***Lepadella rhomboidula* Bryce, 1890**

Most likely ID: n.a.

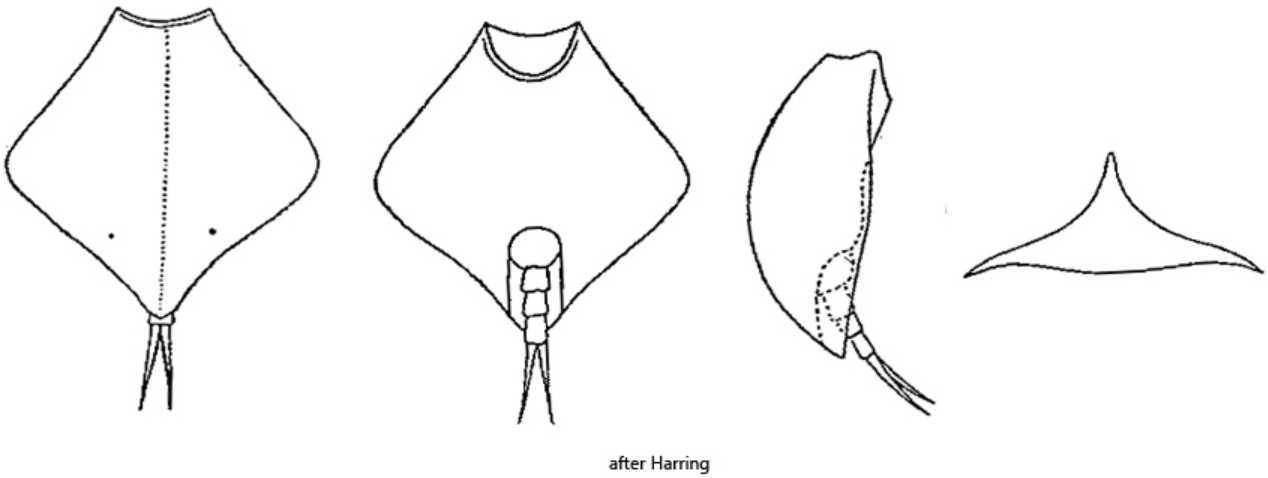
Synonym: *Lepadella triptera f. rhomboidula*

Sampling location: Mainau pond

Phylogenetic tree: *Lepadella rhomboidula*

Diagnosis:

- lorica rhomboidal
- dorsal side with a keel, ventral side flat
- length of lorica 80–86 µm, width 70–88 µm
- ventral sinus weakly concave
- foot groove U-shaped
- pointed toes of equal lengths



Lepadella rhomboidula

So far I have found only one specimen of *Lepadella rhomboidula* in August 2023 in a sample from the Mainau pond. The species is immediately identifiable by the rhombic shape of the lorica. My specimen was infested by an endoparasitic fungus, which is most likely *Bertramia* spec. (s. figs. 2 b and 3 a-b). This endoparasitic fungus is often found in rotifers of various genera.

My specimen of *Lepadella rhomboidula* is 65 µm long and thus somewhat smaller than indicated in the literature (80–86 µm). This may be caused by the infestation with the endoparasitic fungus. The lateral corners of the rhombic lorica are rounded rather than pointed and not directed anteriorly, which would point out *Lepadella triptera var. alata*. The two toes with pointed ends are of equal length (s. fig. 2 a) and not of different lengths, as is the case for *Heterolepadella heterostyla*.

