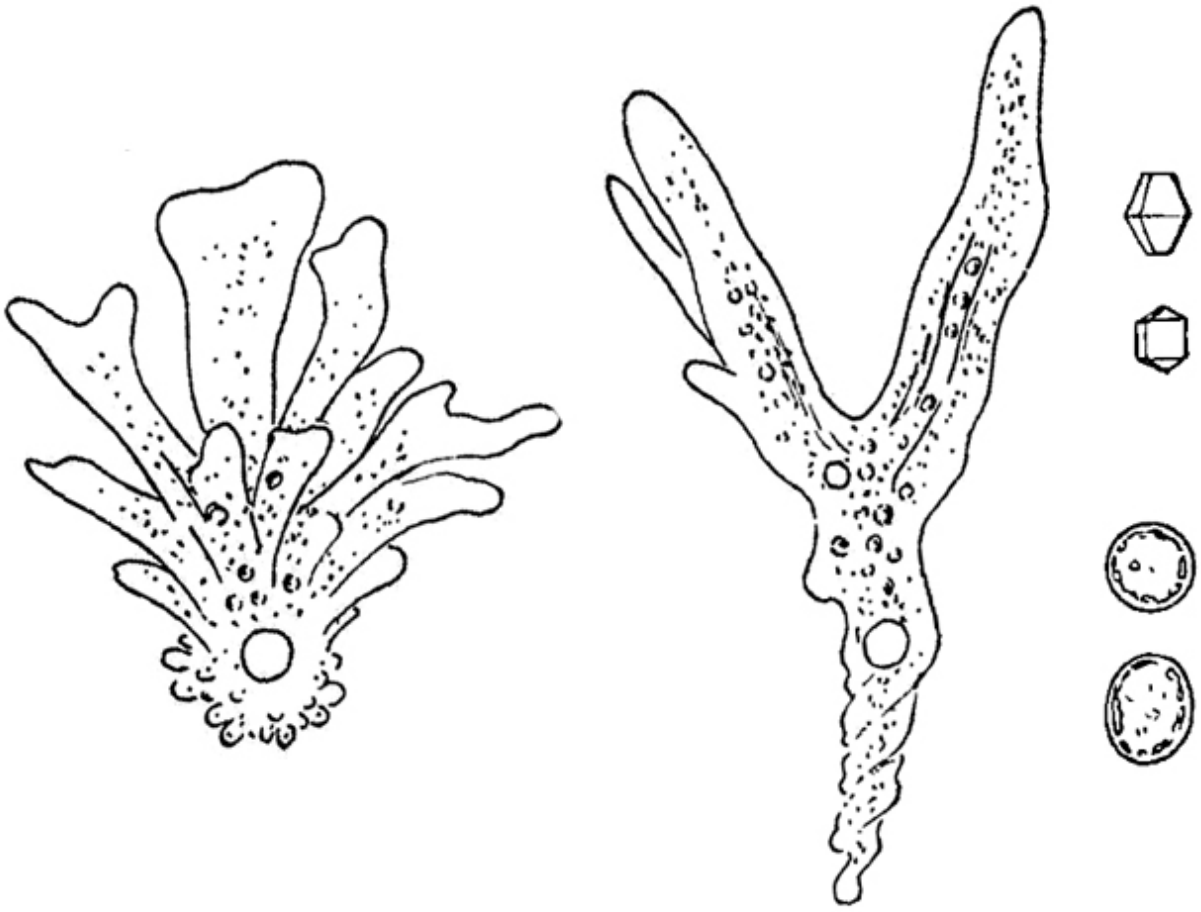
Synonym: n.a.

Sampling location: Simmelried

Phylogenetic tree: *Chaos nobile*

Diagnosis:

