

***Penardiella interrupta* Penard, 1922**

Most likely ID: n.a.

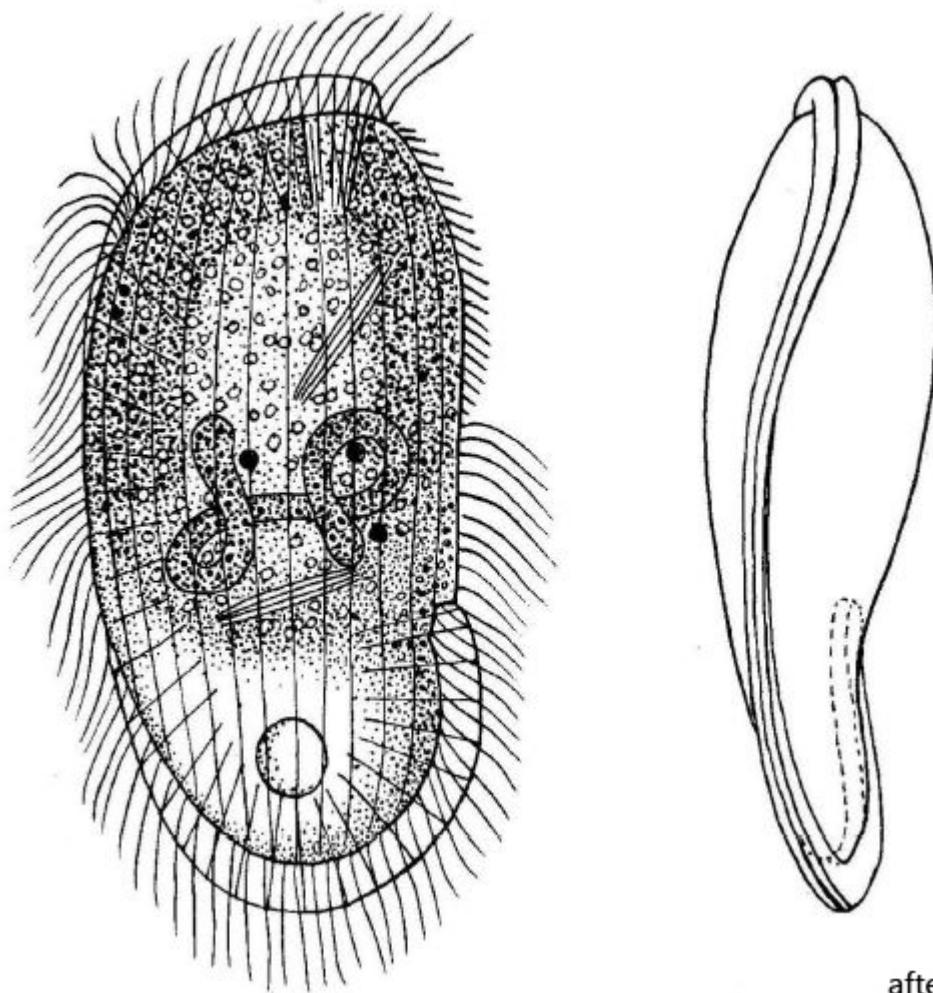
Synonym: n.a.

Sampling location: [Simmelried](#), Pond behind parking space St. Ulrich (Austria)

Phylogenetic tree: [*Penardiella interrupta*](#)

Diagnosis:

- length 70–120 µm
- body ovoid, ellipsoidal or kidney-shaped
- cell laterally flattened
- oral bulge with extrusomes anteriorly
- a belt of extrusomes running meridionally from oral bulge
- belt of extrusomes running from oral bulge over ventral side to the mid of dorsal side
- symbiotic algae present, often filled with dark granules
- contractile vacuole subterminal
- macronucleus oval, elongate or ribbon-like with an adjacent micronucleus
- soft, long cilia, slowly swimming



after Kahl

Penardiella interrupta

I found this haptorian ciliate in the uppermost (still aerobic) mud layer in the [Simmelried](#) (2009) and in June 2025 again in the pond behind parking space St. Ulrich (Austria). *Penardiella interrupta* is somewhat difficult to identify because a thorough investigation of the ciliate is necessary to make the assignment certain. Like *Spathidium*, *Penardiella* has an oral bulge armed with extrusomes. From the oral bulge, a broad, double-row belt of extrusomes runs over the ventral side, encircles the posterior end and reaches up to the middle of the dorsal side, where the belt ends (s. figs. 5 a-b, 6, 7 a-b and 8). *Penardiella interrupta* can be reliably identified by this characteristic.

