

***Halteria grandinella***  
**(Müller, 1773) Dujardin, 1862**

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

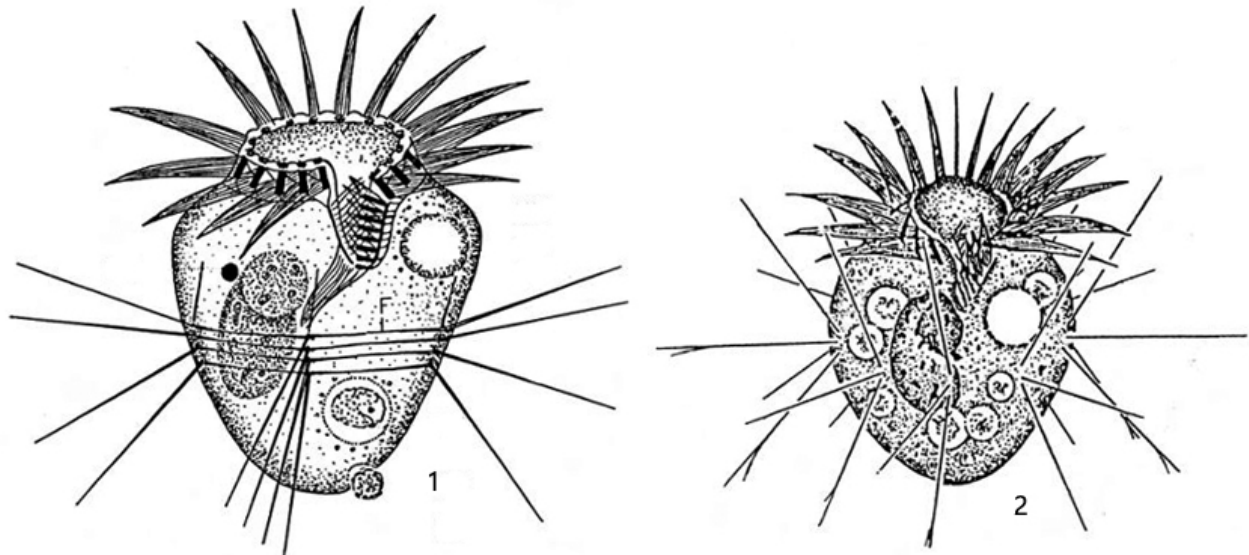
**Synonym:** n. a.

**Sampling location:** [Ulmisried](#), [Hagstaffel pond](#), [Mainau pond](#), [Purren pond](#), [Lake Constance](#), [Simmelried](#)

**Phylogenetic tree:** [Halteria grandinella](#)

**Diagnosis:**

- body globular or ellipsoidal
- length 20–40 µm, about 30 µm across
- macronucleus spherical to oblong with one spherical micronucleus
- contractile vacuole above mid-body, left of mouth opening
- anterior end with prominent adoral membranelles
- in equatorial zone 7–10 longitudinal rows of jumping bristles
- each row consists of 3–4 groups of jumping bristles
- jumping bristles 15–25 µm long, distally sometimes bifurcated
- oral apparatus at anterior end with an inner zone of 5–10 membranelles



1 = after Foissner  
2 = after Song & Wilbert

## Halteria grandinella

*Halteria grandinella* is one of the most common ciliates and it occurs in all my sites. In old samples the species sometimes occurs in masses. The fast, jumping swimming style is very characteristic. Continuous propulsion is provided mainly by the prominent, outer adoral membranelles, which are propeller-shaped at the anterior end (s. figs. 2c and 5). The jumping motion is produced by an equatorial girdle of jumping bristles. These are arranged in short rows of 3-4 bristles (s. fig. 6) of which there are 7-10 distributed in regular intervals around the cell equator. In my populations there were mostly 7 of the rows (s. fig. 3a). The mouth opening is located just below the apical ring of the large outer adoral membranelles and is provided with a short row of inner adoral membranelles (s. figs. 2a and 3b).