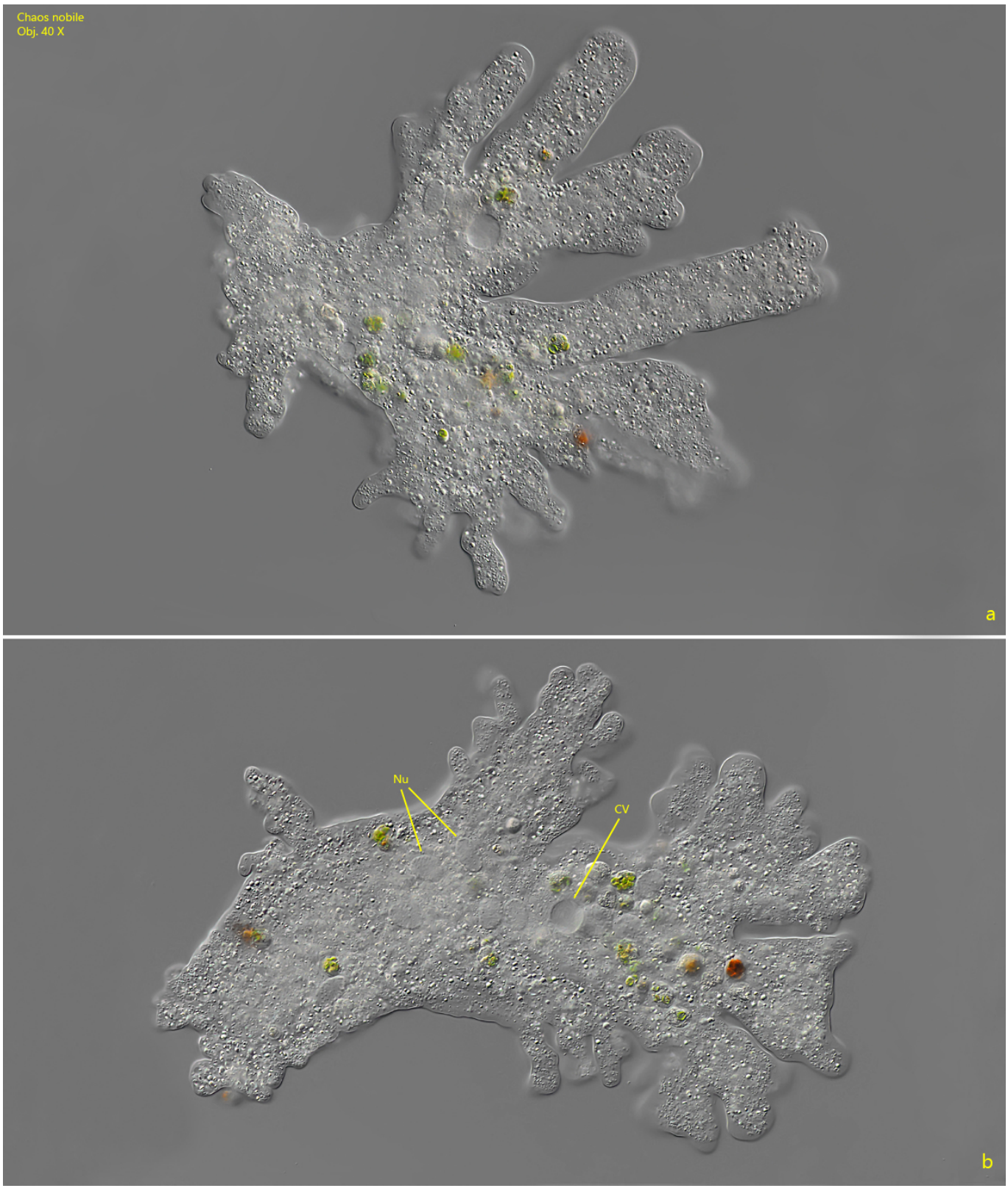
- body polypodial
- length 240–820 µm
- about 6–49 nuclei with small nucleoli mainly covering surface
- one contractile vacuole, mainly near center
- nuclei spherical or oval, sometimes with convex depression, 15–23 µm
- numerous crystals scattered in cytoplasm, mainly bipiramidal
- uroid bulbous



Chaos nobile

I find *Chaos nobile* frequently and regularly in the Simmelried. The polypodial form is easy to confuse with the common *Amoeba proteus*, but *Chaos nobile* is somewhat smaller and the pseudopodia are more delicate. The essential feature, however, are the nuclei. *Chaos nobile* has 6–49 of these, but in my specimens there were almost always fewer than 20. The nuclei are spherical or oval and have a layer of small nucleoli near the surface (s. fig. 3). There are also nucleoli in the nuclear volume itself, but fewer. The nuclei in my specimens were mostly oval and 15–17 µm long. There are also numerous crystals scattered in the cytoplasm. They are almost all bipyramidal in shape as described by Penard and Siemensma (s. fig. 4). *Chaos nobile* differs from the similar species *Chaos carolinense* in the number of nuclei and in size. *Chaos carolinense* has more than 1000 nuclei and is longer than 700 µm.

