

FREE-LIVING NEMATODES FROM TWO DOLOMITE HILLS  
IN HUNGARY, WITH DESCRIPTION OF  
*SCLEROLAIMUS HUNGARICUS* SP. N.

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During elaborating an interesting material from the rocky grasslands of Sas Hill and Út Hill (Hungary) 30 free-living nematode species were observed, including representatives of the rare genus *Sclerolaimus* JAIRAJPURI et AHMAD, 1992 (Dorylaimida, Leptonchidae). A new species, *Sclerolaimus hungaricus* sp. n., is described. With 11 original figures and 6 photos.

Key words: Nematoda, rocky grassland, *Sclerolaimus*, Hungary, new species, taxonomy

INTRODUCTION

The two areas studied, Sas Hill and Út Hill, are dolomite hills of Triassic age belonging to the Duna–Ipoly National Park. The rich superficial forms resulted in a varied mosaic of plant associations, at the same time conditions were favourable for emerging of some very rare and precious endemic species, while other species could take refuge here to avoid extinction. Sas Hill has been protected since 1958. Út Hill is part of Csíki Hills, it has been protected since 1978 as part of the Buda Landscape Protection Area. The parent material of the Csíki Hills is dolomite and limestone of Triassic age (with layers of rock-flint), on which later snow-white Dachstein lime stone, then different marl deposits have been settled (JUHÁSZ 1987). The dolomite rocky grasslands thrive on rendzina soil which is dark grayish-brown, humus-rich, intrazonal soil (STEFANOVITS, FILEP & FÜLEKY 1999).

The nematode fauna of Csíki Hills and Sas Hill is scarcely known. The first data are from ANDRÁSSY (1979) who reported some rare species from Sas Hill, and later (ANDRÁSSY 1980) described a new species (*Scutylenchus apricus* ANDRÁSSY, 1980) from there.

I started to study the nematode fauna of Csíki Hills in 2006 and Sas Hill in 2007 and the research on its seasonal dynamics is still in progress. During my studies 30 Nematoda species have been recorded so far, including a new species here-with described.

## MATERIAL AND METHODS

Soil samples were collected from closed rock grassland (*Festucetum pallenti*–*Brometum pannonici*) and open rock grassland (*Seseli leucospermi*–*Festucetum pallenti*) by the author during 2006–2007.

Nematodes were extracted from soil samples by Baermann-funnel method. An extraction period of one day was applied. Nematodes were fixed in FAA and then transferred in anhydrous glycerine using a slow method (ANDRÁSSY & FARKAS 1988). The specimens were mounted on microscopic slides in anhydrous glycerine and examined using a light microscope. Drawings were made with the aid of a drawing tube. Measurements were taken by an ocular micrometer, curved structures measured along medial line. Photographs were taken by a Zeiss AxioScope 2 microscope, using DIC (Differential Interference Contrast) illumination and an AxioCam MRc5 digital camera with Axiovision 4.7.2 software.

## RESULTS

In these protected territories 23 species were observed from Út Hill and 26 species from Sas Hill. Among them, *Amphidelus lagrecai* VINCIGUERRA et DE FRANCISCI, 1973 known from Hungary, Spain, Italy, and Greece and *Amphidelus coluber* ANDRÁSSY, 1973 known from Kenya, South Africa, and Mexico proves the Mediterranean-submediterranean character of Sas Hill (KISS 2009). The following rare species were also found: *Dorylaimellus egmonti* YEATES et FERRIS, 1984, *Nagelus hexagrammus* (STURHAN, 1966) SIDDIQI, 1979, *Aporcelaimellus medius* ANDRÁSSY, 2002, *Aporcelaimellus alius* ANDRÁSSY, 2002, *Aporcelaimellus amylovorus* (THORNE et SWANGER, 1936) HEYNS, 1965 and *Eucephalobus mucronatus* (KOZŁOWSKA et ROGUSKA-WASILEVSKA, 1963) ANDRÁSSY, 1967.

## LIST OF SPECIES OBSERVED

### Class SECERNENTIA Cephalobidae

*Acrobeles ciliatus* LINSTOW, 1877 – Material examined. Budaörs, Út Hill, open rock grassland, from soil, 03.10.2006 and 11.11.2006, leg. KISS, M.; Budaörs, Út Hill, closed rock grassland, from soil, 03.10.2006 and 11.11.2006, leg. KISS, M.; Buda, Sas Hill, open rock grassland, from soil, 23.02.2007, 24.04.2007, 14.08.2007 and 10.09.2007, leg. KISS, M.; Buda, Sas Hill, closed rock grassland, from soil, 23.02.2007, 24.04.2007, 14.08.2007 and 10.09.2007, leg. KISS, M. – Distribution. Cosmopolitan.

*Eucephalobus mucronatus* (KOZŁOWSKA et ROGUSKA-WASILEVSKA, 1963) ANDRÁSSY, 1967. – Material examined. Buda, Sas Hill, closed rock grassland, from soil, 24.04.2007, leg. KISS, M. – Distribution. Prevalent species, observed in Europe, Asia, Africa and Central America.

