Ophryoglena 1

Most likely ID: *Ophryoglena* nov. spec.

Synonym: n.a.

Sampling location: Simmelried

Phylogenetic tree: n.a.

Diagnosis:

- body oval
- length about 100 µm
- oral apparatus with shape of a “6”
- oral apparatus with inconspicuous watch-glass body
- secondary structure in anterior position to watch-glass body
- distinct fringe of extrusomes beneath pellicle
- extrsomes in posterior half more densely arranged
- extrsomes rod-shaped, about 3.8 µm long
- macronucleus elongated ellipsoid
- one micronucleus adjacent to macronucleus
- one contractile vacuole, right side, below equator
- contractile vacuole with 4 excretion pores
- caudal cilium absent

No drawings from previous authors available.

In April 2020, I found a specimen of an *Ophryoglena* species among decomposing plant masses in the Simmelried, which has a combination of features that do not match any of the species described so far. The main feature is the very thin and small watch-glass body in the oral apparatus (s. figs. 3 and 4) as well as a second, circular structure, which is located anteriorly to the watch-glass body (s. figs. 3 and 4). This second, structure has not yet been found in any of the described *Ophryoglena* species. It is circular with a diameter of 2.8 µm and, like the watch glass body, very delicate. This *Ophryoglena* species has a contractile vacuole on the right side, slightly below the equator. It has 4 excretory pores (s. fig. 5). The

macronucleus is clearly ellipsoid with an attached micronucleus (s. fig. 2). The extrusomes are rod-shaped with a length of about 3.8 µm (s. fig. 7). They are not evenly distributed over the body. In the anterior half they are much more scattered than in the posterior half, where they form a dense fringe.

On the basis of this combination of features, which is not described in the literature for any *Ophryoglena* species, I believe that this is a previously undescribed species *Ophryoglena* nov. spec.