More images and information on *Chaos nobile*: Ferry Siemensma-Microworld-*Chaos nobile*


Chaos nobile
Obj. 40 X
a
Nu
CV
b

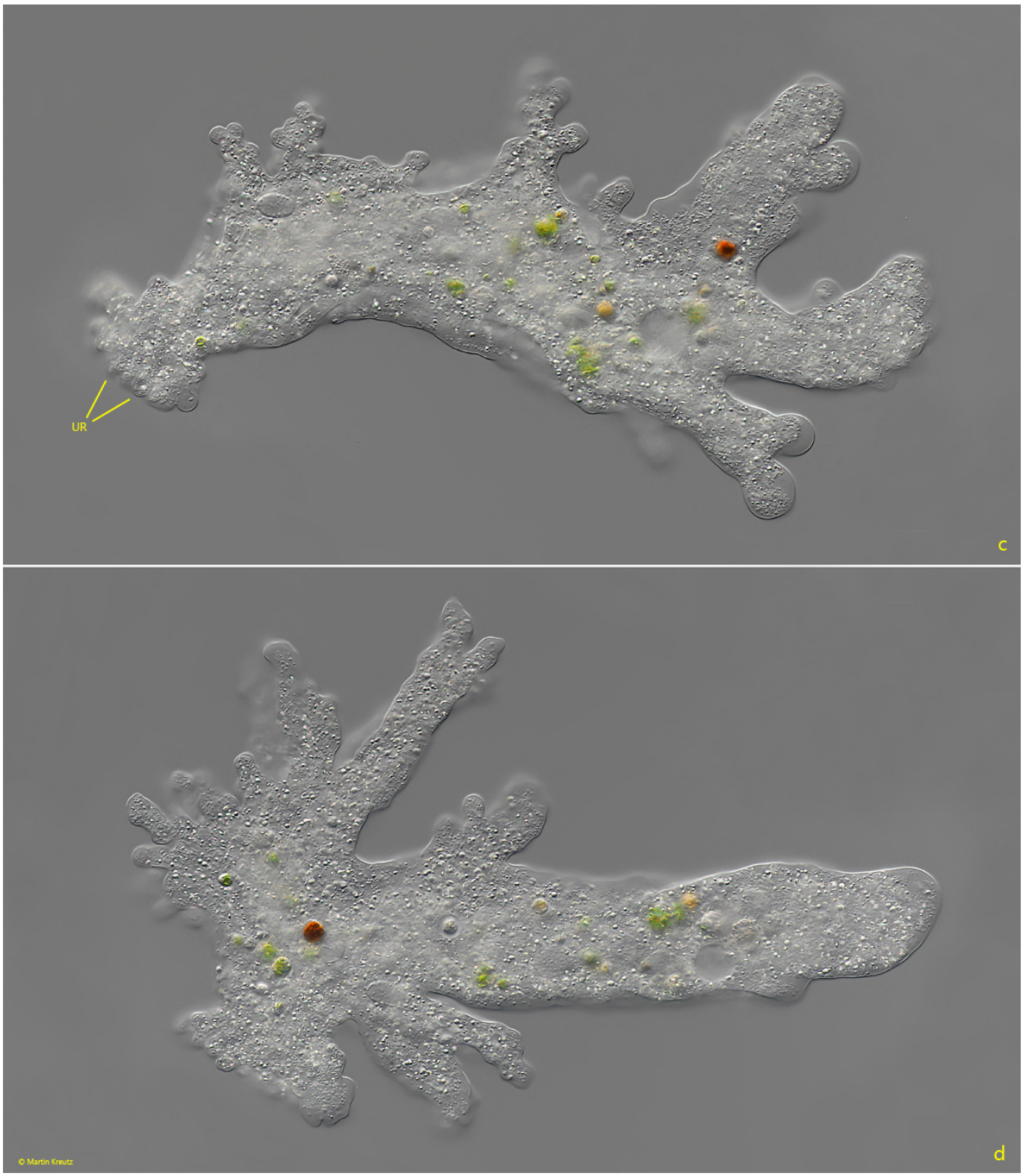


Fig. 1 a-d: *Chaos nobile*. L = 320 µm. Different stages of a freely floating, polypodial specimen. Note the oval nuclei near the center of the cell (s. fig. 1 b). CV = contractile vacuole, UR = uroid. Obj. 40 X.