Penardiella interrupta
Obj. 40 X

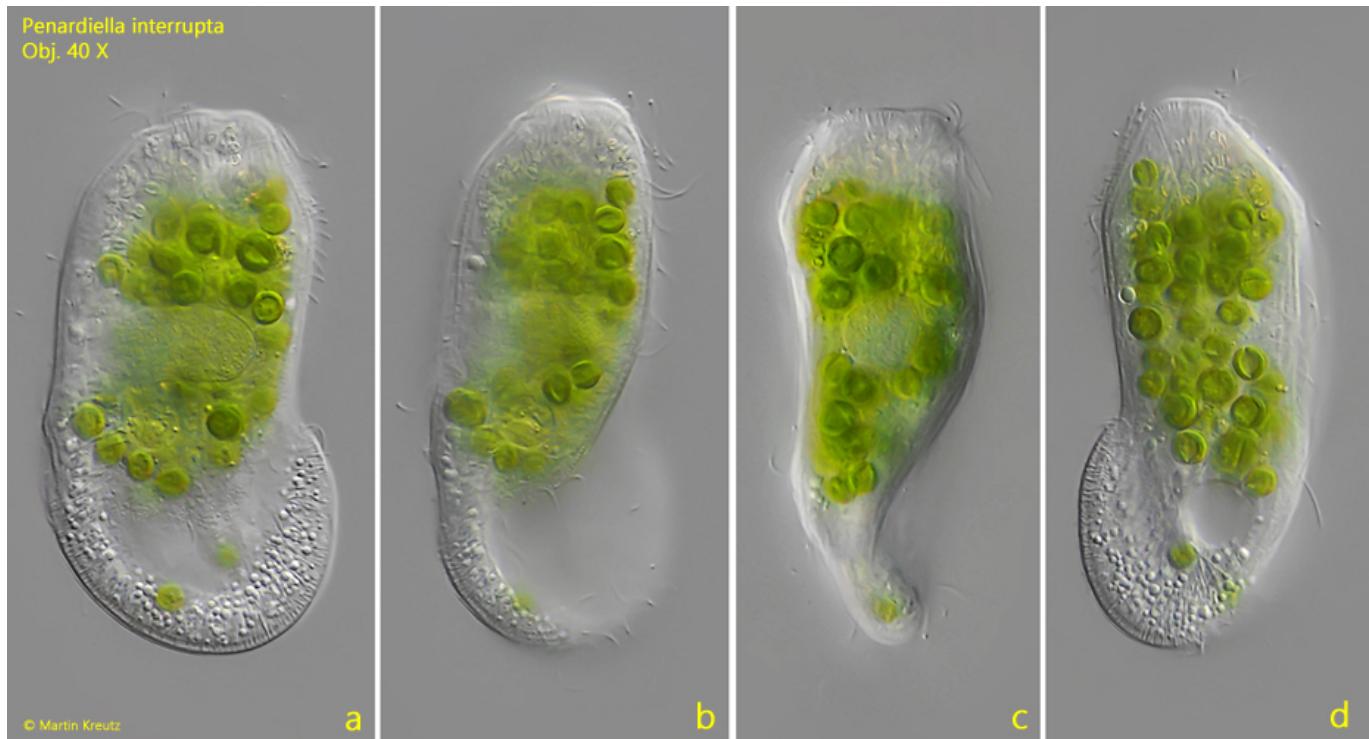


Fig. 1 a-c: *Penardiella interrupta*. L = 118 μ m. A freely swimming specimen. Obj. 40 X.