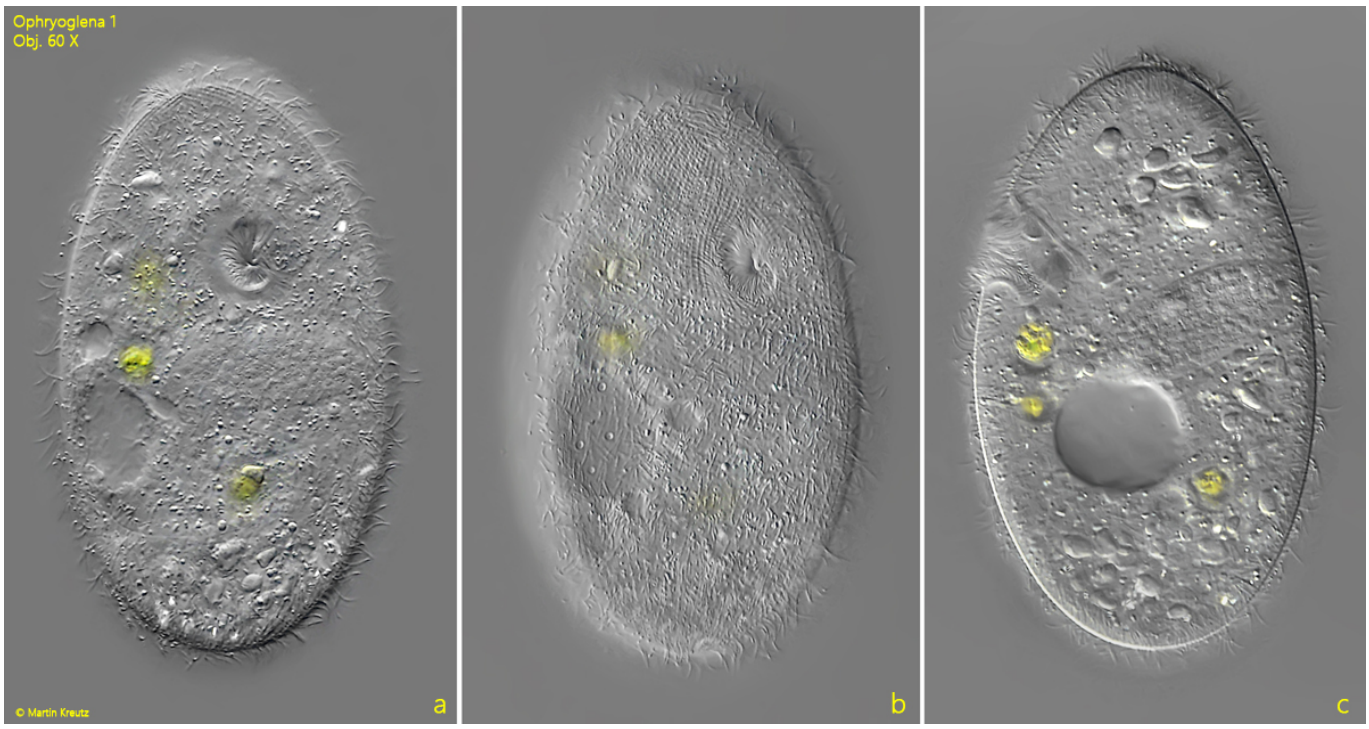

Fig. 1 a-c: *Ophryoglena* 1. L = 102 µm. A slightly squashed specimen from ventral (a, b) and from left (c). Obj. 60 X.

