Monhystrella andreana sp. nov. (Nematoda: Monhysterida) from Chile
Monhystrella andreana sp. nov. (Nematoda: Monhysterida) из Чили

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A description of *Monhystrella andreana* **sp. nov.** from brackish water lake in Tierra del Fuego, Chile, is given. The new species differs from the most morphologically close *M. macrura* (de Man, 1880) mainly in shorter tail and pharynx (esophagus), and in longer spicules.

Дано описание нового вида *Monhystrella andreana* **sp. nov.** из солоноватоводного озера Огненной Земли (Чили). Новый вид отличается от наиболее морфологически близкого *M. macrura* (de Man, 1880) более короткими хвостом и глоткой (пищеводом) и более длинными спикулами.

Key words: South America, free-living nematodes, *Monhystrella*, new species

Ключевые слова: Южная Америка, свободноживущие нематоды, *Monhystrella*, новый вид

INTRODUCTION

Nematodes were collected from the sandy littoral zone of brackish water lake Lago de los Cisnes (Tierra del Fuego, Chile), eastern shore 5 km N of Porvenir, 53. 25020°S, 70. 34614° W, height about 0 m, by Dr Andrey Przhiboro in March 2017. Lago de los Cisnes is a shallow hypersaline lake surrounded by grassy landscape. The lake is located at a distance of 3 km from the western coast of Terra del Fuego. Water salinity is 50 g/l; water pH is around 9.4. The sampling locality is a flat lake shore with numerous limestone macrostromalites up to 1 m high. The samples were collected from the water margin zone between the foots of stromatolites. The collected substrate is wet limestone sand and gravel mixed with fine detritus and various organic remains (bird feathers, parts of vegetation etc.), mostly with high contents of hydrogen sulfide; the substrate formed an irregular 0.5–2 cm layer on the solid limestone plate in 0.3–1.5 m above the water line. Nematodes were fixed in 4% formalin.

The genus *Monhystrella* Cobb, 1918 includes about 30 species (Andrassy, 2005); most of them were found in inland brackish and fresh waters, as well as in hot springs on all continents. A large number of species described from Africa (Abebe & Coomans, 1996; Filipjev, 1931) and South America (Abebe & Coomans, 1995; Andrássy, 1963, 1968; Loof, 1964). The taxonomy of the genus is thoroughly reviewed by Andrássy (1981) and Jacobs (1987).

DESCRIPTION OF THE SPECIES

Order **MONHYSTERIDA**

Family **MONHYSTERIDAE**

Genus ***Monhystrella*** Cobb, 1918

***Monhystrella andreana* sp. nov.**
(Figs 1–4; Table)

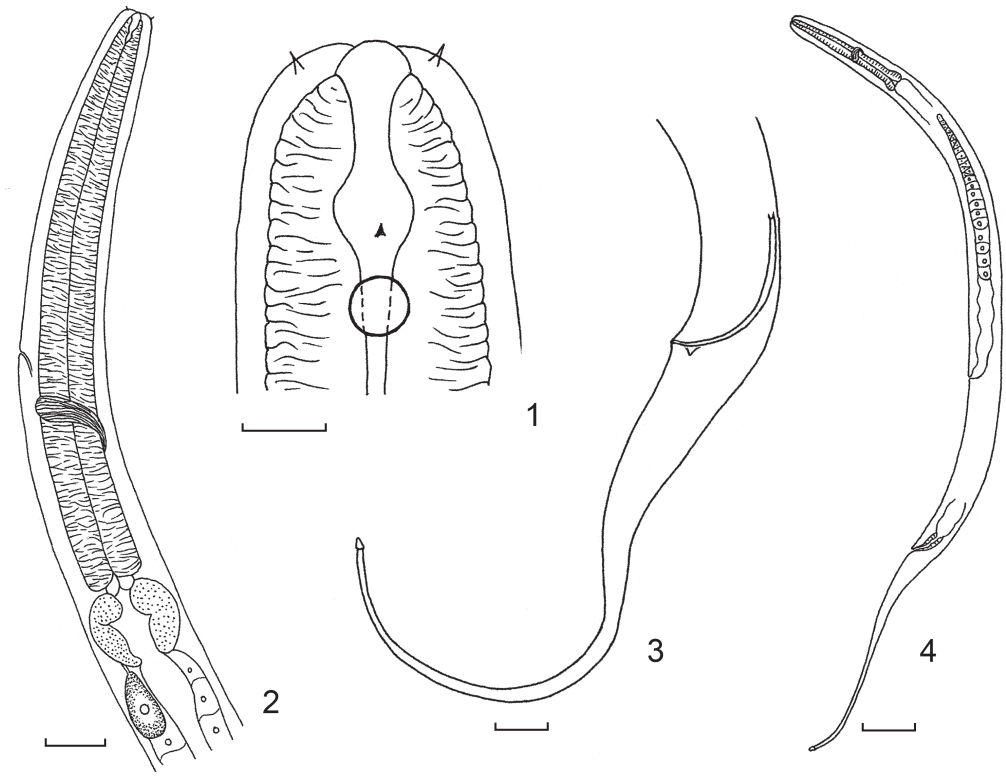
Holotype. Female; **Chile**, lake Lago de los Cisnes, 10 March 2017, Coll. A. Przhiboro. Microscope slide No. A-8706, Zoological Institute, St Petersburg.

