Phacodinium metchnikoffi

(Certes, 1891) Prowazek, 1900

Most likely ID: n.a.

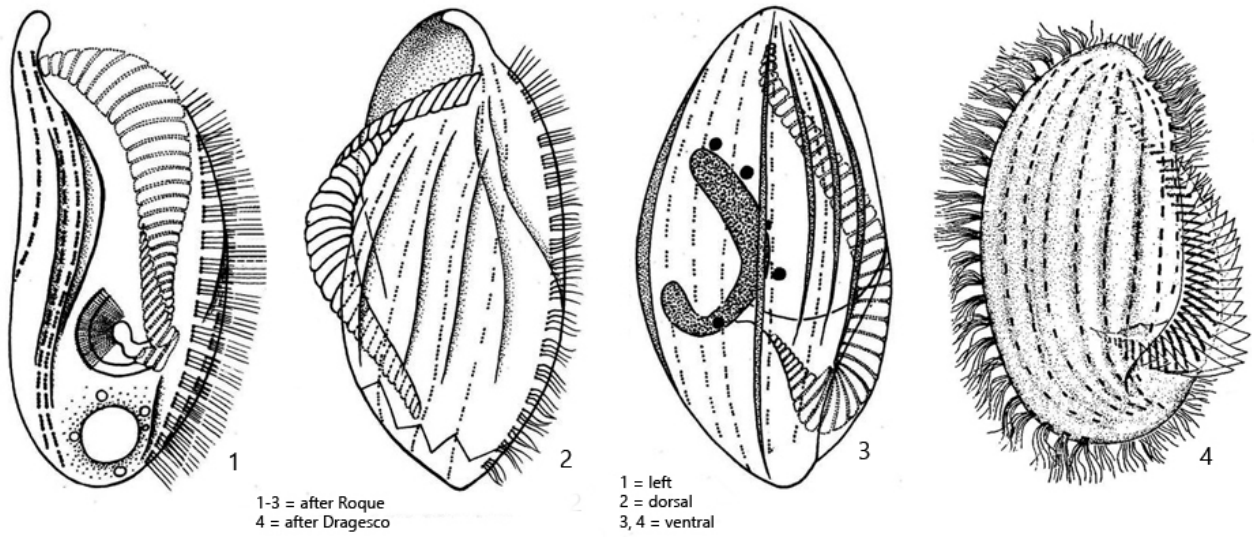
Synonym: *Phacodinium metchnicoffi*, *Conchophthirius metchnikoffi*

Sampling location: Moss

Phylogenetic tree: *Phacodinium metchnikoffi*

Diagnosis:

- body oval, dorso-ventrally flattened
- 4–5 longitudinal ridges on ventral and dorsal side
- length 70–140 µm
- prominent adoral zone of membranelles running from anterior end over the left side to the mouth opening on ventral side
- mouth opening in posterior quarter
- macronucleus horseshoe-shaped
- 5–9 micronuclei adjacent to macronucleus
- contractile vacuole terminal



Phacodinium metchnikoffi

I find *Phacodinium metchnikoffi* frequently and regularly in moss samples. This ciliate seems to be particularly common in moss growing on trees. Kahl has found *Phacodinium metchnikoffi* in moss growing on roofs.

Phacodinium metchnikoffi is very conspicuous due to its long adoral zone on the left side of the body and the longitudinal ribs on both sides of the body. This makes it conspicuous even at low magnifications. The mouth opening is in the posterior quarter. The specimens of my population with a length of 130–140 µm were at the upper end of the range given by Kahl and Penard.