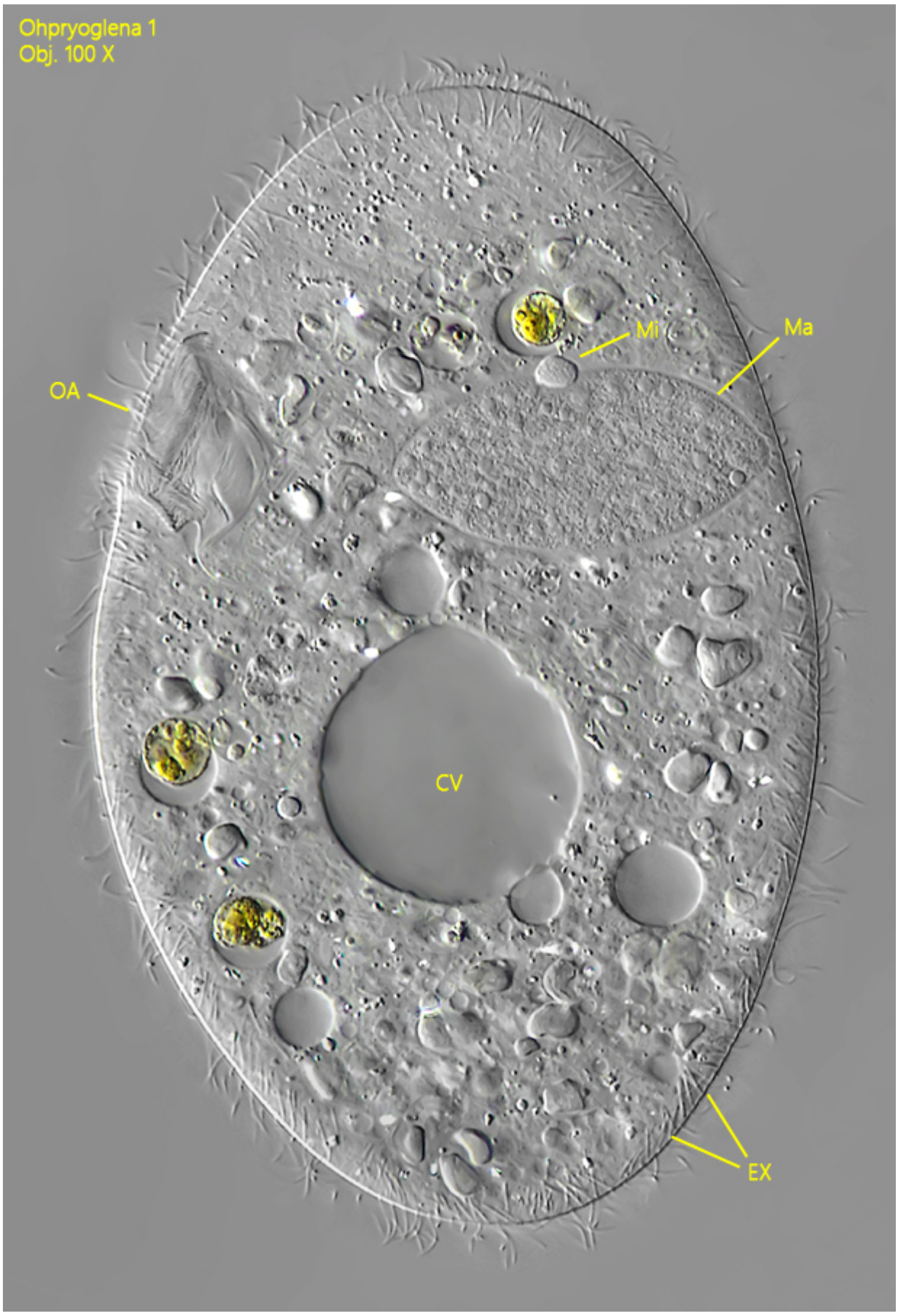

Fig. 2: *Ophryoglena* 1. L = 102 µm. The squashed specimen as shown in fig. 1 a-c from left. CV = contractile vacuole, EX = extrusomes, Ma = macronucleus, Mi =

micronucleus, OA = oral apparatus. Obj. 100 X.

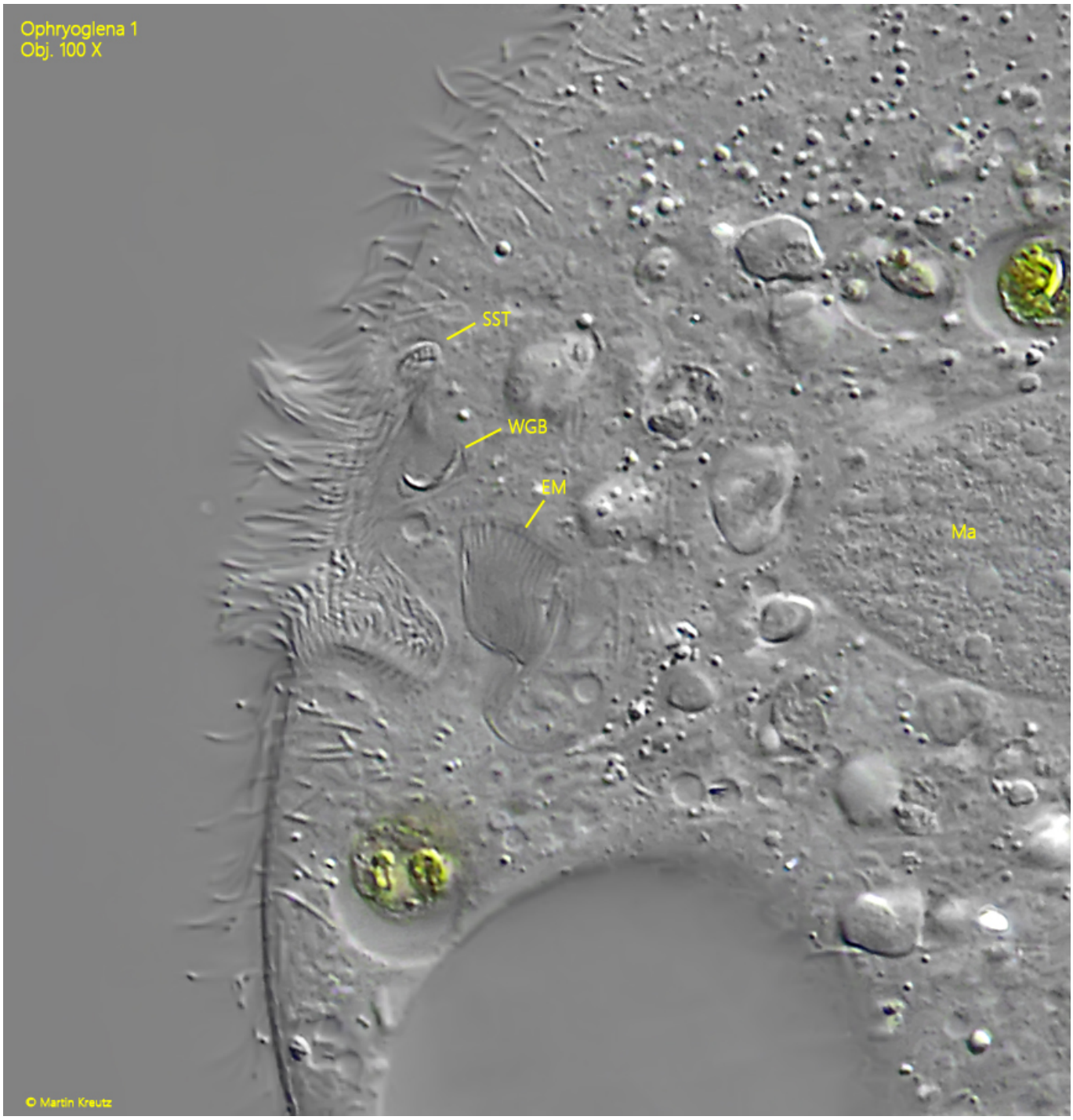

Fig. 3: *Ophryoglena* 1. The oral apparatus in a squashed specimen. The watch-glass body (WGB) is inconspicuous and very thin. Anterionrly to the watch-glass body a second structure (SST) is visible. It seems to be ring shaped. EM = endoral membrane. Obj. 100 X.