Penardiella interrupta
Obj. 100 X

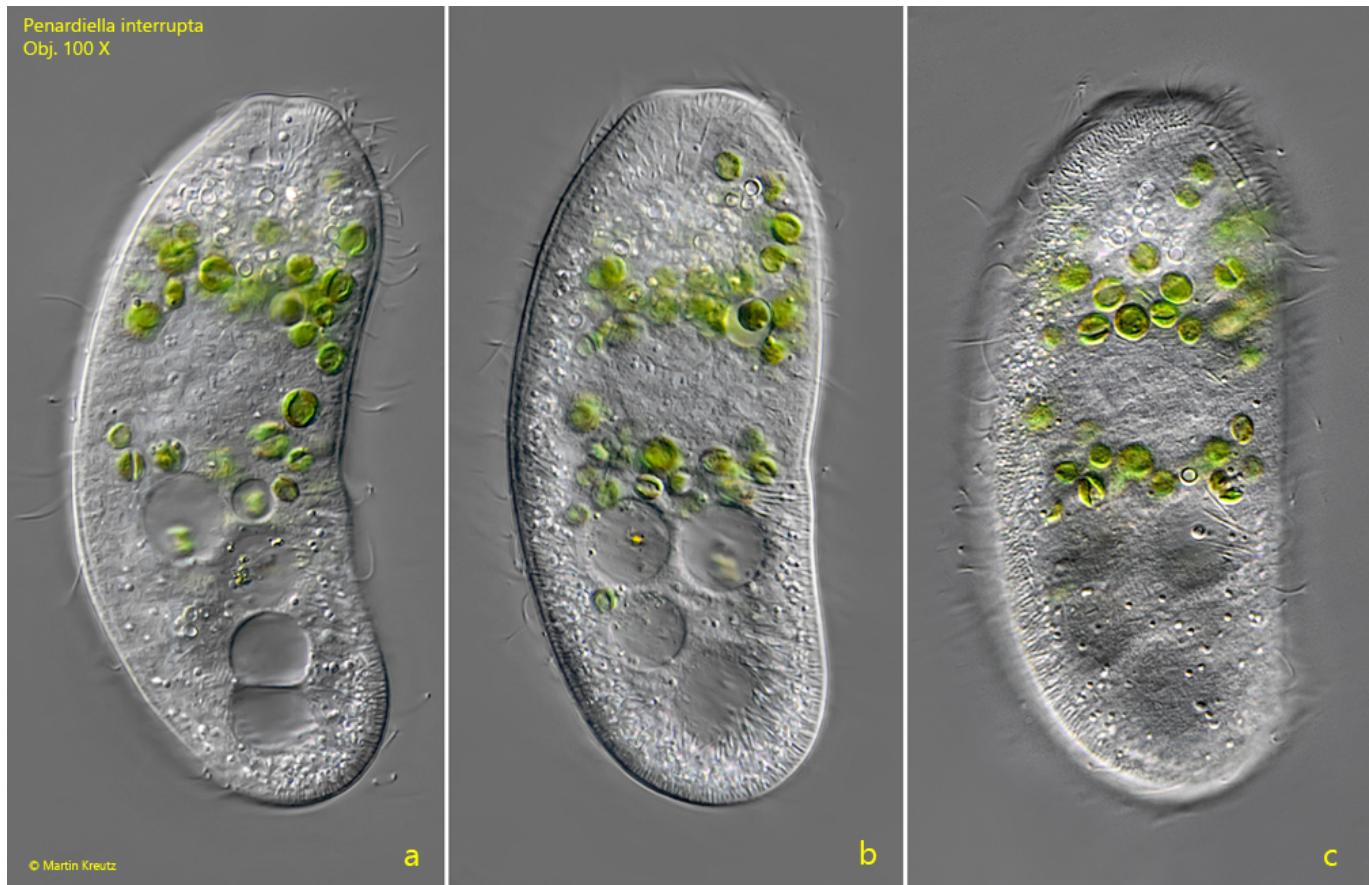


Fig. 2 a-c: *Penardiella interrupta*. L = 100 μ m. A second freely swimming specimen in lateral view from left. Obj. 100 X.

Penardiella interrupta
Obj. 100 X



Fig. 3: *Penardiella interrupta*. L = 100 μ m. A second freely swimming specimen in lateral view from left. Obj. 100 X.



Fig. 4: *Penardiella interrupta*. L = 100 μ m. A freely swimming specimen in lateral view from left. BE = belt of extrusomes, CV = contractile vacuole, EX = extrusomes, Ma = macronucleus, OB = oral bulge. Obj. 100 X.