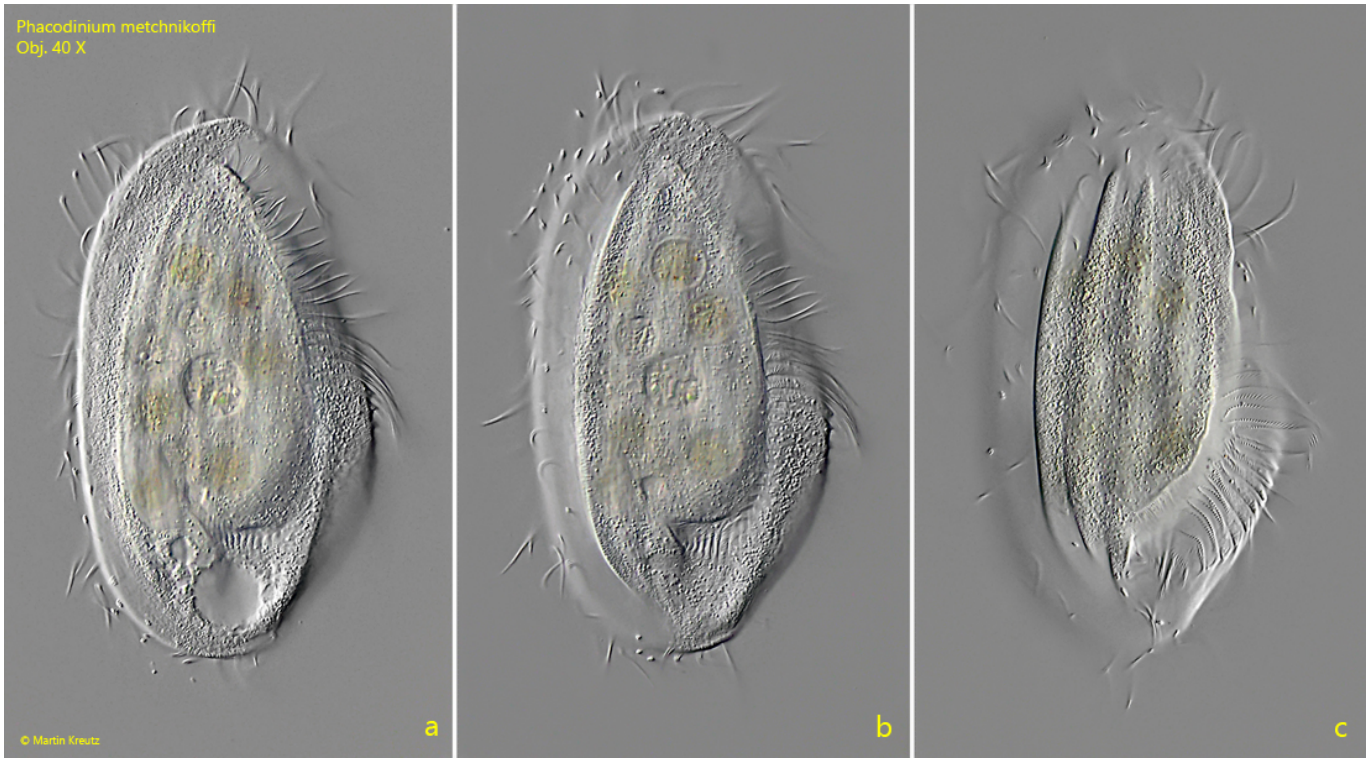


Fig. 1 a-c: *Phacodinium metchnikoffi.* L = 141 µm. Different focal planes of a freely swimming specimen from ventral. Obj. 40 X.