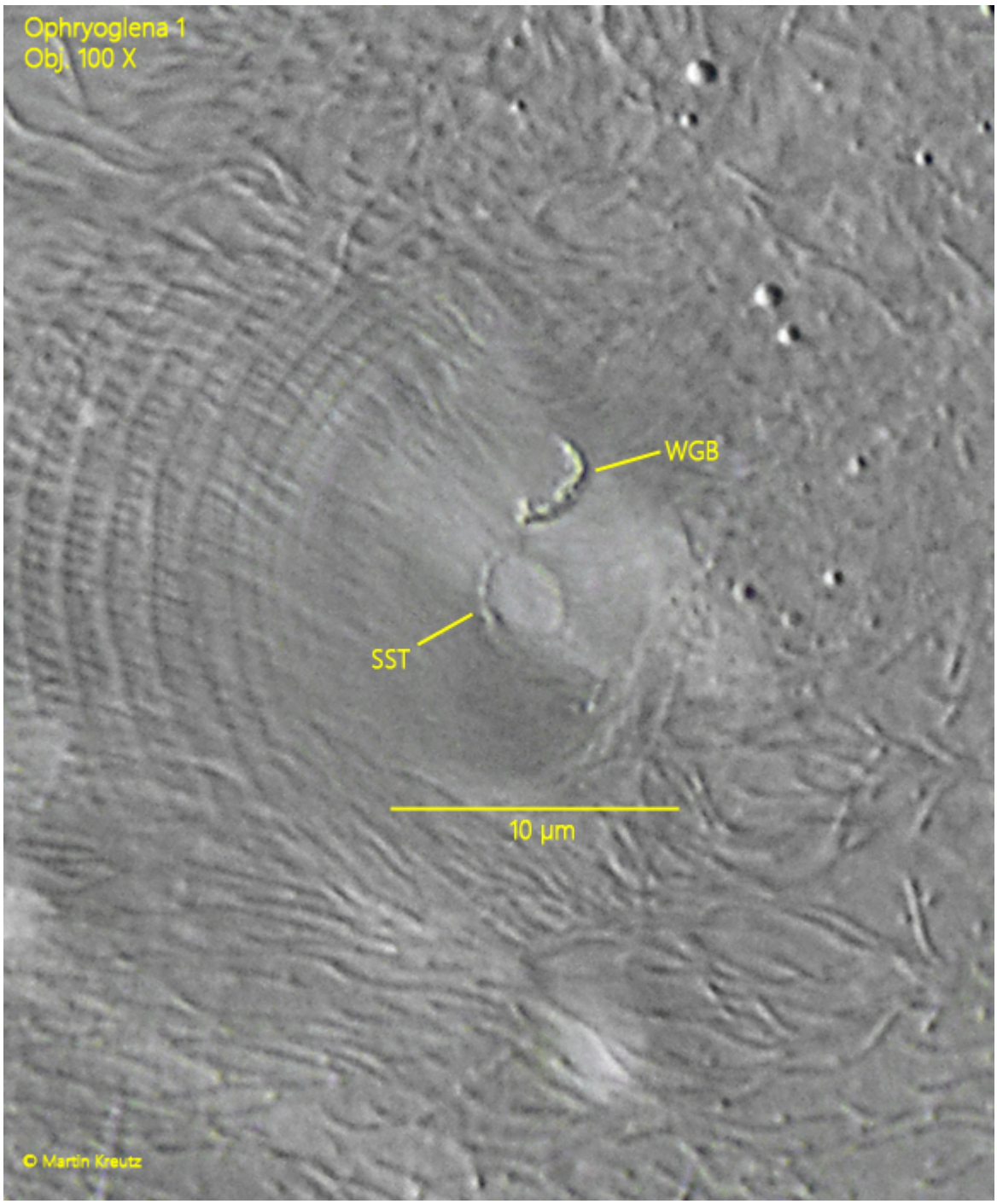

Fig. 4: *Ophryoglena* 1. The oral apparatus in frontal view. The watch-glass body (WGB) is visible and the circular seondary structure (SST). The watch-glass body has a diameter of 3.3 µm and the secondary structure of 2.8 µm. Obj. 100 X.