Penardiella interrupta
Obj. 100 X

BE

OB

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a

b

Fig. 5 a-b: *Penardiella interrupta*. L = 100 μ m. A slightly squashed specimen in ventral view. From the oral bulge a belt of extrusomes (about 10 μ m wide) runs meridionally across the ventral side and encircles the posterior end. BE = belt of extrusomes, OB = oral bulge. Obj. 100 X.

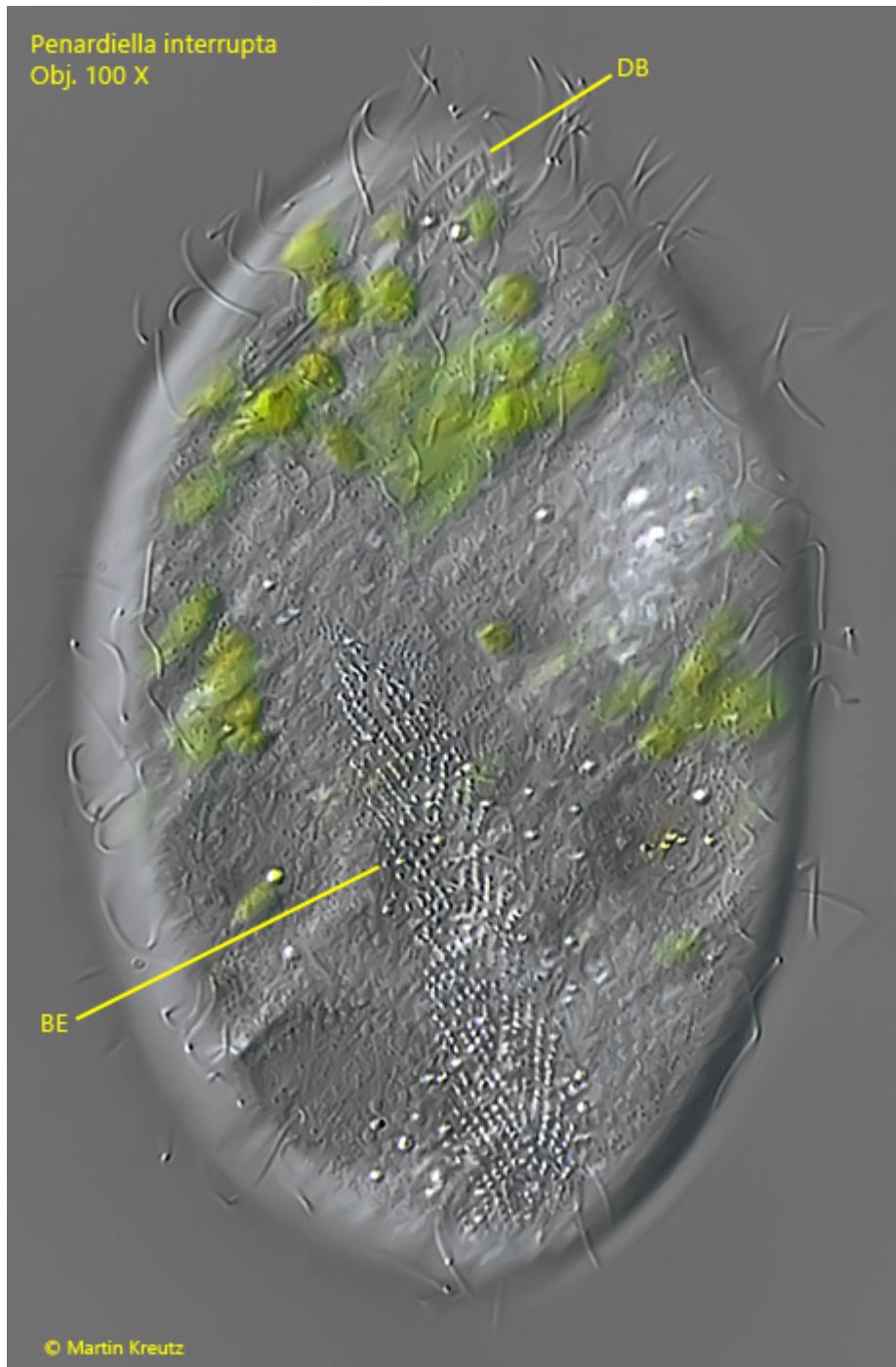


Fig. 6: *Penardiella interrupta*. L = 100 μ m. Coming from the ventral side, the belt of extrusomes runs to the middle of the dorsal side and ends there. BE = belt of extrusomes, DB = dorsal brush. Obj. 100 X.