### Criconematidae

*Criconemoides informis* (MICOLETZKY, 1922) TAYLOR, 1936 – Material examined. Budaörs, Út Hill, open rock grassland, from soil, 03.10.2006 and 11.11.2006, leg. KISS, M.; Budaörs, Út Hill, closed rock grassland, from soil, 03.10.2006 and 11.11.2006, leg. KISS, M.; Sas Hill, open rock grassland, from soil, 23.02.2007, 24.04.2007, 14.08.2007 and 10.09.2007, leg. KISS, M.; Buda, Sas Hill, closed rock grassland, from soil, 23.02.2007, 24.04.2007, 14.08.2007 and 10.09.2007, leg. KISS, M. – Distribution. Europe, Asia, Africa and North America.

### Hoplolaimidae

*Rotylenchus buxophilus* GOLDEN, 1956 – Material examined. Budaörs, Út Hill, open rock grassland, from soil, 03.10.2006 and 11.11.2006, leg. KISS, M.; Budaörs, Út Hill, closed rock grassland, from soil, 03.10.2006 and 11.11.2006, leg. KISS, M. – Distribution. Cosmopolitan.

*Rotylenchus quartus* (ANDRÁSSY, 1958) SHER, 1961 – Material examined. Budaörs, Út Hill, closed rock grassland, from soil, 03.10.2006 and 11.11.2006, leg. KISS, M. – Distribution. Europe.

### Telotylenchidae

*Nagelus hexagrammus* (STURHAN, 1966) SIDDIQI, 1979 – Material examined. Budaörs, Út Hill, closed rock grassland, from soil, 03.10.2006 and 11.11.2006, leg. KISS, M. – Distribution. Rare species, distributed in Europe and Asia.

## Class TORQUENTIA

### Monhysteridae

*Eumonhystera dispar* (BASTIAN, 1865) ANDRÁSSY, 1981 – Material examined. Buda, Sas Hill, open rock grassland, from soil, 23.02.2007, 24.04.2007, leg. KISS, M.; Buda, Sas Hill, closed rock grassland, from soil, 23.02.2007, leg. KISS, M. – Distribution. Common species, distributed in Europe, Asia, Africa and North America.

### Plectidae

*Anaplectus granulosus* (BASTIAN, 1865) DE CONINCK & SCHUURMANS STEKHOVEN, 1933 – Material examined. Budaörs, Út Hill, open rock grassland, from soil, 03.10.2006 and 11.11.2006, leg. KISS, M.; Budaörs, Út Hill, closed rock grassland, from soil, 03.10.2006 and 11.11.2006, leg. KISS, M.; Buda, Sas Hill, open rock grassland, from soil, 23.02.2007, 24.04.2007, 14.08.2007 and 10.09.2007, leg. KISS, M.; Buda, Sas Hill, closed rock grassland, from soil, 23.02.2007, 24.04.2007, 14.08.2007 and 10.09.2007, leg. KISS, M. – Distribution. Cosmopolitan.

*Plectus parietinus* BASTIAN, 1865 – Material examined. Budaörs, Út Hill, open rock grassland, from soil, 03.10.2006 and 11.11.2006, leg. KISS, M.; Budaörs, Út Hill, closed rock grassland, from soil, 03.10.2006 and 11.11.2006, leg. KISS, M.; Buda, Sas Hill, open rock grassland, from soil, 23.02.2007, 24.04.2007, 14.08.2007 and 10.09.2007, leg. KISS, M.; Buda, Sas Hill, closed rock grassland, from soil, 23.02.2007, 24.04.2007, 14.08.2007 and 10.09.2007, leg. KISS, M. – Distribution. Very common in Europe, Africa and North America.

### Class PENETRANTIA

#### Alaimidae

*Alaimus arcuatus* THORNE, 1939 – Material examined. Budaörs, Út Hill, open rock grassland, from soil, 11.11.2006, leg. KISS, M.; Budaörs, Út Hill, closed rock grassland, from soil, 03.10.2006 and 11.11.2006, leg. KISS, M.; Buda, Sas Hill, open rock grassland, from soil, 23.02.2007, 24.04.2007, leg. KISS, M.; Buda, Sas Hill, closed rock grassland, from soil, 23.02.2007, 24.04.2007, leg. KISS, M. – Distribution. Europe, Asia, North America, South America and New Zealand.

*Amphidelus coluber* ANDRÁSSY, 1973 – Material examined. Buda, Sas Hill, closed rock grassland, from soil, 24.04.2007, leg. KISS, M. – Distribution. Europe, Africa and North America.

*Amphidelus lagrecai* VINCIGUERRA et DE FRANCISCI, 1973 – Material examined. Buda, Sas Hill, closed rock grassland, from soil, 24.04.2007, leg. KISS, M. – Distribution. Rare species, distributed in Europe.

