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Italobdella ciosi Bielecki, 1993 a new leech species from Hungary (Hirudinea: Piscicolidae)

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ABSTRACT: (*Italobdella ciosi* Bielecki, 1993 a new leech species from Hungary (Hirudinea: Piscicolidae).) *Italobdella ciosi* Bielecki, 1993 was recorded from the River Tisza and Danube, Hungary based on specimens collected from ventral fins of asp (*Aspius aspius*), barbs (*Barbus barbus*), bream (*Abramis brama*), nase (*Chondrostoma nasus*). Sampling was complemented by dredging from 4–10 m deep. Information about morphological and ecological remarks and a key to the identification of leech are given. *Italobdella ciosi* is new species in Hungary.

Introduction

The genus and the species was described by BIELECKI (1993). The *Italobdella ciosi* is only known from the type locality – Italy: River Adda near Milan (Rivolta) (NEUBERT and NESEMANN 1999). *Italobdella ciosi* was found for first time in Hungary 1994. Since that time, it has been collected in further localities of Hungary. This specimen described in the present paper were preserved in 70% ethanol and deposited in the VITUKI Plc. (Budapest) and the Mátra Museum (Gyönygyös).

Material

The publications present data of *Italobdella ciosi*. The collectings were made from 7 localities from 27. 04. 1994 to 07. 04. 2002:

Budapest: 1659 Rkm., Danube, 26. 08. 1996, 1, dredging, B. Csányi, P. Juhász; Árpád-bridge, 1651,4 Rkm, left bank, Danube, 26.08. 1996, 1, dredging, B. Csányi, P. Juhász; Parlament, 1647,6 Rkm, mainstream, Danube, 26. 08. 1996, 1, dredging, B. Csányi, P. Juhász – Foktő: 1519,5 Rkm, left bank, Danube, 12. 08. 1996, 1, dredging, B. Csányi – Ordas: 1538,8 Rkm, deadarm, Danube, 12. 04. 1999, 4, collected from barbes, J. Békési; 1540–1536 Rkm, Danube, 15. 09. 1999, 6 (1 specimen in the Mátra Museum), collected from bream, J. Békési; 07. 04. 2002, 1, collected from bream, J. Békési – Tiszabecs-Milota: 744–733 Rkm, Tisza, 27. 04. 1994, 1, collected from asp, K. Györe, Cs. Csikai, Z. Sallai; 28. 04. 1994, 2, collected from barbes, 1, collected from nase, K. Györe, Cs. Csikai, Z. Sallai.

Morphological remarks

Description (according to BIELECKI, 1993): The small leeches reach an average body length of 18.8 mm and a width of 3.7 mm (Lt= L + R1 +R2). The subdivision into trachelosoma and urosoma is very visible, even in unfed specimens. In unfed specimens, the body is completely flattened while in recently fed specimens the trachelosoma is more cylindrical. The cranial and caudal suckers are of equal dimensions. Two pairs of eyes are situated on the cranial

sucker, with the first one enlarged. The caudal sucker bears 10 eyeshaped spots. Eleven pairs of white respiratory vesicles are visible on the lateral body side.

The somites are generally quadriannulate, but small furrows indicate further splitting of the somites. The male genital pore is situated on the boundary of somite XIII/XIV and separated from the female pore by three annuli, the seminal receptacle by two annuli. An area copulatrix is absent.

The body is smooth, papillae are absent. The dorsal surface is brown and much darker than the ventral side due to densely packed brown to black melanophores. Transverse white streaks (white melanophores f. Bielecki) pattern the dorsal surface near the pulsative vesicles. The streaks may extend into the median body area to form spots on both trahelosoma and urosoma. The cranial sucker is only radially streaked. Additionally, the white sucker spots are patterned with yellow melanophores.

Key to the species of *Italobdella ciosi*
(according to NEUBERT and NESEMANN 1999)

1(6)	Area copulatrix absent	
2(3)	Eyes and ocelli absent, freshwater, ectoparasite of *Lota lota*	***Calliobdella mammillata***
3(2)	Two pairs of eyes on the cranial sucker, 10 ocelli on the caudal sucker	
4(5)	Brackish water species	***Calliobdella punctata***
5(4)	Freshwater species	***Italobdella ciosi***
6(1)	Area copulatrix present	
7(6)	Area copulatrix enlarged, female genital pore covered by area copulatrix, situated marginally on the frontal rim of the area copulatrix	***Piscicola***
8 (7)	Area copulatrix small	***Cystobranchus, Caspiobdella***

Ecological remarks

Due to its special habitude very little is known about this species. Collecting them was successful only from fish caught by fishermen and by collecting them with sediment-scraping net. Hosts of the species with the habitude of ecto-parasite are asp (*Aspius aspius*), barb (*Barbus barbus*), bream (*Abramis brama*), nase (*Chondrostoma nasus*). The species can touch to the back-stroke swimmer of the host. The species collected by sediment-scraping net were found in the depth of 4–10 metres.

According to preliminary data this leech favours the deep and cool river segments with strong current of large rivers.

Discussion

Italobdella ciosi seems to be parasite species of rheophilic fish. This lesser-known species was detected only from some parts of the River Tisza and Danube, but occurence of it can be expected from other different waterbodies of the river-system of River Danube as well.

The Piscicolidae species living in rivers of Hungary – with the exception of *Piscicola geometra* – are rare, with unknown biogeograhical spreading having high indication value. Because of their hidden habitude they are hardly detected. There are only a few specimens in

the Hungarian Natural History Museum and the Mátra Museum (Juhász et al. 2000). Occurence of the *Italobdella ciosi* proved that involvement of ichthyologists and fishermen provides great help in collecting fugitive leeches successfully.

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