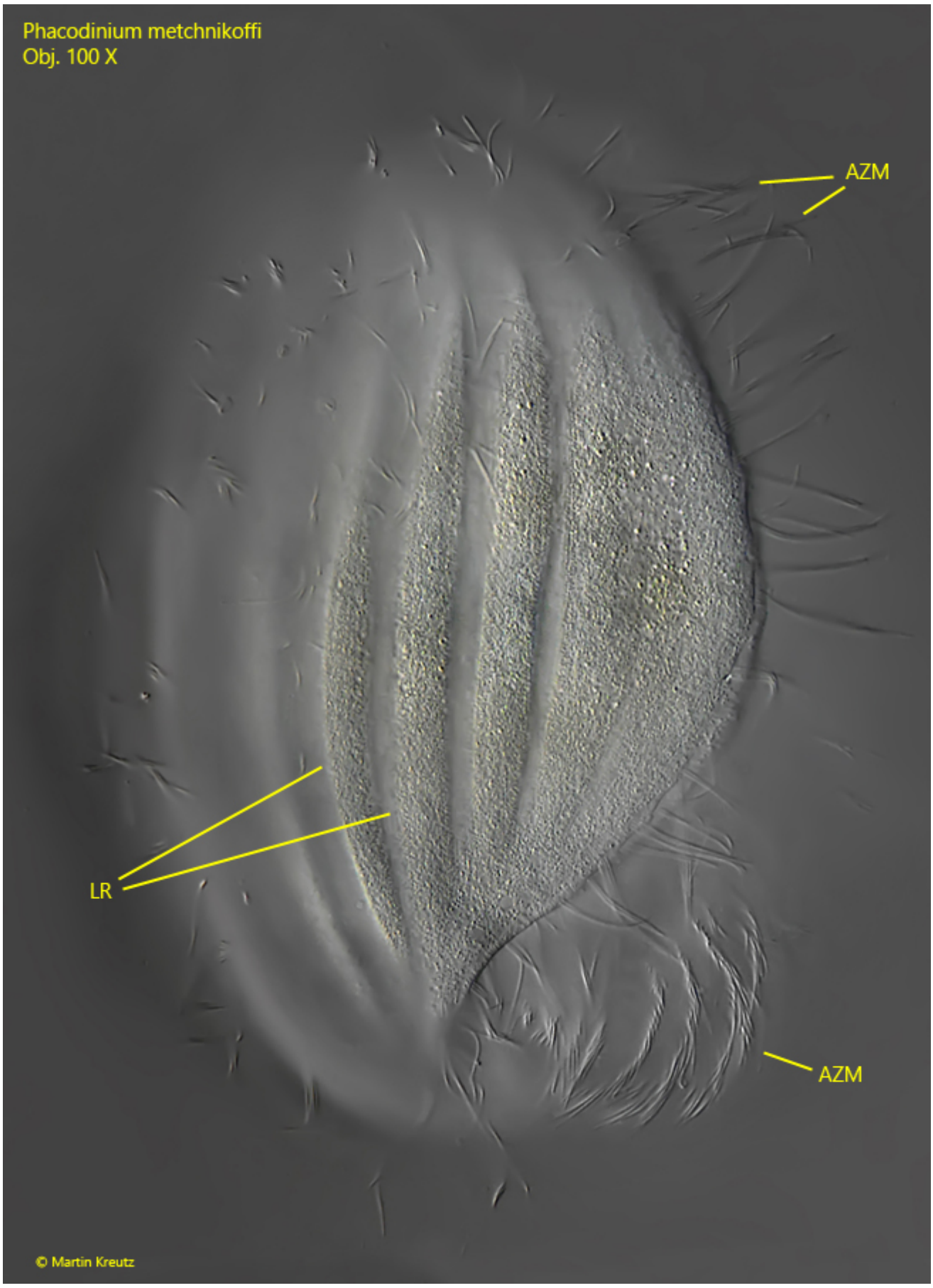


Fig. 2: *Phacodinium metchnikoffi.* L = 130 µm. A slightly squashed specimen from ventral with focal plane on the longitudinal ridges (LR). Note the long adoral zone of

membranelles (AZM) running over the left side to the ventral side in the posterior quarter. Obj. 100 X.