#### Mylonchulidae

*Mylonchulus brachyuris* (BÜTSCHLI, 1837) COBB, 1917 – Material examined. Budaörs, Út Hill, open rock grassland, from soil, and 11.11.2006, leg. KISS, M.; Budaörs, Út Hill, closed rock grassland, from soil, 11.11.2006, leg. KISS, M.; Buda, Sas Hill, open rock grassland, from soil, 23.02.2007, 24.04.2007, and 10.09.2007, leg. KISS, M.; Buda, Sas Hill, closed rock grassland, from soil, 23.02.2007, 24.04.2007, and 10.09.2007, leg. KISS, M. – Distribution. Cosmopolitan.

#### Qudsianematidae

*Allodorylaimus granuliferus* (COBB, 1983) ANDRÁSSY, 1986 – Material examined. Budaörs, Út Hill, open rock grassland, from soil, 03.10.2006 and 11.11.2006, leg. KISS, M.; Budaörs, Út Hill, closed rock grassland, from soil, 03.10.2006 and 11.11.2006, leg. KISS, M.; Buda, Sas Hill, open rock grassland, from soil, 23.02.2007, 24.04.2007, 14.08.2007 and 10.09.2007, leg. KISS, M.; Buda, Sas Hill, closed rock grassland, from soil, 23.02.2007, 24.04.2007, 14.08.2007 and 10.09.2007, leg. KISS, M. – Distribution. Cosmopolitan.

*Crassolabium ettersbergense* (DE MAN, 1885) PEÑA-SANTIAGO & CIOBANU, 2008 – Material examined. Budaörs, Út Hill, open rock grassland, from soil, 03.10.2006, leg. KISS, M.; Budaörs, Út Hill, closed rock grassland, from soil, 11.11.2006, leg. KISS, M.; Buda, Sas Hill, open rock grassland, from soil, 23.02.2007, 24.04.2007, leg. KISS, M.; Buda, Sas Hill, closed rock grassland, from soil, 24.04.2007 and 10.09.2007, leg. KISS, M. – Distribution. Occurring world-wide.

*Eudorylaimus acuticauda* (DE MAN, 1880) ANDRÁSSY, 1959 – Material examined. Budaörs, Út Hill, open rock grassland, from soil, 03.10.2006 and 11.11.2006, leg. KISS, M.; Budaörs, Út Hill, closed rock grassland, from soil, 03.10.2006 and 11.11.2006, leg. KISS, M.; Buda, Sas Hill, open rock grassland, from soil, 23.02.2007, 24.04.2007 and 10.09.2007, leg. KISS, M.; Buda, Sas Hill, closed rock grassland, from soil, 23.02.2007, 24.04.2007, 14.08.2007 and 10.09.2007, leg. KISS, M. – Distribution. Common species, distributed in Europe, Asia and North America.

*Eudorylaimus carteri* (BASTIAN, 1865) ANDRÁSSY, 1959 – Material examined. Budaörs, Út Hill, closed rock grassland, from soil, 11.11.2006, leg. KISS, M.; Buda, Sas Hill, open rock grassland, from soil, 24.04.2007, leg. KISS, M.; Buda, Sas Hill, closed rock grassland, from soil, 24.04.2007 and 10.09.2007, leg. KISS, M. – Distribution. Common species, observed in Europe, Asia, North America and Africa.

*Eudorylaimus paesleri* ANDRÁSSY, 1964 – Material examined. Budaörs, Út Hill, closed rock grassland, from soil, 11.11.2006, leg. KISS, M.; Buda, Sas Hill, open rock grassland, from soil, 23.02.2007, leg. KISS, M.; Buda, Sas Hill, closed rock grassland, from soil, 23.02.2007, 24.04.2007, leg. KISS, M. – Distribution. Europe and North America.

### *Aporcelaimidae*

*Aporcelaimellus alius* ANDRÁSSY, 2002 – Material examined. Buda, Sas Hill, open rock grassland, from soil, 24.04.2007, leg. KISS, M.; Buda, Sas Hill, closed rock grassland, from soil, 23.02.2007, 24.04.2007, leg. KISS, M. – Distribution. Hungary, on dry grass roots and sedge root in Fertő–Hanság National Park (ANDRÁSSY 2002).

*Aporcelaimellus amylovorus* (THORNE & SWANGER, 1936) HEYNS, 1965 – Material examined. Budaörs, Út Hill, open rock grassland, from soil, 03.10.2006, leg. KISS, M.; Budaörs, Út Hill, closed rock grassland, from soil, 03.10.2006 and 11.11.2006, leg. KISS, M.; Buda, Sas Hill, open rock grassland, from soil, 23.02.2007, 24.04.2007 and 10.09.2007, leg. KISS, M.; Buda, Sas Hill, closed rock grassland, from soil, 23.02.2007, 24.04.2007 and 10.09.2007, leg. KISS, M. – Distribution. Europe, Asia, North and South America.

*Aporcelaimellus krygeri* (DITLEVSEN, 1928) HEYNS, 1965 – Material examined. Buda, Sas Hill, closed rock grassland, from soil, 24.04.2007 and 10.09.2007, leg. KISS, M. – Distribution. In Europe and Asia.

*Aporcelaimellus medius* ANDRÁSSY, 2002 – Material examined. Buda, Sas Hill, closed rock grassland, from soil, 24.04.2007 and 10.09.2007, leg. KISS, M. – Distribution. Europe and South America.