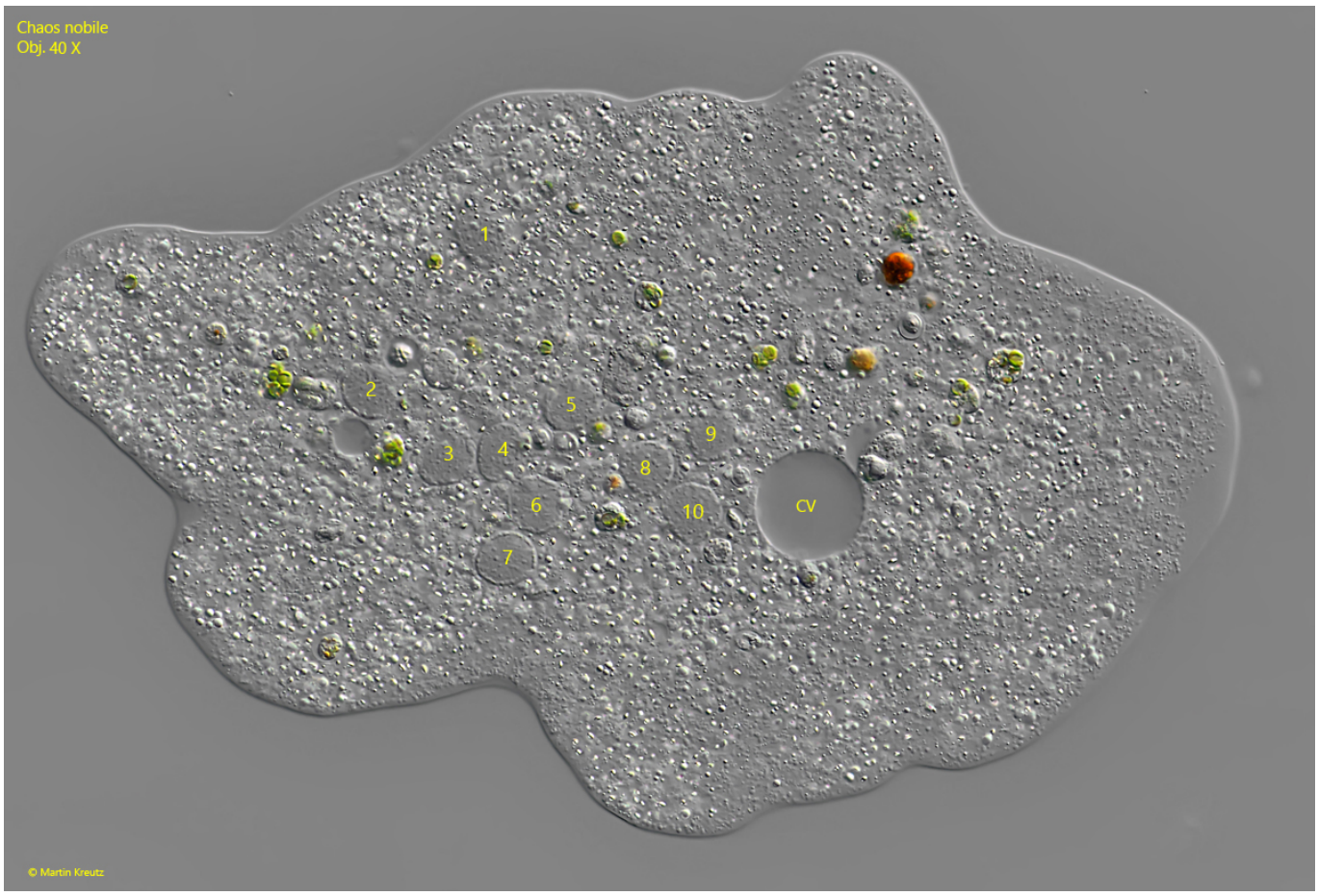


Fig. 2: *Chaos nobile*. The squashed specimen as shown in fig. 1 a-d. In this specimen 10 nuclei are present (1-10). CV = contractile vacuole. Obj. 40 X.