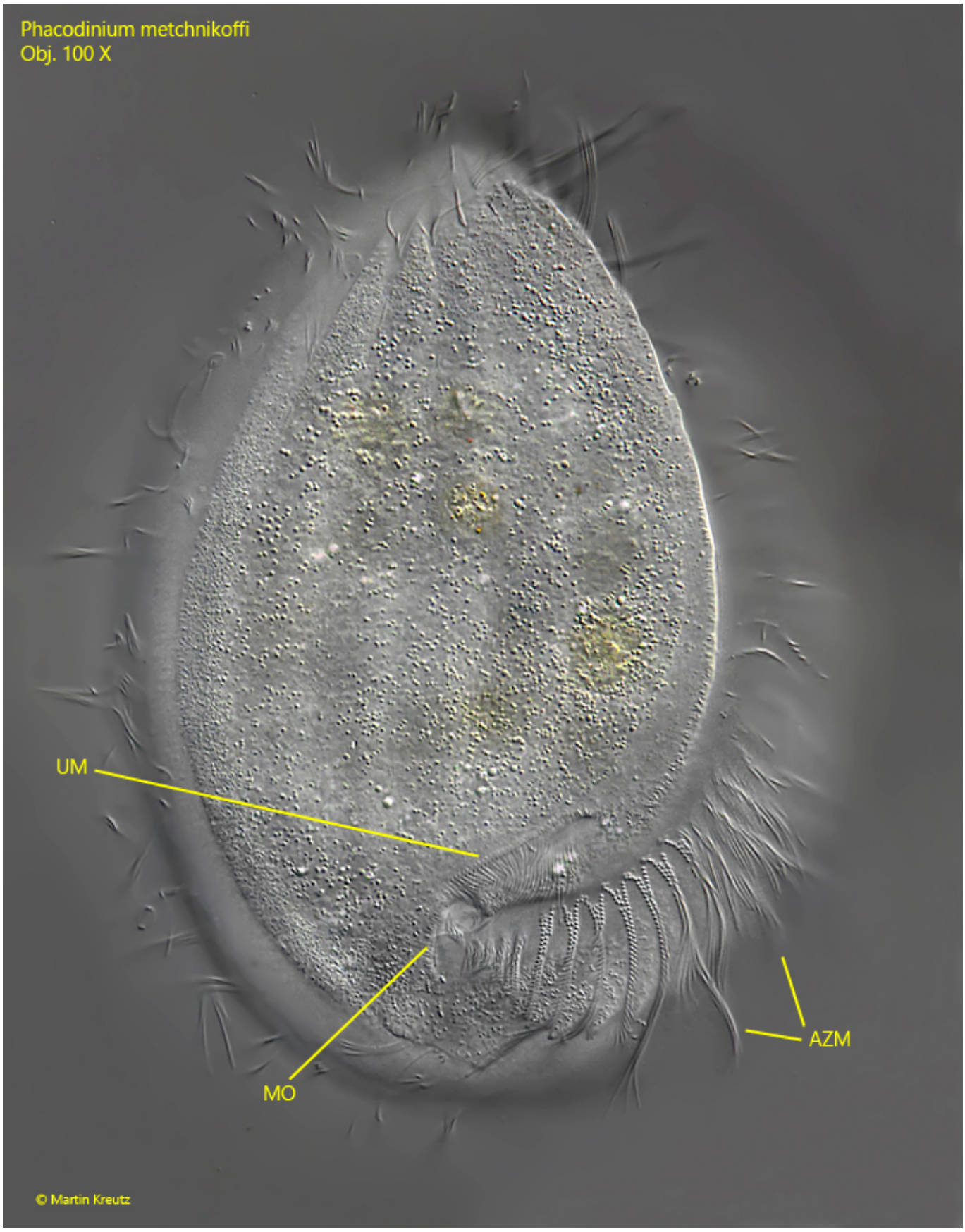


Fig. 3: *Phacodinium metchnikoffi.* L = 130 µm. The same specimen as shown in fig.

2 with focal plane on the mouth opening (MO). Note the narrow groove that leads diagonally upwards at the edge of which the undulating membrane (UM) lies. AZM = adoral zone of membranelles. Obj. 100 X.