*Halteria grandinella*  
Obj. 60 X

Mi

Ma

a

AM

JB

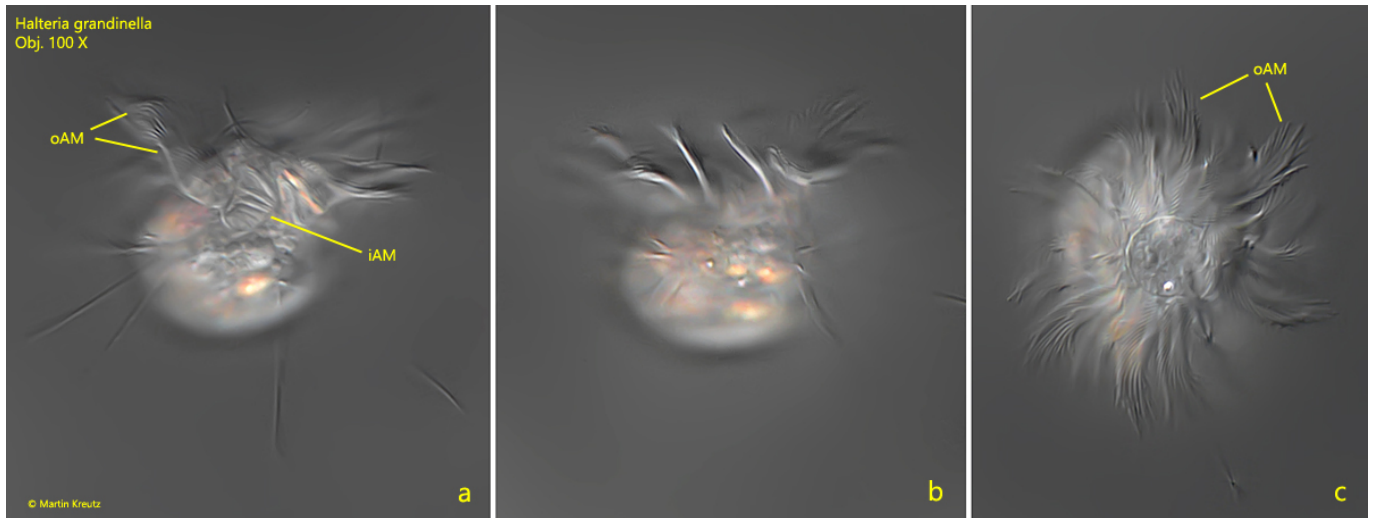
b

CV

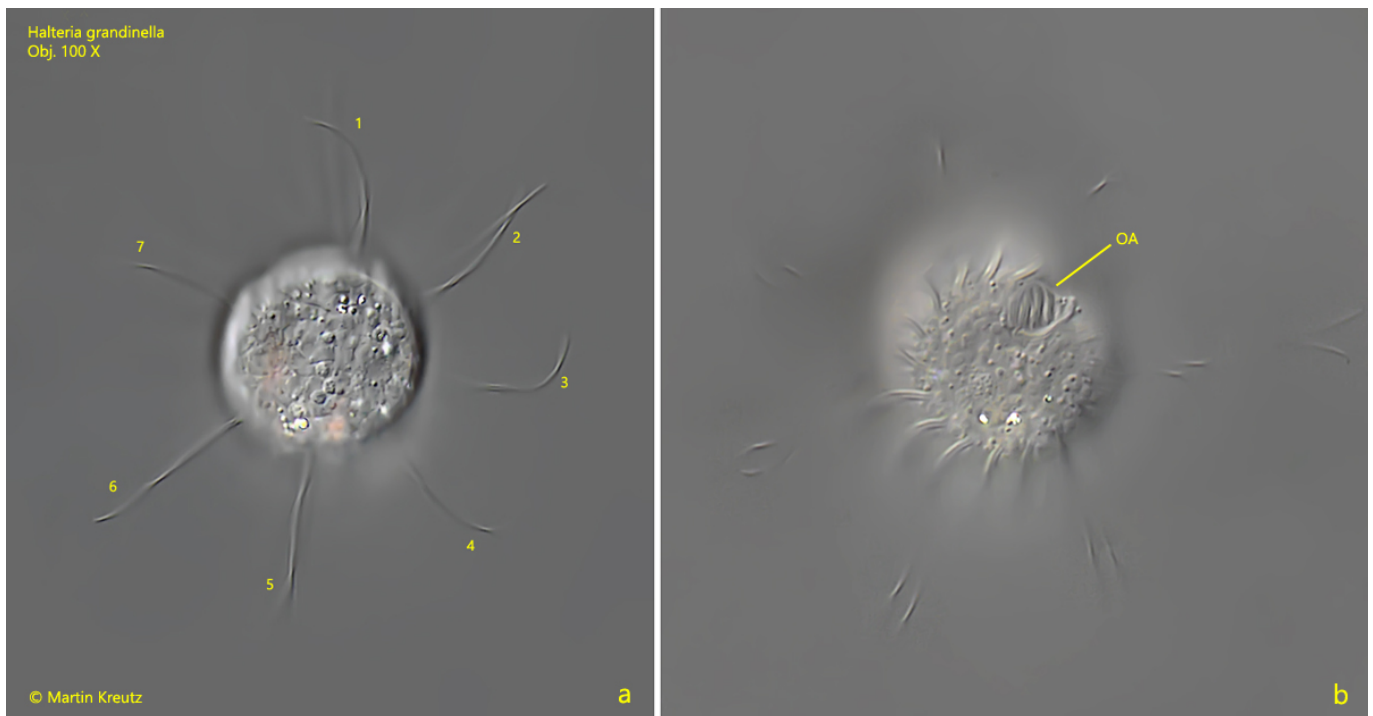
c

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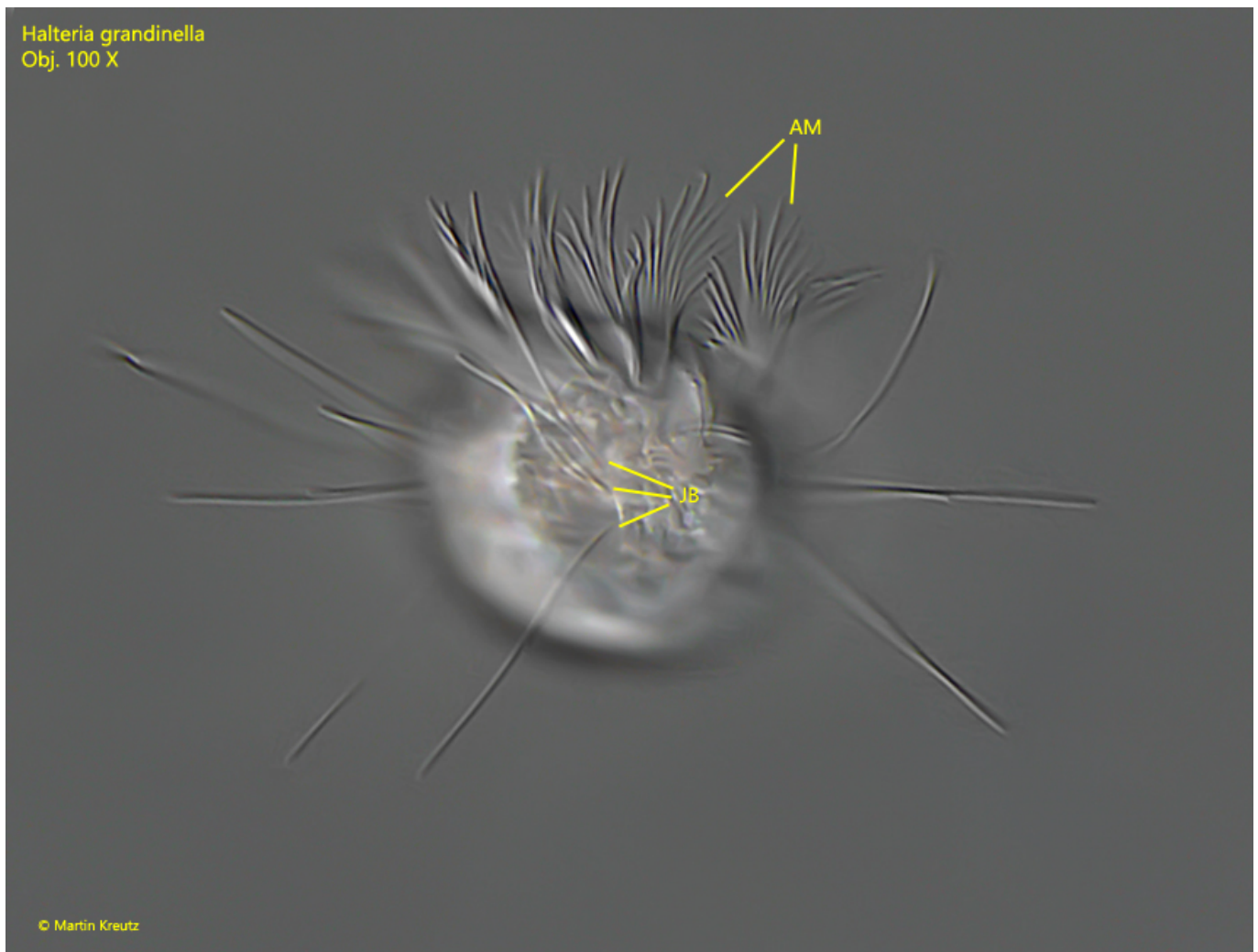
**Fig. 1 a-c:** *Halteria grandinella*. L = 23  $\mu$ m. Lateral view of a freely swimming specimen. CV = contractile vacuole, JB = equatorial jumping bristles, Ma = macronucleus, Mi = micronucleus. Obj. 60 X.