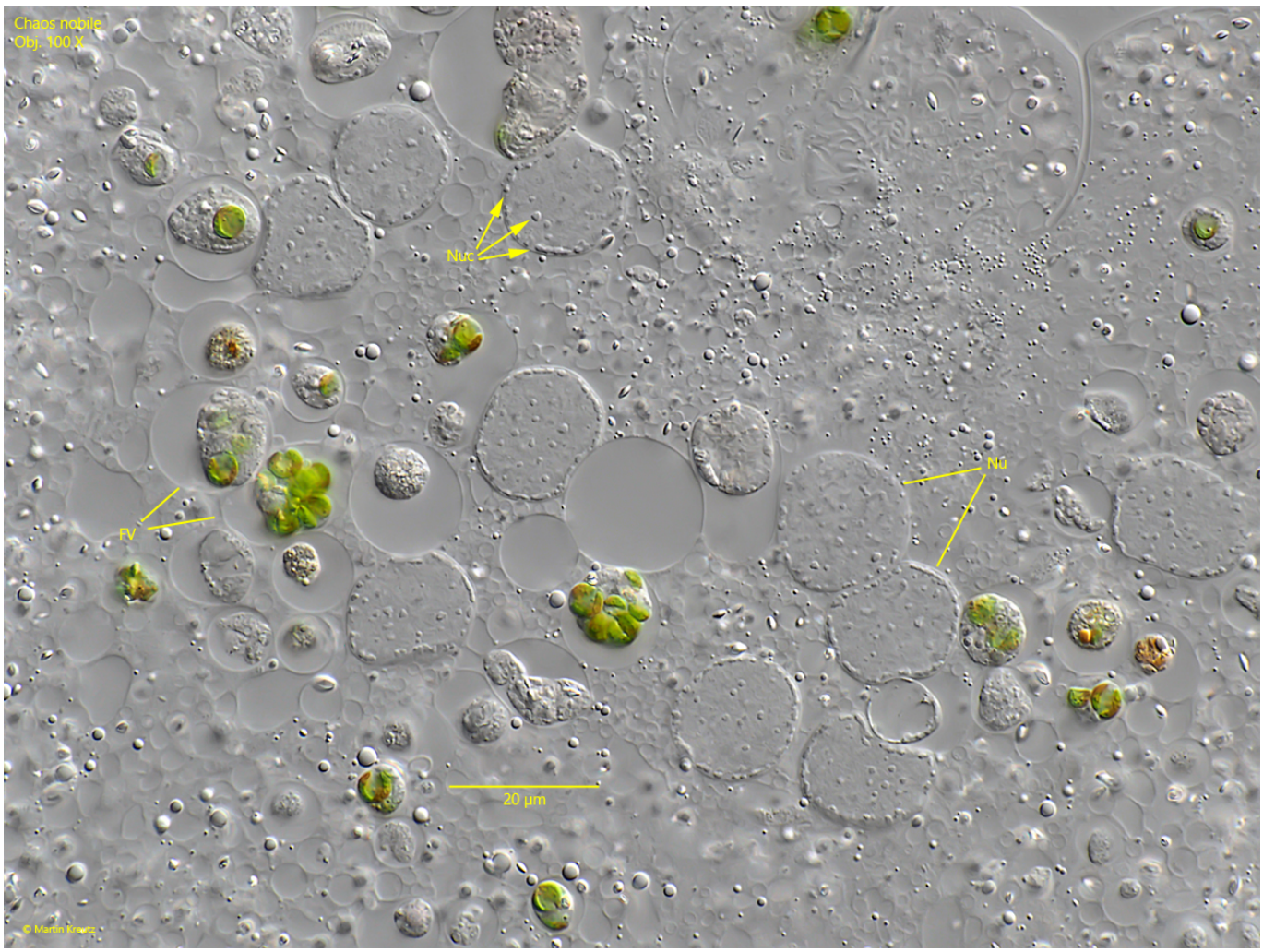


Fig. 3: *Chaos nobile*. The nuclei in detail. Small nucleoli (Nuc) are mainly arranged near the surface of the nuclei and some nucleoli are scattered in the nucleus volume. FV = food vacuoles. Obj. 100 X.