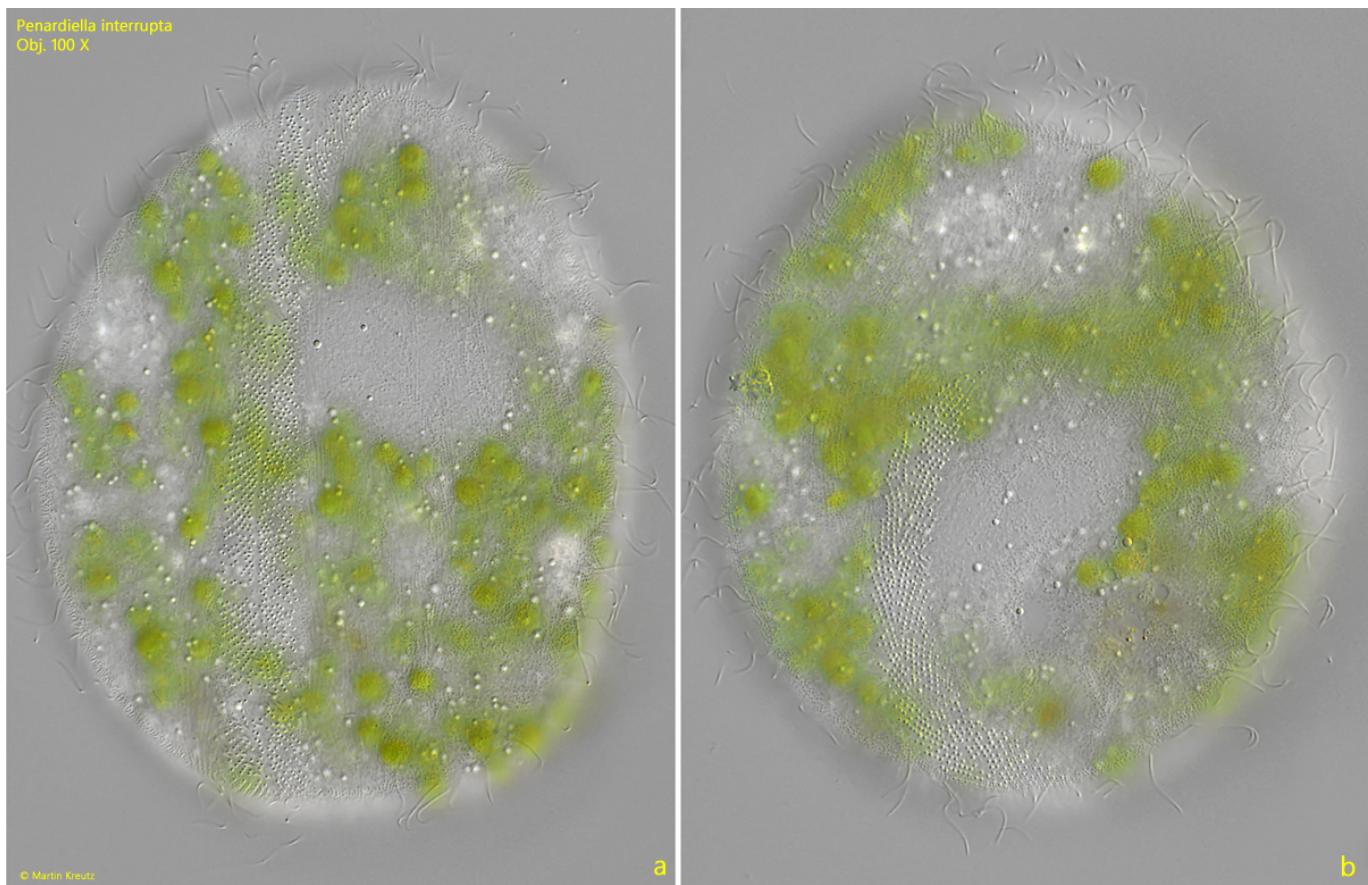


Fig. 7 a-b: *Penardiella interrupta*. A squashed specimen from ventral (a) and dorsal (b). Obj. 100 X.

