Bresslaua vorax (Kahl, 1931)

Most likely ID: n.a.

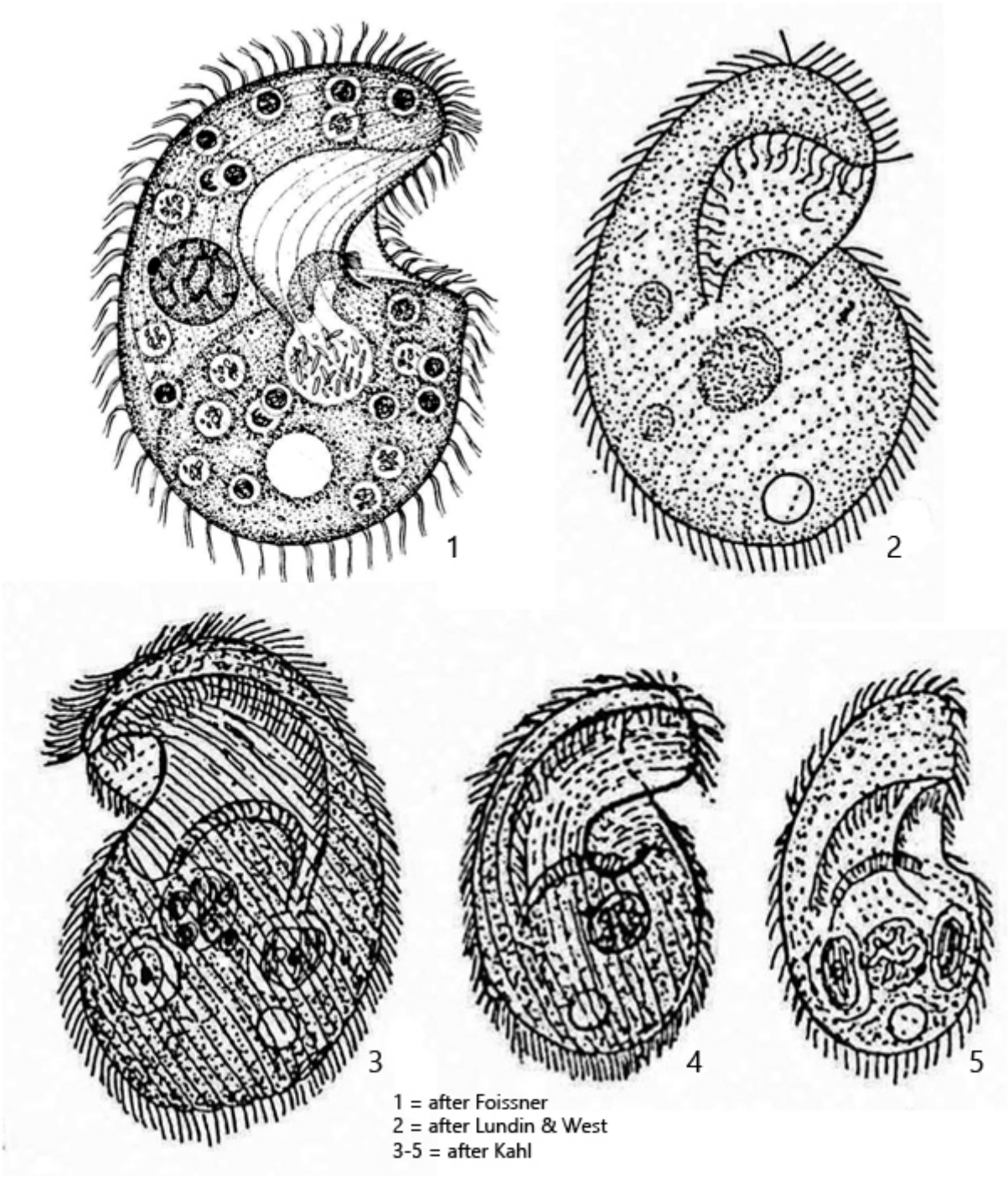
Synonym: n.a.