*Aporcelaimellus obtusicaudatus* (BASTIAN, 1865) ALTHERR, 1868 – Material examined. Budaörs, Út Hill, open rock grassland, from soil, 03.10.2006 and 11.11.2006, leg. KISS, M.; Budaörs, Út Hill, closed rock grassland, from soil, 03.10.2006 and 11.11.2006, leg. KISS, M.; Buda, Sas Hill, open rock grassland, from soil, 23.02.2007, 24.04.2007, 14.08.2007 and 10.09.2007, leg. KISS, M.; Buda, Sas Hill, closed rock grassland, from soil, 23.02.2007, 24.04.2007, 14.08.2007 and 10.09.2007, leg. KISS, M. – Distribution. Over the world.

### *Dorylaimellidae*

*Dorylaimellus egmonti* YEATES & FERRIS, 1984 – Material examined. Budaörs, Út Hill, closed rock grassland, from soil, 03.10.2006., leg. KISS, M. – Distribution. Europe and New Zealand.

### Nordiidae

*Heterodorus brevidentatus* (THORNE, 1939) ANDRÁSSY, 2009 – Material examined. Budaörs, Út Hill, open rock grassland, from soil, 11.11.2006, leg. KISS, M.; Budaörs, Út Hill, closed rock grassland, from soil, 03.10.2006 and 11.11.2006, leg. KISS, M.; Buda, Sas Hill, open rock grassland, from soil, 24.04.2007 and 10.09.2007, leg. KISS, M.; Buda, Sas Hill, closed rock grassland, from soil, 24.04.2007, leg. KISS, M. – Distribution. Europe and North America.

*Longidorella macramphis* (ALTHERR, 1950) ALTHERR, 1950 – Material examined. Budaörs, Út Hill, open rock grassland, from soil, 11.11.2006, leg. KISS, M.; Budaörs, Út Hill, closed rock grassland, from soil, 03.10.2006 and 11.11.2006, leg. KISS, M.; Buda, Sas Hill, open rock grassland, from soil, 24.04.2007 and 10.09.2007, leg. KISS, M.; Buda, Sas Hill, closed rock grassland, from soil, 23.02.2007, 24.04.2007, 14.08.2007 and 10.09.2007, leg. KISS, M. – Distribution. European species.

### Belonidiridae

*Metaxonchium coronatum* (DE MAN, 1907) COOMANS & NAIR, 1975 – Material examined. Budaörs, Út Hill, open rock grassland, from soil, 11.11.2006, leg. KISS, M.; Budaörs, Út Hill, closed rock grassland, from soil, 03.10.2006 and 11.11.2006, leg. KISS, M.; Buda, Sas Hill, open rock grassland, from soil, 23.02.2007, 24.04.2007, 14.08.2007 and 10.09.2007, leg. KISS, M.; Buda, Sas Hill, closed rock grassland, from soil, 23.02.2007, 24.04.2007, and 10.09.2007, leg. KISS, M. – Distribution. European species.

### Nygalaimidae

*Nygalaimus brachyuris* (DE MAN, 1880) THORNE, 1930 – Material examined. Budaörs, Út Hill, closed rock grassland, from soil, 03.10.2006 and 11.11.2006, leg. KISS, M.; Buda, Sas Hill, open rock grassland, from soil, 23.02.2007, 24.04.2007 and 10.09.2007, leg. KISS, M.; Buda, Sas Hill, closed rock grassland, from soil, 23.02.2007, 24.04.2007, 14.08.2007 and 10.09.2007, leg. KISS, M. – Distribution. Common species, occurring world-wide.

### Paraxonchiidae

*Paraxonchium laetificans* (ANDRÁSSY, 1956) ALTHERR & LOOF, 1969 – Material examined. Budaörs, Út Hill, open rock grassland, from soil, 11.11.2006, leg. KISS, M.; Budaörs, Út Hill, closed rock grassland, from soil, 03.10.2006 and 11.11.2006, leg. KISS, M.; Buda, Sas Hill, open rock grassland, from soil, 23.02.2007, 24.04.2007 and 10.09.2007, leg. KISS, M.; Buda, Sas Hill, closed rock grassland, from soil, 23.02.2007, 24.04.2007 and 10.09.2007, leg. KISS, M. – Distribution. Europe, Asia and North America.

## Leptonchidae

*Sclerolaimus* JAIRAJPURI et AHMAD, 1992

Diagnosis. Tylencholaimoidea. Leptonchidae. Leptonchinae. Body small, 0.93–1.37 mm long. The cuticle composed of several layers. Cuticle typically tylencholaimoid with fine transverse striations, inner layer coarsely striated, irregular. Amphids large, nearly encircling head. Lip region cap-like, set off by a deep constriction. Minute sclerotized pieces near the oral opening. Odontostyle thin, needle-like, lumen hardly discernible, odontophore very small, simple, straight. Basal expansion cylindrical, about one-third of oesophagus length. Cardia cylindrical, relatively large. Excretory pore not visible.

Female. Female genital apparatus amphidelphic. Gonads paired, opposed and reflexed. Both ovaries are functional. Vulva transverse. Tail hemispheroid, about one anal body diameter, posterior part hollow.