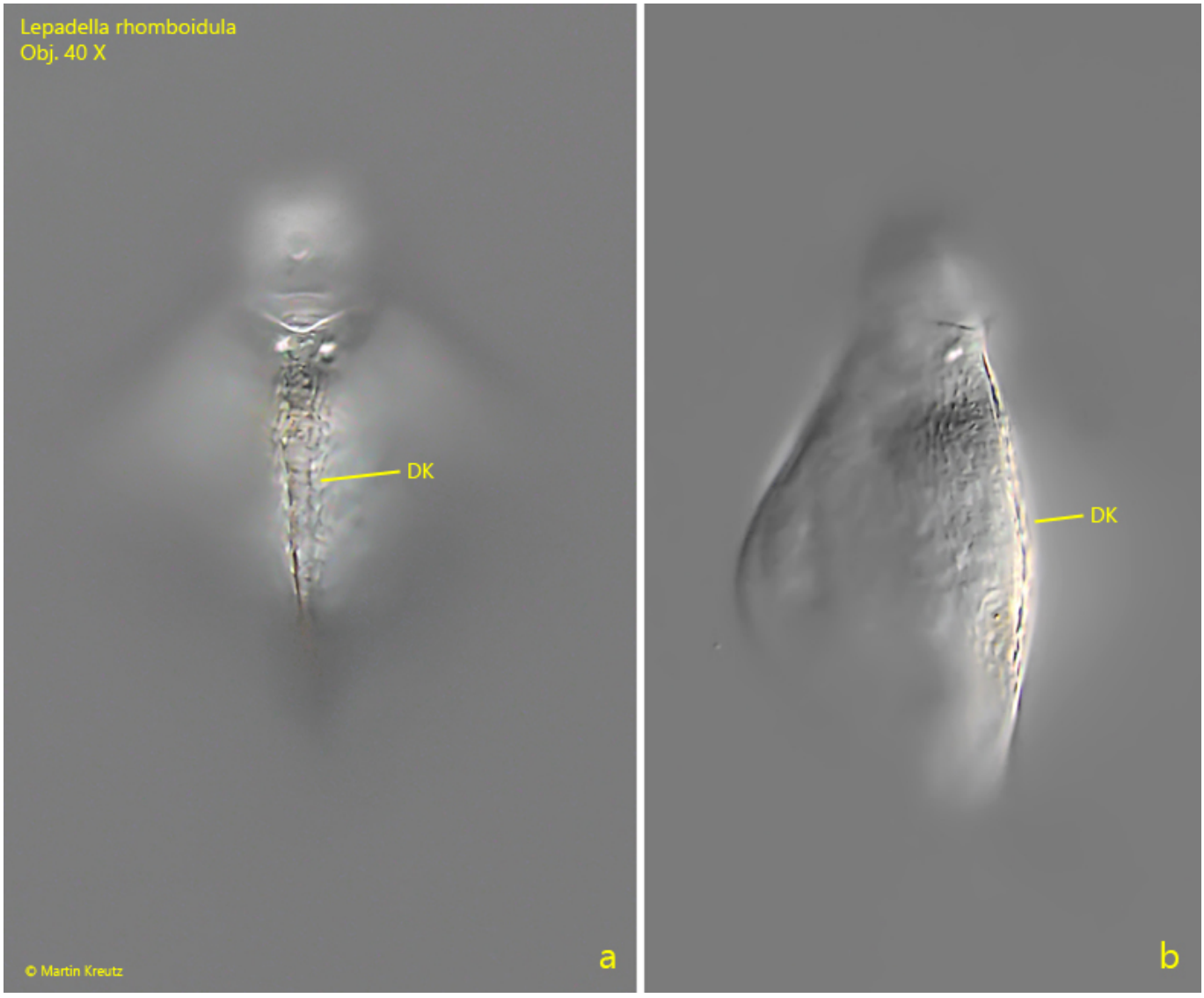


Fig. 1 a-b: *Lepadella rhomboidula*. L = 65 µm (of lorica). A freely swimming specimen from dorsal. Note the dorsal keel (DK). Obj. 40 X.

Fig. 2 a-b: *Lepadella rhomboidula*. L = 65 µm (of lorica). The same specimen as shown in fig. 1 a-b slightly squashed, from ventral. Note the pointed toes (TO) of equal length. This specimen is infested by an endoparasitic fungus (EF, most likely *Bertramia* spec.). The large cell of the endoparasitic fungus has a length of 35 µm. Obj. 60 X.