Sampling location: Moss

Phylogenetic tree: *Bresslaua vorax*

Diagnosis:

- body broadly oval, laterally slightly flattened
- deeply indented at the mouth opening
- postoral left side saccate
- length 70–120 µm, width 50–80 µm
- macronucleus globular to slighty ellipsoid, nucleolus reticulate
- one micronucleus adjacent to macronucleus, about 3 x 1.5 µm
- mouth opening with a right and left field of polykineties
- extrusomes inconspicuous, 0.8–1 µm long
- ciliary rows consiting of paired cilia
- contractile vacuole almost terminal
- no caudal cilia



Bresslaua vorax

I found *Bresslaua vorax* in moss samples that came mainly from trees and walls. If the moos is poured over with rainwater in Petri dishes, large populations of *Bresslaua vorax* occurred in some of the samples. *Bresslaua vorax* has so far been found in mosses, hay infusions and soil samples. Limnetic records has not yet been confirmed.

Bresslaua vorax is easily confused with *Colpoda cucullus* in terms of size and shape. However, the anterior half of *Colpoda cucullus* is much more broadly rounded, the body is kidney-shaped and the mouth opening is smaller. In addition, *Colpoda cucullus* is exclusively feeding on bacteria, whereas *Bresslaua vorax* is a predator of other ciliates (s. fig. 6). In

addition, the extrusomes of *Colpoda cucullus* are larger and comma-shaped.

In my populations, the specimens of *Bresslaua vorax* were 80 – 95 µm long. I have not found any larger specimens. However, with good nutrition giant forms up to 250 µm were described by Kahl (1931). The specimens in my population mainly preyed mainly *Colpoda steinii*. Some specimens were completely opaque and deformed due to the high number of ingested ciliates. I found transparent specimens of *Bresslaua vorax* only in old samples, with a low concentration of prey ciliates.

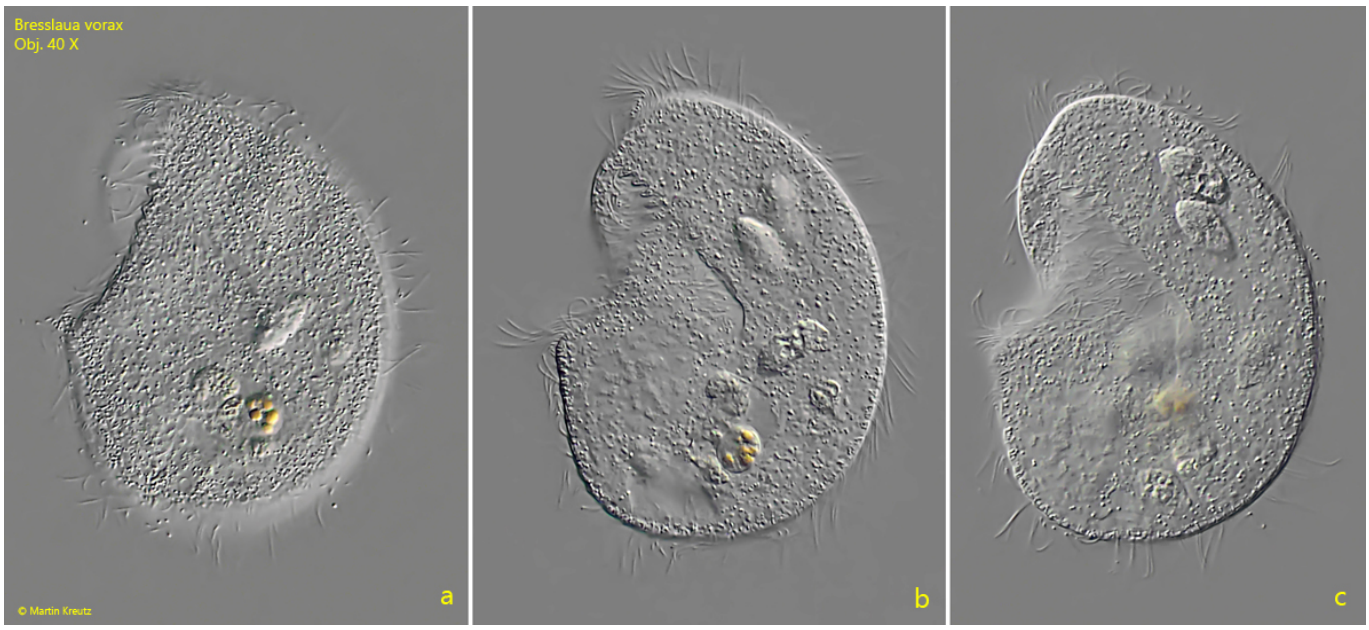


Fig. 1 a-c: *Bresslaua vorax*. L = 89 µm. A freely swimming specimen from left. Obj. 40 X.