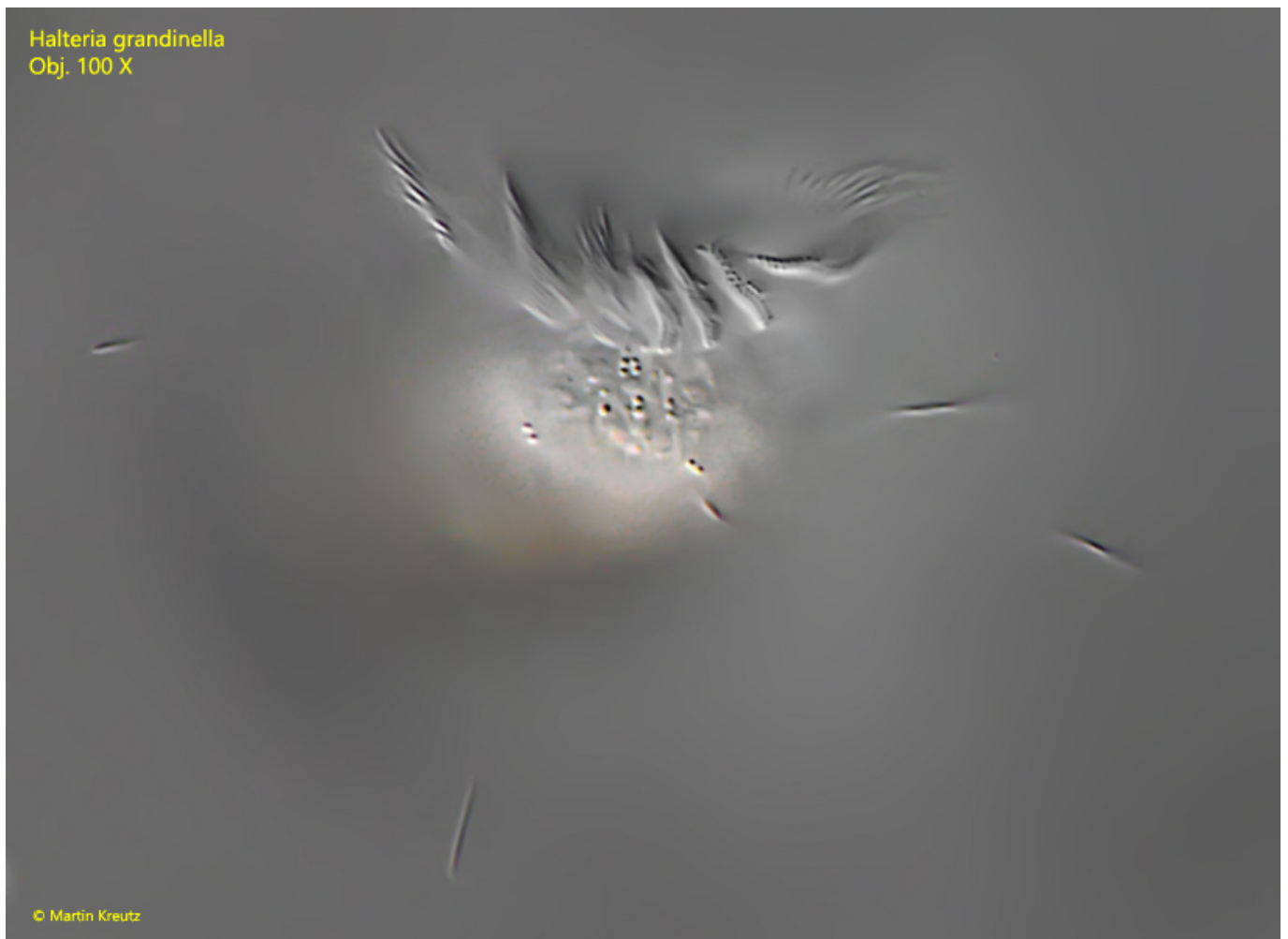
**Fig. 2 a-c:** *Halteria grandinella*. L = 23  $\mu$ m. Lateral view (a, b) and apical view (c) of a second, freely swimming specimen. Note the prominent ring of outer adoral membranelles (oAM) and the smaller inner adoral membranes (iAM) of the oral apparatus. Obj. 100 X.