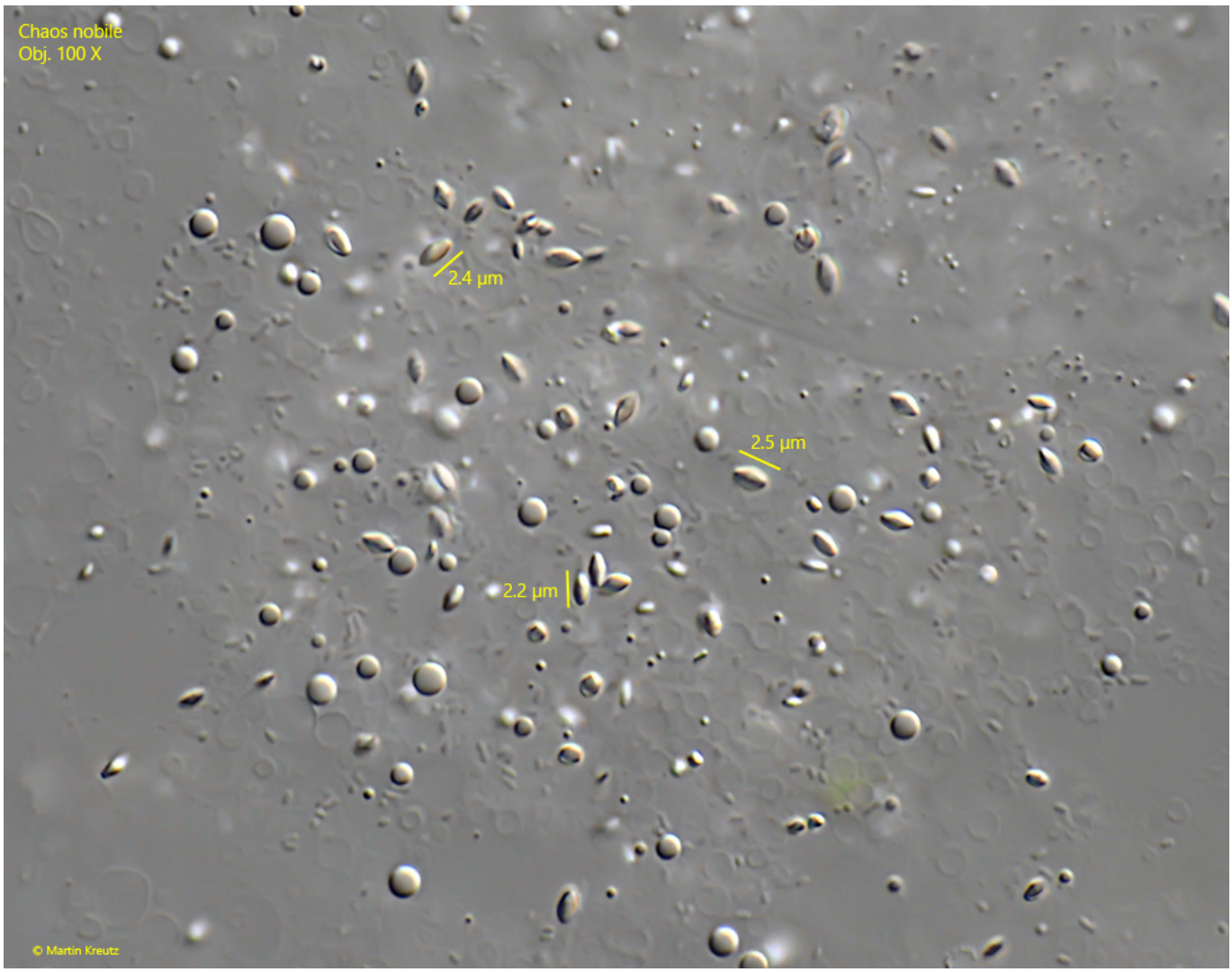


Fig. 4: *Chaos nobile*. The crystals scattered in the cytoplasm in detail. In this specimen the crystals are mainly bipiramidal and have a length of 2–2.5 µm. Obj. 100 X.