Fig. 2 a-b: *Bresslaua vorax*. L = 89 µm. The same specimen as shown in fig. 1 a-c at higher magnification. Obj. 60 X.

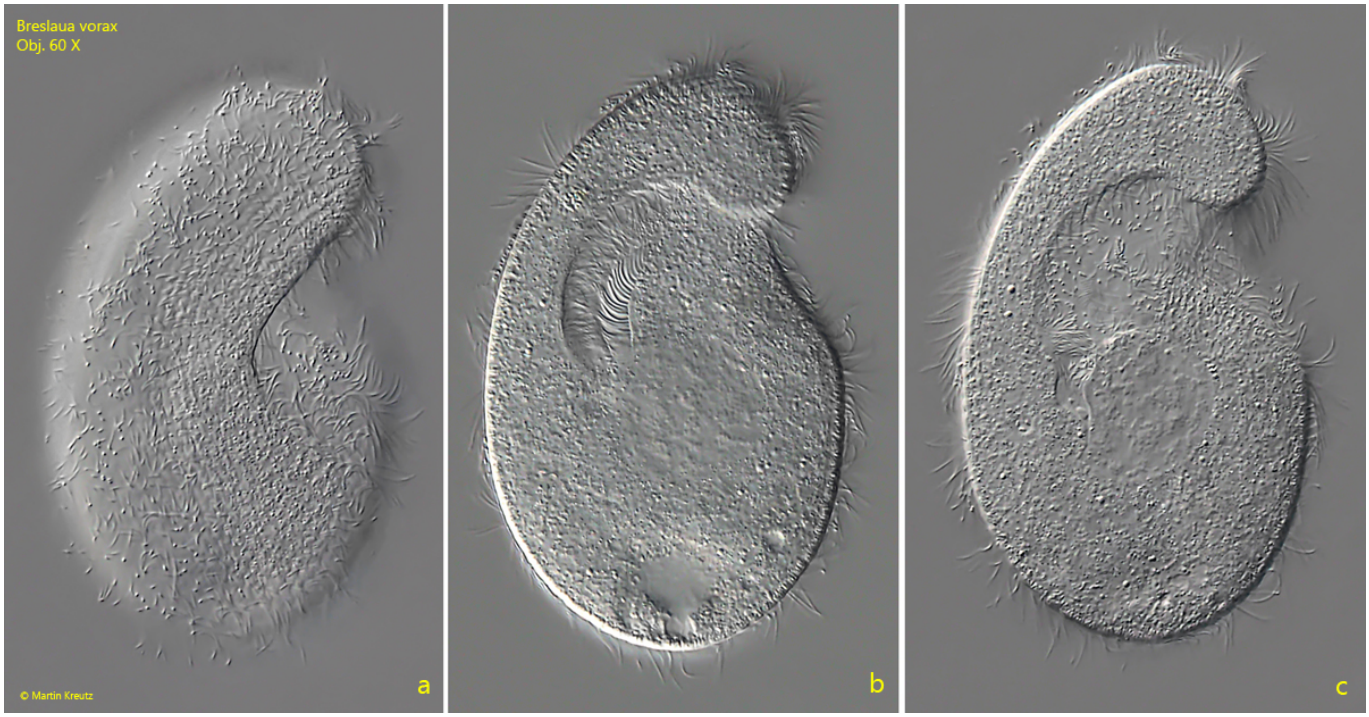


Fig. 3 a-c: *Bresslaua vorax*. L = 94 µm. A freely swimming specimen from right. Obj. 60 X.

Fig. 4 a-b: *Bresslaua vorax*. L = 94 µm. Two focal planes of the slighty squashed specimen as shown in fig. 3 a-c. Note the curved oral polykinetid of the left side (LOP). CV = contractile vacuole, EX = extrusomes, Ma = macronucleus with reticulate nucleolus, Mi? = probably the micronucleus. Obj. 100 X

Fig. 5: *Bresslaua vorax*. A strongly squashed specimen. Note the ingested ciliates (IC). EX = extrusomes, Ma = macronucleus with reticulate nucleolus, Nuc = nucleolus. Obj. 100 X.