Penardiella interrupta
Obj. 100 X

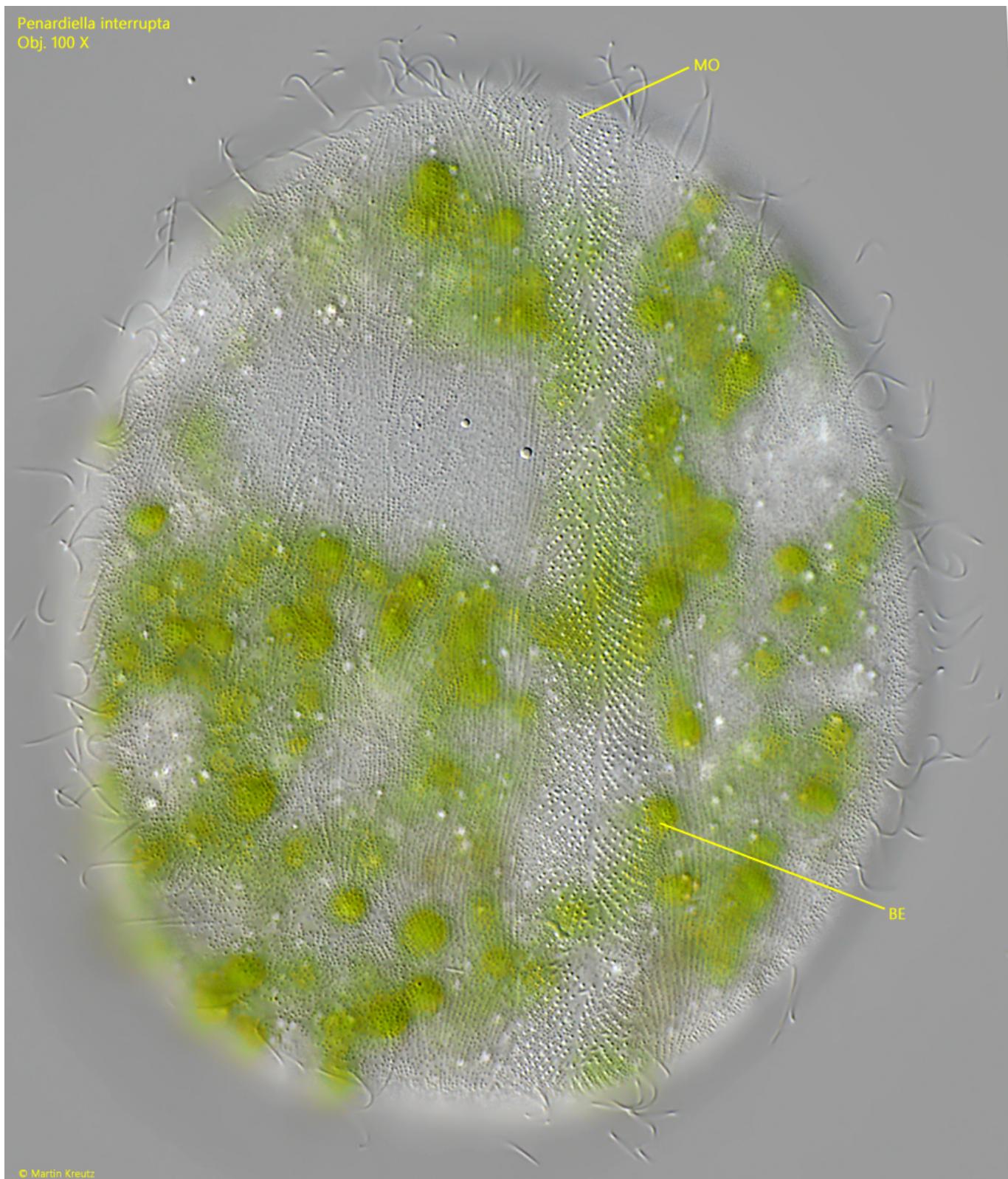


Fig. 8: *Penardiella interrupta*. The ventral belt of extrusomes (BE) in detail. MO = mouth opening. Obj. 100 X.