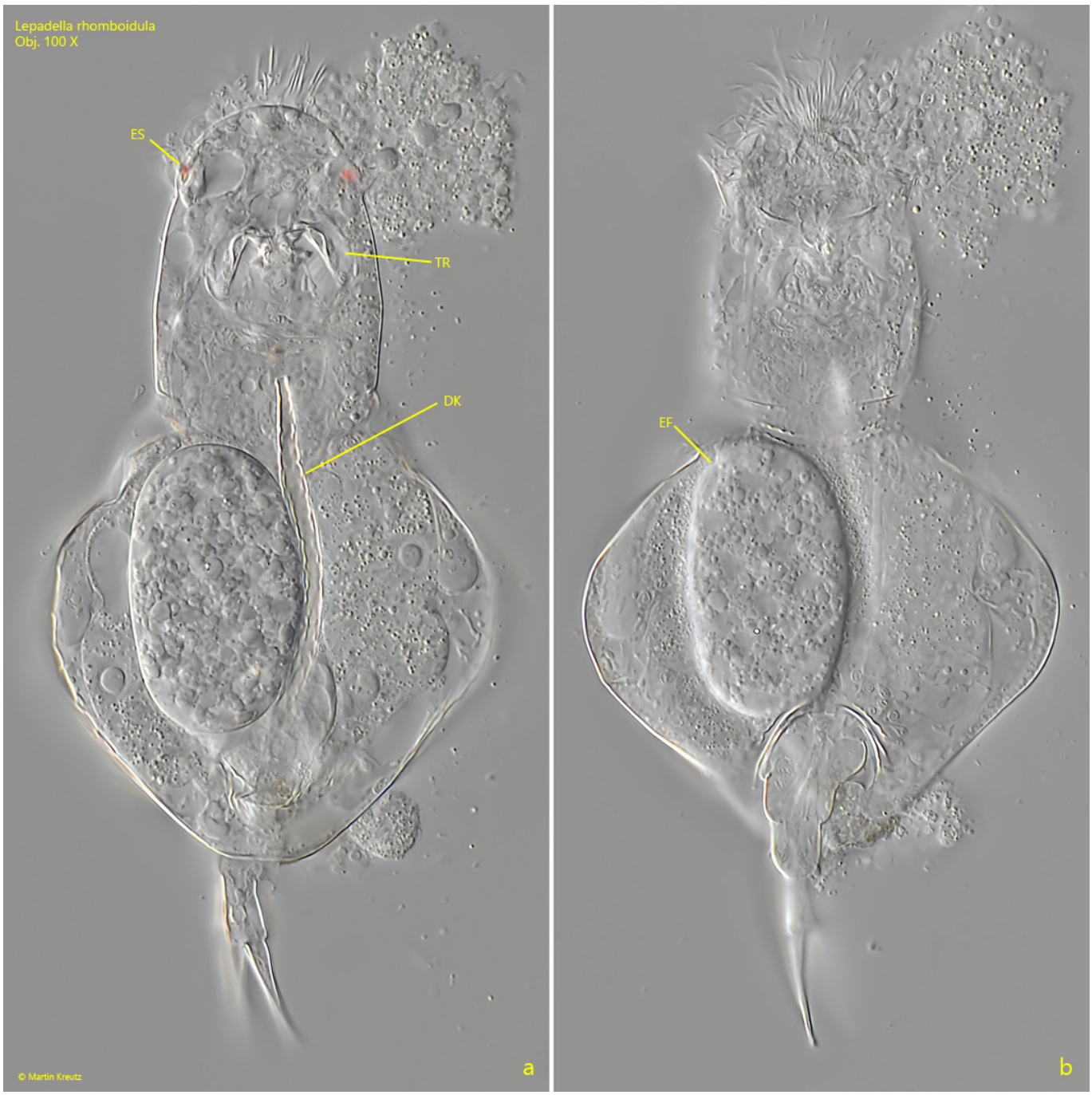


Fig. 3 a-b: *Lepadella rhomboidula*. L = 65 µm (of lorica). The same specimen as shown in fig. 1 a-b strongly squashed from ventral. DK = dorsal keel (from ventral), EF = endoparasitic fungus cell (most likely *Bertramia* spec.). Obj. 100 X.