Fig. 6: *Bresslaua vorax*. The extrusomes (EX) with a length of 1–1.2 µm in detail. Obj. 100 X.

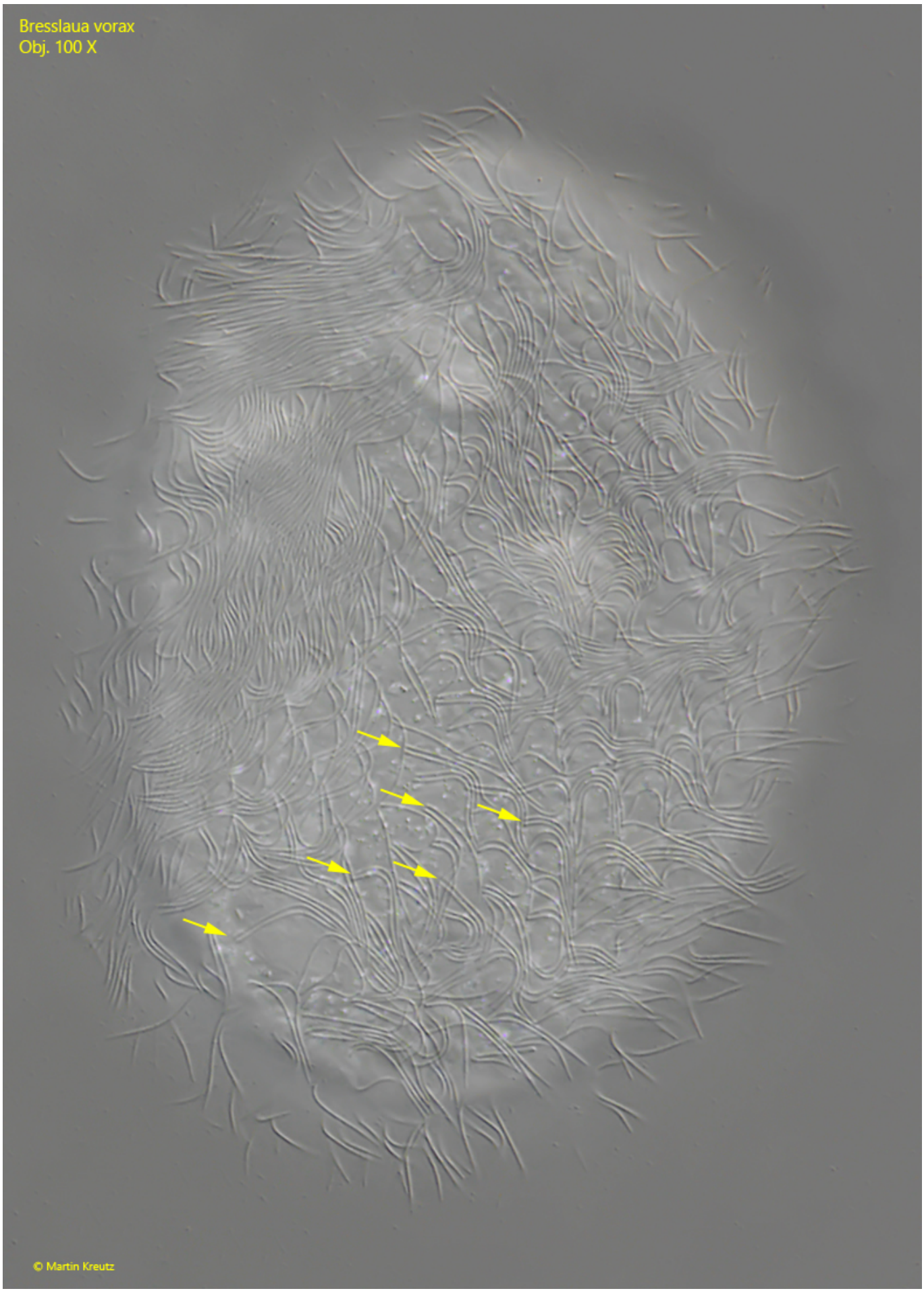

Bresslaua vorax
Obj. 100 X
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Fig. 7: *Bresslaua vorax*. Focal plane on the ciliation of a strongly squashed specimen. Note the paired cilia (arrows) of the somatic ciliation. Obj. 100 X.