Male. Spicules dorylaimoid. Ventromedial supplements present, widely spaced. Tail hemispheroid longer than anal body diameter, posterior part hollow.

Type species. *Tylencholaimus paradoxus* LOOF et JAIRAJPURI, 1968 = *Sclerolaimus paradoxus* (LOOF et JAIRAJPURI, 1968) JAIRAJPURI & AHMAD, 1992.

Remarks. *Sclerolaimus paradoxus* (LOOF et JAIRAJPURI, 1968) was originally described in the genus *Tylencholaimus* DE MAN, 1876. Later JAIRAJPURI and AHMAD (1992) detached it as a type species of their newly described genus *Sclerolaimus* classified in the family Tylencholaiminae (Tylencholaimidae). The above mentioned authors regarded *Sclerolaimus* closely related to *Tylencholaimus* DE MAN, 1876 and *Capilonchus* SIDDIQI, 1982 differing from the former in the sclerotized vestibule, the presence of cuticularised pieces around oral opening, the very fine odontostyle, the large and basally slightly thickened odontophore, furthermore in the well-developed cardia. (In *Tylencholaimus*, the vestibule is not sclerotized, cuticularised pieces are absent, odontostyle and odontophore are provided with distinct lumen and aperture, odontophore possesses distinct basal knobs and cardia is not enlarged). It differs from *Capilonchus* by the absence of labial disc, the presence of cuticularised pieces around stoma, the shape of vestibule, the well-developed cardia and by the amphidelphic reproductive system. (In *Capilonchus* a prominent labial disc is present and there are no cuticularised pieces around the stoma, the vestibule is inverted, thistle-funnel shaped, cardia rounded and the reproductive system mono-opisthodelphic).

ANDRÁSSY (2009) transferred the genus *Sclerolaimus* in Leptonchidae (Leptonchinae) on the basis of the cap-like head region, the attenuated odontostyle with

hardly discernible lumen, the simple odontophore and on the short basal part of oesophagus. This genus is thought to be closely related to *Leptonchus* COBB, 1920, but the straight odontophore and the relatively long cylindrus distinguish it from *Leptonchus* (ANDRÁSSY 2009).

### ***Sclerolaimus hungaricus* sp. n.**

(Figs 1–17)

**Diagnosis.** *Sclerolaimus hungaricus* sp. n. can be identified by the cap-like head region with six small sclerotized pieces, needle-like odontostyle, 7–9 ventromedial supplements, hemispheroid tail of male and conoid rounded tail of female.

**Description.** Holotype female, L = 1.27 mm; a = 28; b = 5.9; c = 44; c' = 1.2; V = 55%. Paratype females (n = 12), L = 1.06–1.37 mm; a = 29–34; b = 5.2–5.9; c = 36–44; c' = 1.0–1.2; V = 51–55%. Paratype males (n = 10), L = 1.06–1.27 mm; a = 29–37; b = 4.3–6.4; c = 32–44; c' = 1.1–1.4.

Body slender, 36–42 µm wide at middle, ventrally curved after fixation. Cuticle smooth, very thin, 1 µm in most regions and 1.0–1.5 µm in the middle of tail. Outer layer of cuticula with fine transverse striations, inner layer coarsely striated and irregularly contoured. Amphids large, nearly encircling head. Lip region 9–10 µm wide. Lips offset by a deep constriction, cap-like, the central part overhang, the inner papillae very large. Body at the posterior end of oesophagus 3.1–3.3 times wider than head.

Odontostyle 6–7 µm long, very fine, odontophore straight, 8–10 µm long with small basal thickenings. Lumen of odontostyle frequently hardly discernible. Oesophagus 205–247 µm long, occupying 16–19% of body length. The two parts of oesophagus separated by a deep constriction. Glandularium 35–42 µm long, 12–19 % of entire length of oesophagus. Excretory pore not seen. Cardia cylindroid, 8–10 µm.

Intestine consisting of large, elongate-ovoid cells. Female prerectum 6–8 anal body widths long; intestine–prerectal junction with three large cells.

Female. Vulva transverse. Sexual apparatus amphidelphic, ovaries opposed, reflexed; both ovaries functional. Uterus in mature females not containing spermatozoa. Mature eggs not observed. Distance vulva–anus 19–21 times longer than tail. Tail 27–33 µm long, conoid-rounded.