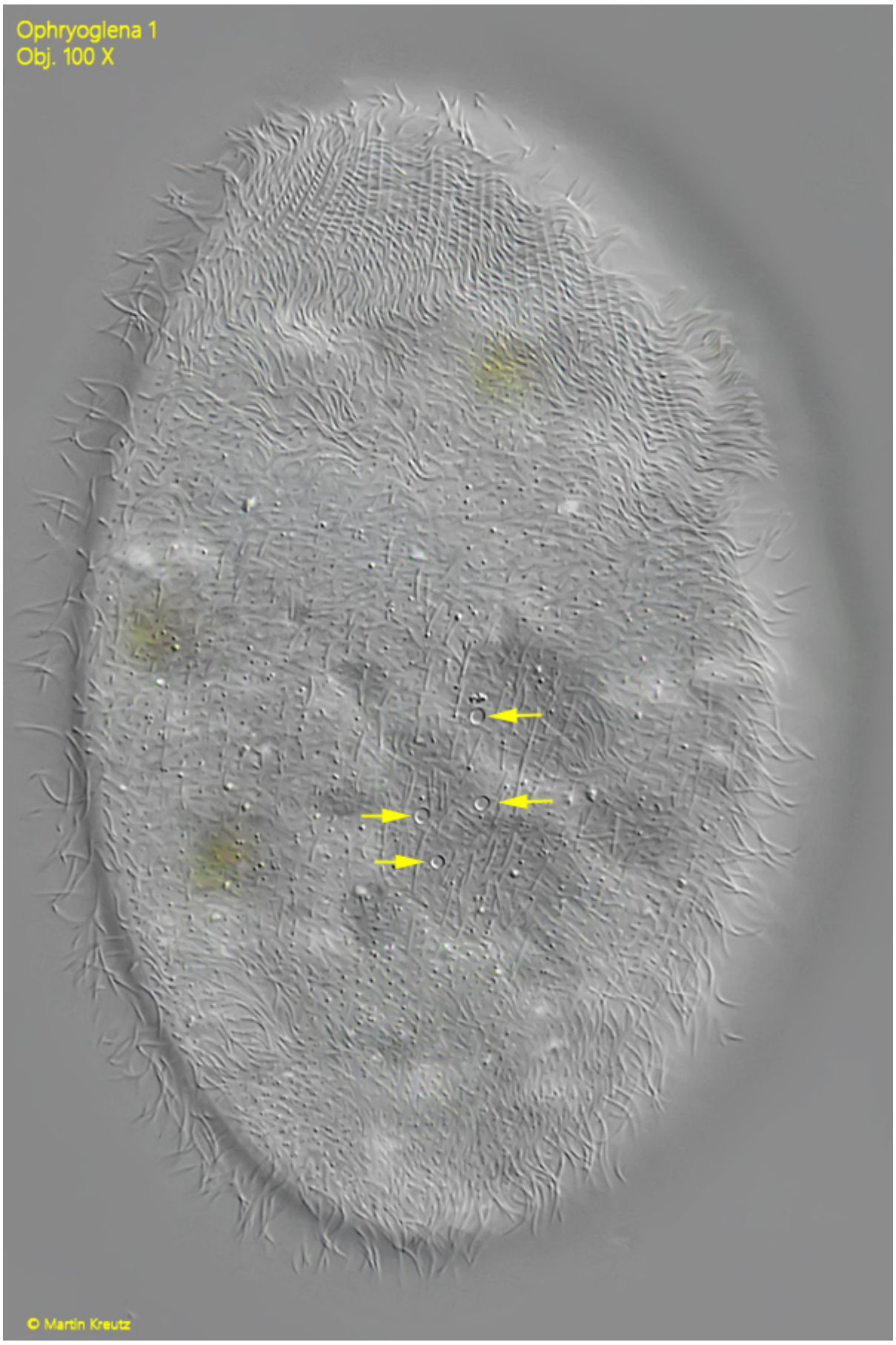

Fig. 5: *Ophryoglena* 1. A squashed specimen from right with 4 excretion pores (arrows) of the contractile vacuole. Obj. 100 X.

