Proales parasita Ehrenberg, 1838

Most likely ID: n.a.

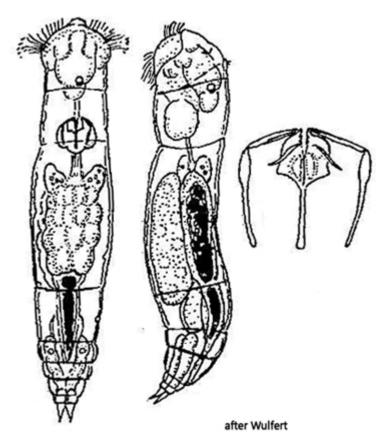
Synonym: Notommata parasita

Sampling location: Pond of Schmieder clinic

Phylogenetic tree: Proales parasita

Diagnosis:

- body sindle shaped
- length 140-160 µm
- foot short, two parts
- toes short, conical
- neck well marked
- one eyespot with lens, shifted to right side
- cerebral ganglion rectangular with hemispherical, granular sac
- stomach filled with greenish, yellowish and reddish masses
- parasitic lifestyle in Volvox, Uroglena and Ophrydium



Proales parasita

I could find *Proales parasita* only once in June 2017. The identification is not difficult due to the parasitic lifestyle in colonies of *Volvox*, *Uroglena* or *Ophrydium*. The two other parasitic ${\it rotifers\ that\ live\ in\ } \textit{Volvox\ or\ } \textit{Uroglena\ are\ } \textit{Ascomorphella\ } \textit{volvocicola\ } \textit{and\ } \textit{Cephalodella\ }$ edax. The first species has no toes and Cephalodella edax has the eyespot on top of the forehead. These features mean that these two species can be excluded.

The specimens in my population were about 10 % larger than the maximum stated length (160 µm). However, there are few independent descriptions of *Proales parasita*, so little is known about the variability in size. As in many *Proales* species, the singular eyespot is asymmetrically arranged in the body and shifted to the right side of the body (s. fig. 2). Due to the rich food supply from the cells of their host, the specimens can be opaque and deformed.



Fig. 1 a-b: Proales parasita. $L=190~\mu m$. Two focal planes of a freely swimming specimen from left. Note the cerebral ganglion with the adjacent granular sac (GS). Obj. 60 X.

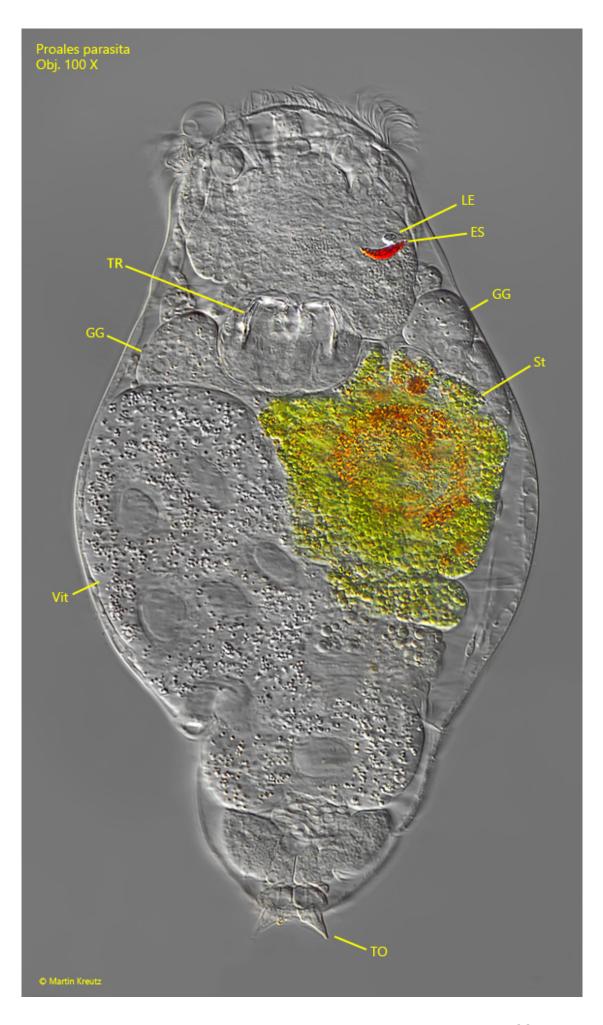


Fig. 2: Proales parasita. A squashed specimen from dorsal. Note the eyespot (ES) with a lens (LE) shifted to the right side. GG = gastric glands, ST = stomach, TO = toes, TR = trophi, Vit = vitellarium. Obj. 100 X.