Paratypes. Four females and three males, the same data as for holotype.

Table. Morphometrics of *Monhystrella andreana* **sp. nov.** All measurements are in μm and in the form: range (mean ± s.d.).

Character	Holotype (femail)	Females (n=8)	Males (n=3)
L	689	676–780 (724±18)	592–728 (651)
a	29.9	27.7–33.9 (30.1±1)	32.9–38.3 (34.8)
b	6.7	6.1–8.2 (6.7±0.3)	6.2–7 (6.5)
c	4.8	4.8–5.9 (5.2±0.2)	6.2–7.9 (7.1)
c´	8.5	8–11 (9±1)	4–6 (5)
Body width	23	23–27 (24±1)	19
Pharyngeal length (esophagus)	103	95–115 (108±3)	95–104 (99)
Tail length	145	102–162 (142±9)	80–101 (92)
Spinneret	6	4–5 (4.5)	4–6 (5)
Anal body width	17	15–19 (17±1)	15–18 (17)
V%	57	53–58 (57±1)%	–
V – anus	148	148–205 (174±9)	–
V – anus / tail	1.1	1.1–1.4 (1.3±0.1)	–
Gonad	230	220–230 (227±10)	350–480 (400)
NR%	~60%	~60%	~60%
Cephalic seta	~1	~1	~1
Amphid diameter	3.5	3–3.5	3–3.5
Distance from center of amphid to head edge	12	10–12 (11)	11
Body wide at amphid	16	14–16 (15±1)	10–11
Spicule length (along chord)	–	–	28–29
Gubernaculum	–	–	3–4

Description. Cuticle thin, about 0.5 μm. Somatic setae few, distribution variable. Labial papillae undetectable. Four shorter cephalic setae on lip region. Lip region offset. Stoma with one denticle. Amphidial fovea circular, center of amphid at 10–12 μm from anterior body end. Esophagus (pharynx) muscular, more or less cylindrical anteriorly, without developed terminal bulb. Cardium small. Anterior part of mid-intestine forming well demarcated progaster. Renette gland posterior to progaster; excretory pore anterior to level of nerve ring. Rectum shorter than anal body width. Reproductive system of females monodelphic prodelphic. Mature eggs in uterus absent. Postvulval uterine sac absent. Vagina short, not muscular. Tail elongate-conoid anteriorly and



Figs 1–4. *Monhystrella andreana* **sp. nov. 1**, head; **2**, pharynx (esophagus); **3**, mail tail; **4**, entire body of female. Scale bars: 5 μm for fig. 1; 10 μm for figs 2, 3; 50 μm for fig. 4.

slender posteriorly. Spinneret not very long. Reproductive system of males monorhic, proorhic. Spicules comparatively long and slender. Tail conoid anteriorly and slender posteriorly, similar to female.

Comparision. *Monhystrella andreana* **sp. nov.** is most close to the widespread *M. macrura* (de Man, 1880) from which it differs in shorter tail and esophagus at greater body length, shorter head setae, structure of stoma and relatively longer spicules.

Etymology. This species is named in honor of my colleague Dr Andrey A. Przhiboro, who collected the material in the lakes of Tierra del Fuego.

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REFERENCES

Abebe E. & Coomans A. 1995. Freshwater nematodes of the Galápagos. *Hydrobiologia*, **299**: 1–51.

Abebe E. & Coomans A. 1996. Aquatic nematodes from Ethiopia. *Hydrobiologia*, **324**: 53 –77.

Andrássy I. 1963. The zoological results of Gy. Topál's collectings in South Argentina. *Annales Historico-Naturalles Masei Nationalis Hungarici*, **55**: 243–273.

Andrássy I. 1968. Nematoden aus den Galeriewäldern des Acaray-Flusses. *Opuscula Zoologica, Budapest*, **8**(2): 167–315.

Andrássy I. 1981. Revision of the order Monhysterida (inhabiting soil and inland waters). *Opuscula Zoologica Budapest*, **17**–**18**(1): 13–47.

Andrássy I. 2005. *Free-living nematodes of Hungary*, **1**. Budapest: Hungarian Natural History Museum. 518 p.

Filipjev I.N. 1931. Report on freshwater Nematoda. *Proceedings of the Zoological Society of London*, **2**: 443–429.

Jacobs L.J. 1987. A redefinition of the genus *Monhystrella* Cobb (Nematoda, Monhystrridae) with keys to the species. *Zoologica scripta*, **16**(3): 191–197.

Loof P.A.A. 1964. Free-living and plant-parasitic nematodes from Venezuela. *Nematologica*, **10**(2): 201–300.

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