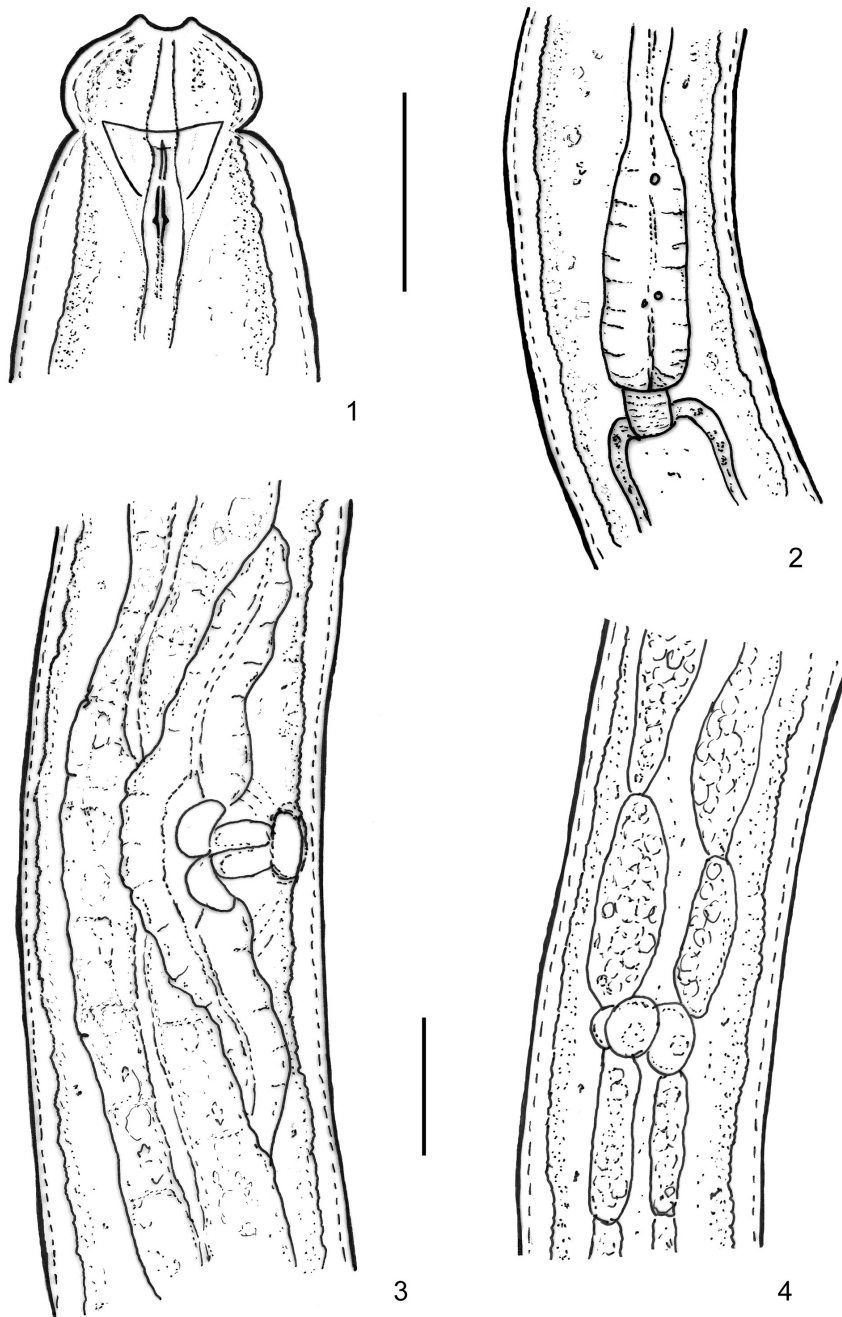
Male. Similar to female but generally more slender. Testes two, dorylaimid. Spicules dorylaimid, slender, 34–40 µm long with lateral guiding pieces. Tail 30–35 µm long, hemispheroid, somewhat more conoid than that of female. 7–9 (mostly 9) ventromedial supplements present.

**Material examined.** Holotype female on slide No. H185. Soil from rocky grassland, Út Hill near Budaörs, Hungary. Leg. M. Kiss, 11 November 2006. Paratypes on slides No. H178, H184, H185. Soil from rocky grassland, Út Hill near Budaörs, Hungary. Leg. M. Kiss, 11 November 2006 and H196 soil from open rock grassland, Sas Hill near Buda, Hungary. Leg. M. Kiss, 24 April 2007.