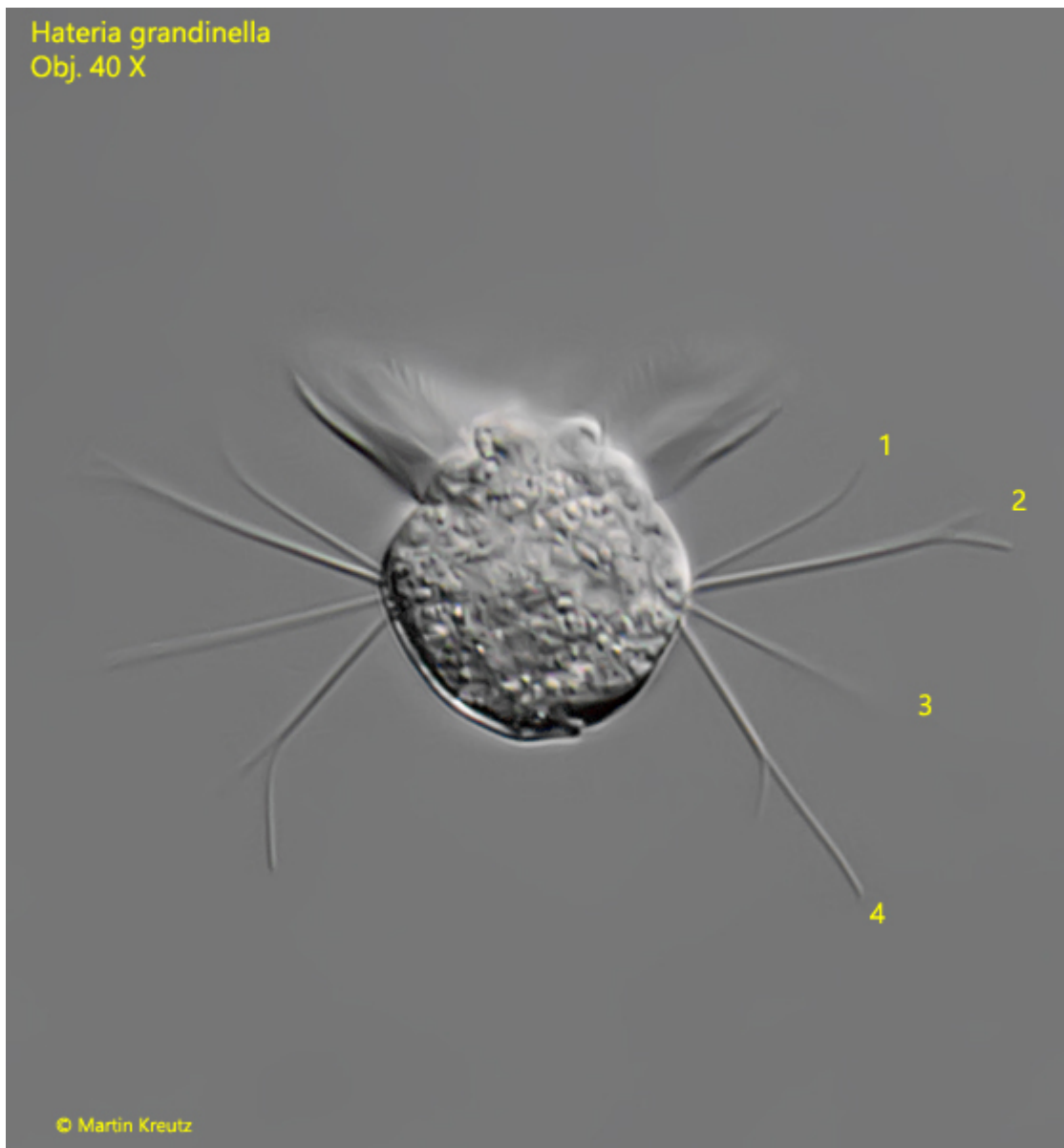
**Fig. 3 a-b:** *Halteria grandinella*. Diameter = 26  $\mu$ m. View from posterior (a) of the equatorial ring of the seven jumping bristles (1-7) and from anterior (b) of the oral apparatus (OA). Obj. 100 X.



