

# BEAUFORTIA

SERIES OF MISCELLANEOUS PUBLICATIONS

ZOOLOGICAL MUSEUM - AMSTERDAM

No. 43

Volume 5

April 15, 1955

## *Trocheta bykowskii* Gedroyć, 1912, in the Netherlands\*)

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Recently, while collecting *Hirudinea* in the Netherlands we came across the species *Trocheta bykowskii* GEDROYĆ, 1912 (syn. *Blanchardia bykowskii* GEDROYĆ, 1916).

The genus *Trocheta* was described by DUTROCHET in 1817. The only European species he mentions is *Trocheta subviridis*, one of the larger leeches, the length of this animal in rest being 80-140 mm.

GEDROYĆ, 1912, described a second European species of the genus as *Trocheta bykowskii*. This animal was found in Poland (Carpathian mountains region).

The differences between *Trocheta subviridis* and *T. bykowskii* chiefly concern the size (*T. subviridis* being about 2-3 times as long as *T. bykowskii*) and the position of the genital openings, which are separated by 5, 5½ or 6 rings on the ventral side in *T. subviridis* and by 2 or 3 rings in *T. bykowskii*.

In 1936 PAWŁOWSKI published some comments on a number of *Trocheta*'s examined by himself; he identified these leeches as *T. bykowskii*.

During the years 1944-1953, a number of *Hirudinea* were collected in the Netherlands, which were fully in accordance with PAWŁOWSKI's description of *T. bykowskii*.

The length of the animal is 20-45 mm and the width 3-4 mm. The colour design on the dorsal side shows blackish spots, which have a likeness to the spots of *Herpobdella octoculata*. Sometimes a dark median stripe is observed, while in a few specimens any colour design fails.

Papillae are mostly absent, but little, irregular warts are sometimes visible. The subdivision of the somites into rings differs. A complete somite consists of one broad ring (divided into two), three broad rings, a narrow ring and a broad ring less evidently divided into two, so that seemingly three broad and five narrow rings succeed each other.

The eyes are situated as in *Herpobdella*; usually, however, their number is less than eight. It takes some trouble to discern them.

\*) Received November 1951.

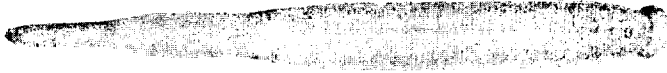


FIGURE 1. *Trocheta bykowskii*

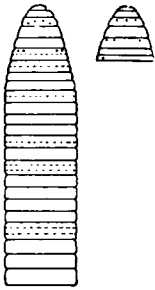


FIGURE 2. *Trocheta bykowskii*. Left, anterior part of body from dorsal side, with normal position of the eyes. Right, anterior part with abnormal eye position.

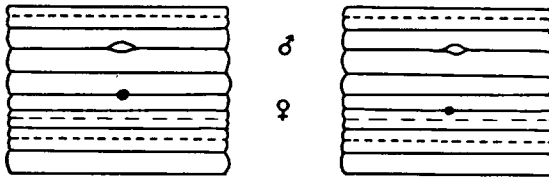


FIGURE 3. *Trocheta bykowskii*. The genital region, left specimen with 2 and right specimen with 3 rings between genital openings.

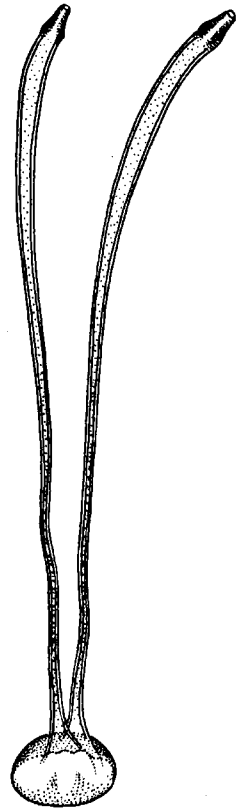


FIGURE 4. *Trocheta bykowskii*, pseudospermatophore.

The genital pores are separated by two broad annuli; rarely the female genital pore is situated caudadly of the narrow annulus (see figure). The anus is found three annuli ahead of the posterior sucker.

Morphological details of the species are shown in figures 1 to 4.

VERRIEST (1950) records the occurrence of *Trocheta subviridis* in Belgium and the Netherlands. In our opinion, however, his specimens all belong to *Trocheta bykowskii*, which is not identical with *T. subviridis*.

As little is known about the biology of *Trocheta bykowskii*, some particulars on the habitats in the Netherlands are given.

The first finding dates from 1925, when in a market-garden at Leiden a leech was found. This specimen remained unidentified in the collection

of the "Rijksmuseum van Natuurlijke Historie", Leiden, until 1944. In this year some animals of the species were found under stones on the shore of the IJsselmeer near Diemerdam. In 1949 the same species was found under stones on the bank of the Merwede near Sleewijk and on the left bank of the Meuse near St. Pieter, south of Maastricht, and again in 1951 along the Diemerzeedijk (shore of the IJsselmeer). A large number was found in the willowplot "De Dood", a part of the Brabantse Biesbos, where the *Trocheta*'s occurred in the mud. This freshwater region is remarkable for its being subject to the tidal movement, running dry twice a day, the depth of the water in flood amounting to about 2 m.

All in all these data tend to show, that *T. bykowskii* in our country lives in a medium now and then flooded by water which is a little brackish.

In the Biesbos the food appeared to consist of *Enchytraeidae* and *Tubificidae*.

GEDROYC mentions as biotope calcareous spring-water.

PAWLOWSKI collected the animals in running water under stones.

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