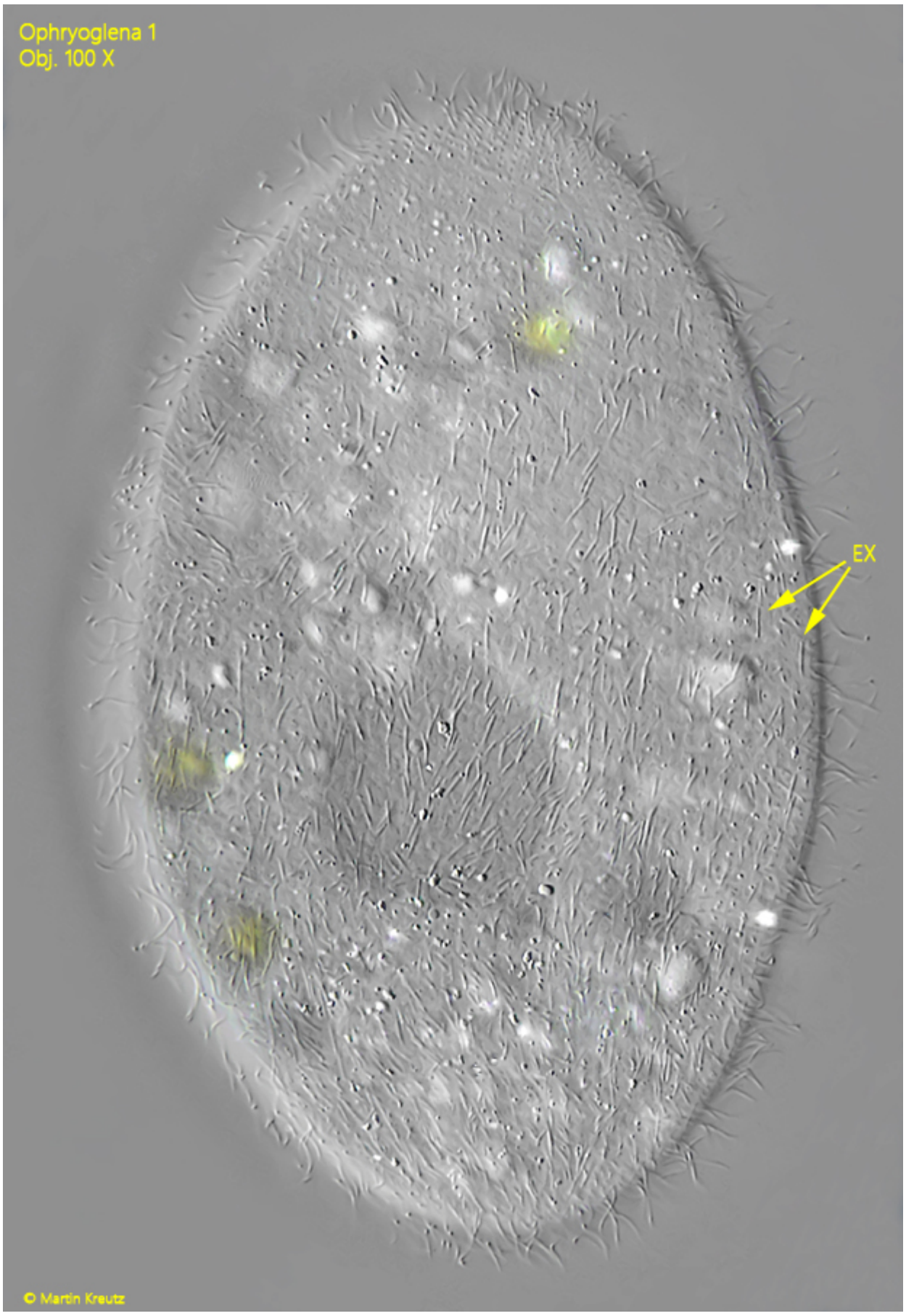

Fig. 6: *Ophryoglena* 1. The distribution of the extrusomes (EX) beneath the pellicle is not homogenous. The density of them ist much higher in the posterior half. Obj.

100 X.



Fig. 7: *Ophryoglena* 1. The extrusomes are rod-shaped with a length of about 3.8 µm. Obj. 100 X.