Notholca acuminata Ehrenberg, 1832

Most likely ID: n.a.

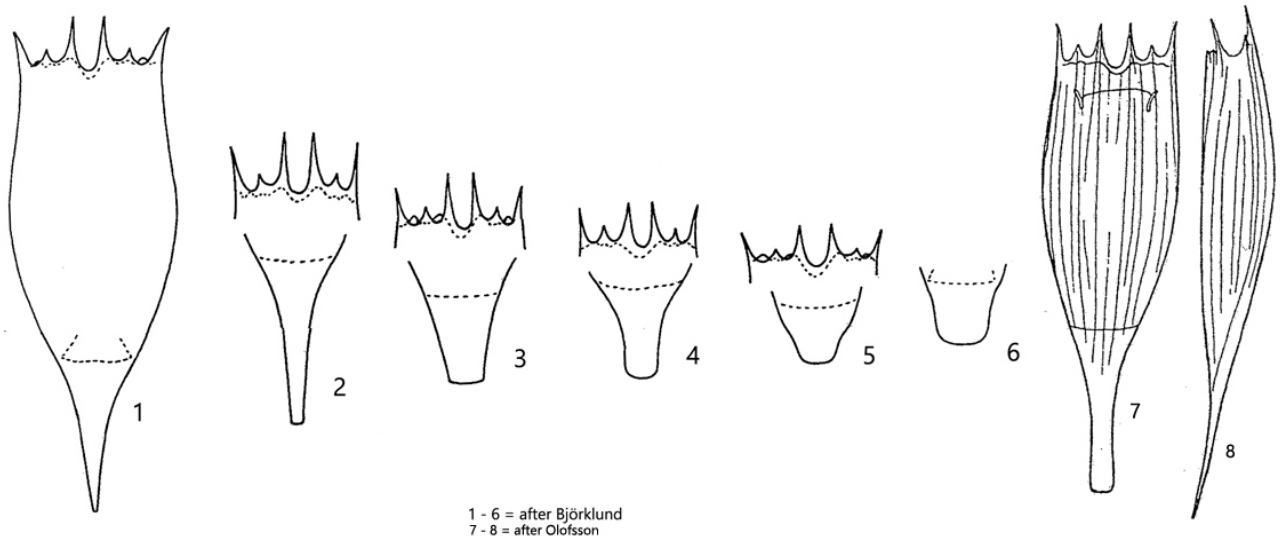
Synonyms: *Notholca acuminata* var. *extensa*, *Notholca bipalium* var. *acuminata*, *Notholca equispinata, Notholca foliacea, Notholca striata, Notholca striata acuminata, Notholca striata* var. *acuminata, Notholca striata labis, Notholca thalassia*

Sampling location: Lake Constance, Mühlweiher Litzelstetten, Kaltbrunn pond, Hagstaffel pond**,** Mühlhalden pond

Phylogenetic tree: ***Notholca acuminata***

Diagnosis:

- lorica oval, dorso-ventrally flattened
- lorica with posterior, spatula-shaped extension
- length 136–360 µm
- dorsal side of lorica with longitudinal striation
- anterior dorsal margin with 4 long and 2 short spines
- anterior ventral margin with U-shaped sinus
- without spherical eyespot



Notholca acuminata

Notholca acuminata is a rotifer with a planktonic lifestyle, which is mainly found in the cold season. Within the species there is a high degree of variability. For example, the spatula-shaped posterior end of *Notholca acuminata* can vary in length and shape (s. drawings above). The species feeds mainly on diatoms, dinophyceans and small green algae, which explains the usually orange or brownish color of the stomach. The lorica of *Notholca acuminata* is strongly flattened dorsal-ventrally, making it an attractive microscopic object. The characteristic shape of *Notholca acuminata* prevents confusion with other planktonic rotifers.

Fig. 1 a-c: *Notholca acuminata*. L = 298 µm. Different focal planes from ventral of a a slightly squashed specimen. BL = bladder, ES = eyespot, ST = stomach, US = U-shaped sinus of the anterior ventral margin of lorica, Vit = vitellarium. Obj. 40 X.

