Bryometopus sphagni

(Penard, 1922) Kahl, 1932

Most likely ID: n.a.

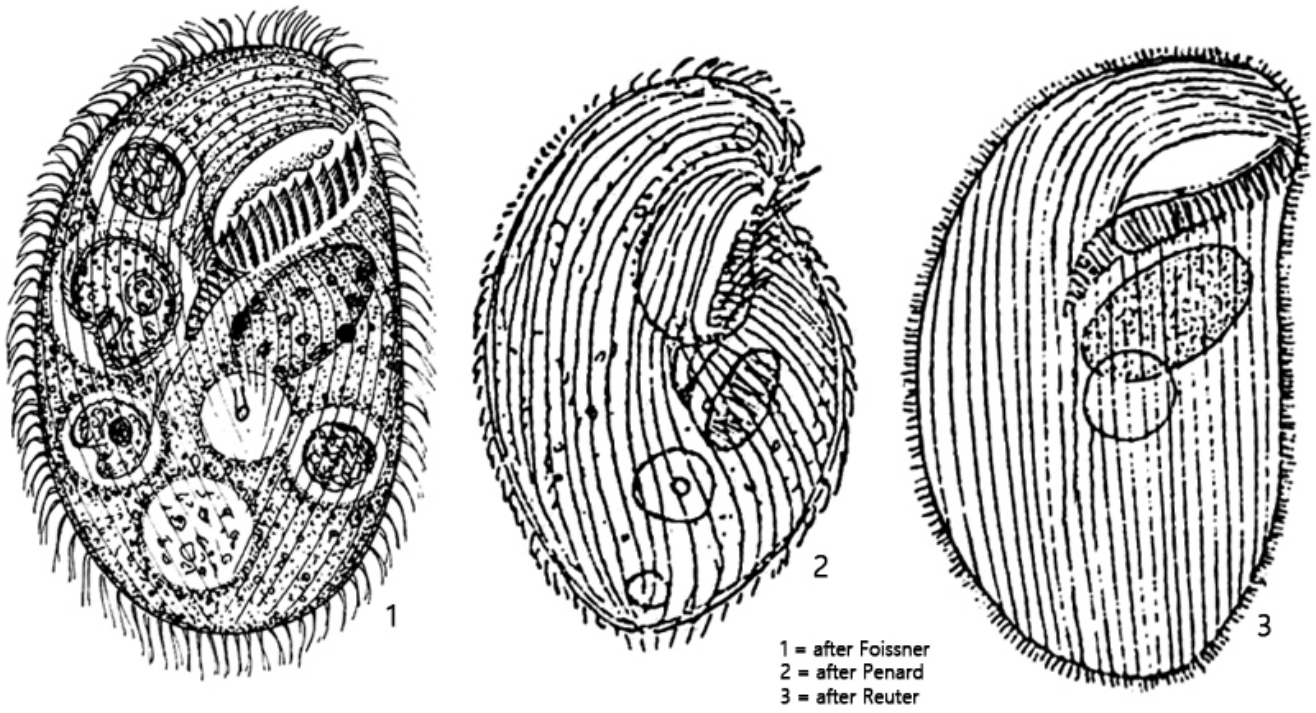
Synonym: n.a.

Sampling location: Moss

Phylogenetic tree: *Bryometopus sphagni*

Diagnosis:

- body ovoid, slightly reniform
- length 70–180 µm
- oral apparatus in anteruir left quadrant
- adoral zone running obliquely in a furrow
- paroral membranelle on right side of peristome
- macronucleus ellipsoid, central
- usually 2 micronuclei, sometimes up to 4
- contractile vacuole slightly below equator
- excretion porus ventral
- somatic ciliation of paired cilia



Bryometopus sphagni

I have found *Bryometopus sphagni* several times in moss samples from trees and rocks, which I have moistened with a little water. Penard (1922) also found the species in Sphagnum ponds.

According to Foissner (1993), *Bryometopus sphagni* is characterized by a high variability in size. In my population I have only found specimens below 100 µm in length. At low magnifications the specimens appear slightly kidney-shaped. The oblique mouth opening on the left, apical quarter is typical. It is oval in shape (s. fig. 2 a). The adoral zone runs in a groove diagonally across the body from left to right, where it ends in the anterior third (s. fig. 2 c). On the right side of the groove a paroral membrane is located, which is difficult to recognize.