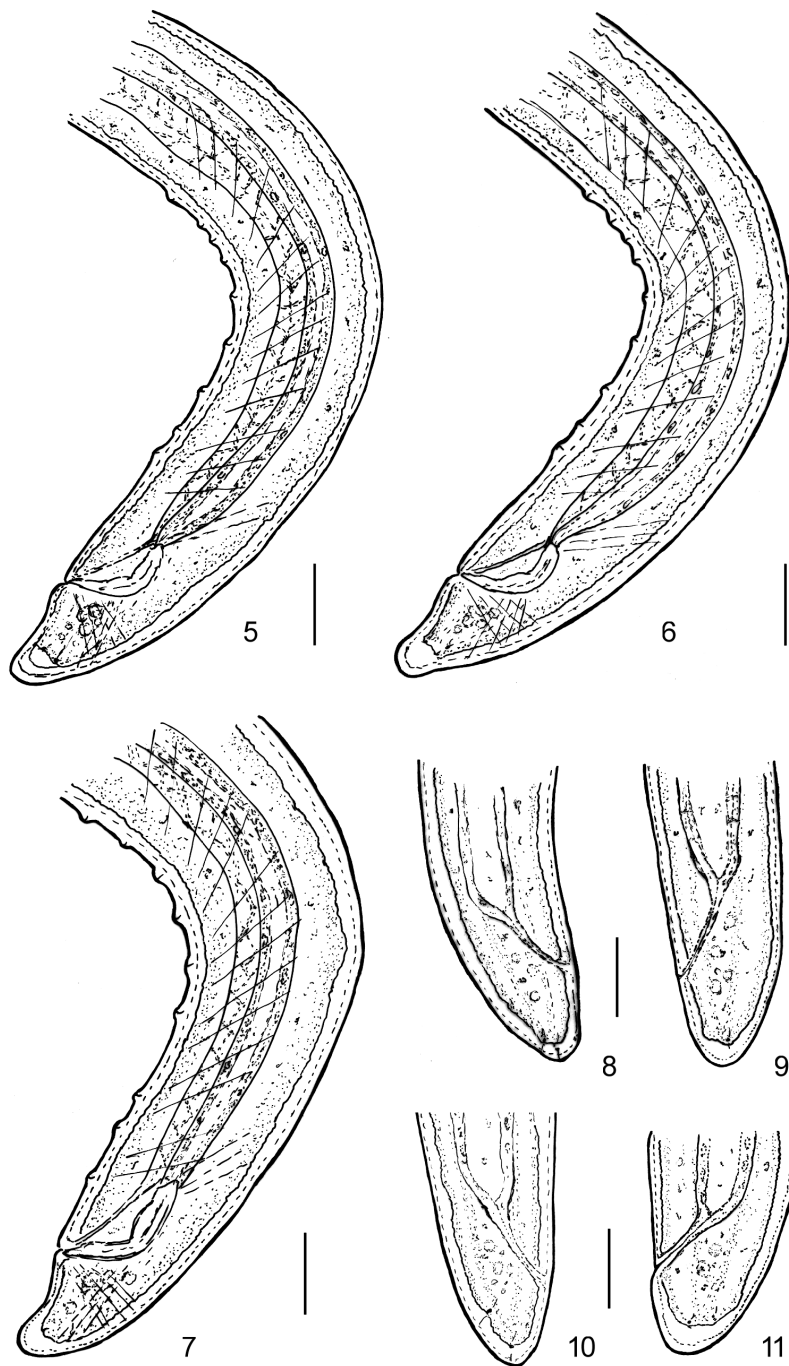
The type material is deposited in the Soil Zoology Collection of the Hungarian Natural History Museum, Budapest.