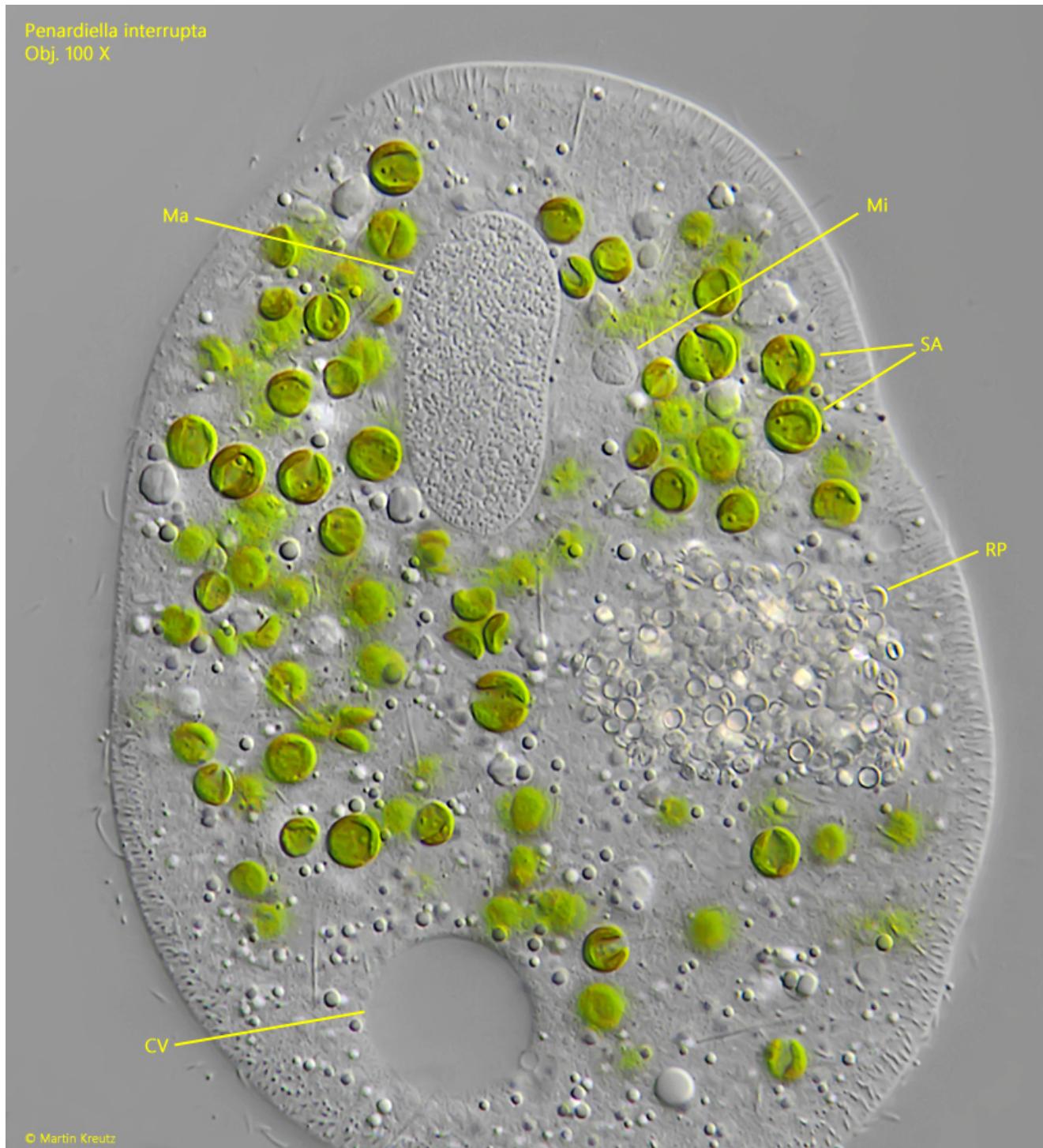


Fig. 9: *Penardiella interrupta*. L = 100 μ m. The macronucleus (Ma) and micronucleus (Mi) in a strongly squashed specimen. Near mid body the remains of prey are visible (RP), likely the ring-shaped granules of *Dexiotricha granulosa*. CV = contractile vacuole, SA = symbiotic algae. Obj. 100 X.