The specimens in my population always had 2 micronuclei (s. fig. 5). The contractile vacuole was located on the border to the posterior third (s. fig. 2 c) and had a clearly visible, ventrally located excretory pore (s. fig. 3 b). The somatic ciliate consists of cilia arranged in pairs, as is typical for colpodid ciliates (s. fig. 4).

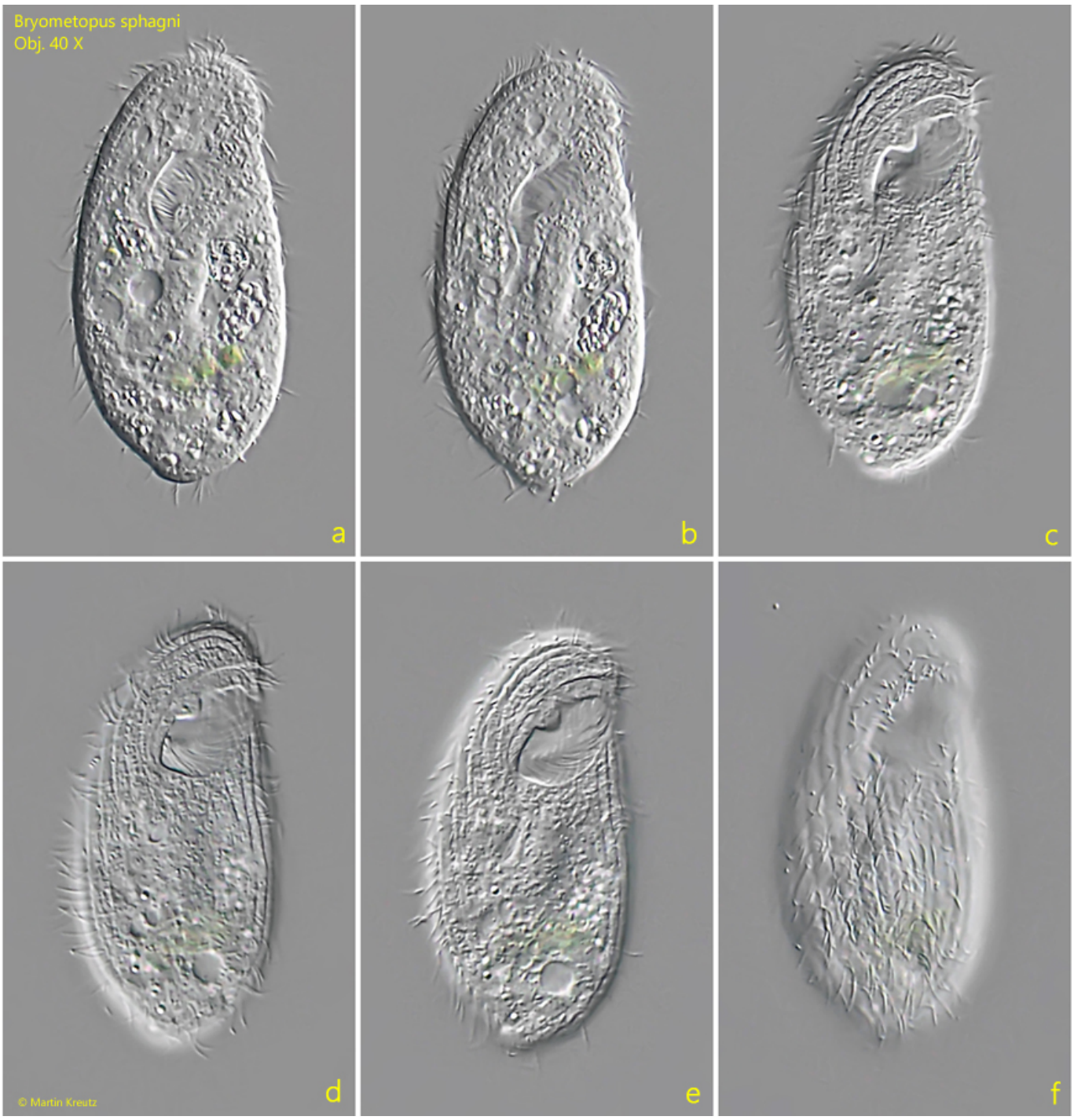


Fig. 1 a-f: *Bryometopus sphagni*. L = 70 µm. A freely swimming specimen. Obj. 40 X.