Fig. 2 a-b: *Notholca acuminata*. L = 284 µm. Two focal planes of a second specimen from dorsal. Note longitudinal striation (LS) of the dorsal side and the 6 spines of the anterior dorsal margin of the lorica (1–6). The short spines 2 and 5 are out of focus. Obj. 40 X.

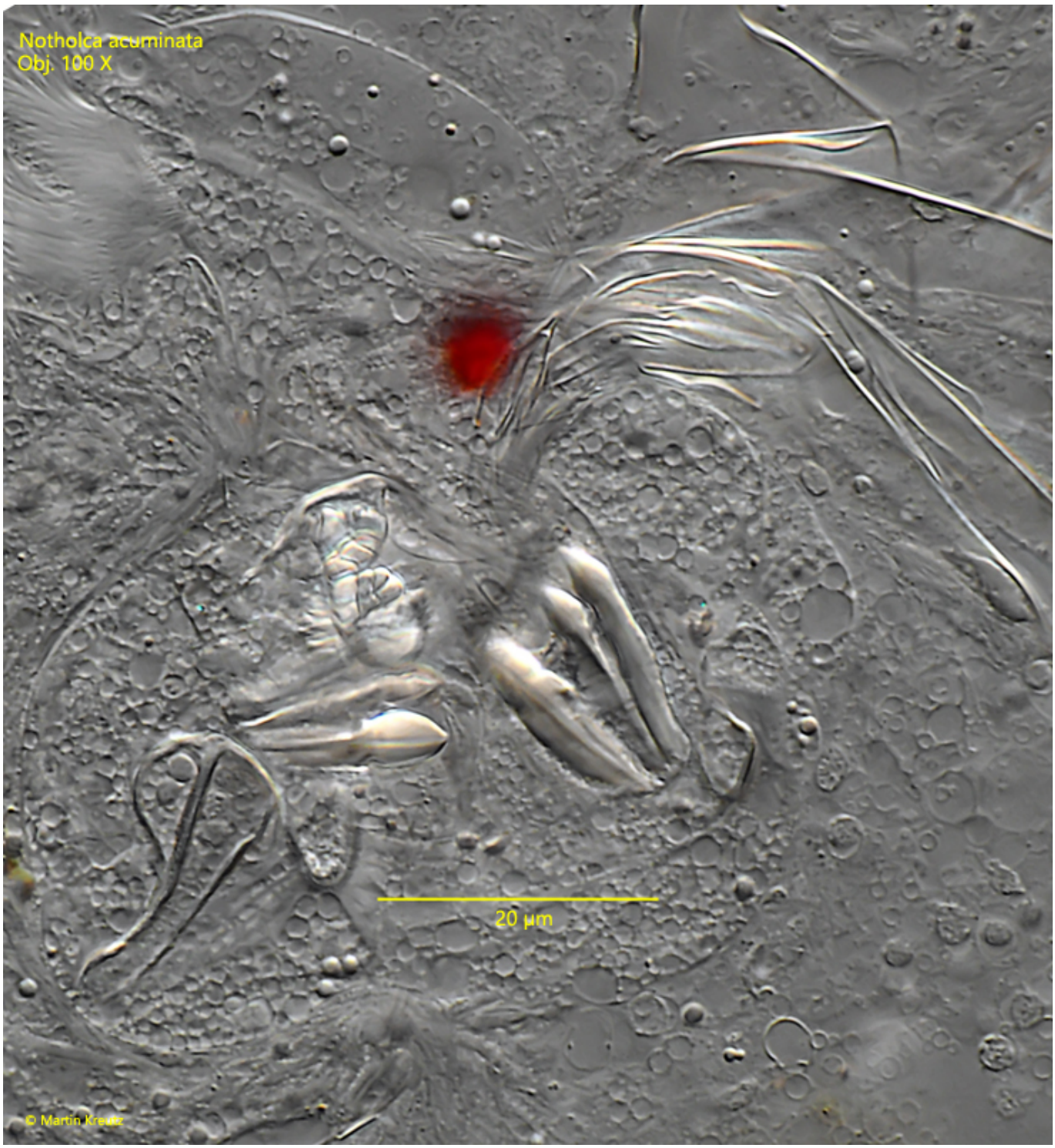


Fig. 3: *Notholca acuminata*. The trophi in a strongly squashed specimen. Obj. 100 X.