

**New record of *Haplotaxis gordioides*
(Oligochaeta:Haplotaxidae) from Hungary and
its occurrence in tap water**

MICHAEL E. SMITH – SÁNDOR ANDRIKOVICH – DÁVID MURÁNYI

ABSTRACT: Four specimens of *Haplotaxis gordioides* (Oligochaeta:Haplotaxidae) were collected on 10 January 1998 and 21 February 1998 from unfiltered, unchlorinated indoor tap water in Járdánháza, Heves-Borsodi Hills, Hungary. Morphological characteristics are discussed. This is the first reported collection of *Haplotaxis gordioides* in Hungary.

Haplotaxid worms are primitive oligochaetes (BRINKHURST, 1984, 1992, 1994), found primarily in groundwater. The family has a cosmopolitan distribution, but many species are restricted to specific locales or habitats (BRINKHURST, 1978; BRINKHURST & JAMIESON, 1971). Also, because haplotaxids are rarely collected, detailed distribution patterns for most individual species are lacking. BRINKHURST and JAMIESON (1971) described the distribution of *Haplotaxis gordioides* as Holarctic and he listed several areas of Europe where it has been, or is expected to be found (BRINKHURST, 1978).

The oligochaete fauna of Hungary is poorly known (FERENCZ, 1979). To date, *Haplotaxis gordioides* has not been collected from Hungary, although it was included in keys by ANDRÁSSY (1955) and FERENCZ (1979) as potentially occurring in the oligochaete fauna of the region. The purpose of this paper is to report the collection of *Haplotaxis gordioides* for the first time from Hungary and to provide information on some morphological characteristics.

CLASS Oligochaeta
ORDER Haplotaxida
FAMILY Haplotaxidae

Haplotaxis gordioides (Hartmann, 1821)

Two immature worms were collected 10 January 1998 in indoor tap water from a private groundwater well serving six residences in the village of Járdánháza, Heves-Borsodi Hills, Hungary. The water was unfiltered and unchlorinated. One worm was complete, the other was missing the head region. Two more immature, complete worms were collected 21 February 1998 from the same site. Specimens were preserved in 70% ethanol and cut in several portions to facilitate mounting in CMC-9AF. Mounted specimens are deposited in the invertebrate collection of the Zoology Department at Eszterházy Károly Teachers' Training College, Eger, Hungary (slide numbers 1a, 1b, 2a, 2b, 3a, 3b, 4a, 4b). Unmounted portions are housed at the same location in 70% ethanol. The following morphological data is for the three complete worms.

Elongate, thread-like worm; l (preserved) = 156-207 mm, w (preserved) = 0.5 mm, s = 328-429. Prostomium long, with a transverse groove. Anterior segments biannulate, clearly

visible in the anterior segments of two worms. Dorsal chaetae shorter than ventrals, simple-pointed, usually solitary; some anterior segments with two chaetae per bundle, one a shorter, developing replacement chaeta. Dorsal chaetae may be reduced in number or absent in many anterior, middle, or posterior segments. Ventral chaetae larger than dorsals, simple-pointed, sickle-shaped, usually solitary; some segments with two chaetae per bundle, one a shorter, developing replacement chaeta.

Remarks – BRINKHURST (1966) revised the Haplotaxidae and merged several previously described species into *Haplotaxis gordioides*. The collected specimens, although immature, were easily identified as *Haplotaxis gordioides* based on the combination of morphological characteristics described. Verification of this species in Hungary adds to currently available information on its distribution, and increases the knowledge of the poorly known oligochaete fauna in Hungary.

Összefoglalás (Summary)

Dolgozatunkban beszámolunk a *Haplotaxis gordioides* (Oligochaeta:Haplotaxidae) négy példányának előkerüléséről 1998. január 10-én és február 21-én vízvezetéki csapvízből a Heves-Borsodi-dombságban lévő Járdánháza községről. A csap hat házat ellátó ásott kút vizét szállítja a lakásba, vize szűretlen és klórozatlan. A főként talajvizekben élő állat hazai előkerüléséről eddig még nem volt adat, bár előfordulását ANDRÁSSY (1955) és FERENCZ (1979) is valószínűsíti – rejtve maradását minden bizonnyal a szegényes hazai Oligochaeta-kutatás okozhatta. A begyűjtött példányok 70%-os alkoholban konzerválva, illetve tárgylemezen CMC-9AF-ben preparálva az Eszterházy Károly Tanárképző Főiskola Állattani Tanszékének gyűjteményében található. A dolgozatban összefoglalást adunk az állatok morfológiai jellemzőiről és elterjedéséről.

References

- ANDRÁSSY, I. (1955): Gyűrűsférgesek I. Annelida I. – Magyarország Állatvilága, 3,10: 1-59.
- BRINKHURST, R. O. (1966): A taxonomic revision of the Haplotaxidae. – J. Zool. Lond., 150: 29-51.
- BRINKHURST, R. O. (1978): Oligochaeta. – In: Illies, J. (ed.): Limnofauna Europaea. New York, 139-144.
- BRINKHURST, R. O. (1984): The position of the Haplotaxidae in the evolution of oligochaete annelids. – Hydrobiologia, 115:25-36.
- BRINKHURST, R. O. (1992): Evolutionary relationships within the Clitellata. – Soil Biol. Biochem., 24:1201-1205.
- BRINKHURST, R. O. (1994): Evolutionary relationships within the Clitellata: An update. – Megadrilogica, 5:109-112.
- BRINKHURST, R. O. & JAMIESON, B. G. M. (1971): Aquatic Oligochaeta of the world. – University of Toronto Press, Toronto, 860 pp.
- FERENCZ, M. (1979): A vízi kevéssertéjű gyűrűsférgesek (Oligochaeta) kishatározója. – Vízügyi Hidrobiológia 7. – Vízügyi Dokumentációs és Továbbképző Intézet, Budapest, pp. 167.

Michael E. SMITH
Department of Biology
Valdosta State University
Valdosta, GA 31698 USA

Sándor ANDRIKOVICS and Dávid MURÁNYI
Department of Zoology
Eszterházy Károly Teachers' Training
College
H-3300 EGER