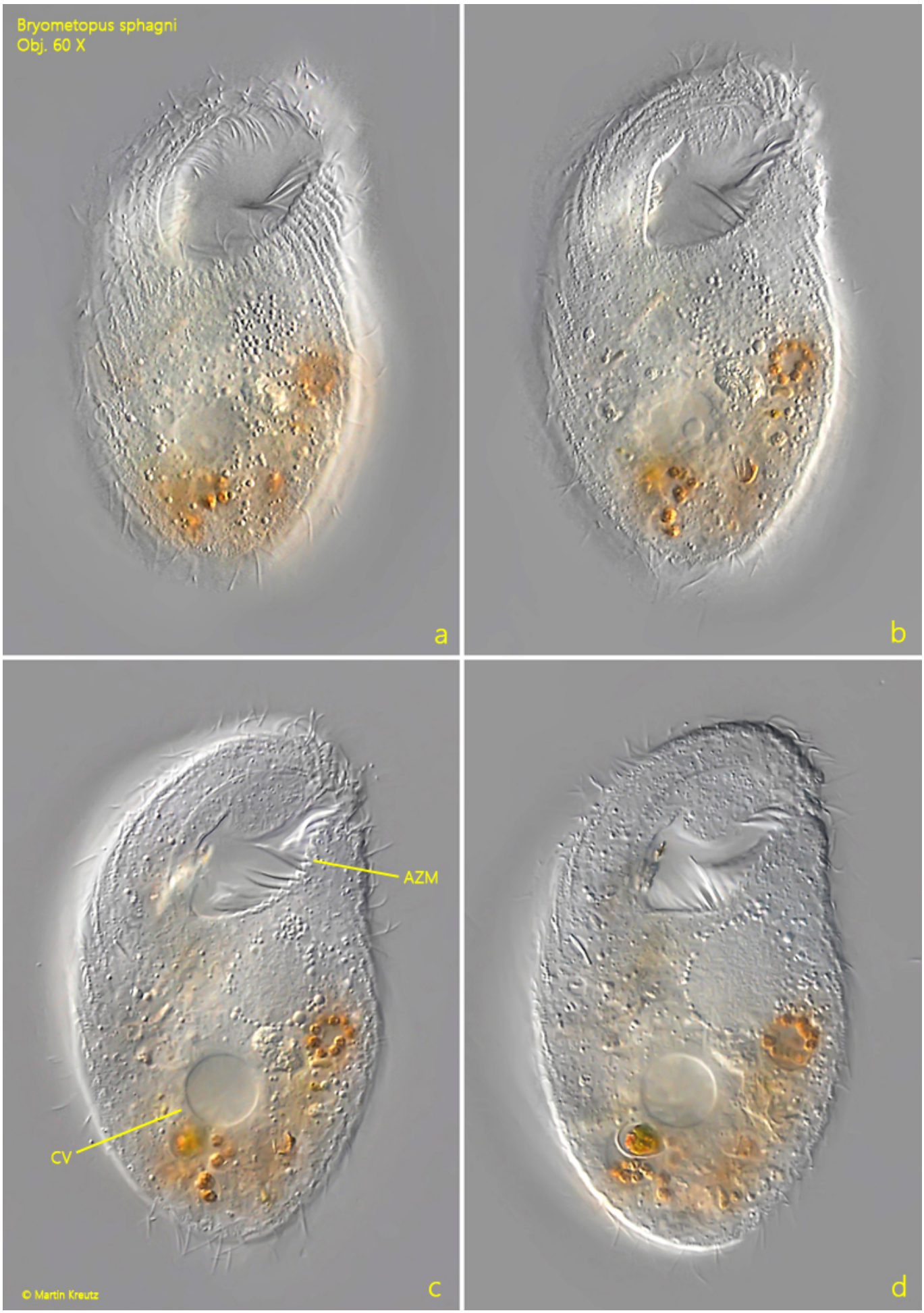

Bryometopus sphagni
Obj. 60 X
a
b
AZM
CV
© Martin Kreutz
c
d

Fig. 2 a-d: *Bryometopus sphagni*. L = 88 µm. Different focal planes of a slightly squashed specimen. Note the adoral zone of membranelles (AZM) at the left side of the mouth opening. CV = contractile vacuole. Obj. 60 X.