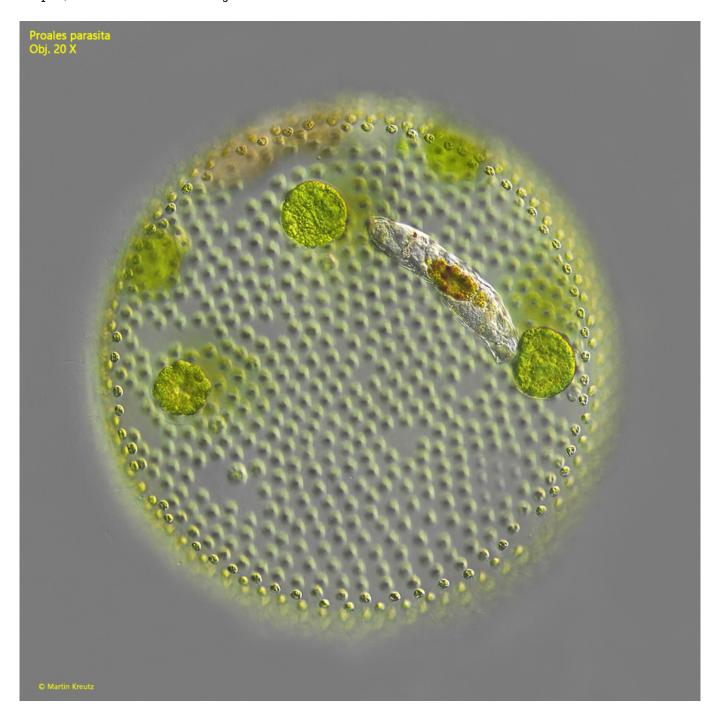


Fig. 3: Proales parasita. $L = 180 \mu m$. A specimen parasitizes in a colony of Volvox aureus and feeds on the host's cells. Obj. 100 X.

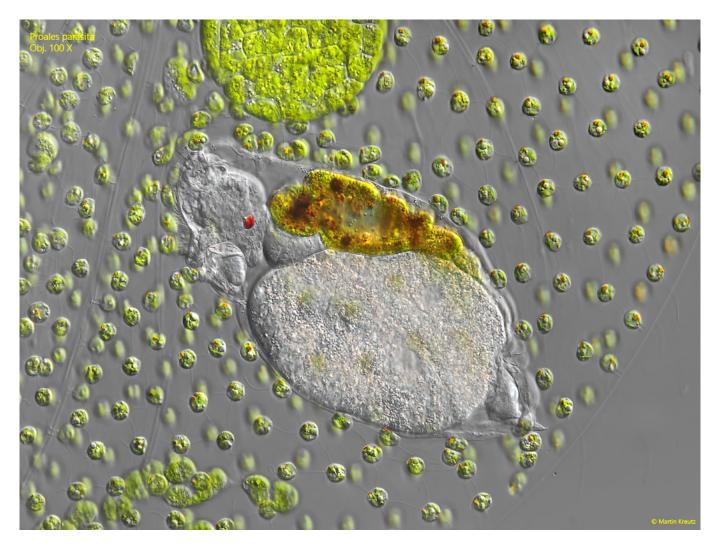


Fig. 4: $Proales\ parasita$. The specimen as shown in fig. 3 in detail. Obj. 100 X.

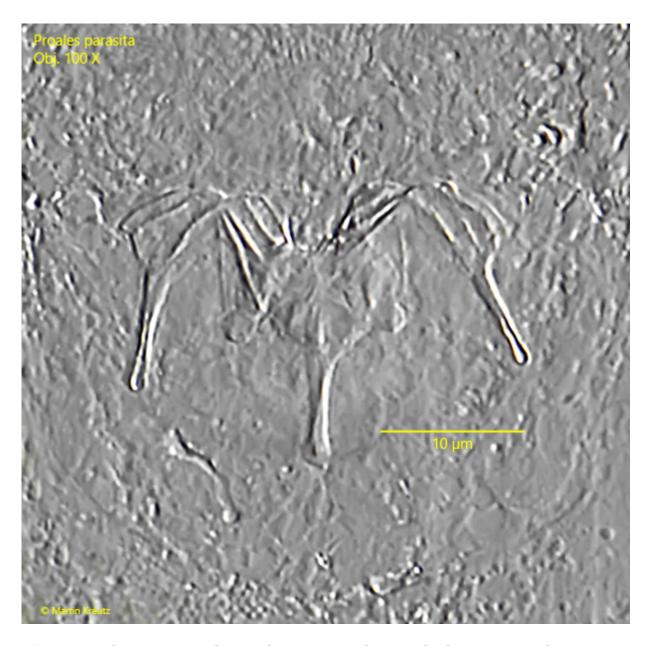


Fig. 5: $Proales\ parasita$. The trophi in a strongly squashed specimen. Obj. 100 X.