**Fig. 4:** *Halteria grandinella*. A lateral view with the focal plane on a longitudinal row of jumping bristles (JB). AM = adoral membranelles. Obj. 100 X.

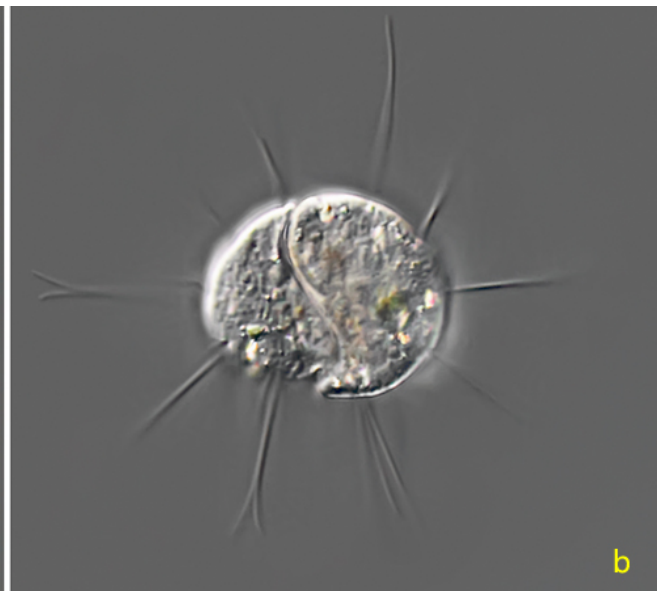
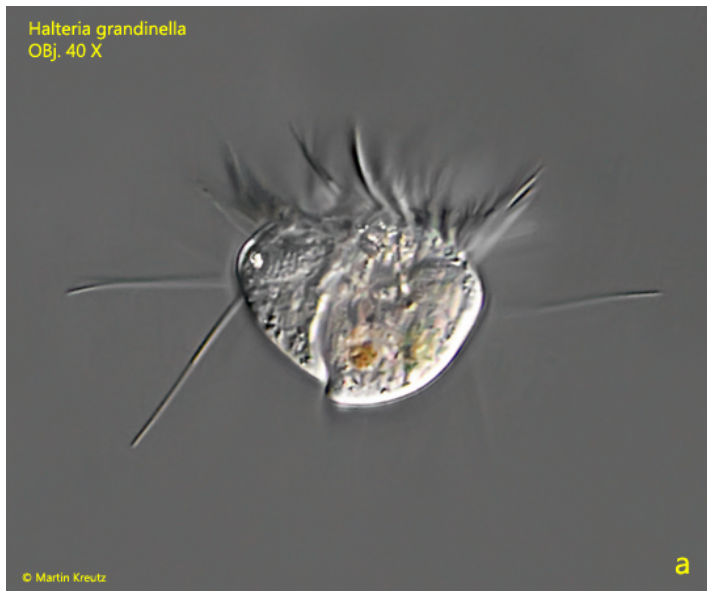


**Fig. 5:** *Halteria grandinella*. A lateral view of a freely swimming specimen with focal plane on the prominent adoral membranelles. Obj. 100 X.



**Fig. 6:** *Halteria grandinella*. L = 20  $\mu\text{m}$ . Lateral view of a freely swimming specimen. Note arrangement of the four jumping bristles (1–4) in longitudinal rows in the equatorial zone. Some of the bristles are bifurcated. Obj. 40 X.





**Fig. 7 a-b:** *Halteria grandinella*. L = 28  $\mu\text{m}$ . Two conjugating specimens in lateral (a) and posterior view (b). Obj. 40 X.