**Etymology.** The Latin *hungaricus* means Hungarian.

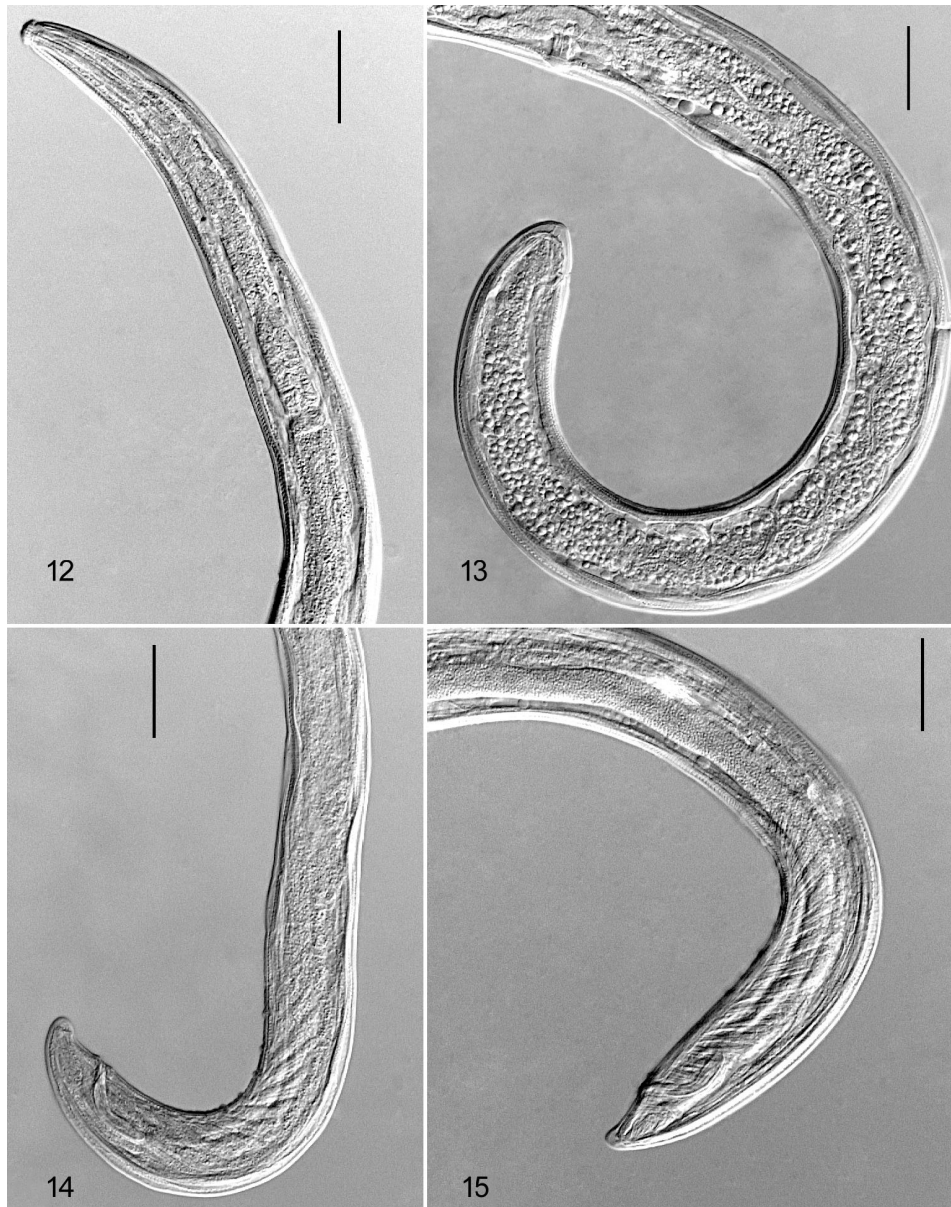




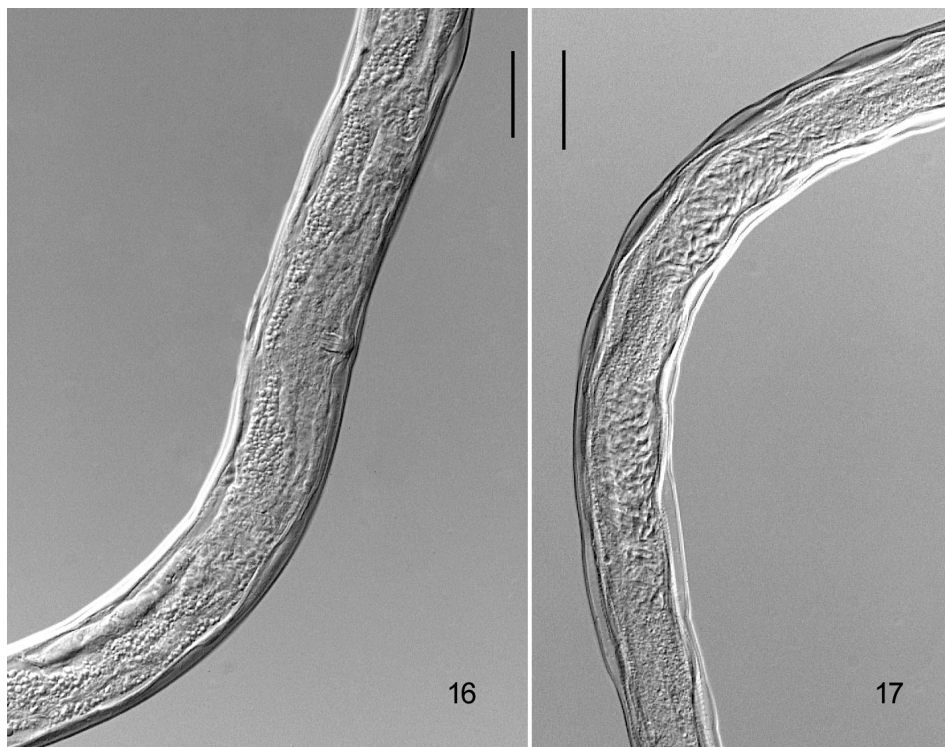
**Figs 1–4.** *Sclerolaimus hungaricus* sp. n.: 1 = anterior end, 2 = cardiac region, 3 = vulval region, 4 = intestine–pretrectal junction. (Scale bars 20  $\mu$ m each)



**Figs 5–10.** *Sclerolaimus hungaricus* sp. n.: 5–6 = male tail, 7–11 = female tail. (Scale bars 20  $\mu$ m each)



**Figs 12–15.** *Sclerolaimus hungaricus* sp. n.: 12 = anterior end, 13 = female tail, 14–15 = male tail.  
(Scale bars 40  $\mu$ m each)



**Figs 16–17.** *Sclerolaimus hungaricus* sp. n.: 16 = female genital region, 17 = male genital region. (Scale bars 40  $\mu$ m each)

**Remarks.** This is the second species of the genus *Sclerolaimus*. The type species, *Sclerolaimus paradoxus* (LOOF et JAIRAJPURI, 1968) JAIRAJPURI & AHMAD, 1992 has only 3–6 supplements, female tail hemispheroid in contrast to the new species that has 7–9 preanal supplements, longer tail (females:  $c = 36\text{--}44$  vs.  $c = 48\text{--}76$ ; and males:  $c = 32\text{--}44$  vs.  $c = 46\text{--}71$ ), female tail conoid-rounded, constriction of oesophagus lies farther back (80–88% of entire length of oesophagus vs 70–74%) and somewhat thicker body ( $a = 29\text{--}34$ ) than type species ( $a = 33\text{--}41$ ).

The genus *Sclerolaimus* appears to have a European distribution. *S. paradoxus* was recorded from The Netherlands and Switzerland, while *S. hungaricus* sp. n. from Hungary.

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