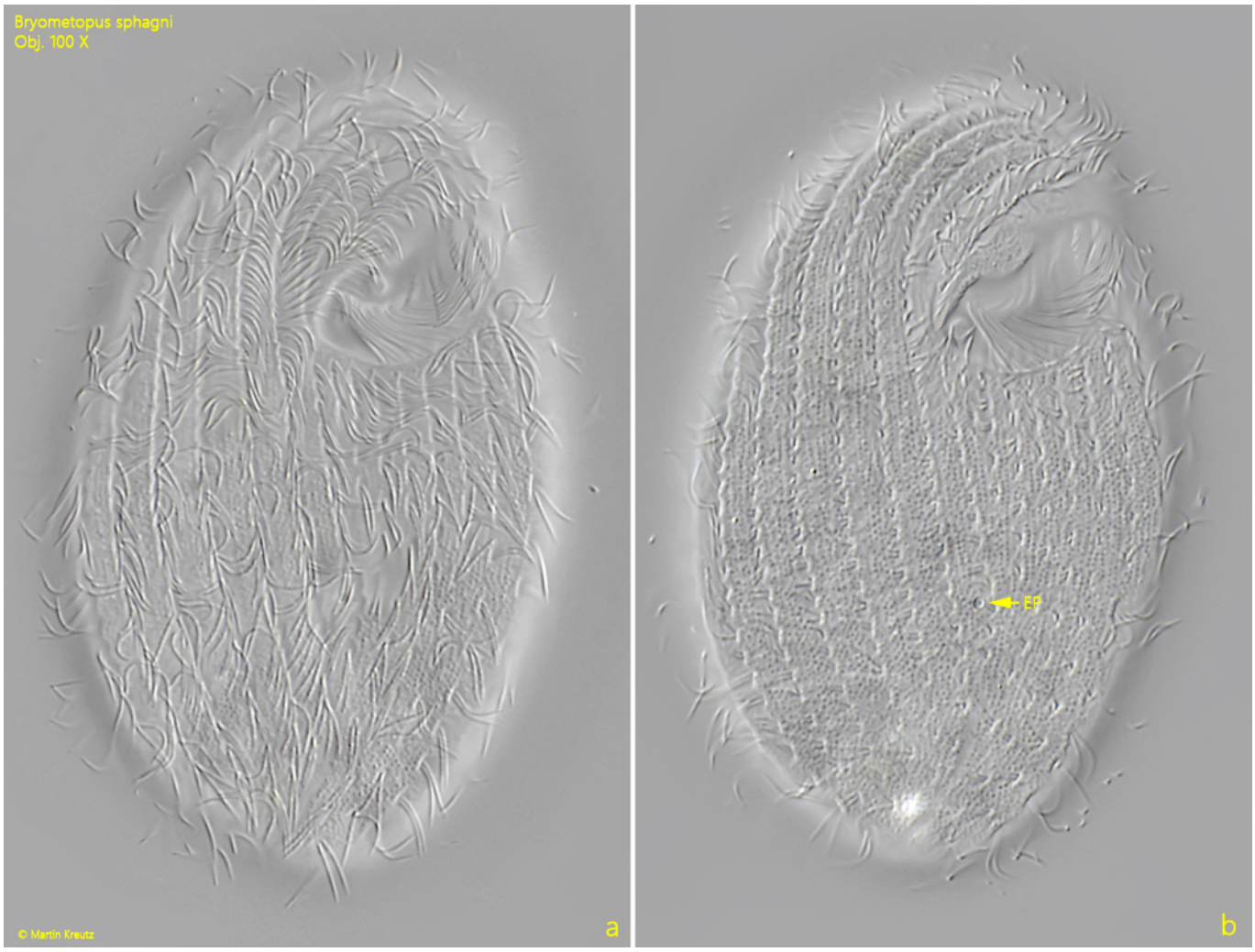


Fig. 3 a-b: *Bryometopus sphagni*. L = 76 µm. Two focal planes of the ventral side on the somatic ciliation (a) and on the excretion porus (b, EP). Obj. 100 X.