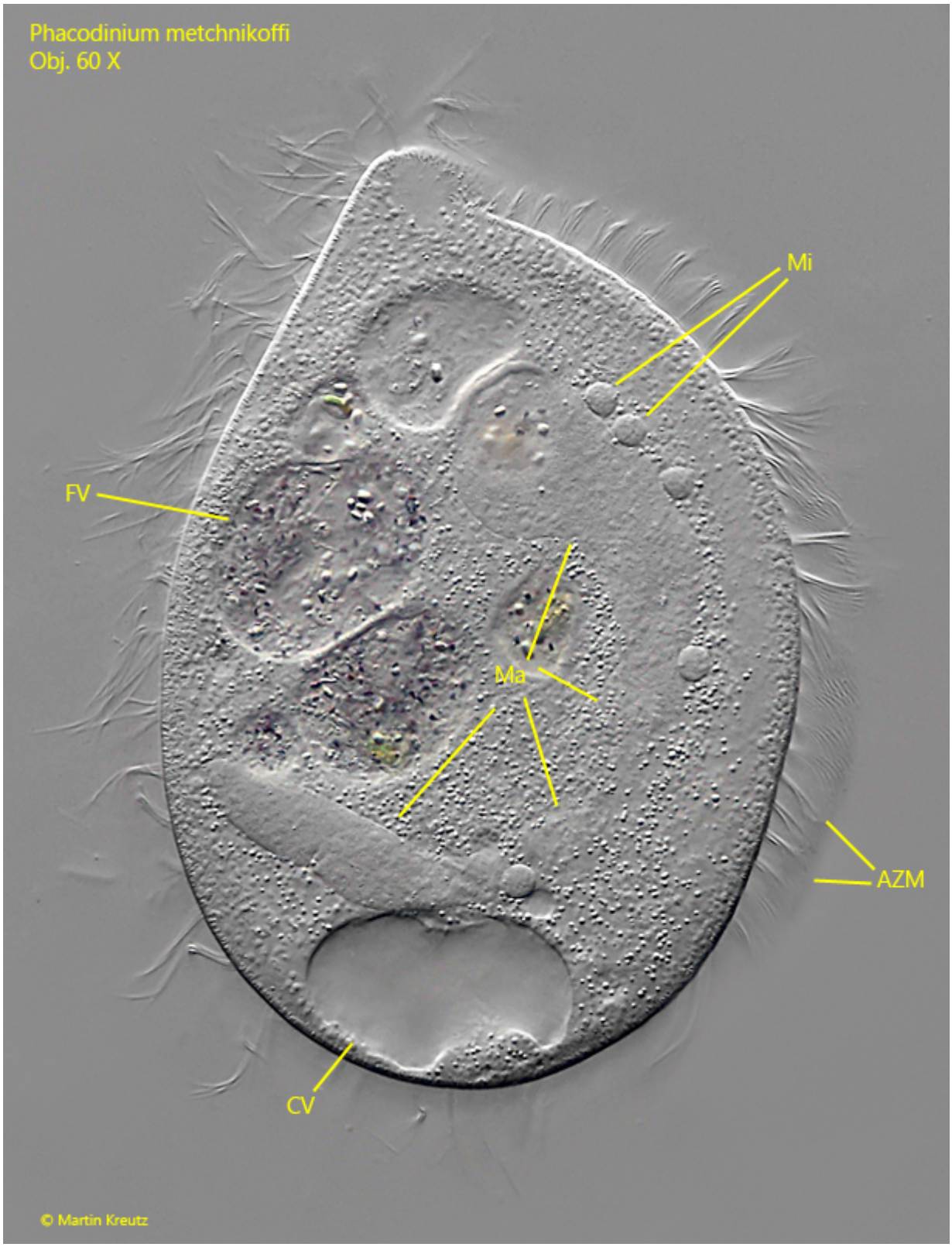


Fig. 4: *Phacodinium metchnikoffi.* The horseshoe-shaped macronucleus (Ma) and the adjacent micronuclei (Mi) in a strongly squashed specimen. Obj. 100 X.