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OCCURRENCE OF HYPANIA INVALIDA (GRUBE) IN THE TISZA (ANNELIDA, POLYCHAETA)

MAGDOLNA FERENCZ

Zoo-Morhological and Systematical Institute of the Attila József University, Szeged

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Introduction

As I have investigated the benthos of Tisza only at the Szeged region, so far, from the habitats here I could not get systematically *Hypania invalida*, therefore I cannot give any detailed information about it, as yet. Nevertheless, the occurrence itself being so interesting, I am considering a short publication as necessary.

In fresh waters, from the constituents of the zoobenthos the *Polychaeta* have but a little role, owing to their low species number. Their appearance and distribution are rather a zoogeographic and ecological curiosity, meaning a new datum of occurrence possibly only for the local faunalist. A datum like that is also the observation of *Hypania invalida* in the Tisza, meaning at the same time the first occurrence of the species in Hungary, as well.

Material and method

In the course of my zoobenthos investigations, *Hypania invalida* was found from two collections (October 28, 1965; August 12, 1968), at both occasions, with a low number of specimens. The habitat has been the Szeged sector of the Tisza, above the swimminghouse "Béke", in a distance of about 10 m from the bank, from a depth of 3—4 m. The speed of stream was 0,5—1,1 m/sec. according to the mean data of the investigations performed in the time of the summer low water. In the time of the collection of 1965, according to the data measured 20 cm below the water surface ,the water temperature was 9,5°C, pH: 7,78; O_2-consumption: 8,8 mg/l; dissolved O_2: 12,0 mg/l, saturation: 103%; total dry material: 459 mg/l; total floating material 40 mg/l. The substratum in this place is sandy, with rubbles, resp. mostly with slag. Tlese physiographic conditions of the rived agree with B. Russev' s (Russev — Marinov, 1964) data according to which *Hypania invalida* is mainly a member of the scoriorpheophilous biocoenosis.

For collecting I have used Ekman — Birge's silt dredger, and

fixed the material selected in 4% formaldehyd. The worms were found partly in their living pipes, partly free, and several empty living pipes have been found in other habitats, as well.

Discussion

Some data about the occurrence of *Hypania invalida* in European rivers have been published by a lot of authors, so far (Annenkvova, 1929, 1930, Brezeanu — Popescu — Arion, 1962, Brtek, 1953, Dudich, 1967, Olivari, 1961, Popescu, 1962, Popescu — Prunescu — Arion, 1961, Russev, 1959, Russev — Marinov, 1964, Weber, 1964). According to the researchers mentoined, it wandered up into the Danube from the Black Sea (Weber, 1964). *Hypania invalida* — in contradistinction to the other two species, *Hypaniola kowalewskii* (Grimm) and *Manajunkia caspica* (Annenkova), that migrated similarly to the Danube — has got even to the Austrian Danube reaches. In Brtek's opinino "...the species that can be observed above the Iron Gate of the Danube, too, have got acclimatized to the freseh-water life much earlyer than those getting up only till the Iron Gate." (Brtek, 1953).

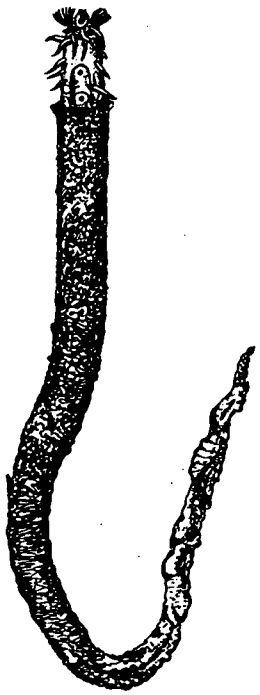

Fig. 1. *Hipania invalida* (Grube)

By finding this species with a low specimen number like here, it is not excluded that it occurs possibly in other places of the Tisza in a

much larger amount, and I haven't any material collected from other sectors of the river bed yet. From the fact that *Hypania invalida* has got so widespread in the European rivers, the conclusion may be drawn that the species is an euryecic one with a wide tolerance limit. It can be seen from Annenkova's data, as well, that from the five Ponto-Caspian *Polychaeta* relict species enumerated by her just *Hypania invalida* has shown the widest limits of distribution in the Caspian and Black Seas themselves (Annenkova, 1929, 1930).

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