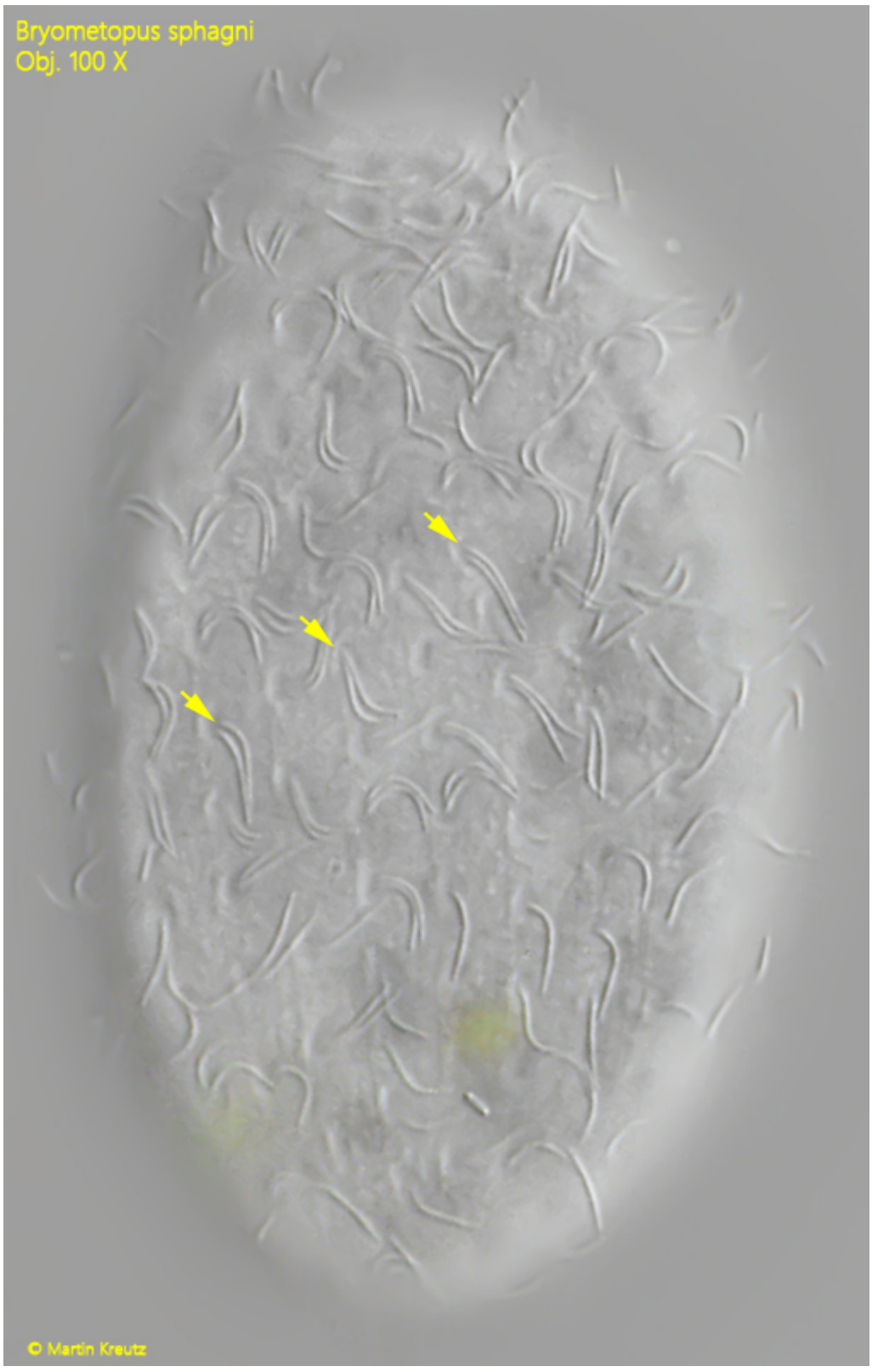


Fig. 4: *Bryometopus sphagni*. L = 65 µm. Dorsal view with focal plane on the somatic ciliation. Note the paired cilia (arrows). Obj. 100 X.