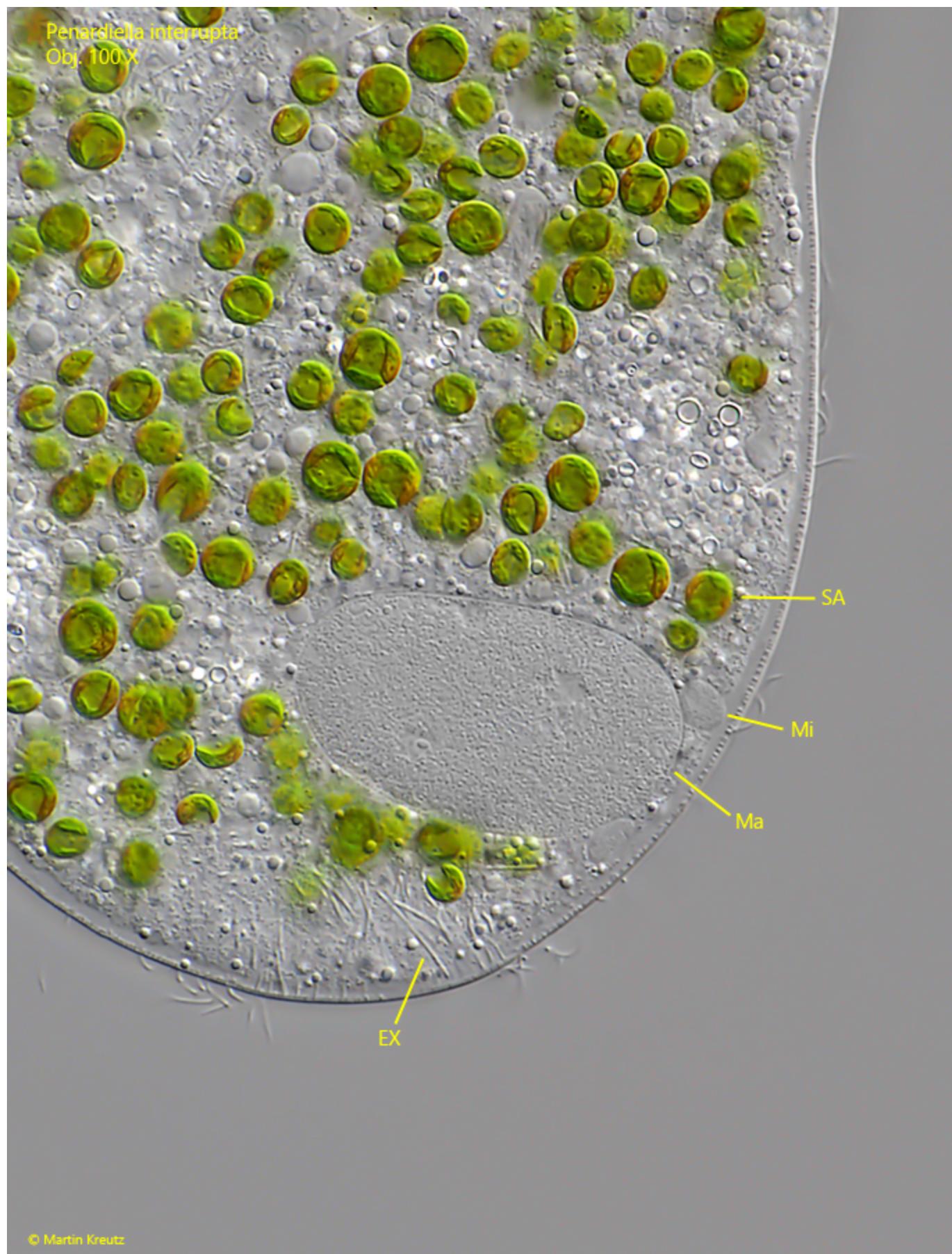


Fig. 10: *Penardiella interrupta*. The macronucleus (Ma) and micronucleus (Mi) in a second specimen. EX = extrusomes, SA = symbiotic algae. Obj. 100 X.