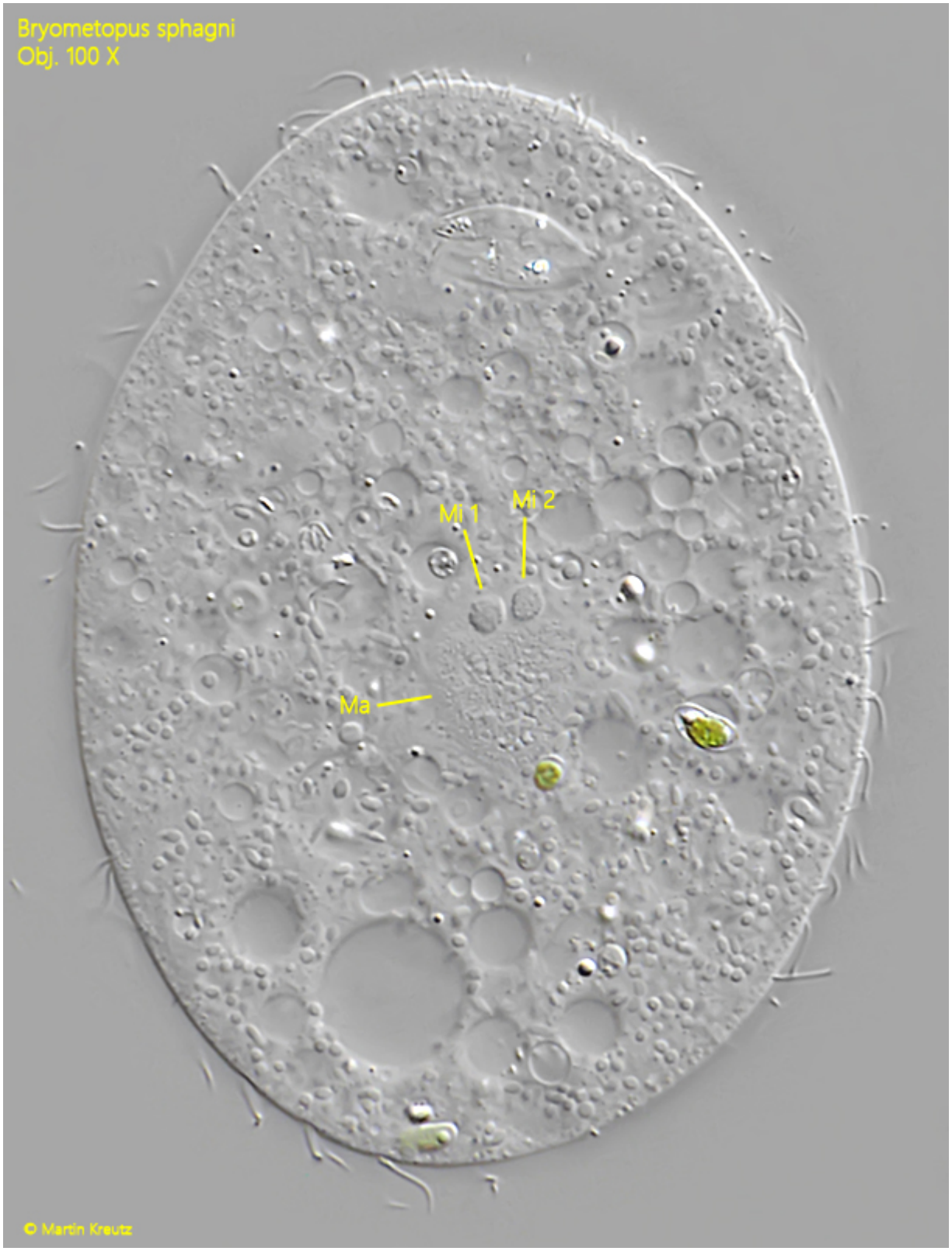


Fig. 5: *Bryometopus sphagni*. The macronucleus (Ma) with two micronuclei (Mi 1, Mi 2) in a squashed specimen. Obj. 100 X.